

ISO 20022

Card Payments Exchanges - Terminal Management - Maintenance 2024 - 2025

Message Definition Report - Part 2

Approved by the Cards and Related Retail Financial Services SEG
on 20 February 2025

This document provides details of the Message Definitions for Card Payments Exchanges - Terminal Management -
Maintenance 2024 - 2025.

March 2025

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1 Message Set Overview

Introduction

This document describes the Card Payments Exchanges - Terminal Management message set. It includes the new version of the MessageDefinitions that have been added as part of the maintenance cycle 2024-2025 (See MCR #250) and approved by the Cards and Related Retail Financial Services Standards Evaluation Group on 20 February 2025.

1.1 List of MessageDefinitions

The following table lists all MessageDefinitions described in this book.

MessageDefinition	Definition
catm.001.001.14 StatusReportV14	The StatusReport message is sent by a POI to inform the master terminal manager (MTM) or the terminal manager (TM) about the status of the acceptor system including the identification of the POI, its components and their installed versions.
catm.002.001.13 ManagementPlanReplacementV13	The ManagementPlanReplacement message is sent by a terminal manager to a POI to set maintenance actions to be performed.
catm.003.001.14 AcceptorConfigurationUpdateV14	The AcceptorConfigurationUpdate message is sent by a TM to a POI to update configurations.
catm.004.001.05 TerminalManagementRejectionV05	The TerminalManagementRejection message is sent by the terminal manager to reject a message request sent by an acceptor, to indicate that the received message could not be processed.
catm.005.001.11 MaintenanceDelegationRequestV11	The MaintenanceDelegationRequest message is sent by a terminal manager to the master terminal manager to request delegation of maintenance functions or maintenance operation on the terminal estate managed by the master terminal manager.
catm.006.001.08 MaintenanceDelegationResponseV08	The MaintenanceDelegationResponse message is sent by the master terminal manager to a terminal manager to provide the outcome of a maintenance delegation request.
catm.007.001.07 CertificateManagementRequestV07	The CertificateManagementRequest message is sent by a POI terminal or any intermediary entity either to a terminal manager acting as a certificate authority for managing X.509 certificate of a public key owned by the initiating party, or for requesting the inclusion or the removal of the POI to a white list of the terminal manager.
catm.008.001.07 CertificateManagementResponseV07	The CertificateManagementResponse is sent by a terminal manager in response to a CertificateManagementRequest to provide the outcome of the requested service.

2 catm.001.001.14 StatusReportV14

2.1 MessageDefinition Functionality

The StatusReport message is sent by a POI to inform the master terminal manager (MTM) or the terminal manager (TM) about the status of the acceptor system including the identification of the POI, its components and their installed versions.

Outline

The StatusReportV14 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Set of characteristics related to the transfer of the status report.
- B. StatusReport
Status of the point of interaction (POI), its components and their installed versions.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

2.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <StsRpt>	[1..1]			
	Header <Hdr>	[1..1]			8
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		8
	FormatVersion <FrmtVrsn>	[1..1]	Text		8
	ExchangeIdentification <XchgId>	[1..1]	Quantity		9
	CreationDateTime <CreDtTm>	[1..1]	DateTime		9
	InitiatingParty <InitgPty>	[1..1]	±		9
	RecipientParty <RcptPty>	[0..1]	±		9
	Traceability <Tracblt>	[0..*]	±		10
	StatusReport <StsRpt>	[1..1]			10
	POIIdentification <POIID>	[1..1]	±		11
	InitiatingTrigger <InitgTrggr>	[0..1]			12
	TriggerSource <TrggrSrc>	[1..1]	CodeSet		12
	SourceIdentification <SrcId>	[1..1]	Text		13
	TriggerType <TrggrTp>	[1..1]	CodeSet		13
	AdditionalInformation <AddtlInf>	[0..1]	Text		13
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		13
	DataSet <DataSet>	[1..1]			14
	Identification <Id>	[1..1]	±		15
	SequenceCounter <SeqCntr>	[0..1]	Text		15
	LastSequence <LastSeq>	[0..1]	Indicator		15
	Content <Cntt>	[1..1]			15
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpld>	[0..*]	Text		19
	AttendanceContext <AtndncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtnProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrtctdDlgtnProof>	[0..1]	±		22
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		22
	SecurityTrailer <SctyTrlr>	[0..1]	±		23

2.3 Constraints

C1 ActiveCurrency

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

C2 ActiveOrHistoricCurrency

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

C3 AnyBIC

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

C4 Country

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

C5 IBAN

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

C6 IdentificationAndProxyGuideline

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

C7 IdentificationOrProxyPresenceRule

Identification must be present or Proxy must be present. Both may be present.

C8 OneElementPresenceRule

At least one of these subelements must be present.

C9 OneElementPresenceRule

At least one of these subelements must be present.

C10 OneElementPresenceRule

At least one of these subelements must be present.

C11 SupplementaryDataRule

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

C12 ValidationByTable

Must be a valid terrestrial language.

2.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

2.4.1 Header <Hdr>

Presence: [1..1]

Definition: Set of characteristics related to the transfer of the status report.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		8
	FormatVersion <FrmtVrsn>	[1..1]	Text		8
	ExchangeIdentification <XchgId>	[1..1]	Quantity		9
	CreationDateTime <CreDtTm>	[1..1]	DateTime		9
	InitiatingParty <InitgPty>	[1..1]	±		9
	RecipientParty <RcptPty>	[0..1]	±		9
	Traceability <Tracblt>	[0..*]	±		10

2.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

2.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: "Max6Text" on page 607

2.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 600

2.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: "ISODatetime" on page 599

2.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

2.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrld>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrld>	[1..1]	Text		320

2.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "[Traceability8](#)" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

2.4.2 StatusReport <StsRpt>

Presence: [1..1]

Definition: Status of the point of interaction (POI), its components and their installed versions.

StatusReport <StsRpt> contains the following **StatusReport14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[1..1]	±		11
	InitiatingTrigger <InitgTrggr>	[0..1]			12
	TriggerSource <TrggrSrc>	[1..1]	CodeSet		12
	SourceIdentification <SrcId>	[1..1]	Text		13
	TriggerType <TrggrTp>	[1..1]	CodeSet		13
	AdditionalInformation <AddtlInf>	[0..1]	Text		13
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		13
	DataSet <DataSet>	[1..1]			14
	Identification <Id>	[1..1]	±		15
	SequenceCounter <SeqCntr>	[0..1]	Text		15
	LastSequence <LastSeq>	[0..1]	Indicator		15
	Content <Cntt>	[1..1]			15
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpld>	[0..*]	Text		19
	AttendanceContext <AttndncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtnProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrtctdDlgtnProof>	[0..1]	±		22
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		22

2.4.2.1 POIIdentification <POIID>

Presence: [1..1]

Definition: Identification of the point of interaction for terminal management.

POIIdentification <POIID> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

2.4.2.2 InitiatingTrigger <InitgTrggr>

Presence: [0..1]

Definition: Identification of the requestor.

InitiatingTrigger <InitgTrggr> contains the following **TriggerInformation2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TriggerSource <TrggrSrc>	[1..1]	CodeSet		12
	SourceIdentification <SrclId>	[1..1]	Text		13
	TriggerType <TrggrTp>	[1..1]	CodeSet		13
	AdditionalInformation <AddtlInf>	[0..1]	Text		13

2.4.2.2.1 TriggerSource <TrggrSrc>

Presence: [1..1]

Definition: Actor who trigger the request.

Datatype: "[PartyType5Code](#)" on page 579

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

2.4.2.2.2 SourceIdentification <SrcId>

Presence: [1..1]

Definition: Identification of the trigger source.

Datatype: "Max35Text" on page 605

2.4.2.2.3 TriggerType <TrggrTp>

Presence: [1..1]

Definition: Identification of the type of the call.

Datatype: "ExchangePolicy2Code" on page 567

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

2.4.2.2.4 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information related to request.

Datatype: "Max70Text" on page 607

2.4.2.3 TerminalManagerIdentification <TermnIMgrId>

Presence: [1..1]

Definition: Identification of the terminal management system (TMS) to contact for the maintenance.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

2.4.2.4 DataSet <DataSet>

Presence: [1..1]

Definition: Data related to a status report of a point of interaction (POI).

DataSet <DataSet> contains the following **StatusReportDataSetRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		15
	SequenceCounter <SeqCntr>	[0..1]	Text		15
	LastSequence <LastSeq>	[0..1]	Indicator		15
	Content <Cntt>	[1..1]			15
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpld>	[0..*]	Text		19
	AttendanceContext <AtndncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtnProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		22
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		22

2.4.2.4.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set containing the status report.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

2.4.2.4.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "[Max9NumericText](#)" on page 608

2.4.2.4.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

2.4.2.4.4 Content <Cntt>

Presence: [1..1]

Definition: Content of the status report.

Content <Cntt> contains the following **StatusReportContent14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpld>	[0..*]	Text		19
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtnProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrtctdDlgtnProof>	[0..1]	±		22
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		22

2.4.2.4.4.1 POICapabilities <POICpblties>

Presence: [0..1]

Definition: Capabilities of the POI (Point Of Interaction) performing the status report.

POICapabilities <POICpblties> contains the following elements (see "[PointOfInteractionCapabilities9](#)" on page 395 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		396
	CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>	[0..*]	CodeSet		397
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		397
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		397
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		398
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		398
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		398
	MessageCapabilities <MsgCpblties>	[0..*]			398
	Destination <Dstn>	[1..*]	CodeSet		398
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		399
	NumberOfLines <NbOfLines>	[0..1]	Quantity		399
	LineWidth <LineWidth>	[0..1]	Quantity		399
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	399

2.4.2.4.4.2 POIComponent <POICmpnt>

Presence: [0..*]

Definition: Data related to a component of the POI (Point Of Interaction) performing the status report.

POIComponent <POICmpnt> contains the following elements (see "[PointOfInteractionComponent17](#)" on page 421 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		423
	SubTypeInfo <SubTplnf>	[0..1]	Text		424
	Identification <Id>	[1..1]			425
	ItemNumber <ItmNb>	[0..1]	Text		425
	ProviderIdentification <PrvdrId>	[0..1]	Text		425
	Identification <Id>	[0..1]	Text		425
	SerialNumber <SriNb>	[0..1]	Text		425
	Status <Sts>	[0..1]			425
	VersionNumber <VrsnNb>	[0..1]	Text		426
	Status <Sts>	[0..1]	CodeSet		426
	ExpiryDate <XpryDt>	[0..1]	Date		426
	StandardCompliance <StdCmplc>	[0..*]			426
	Identification <Id>	[1..1]	Text		426
	Version <Vrsn>	[1..1]	Text		427
	Issuer <Issr>	[1..1]	Text		427
	Characteristics <Chrtcs>	[0..1]			427
	Memory <Mmry>	[0..*]			428
	Identification <Id>	[1..1]	Text		429
	TotalSize <TtlSz>	[1..1]	Quantity		429
	FreeSize <FreeSz>	[1..1]	Quantity		429
	Unit <Unit>	[1..1]	CodeSet		429
	Communication <Com>	[0..*]			429
	CommunicationType <ComTp>	[1..1]	CodeSet		430
	RemoteParty <RmotPty>	[1..*]	CodeSet		431
	Active <Actv>	[1..1]	Indicator		431
	Parameters <Params>	[0..1]	±		431
	PhysicalInterface <PhysIntrfc>	[0..1]			432
	InterfaceName <IntrfcNm>	[1..1]	Text		432
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		432
	UserName <UsrNm>	[0..1]	Text		433

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccessCode <AccsCd>	[0..1]	Binary		433
	SecurityProfile <SctyPrfl>	[0..1]	Text		433
	AdditionalParameters <AddtlParams>	[0..1]	Binary		433
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		434
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		434
	SecurityElement <SctyElmt>	[0..*]	±		434
	Assessment <Assmnt>	[0..*]			435
	Type <Tp>	[1..1]	CodeSet		436
	Assigner <Assgnr>	[1..*]	Text		436
	DeliveryDate <DlrvyDt>	[0..1]	DateTime		436
	ExpirationDate <XprtnDt>	[0..1]	DateTime		436
	Number <Nb>	[1..1]	Text		436
	Package <Packg>	[0..*]			437
	PackageIdentification <PackgId>	[0..1]	±		437
	PackageLength <PackgLngh>	[0..1]	Quantity		437
	OffsetStart <OffsetStart>	[0..1]	Quantity		437
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		438
	PackageBlock <PackgBlck>	[0..*]			438
	Identification <Id>	[1..1]	Text		438
	Value <Val>	[0..1]	Binary		438
	ProtectedValue <PrctcdVal>	[0..1]	±		438
	Type <Tp>	[0..1]	Text		439
	ProbeValue <PrbVal>	[0..1]	Binary		439

2.4.2.4.4.3 POIGroupIdentification <POIGrpld>

Presence: [0..*]

Definition: Identifier assigned to a set of POI terminals performing some categories of transactions.

Datatype: "Max35Text" on page 605

2.4.2.4.4.4 AttendanceContext <AttndncCntxt>

Presence: [0..1]

Definition: Human attendance at the POI (Point Of Interaction) location during transactions.

Datatype: "AttendanceContext1Code" on page 552

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.
UATT	Unattended	Unattended payment, no attendant present.

2.4.2.4.4.5 POIDateTime <POIDtTm>

Presence: [1..1]

Definition: System date time of the point of interaction (POI) sending the status report.

Datatype: ["ISODateTime" on page 599](#)

2.4.2.4.4.6 DataSetRequired <DataSetReqrd>

Presence: [0..*]

Definition: Request the terminal management system to answer with the identified data set.

DataSetRequired <DataSetReqrd> contains the following **DataSetRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtmProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrctcdDlgtmProof>	[0..1]	±		22

2.4.2.4.4.6.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the required data set.

Identification <Id> contains the following elements (see ["DataSetIdentification11" on page 401](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

2.4.2.4.4.6.2 POIChallenge <POIChllng>

Presence: [0..1]

Definition: Point of interaction challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 541

2.4.2.4.4.6.3 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 541

2.4.2.4.4.6.4 SessionKey <SsnKey>

Presence: [0..1]

Definition: Temporary encryption key that the host will use for protecting keys to download.

SessionKey <SsnKey> contains the following elements (see "CryptographicKey18" on page 492 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		493
	AdditionalIdentification <AddtlId>	[0..1]	Binary		493
	Name <Nm>	[0..1]	Text		494
	SecurityProfile <SctyPrfl>	[0..1]	Text		494
	ItemNumber <ItmNb>	[0..1]	Text		494
	Version <Vrsn>	[1..1]	Text		494
	Type <Tp>	[0..1]	CodeSet		494
	Function <Fctn>	[0..*]	CodeSet		495
	ActivationDate <ActvtnDt>	[0..1]	DateTime		495
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		496
	KeyValue <KeyVal>	[0..1]	±		496
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			496
	Identification <Id>	[1..1]	Text		496
	Type <Tp>	[1..1]	CodeSet		496
	ProtectedComponentWithAuthorisedAccess <PrctcdCmpntWthAuthrsdAccs>	[0..*]	±		497
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		497
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			497
	Name <Nm>	[1..1]	Text		497
	Value <Val>	[0..1]	Text		498

2.4.2.4.4.6.5 DelegationProof <DlgtnProof>

Presence: [0..1]

Definition: Proof of delegation to be validated by the terminal manager receiving a status report from a new POI.

Datatype: "Max5000Binary" on page 542

2.4.2.4.4.6.6 ProtectedDelegationProof <PrctcdDlgtnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrctcdDlgtnProof> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

2.4.2.4.4.7 Event <Evt>

Presence: [0..*]

Definition: Result of an individual terminal management action by the point of interaction.

Event <Evt> contains the following elements (see "TMSEvent12" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TimeStamp <TmStmp>	[1..1]	DateTime		439
	Result <Rslt>	[1..1]	CodeSet		440
	ActionIdentification <ActnId>	[1..1]			441
	ActionType <ActnTp>	[1..1]	CodeSet		441
	DataSetIdentification <DataSetId>	[0..1]	±		441
	AdditionalErrorInformation <AddtlErrInf>	[0..1]	Text		442
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	Text		442
	DeviceResponse <DvcRspn>	[0..1]	±		442

2.4.2.4.4.8 Errors <Errs>

Presence: [0..*]

Definition: Error log of the point of interaction since the last status report.

Datatype: "Max140Text" on page 603

2.4.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on [page 509](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

3 catm.002.001.13 ManagementPlanReplacementV13

3.1 MessageDefinition Functionality

The ManagementPlanReplacement message is sent by a terminal manager to a POI to set maintenance actions to be performed.

Outline

The ManagementPlanReplacementV13 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Set of characteristics related to the transfer of the management plan.
- B. ManagementPlan
Sequence of terminal maintenance actions to be performed by a point of interaction (POI).
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

3.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <MgmtPlanRplcmnt>	[1..1]			
	Header <Hdr>	[1..1]			27
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		28
	FormatVersion <FrmtVrsn>	[1..1]	Text		28
	ExchangeIdentification <XchgId>	[1..1]	Quantity		28
	CreationDateTime <CreDtTm>	[1..1]	DateTime		28
	InitiatingParty <InitgPty>	[1..1]	±		28
	RecipientParty <RcptPty>	[0..1]	±		29
	Traceability <Tracblt>	[0..*]	±		29
	ManagementPlan <MgmtPlan>	[1..1]			30
	POIdentification <POId>	[0..1]	±		32
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		32
	DataSet <DataSet>	[1..1]			33
	Identification <Id>	[1..1]	±		35
	SequenceCounter <SeqCntr>	[0..1]	Text		35
	LastSequence <LastSeq>	[0..1]	Indicator		35
	Content <Cntt>	[0..1]			35
	TMChallenge <TMChllng>	[0..1]	Binary		37
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		37
	Action <Actn>	[1..*]			37
	Type <Tp>	[1..1]	CodeSet		38
	RemoteAccess <RmotAccs>	[0..1]	±		39
	Key <Key>	[0..*]			40
	KeyIdentification <KeyId>	[1..1]	Text		40
	KeyVersion <KeyVrsn>	[1..1]	Text		40
	SequenceNumber <SeqNb>	[0..1]	Quantity		40
	DerivationIdentification <DerivtnId>	[0..1]	Binary		40
	Type <Tp>	[0..1]	CodeSet		40
	Function <Fctn>	[0..*]	CodeSet		41
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		42

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	TMSProtocol <TMSPrctcol>	[0..1]	Text		42
	TMSProtocolVersion <TMSPrctcolVrsn>	[0..1]	Text		42
	DataSetIdentification <DataSetId>	[0..1]	±		42
	ComponentType <CmpntTp>	[0..*]	CodeSet		43
	DelegationScopeIdentification <DlgtNScpId>	[0..1]	Text		44
	DelegationScopeDefinition <DlgtNScpDef>	[0..1]	Binary		44
	DelegationProof <DlgtNProof>	[0..1]	Binary		44
	ProtectedDelegationProof <PrctcdDlgtNProof>	[0..1]	±		44
	Trigger <Trggr>	[1..1]	CodeSet		45
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		45
	ReTry <ReTry>	[0..1]	±		45
	TimeCondition <TmCond>	[0..1]	±		46
	TMChallenge <TMChllng>	[0..1]	Binary		46
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		46
	ErrorAction <ErrActn>	[0..*]	±		46
	AdditionalInformation <AddtlInf>	[0..*]	Binary		47
	MessageItem <Msgltn>	[0..*]	±		47
	DeviceRequest <DvcReq>	[0..1]	±		47
	SecurityTrailer <SctyTrlr>	[0..1]	±		52

3.3 Constraints

C1 ActiveCurrency

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

C2 ActiveOrHistoricCurrency

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

C3 AnyBIC

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

C4 Country

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

C5 IBAN

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

C6 IdentificationAndProxyGuideline

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

C7 IdentificationOrProxyPresenceRule

Identification must be present or Proxy must be present. Both may be present.

C8 OneElementPresenceRule

At least one of these subelements must be present.

C9 OneElementPresenceRule

At least one of these subelements must be present.

C10 OneElementPresenceRule

At least one of these subelements must be present.

C11 SupplementaryDataRule

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

C12 ValidationByTable

Must be a valid terrestrial language.

3.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

3.4.1 Header <Hdr>

Presence: [1..1]

Definition: Set of characteristics related to the transfer of the management plan.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		28
	FormatVersion <FrmtVrsn>	[1..1]	Text		28
	ExchangeIdentification <XchgId>	[1..1]	Quantity		28
	CreationDateTime <CreDtTm>	[1..1]	DateTime		28
	InitiatingParty <InitgPty>	[1..1]	±		28
	RecipientParty <RcptPty>	[0..1]	±		29
	Traceability <Tracblt>	[0..*]	±		29

3.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

3.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 607

3.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 600

3.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 599

3.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

3.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwr>	[1..1]	Text		319
	UTMNorthward <UTMNrthwr>	[1..1]	Text		320

3.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeIn <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

3.4.2 ManagementPlan <MgmtPlan>

Presence: [1..1]

Definition: Sequence of terminal maintenance actions to be performed by a point of interaction (POI).

ManagementPlan <MgmtPlan> contains the following **ManagementPlan13** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[0..1]	±		32
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		32
	DataSet <DataSet>	[1..1]			33
	Identification <Id>	[1..1]	±		35
	SequenceCounter <SeqCntr>	[0..1]	Text		35
	LastSequence <LastSeq>	[0..1]	Indicator		35
	Content <Cntt>	[0..1]			35
	TMChallenge <TMChllng>	[0..1]	Binary		37
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		37
	Action <Actn>	[1..*]			37
	Type <Tp>	[1..1]	CodeSet		38
	RemoteAccess <RmotAccs>	[0..1]	±		39
	Key <Key>	[0..*]			40
	KeyIdentification <KeyId>	[1..1]	Text		40
	KeyVersion <KeyVrsn>	[1..1]	Text		40
	SequenceNumber <SeqNb>	[0..1]	Quantity		40
	DerivationIdentification <DerivtnId>	[0..1]	Binary		40
	Type <Tp>	[0..1]	CodeSet		40
	Function <Fctn>	[0..*]	CodeSet		41
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		42
	TMSProtocol <TMSPrtcol>	[0..1]	Text		42
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		42
	DataSetIdentification <DataSetId>	[0..1]	±		42
	ComponentType <CmpntTp>	[0..*]	CodeSet		43
	DelegationScopelIdentification <DlgtnScpld>	[0..1]	Text		44
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		44
	DelegationProof <DlgtnProof>	[0..1]	Binary		44
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		44
	Trigger <Trggr>	[1..1]	CodeSet		45
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		45
	ReTry <ReTry>	[0..1]	±		45

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TimeCondition <TmCond>	[0..1]	±		46
	TMChallenge <TMChllng>	[0..1]	Binary		46
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		46
	ErrorAction <ErrActn>	[0..*]	±		46
	AdditionalInformation <AddtlInf>	[0..*]	Binary		47
	MessageItem <Msgltm>	[0..*]	±		47
	DeviceRequest <DvcReq>	[0..1]	±		47

3.4.2.1 POIIdentification <POIId>

Presence: [0..1]

Definition: Identification of the point of interaction (POI) for terminal management.

POIIdentification <POIId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

3.4.2.2 TerminalManagerIdentification <TermnlMgrId>

Presence: [1..1]

Definition: Identification of the terminal management system (TMS) sending the management plan.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

3.4.2.3 DataSet <DataSet>

Presence: [1..1]

Definition: Data set related to the sequence of actions to be performed by a point of interaction (POI).

DataSet <DataSet> contains the following **TerminalManagementDataSet34** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		35
	SequenceCounter <SeqCntr>	[0..1]	Text		35
	LastSequence <LastSeq>	[0..1]	Indicator		35
	Content <Cntt>	[0..1]			35
	TMChallenge <TMChllng>	[0..1]	Binary		37
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		37
	Action <Actn>	[1..*]			37
	Type <Tp>	[1..1]	CodeSet		38
	RemoteAccess <RmotAccs>	[0..1]	±		39
	Key <Key>	[0..*]			40
	KeyIdentification <KeyId>	[1..1]	Text		40
	KeyVersion <KeyVrsn>	[1..1]	Text		40
	SequenceNumber <SeqNb>	[0..1]	Quantity		40
	DerivationIdentification <DerivtnId>	[0..1]	Binary		40
	Type <Tp>	[0..1]	CodeSet		40
	Function <Fctn>	[0..*]	CodeSet		41
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		42
	TMSProtocol <TMSPrtcol>	[0..1]	Text		42
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		42
	DataSetIdentification <DataSetId>	[0..1]	±		42
	ComponentType <CmpntTp>	[0..*]	CodeSet		43
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		44
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		44
	DelegationProof <DlgtnProof>	[0..1]	Binary		44
	ProtectedDelegationProof <PrtctdDlgtnProof>	[0..1]	±		44
	Trigger <Trggr>	[1..1]	CodeSet		45
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		45
	ReTry <ReTry>	[0..1]	±		45
	TimeCondition <TmCond>	[0..1]	±		46
	TMChallenge <TMChllng>	[0..1]	Binary		46
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		46

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ErrorAction <ErrActn>	[0..*]	±		46
	AdditionalInformation <AddtlInf>	[0..*]	Binary		47
	MessageItem <Msgltn>	[0..*]	±		47
	DeviceRequest <DvcReq>	[0..1]	±		47

3.4.2.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set containing the management plan.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

3.4.2.3.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "[Max9NumericText](#)" on page 608

3.4.2.3.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

3.4.2.3.4 Content <Cntt>

Presence: [0..1]

Definition: Content of the management plan.

Content <Cntt> contains the following **ManagementPlanContent13** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMChallenge <TMChllng>	[0..1]	Binary		37
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		37
	Action <Actn>	[1..*]			37
	Type <Tp>	[1..1]	CodeSet		38
	RemoteAccess <RmotAccs>	[0..1]	±		39
	Key <Key>	[0..*]			40
	KeyIdentification <KeyId>	[1..1]	Text		40
	KeyVersion <KeyVrsn>	[1..1]	Text		40
	SequenceNumber <SeqNb>	[0..1]	Quantity		40
	DerivationIdentification <DerivtnId>	[0..1]	Binary		40
	Type <Tp>	[0..1]	CodeSet		40
	Function <Fctn>	[0..*]	CodeSet		41
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		42
	TMSProtocol <TMSPrtcol>	[0..1]	Text		42
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		42
	DataSetIdentification <DataSetId>	[0..1]	±		42
	ComponentType <CmpntTp>	[0..*]	CodeSet		43
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		44
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		44
	DelegationProof <DlgnProof>	[0..1]	Binary		44
	ProtectedDelegationProof <PrtctdDlgnProof>	[0..1]	±		44
	Trigger <Trgr>	[1..1]	CodeSet		45
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		45
	ReTry <ReTry>	[0..1]	±		45
	TimeCondition <TmCond>	[0..1]	±		46
	TMChallenge <TMChllng>	[0..1]	Binary		46
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		46
	ErrorAction <ErrActn>	[0..*]	±		46
	AdditionalInformation <AddtlInf>	[0..*]	Binary		47
	MessageItem <Msgltn>	[0..*]	±		47
	DeviceRequest <DvcReq>	[0..1]	±		47

3.4.2.3.4.1 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 541

3.4.2.3.4.2 KeyEnciphermentCertificate <KeyNcphrmntCert>

Presence: [0..*]

Definition: Certificate chain of an asymmetric encryption keys for the encryption of temporary transport key of the key to inject.

Datatype: "Max10KBinary" on page 540

3.4.2.3.4.3 Action <Actn>

Presence: [1..*]

Definition: Terminal management action to be performed by the point of interaction (POI).

Action <Actn> contains the following **TMSAction13** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		38
	RemoteAccess <RmotAccs>	[0..1]	±		39
	Key <Key>	[0..*]			40
	KeyIdentification <KeyId>	[1..1]	Text		40
	KeyVersion <KeyVrsn>	[1..1]	Text		40
	SequenceNumber <SeqNb>	[0..1]	Quantity		40
	DerivationIdentification <DerivtnId>	[0..1]	Binary		40
	Type <Tp>	[0..1]	CodeSet		40
	Function <Fctn>	[0..*]	CodeSet		41
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		42
	TMSProtocol <TMSPrtcol>	[0..1]	Text		42
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		42
	DataSetIdentification <DataSetId>	[0..1]	±		42
	ComponentType <CmpntTp>	[0..*]	CodeSet		43
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		44
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		44
	DelegationProof <DlgtnProof>	[0..1]	Binary		44
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		44
	Trigger <Trgg>	[1..1]	CodeSet		45
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		45
	ReTry <ReTry>	[0..1]	±		45
	TimeCondition <TmCond>	[0..1]	±		46
	TMChallenge <TMChllng>	[0..1]	Binary		46
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		46
	ErrorAction <ErrActn>	[0..*]	±		46
	AdditionalInformation <AddtlInf>	[0..*]	Binary		47
	MessageItem <Msgltn>	[0..*]	±		47
	DeviceRequest <DvcReq>	[0..1]	±		47

3.4.2.3.4.3.1 Type <Tp>

Presence: [1..1]

Definition: Types of action to be performed by a point of interaction (POI).

Datatype: "TerminalManagementAction5Code" on page 594

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

3.4.2.3.4.3.2 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Host access information.

RemoteAccess <RmotAccs> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

3.4.2.3.4.3.3 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		40
	KeyVersion <KeyVrsn>	[1..1]	Text		40
	SequenceNumber <SeqNb>	[0..1]	Quantity		40
	DerivationIdentification <DerivtnId>	[0..1]	Binary		40
	Type <Tp>	[0..1]	CodeSet		40
	Function <Fctn>	[0..*]	CodeSet		41

3.4.2.3.4.3.3.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 603

3.4.2.3.4.3.3.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 603

3.4.2.3.4.3.3.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 600

3.4.2.3.4.3.3.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

Definition: Identification used for derivation of a unique key from a master key provided for the data protection.

Datatype: "Min5Max16Binary" on page 542

3.4.2.3.4.3.3.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 563

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by

CodeName	Name	Definition
		the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).

3.4.2.3.4.3.3.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 571

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslatelInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).

CodeName	Name	Definition
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

3.4.2.3.4.3.4 TerminalManagerIdentification <TermnlMgrld>

Presence: [0..1]

Definition: Identification of the master terminal manager or the terminal manager with which the POI has to perform the action.

TerminalManagerIdentification <TermnlMgrld> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

3.4.2.3.4.3.5 TMSProtocol <TMSPrtcol>

Presence: [0..1]

Definition: TMS protocol to use for performing the maintenance action.

Datatype: "Max35Text" on page 605

3.4.2.3.4.3.6 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

Definition: Version of the TMS protocol to use to perform the maintenance action.

Datatype: "Max35Text" on page 605

3.4.2.3.4.3.7 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the action has to be performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification11](#)" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

3.4.2.3.4.3.8 ComponentType <CmpntTp>

Presence: [0..*]

Definition: Type of POI components to send in a status report.

Datatype: "[DataSetCategory20Code](#)" on page 565

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).

CodeName	Name	Definition
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
PROB	Probe	Probe used to monitor a feature on the POI.

3.4.2.3.4.3.9 DelegationScopelIdentification <DlgnScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 605

3.4.2.3.4.3.10 DelegationScopeDefinition <DlgnScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopelIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 541

3.4.2.3.4.3.11 DelegationProof <DlgnProof>

Presence: [0..1]

Definition: Contains the necessary information to secure the management of the Delegation. The format of this element is out of scope of this definition.

Datatype: "Max5000Binary" on page 542

3.4.2.3.4.3.12 ProtectedDelegationProof <PrctcdDlgnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtnProof> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

3.4.2.3.4.3.13 Trigger <Trggr>

Presence: [1..1]

Definition: Event on which the action has to be activated by the point of interaction (POI).

Datatype: "TerminalManagementActionTrigger1Code" on page 595

CodeName	Name	Definition
DATE	DateTime	Date and time trigger the terminal management action.
HOST	HostEvent	Acquirer triggers the terminal management action.
MANU	Manual	Acceptor triggers the terminal management action.
SALE	SaleEvent	Sale system triggers the terminal management action.

3.4.2.3.4.3.14 AdditionalProcess <AddtlPrc>

Presence: [0..*]

Definition: Additional process to perform before starting or after completing the action by the point of interaction (POI).

Datatype: "TerminalManagementAdditionalProcess1Code" on page 595

CodeName	Name	Definition
MANC	ManualConfirmation	Manual confirmation of the merchant before the terminal management action.
RCNC	Reconciliation	Acquirer reconciliation to be performed before the terminal management action.
RSRT	RestartSystem	Restart the system after performing the terminal management action.

3.4.2.3.4.3.15 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of the action fails.

ReTry <ReTry> contains the following elements (see "[ProcessRetry3](#)" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

3.4.2.3.4.3.16 TimeCondition <TmCond>

Presence: [0..1]

Definition: Date and time the action has to be performed.

TimeCondition <TmCond> contains the following elements (see "[ProcessTiming5](#)" on page 533 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		534
	StartTime <StartTm>	[0..1]	DateTime		534
	EndTime <EndTm>	[0..1]	DateTime		534
	Period <Prd>	[0..1]	Text		534
	MaximumNumber <MaxNb>	[0..1]	Quantity		534
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		534

3.4.2.3.4.3.17 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "[Max140Binary](#)" on page 541

3.4.2.3.4.3.18 KeyEnciphermentCertificate <KeyNcphrmntCert>

Presence: [0..*]

Definition: Certificate chain for the encryption of temporary transport key of the key to inject.

Datatype: "[Max10KBinary](#)" on page 540

3.4.2.3.4.3.19 ErrorAction <ErrActn>

Presence: [0..*]

Definition: Action to perform in case of error on the related action in progress.

ErrorAction <ErrActn> contains the following elements (see "[ErrorAction5](#)" on page 448 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRslt>	[1..*]	CodeSet		448
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		449

3.4.2.3.4.3.20 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information about the maintenance action.

Datatype: "Max3000Binary" on page 541

3.4.2.3.4.3.21 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see "MessageItemCondition2" on page 400 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		400
	Condition <Cond>	[1..1]	CodeSet		400
	Value <Val>	[0..*]	Text		400

3.4.2.3.4.3.22 DeviceRequest <DvcReq>

Presence: [0..1]

Definition: Information related to a device request of the POI.

DeviceRequest <DvcReq> contains the following elements (see "DeviceRequest8" on page 148 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	153
	Context <Cntxt>	[0..1]		C10	159
	PaymentContext <PmtCntxt>	[0..1]			162
	CardPresent <CardPres>	[0..1]	Indicator		162
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		162
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		163
	AttendanceContext <AttndncCntxt>	[0..1]	CodeSet		163
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		163
	TransactionChannel <TxChanl>	[0..1]	CodeSet		163
	BusinessArea <BizArea>	[0..1]	CodeSet		164
	AttendantMessageCapable <AttndntMsgCpbl>	[0..1]	Indicator		164
	AttendantLanguage <AttndntLang>	[0..1]	CodeSet	C14	164
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		165
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		165
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		166
	SaleContext <SaleCntxt>	[0..1]			166
	SaleIdentification <SaleId>	[0..1]	Text		167
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		167
	SaleReconciliationIdentification <SaleRcnclntId>	[0..1]	Text		168
	CashierIdentification <CshrlId>	[0..1]	Text		168
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	168
	ShiftNumber <ShftNb>	[0..1]	Text		168
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		168
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		168
	InvoiceNumber <InvcNb>	[0..1]	Text		168
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		169
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			169
	CommonName <CmonNm>	[1..1]	Text		169
	Address <Adr>	[0..1]	Text		169
	CountryCode <CtryCd>	[1..1]	CodeSet		169

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		169
	RegisteredIdentifier <Regldr>	[1..1]	Text		169
	SplitPayment <Spltpmt>	[0..1]	Indicator		170
	RemainingAmount <RmngAmt>	[0..1]	Amount		170
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		170
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		170
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		170
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		171
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		171
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	171
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		172
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		172
	SystemToNotify <SysToNtfy>	[0..1]	Text		172
	Debtor <Dbtr>	[0..1]	±		173
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	174
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		176
	DirectDebitContext <DrctDbtCntxt>	[0..1]			176
	Debtor <Dbtr>	[0..1]	±		177
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	178
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		179
	Creditor <Cdtr>	[0..1]	±		179
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	180
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		181
	MandateRelatedInformation <MndtRltdInf>	[1..1]			181
	MandateIdentification <Mndtld>	[1..1]	Text		182
	DateOfSignature <DtOfSgntr>	[0..1]	Date		182
	MandateImage <Mndtlmg>	[0..1]	Binary		182
	ProtectedMandateImage <PrctdMndtlmg>	[0..1]	±		182

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ServiceContent <SvcCntt>	[1..1]	CodeSet		182
	DisplayRequest <DispReq>	[0..1]			183
	DisplayOutput <DispOutpt>	[1..*]	±		183
	InputRequest <InptReq>	[0..1]			184
	DisplayOutput <DispOutpt>	[0..1]	±		185
	InputData <InptData>	[1..1]			186
	DeviceType <DvcTp>	[1..1]	CodeSet		187
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		187
	InputCommand <InptCmd>	[1..1]	CodeSet		188
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		189
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		189
	InputText <InptTxt>	[0..1]	±		189
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		190
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		190
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		190
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		191
	DisableCancelFlag <Dsb/CclFlg>	[0..1]	Indicator		191
	DisableCorrectFlag <Dsb/CrrctFlg>	[0..1]	Indicator		191
	DisableValidFlag <Dsb/VldFlg>	[0..1]	Indicator		191
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		191
	PrintRequest <PrtReq>	[0..1]			192
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		192
	ResponseMode <RspnMd>	[1..1]	CodeSet		192
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		193
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		193
	OutputContent <OutptCntt>	[1..1]	±		193
	PlayResourceRequest <PlayRsrcReq>	[0..1]			194
	ResponseMode <RspnMd>	[0..1]	CodeSet		195
	ResourceAction <RsrcActn>	[1..1]	CodeSet		195
	SoundVolume <SoundVol>	[0..1]	Rate		195
	DisplayResolution <DispRsltn>	[0..1]	Text		195

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Resource <Rsrc>	[0..1]			195
	ResourceType <RsrcTp>	[1..1]	CodeSet		196
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		196
	Language <Lang>	[0..1]	CodeSet	C14	196
	ResourceReference <RsrcRef>	[0..1]	Text		196
	TimingSlot <TmgSlot>	[0..1]	CodeSet		197
	SecureInputRequest <ScrInptReq>	[0..1]			197
	PINRequestType <PINReqTp>	[1..1]	CodeSet		197
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		198
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		198
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		198
	CardholderPIN <CrhdldrPIN>	[0..1]			198
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		198
	PINFormat <PINFrmt>	[1..1]	CodeSet		199
	AdditionalInput <AddtlInpt>	[0..1]	Text		199
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			199
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		200
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		200
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		201
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		201
	DisplayOutput <DispOutpt>	[0..1]	±		201
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			202
	Class <Clss>	[1..1]	Binary		202
	Instruction <Instr>	[1..1]	Binary		202
	Parameter1 <Param1>	[1..1]	Binary		202
	Parameter2 <Param2>	[1..1]	Binary		202
	Data <Data>	[0..1]	Binary		202
	ExpectedLength <XpctdLngth>	[0..1]	Binary		202
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			203
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		203
	DisplayOutput <DispOutpt>	[0..1]	±		203

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TransmissionRequest <TrnsmssnReq>	[0..1]			204
	DestinationAddress <DstnAdr>	[1..1]	±		204
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		205
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		205
	MessageToSend <MsgToSnd>	[1..1]	Binary		205
	InputNotification <InptNtfctn>	[0..1]			205
	ExchangeIdentification <XchglId>	[1..1]	Text		205
	OutputContent <OutptCntt>	[1..1]	±		206
	SupplementaryData <SplmtryData>	[0..*]	±	C13	206

3.4.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on page 509 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

4 catm.003.001.14 AcceptorConfigurationUpdateV14

4.1 MessageDefinition Functionality

The AcceptorConfigurationUpdate message is sent by a TM to a POI to update configurations.

Outline

The AcceptorConfigurationUpdateV14 MessageDefinition is composed of 3 MessageBuildingBlocks:

A. Header

Set of characteristics related to the transfer of the acceptor parameters.

B. AcceptorConfiguration

Acceptor configuration to be downloaded from the terminal management system.

C. SecurityTrailer

Trailer of the message containing a MAC or a digital signature.

4.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <AccptrCfgrnUpd>	[1..1]			
	Header <Hdr>	[1..1]			55
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		55
	FormatVersion <FrmtVrsn>	[1..1]	Text		55
	ExchangeIdentification <XchgId>	[1..1]	Quantity		56
	CreationDateTime <CreDtTm>	[1..1]	DateTime		56
	InitiatingParty <InitgPty>	[1..1]	±		56
	RecipientParty <RcptPty>	[0..1]	±		56
	Traceability <Tracblt>	[0..*]	±		57
	AcceptorConfiguration <AccptrCfgrn>	[1..1]			57
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		58
	POIGroupIdentification <POIGrpld>	[0..*]	Text		59
	DataSet <DataSet>	[1..*]			59
	Identification <Id>	[1..1]	±		60
	SequenceCounter <SeqCntr>	[0..1]	Text		60
	LastSequence <LastSeq>	[0..1]	Indicator		61
	POIIdentification <POIID>	[0..*]	±		61
	ConfigurationScope <CfgrnScp>	[0..1]	CodeSet		61
	Content <Cntt>	[1..1]		C1	61
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		62
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		62
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		63
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		66
	MerchantParameters <MrchntParams>	[0..*]	±		66
	TerminalParameters <TermnlParams>	[0..*]	±		67
	ApplicationParameters <ApplParams>	[0..*]	±		68
	HostCommunicationParameters <HstComParams>	[0..*]	±		69
	SecurityParameters <SctyParams>	[0..*]	±		70
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		71
	TerminalPackage <TermnlPackg>	[0..*]	±		71

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityTrailer <SctyTrlr>	[0..1]	±		72

4.3 Constraints

C1 OneElementPresenceRule

At least one of these subelements must be present.

4.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

4.4.1 Header <Hdr>

Presence: [1..1]

Definition: Set of characteristics related to the transfer of the acceptor parameters.

Header <Hdr> contains the following TMSHeader1 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		55
	FormatVersion <FrmtVrsn>	[1..1]	Text		55
	ExchangeIdentification <XchgId>	[1..1]	Quantity		56
	CreationDateTime <CreDtTm>	[1..1]	DateTime		56
	InitiatingParty <InitgPty>	[1..1]	±		56
	RecipientParty <RcptPty>	[0..1]	±		56
	Traceability <Tracblt>	[0..*]	±		57

4.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

4.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 607

4.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 600

4.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: "ISODatetime" on page 599

4.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

4.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrld>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrld>	[1..1]	Text		320

4.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "[Traceability8](#)" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

4.4.2 AcceptorConfiguration <AccptrCfgtn>

Presence: [1..1]

Definition: Acceptor configuration to be downloaded from the terminal management system.

AcceptorConfiguration <AcptrCfgtn> contains the following **AcceptorConfiguration14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		58
	POIGroupIdentification <POIGrpld>	[0..*]	Text		59
	DataSet <DataSet>	[1..*]			59
	Identification <Id>	[1..1]	±		60
	SequenceCounter <SeqCntr>	[0..1]	Text		60
	LastSequence <LastSeq>	[0..1]	Indicator		61
	POIIdentification <POIID>	[0..*]	±		61
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		61
	Content <Cntt>	[1..1]		C1	61
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		62
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		62
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		63
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		66
	MerchantParameters <MrchntParams>	[0..*]	±		66
	TerminalParameters <TermnlParams>	[0..*]	±		67
	ApplicationParameters <ApplParams>	[0..*]	±		68
	HostCommunicationParameters <HstComParams>	[0..*]	±		69
	SecurityParameters <SctyParams>	[0..*]	±		70
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		71
	TerminalPackage <TermnlPackg>	[0..*]	±		71

4.4.2.1 TerminalManagerIdentification <TermnlMgrld>

Presence: [1..1]

Definition: Identification of the terminal management system (TMS) sending the acceptor parameters.

TerminalManagerIdentification <TermnIMgrid> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

4.4.2.2 POIGroupIdentification <POIGrpid>

Presence: [0..*]

Definition: Identifier assigned to a set of POI terminals performing some categories of transactions.

Datatype: "Max35Text" on page 605

4.4.2.3 DataSet <DataSet>

Presence: [1..*]

Definition: Data set containing the acceptor parameters of a point of interaction (POI).

DataSet <DataSet> contains the following **AcceptorConfigurationDataSet6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		60
	SequenceCounter <SeqCntr>	[0..1]	Text		60
	LastSequence <LastSeq>	[0..1]	Indicator		61
	POIIdentification <POIID>	[0..*]	±		61
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		61
	Content <Cntt>	[1..1]		C1	61
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		62
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		62
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		63
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		66
	MerchantParameters <MrchntParams>	[0..*]	±		66
	TerminalParameters <TermnlParams>	[0..*]	±		67
	ApplicationParameters <AppIParams>	[0..*]	±		68
	HostCommunicationParameters <HstComParams>	[0..*]	±		69
	SecurityParameters <SctyParams>	[0..*]	±		70
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		71
	TerminalPackage <TermnlPackg>	[0..*]	±		71

4.4.2.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set transferred.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

4.4.2.3.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "Max9NumericText" on page 608

4.4.2.3.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

4.4.2.3.4 POIIdentification <POIID>

Presence: [0..*]

Definition: Identification of the point of interactions involved by the configuration data set.

POIIdentification <POIID> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

4.4.2.3.5 ConfigurationScope <CfgtnScp>

Presence: [0..1]

Definition: Scope of the configuration contained in the data set.

Datatype: "PartyType15Code" on page 577

CodeName	Name	Definition
PGRP	POIGroup	Configuration to apply to a subset of the whole POI system.
PSYS	POISystem	Configuration to apply to the whole POI system.
PSNG	SinglePOI	Configuration to apply to a single POI terminal.

4.4.2.3.6 Content <Cntt>

Presence: [1..1]

Definition: Content of the acceptor parameters.

Impacted by: C1 "OneElementPresenceRule"

Content <Cntt> contains the following **AcceptorConfigurationContent14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		62
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		62
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		63
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		66
	MerchantParameters <MrchntParams>	[0..*]	±		66
	TerminalParameters <TermnlParams>	[0..*]	±		67
	ApplicationParameters <ApplParams>	[0..*]	±		68
	HostCommunicationParameters <HstComParams>	[0..*]	±		69
	SecurityParameters <SctyParams>	[0..*]	±		70
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		71
	TerminalPackage <TermnlPackg>	[0..*]	±		71

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

4.4.2.3.6.1 ReplaceConfiguration <RplcCfgrn>

Presence: [0..1]

Definition: True if the whole configuration related to the terminal manager has to be replaced by the configuration included in the message content.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

4.4.2.3.6.2 TMSProtocolParameters <TMSPrtcolParams>

Presence: [0..*]

Definition: Configuration parameters of the TMS protocol between a POI and a terminal manager.

TMSProtocolParameters <TMSPrctcolParams> contains the following elements (see "TMSProtocolParameters7" on page 292 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		292
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		293
	ProtocolVersion <PrctcolVrsn>	[0..1]	Text		293
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		293
	Version <Vrsn>	[1..1]	Text		294
	ApplicationIdentification <Applld>	[0..*]	Text		294
	HostIdentification <Hstld>	[1..1]	Text		294
	POIIdentification <POIld>	[0..1]	Text		294
	InitiatingPartyIdentification <InitgPtyld>	[0..1]	Text		294
	RecipientPartyIdentification <RcptPtyld>	[0..1]	Text		294
	FileTransfer <FileTrf>	[0..1]	Indicator		295
	MessageItem <Msgltm>	[0..*]	±		295
	ExternallyTypeSupported <XtrnlyTpSprtd>	[0..*]	Text		295

4.4.2.3.6.3 AcquirerProtocolParameters <AcqrrPrctcolParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to an acquirer protocol.

AcquirerProtocolParameters <AcqrrPrtcolParams> contains the following elements (see "AcquirerProtocolParameters17" on page 257 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		260
	AcquirerIdentification <Acqrrld>	[1..*]	±		260
	Version <Vrsn>	[1..1]	Text		260
	ApplicationIdentification <Applld>	[0..*]	Text		260
	Host <Hst>	[0..*]			261
	HostIdentification <Hstld>	[1..1]	Text		261
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		261
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		262
	ExternallyTypeSupported <XtrnlyTpSprrtd>	[0..*]	Text		262
	OnLineTransaction <OnLineTx>	[0..1]			262
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		263
	BatchTransfer <BtchTrf>	[0..1]			263
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		264
	MaximumNumber <MaxNb>	[0..1]	Quantity		264
	MaximumAmount <MaxAmt>	[0..1]	Amount		265
	ReTry <ReTry>	[0..1]	±		265
	TimeCondition <TmCond>	[0..1]	±		265
	CompletionExchange <CmpltnXchg>	[0..1]			265
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		266
	MaximumNumber <MaxNb>	[0..1]	Quantity		266
	MaximumAmount <MaxAmt>	[0..1]	Amount		267
	ReTry <ReTry>	[0..1]	±		267
	TimeCondition <TmCond>	[0..1]	±		267
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		267
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		267
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		268
	OffLineTransaction <OffLineTx>	[0..1]			268
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		269
	BatchTransfer <BtchTrf>	[0..1]			269
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		270

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		271
	ReTry <ReTry>	[0..1]	±		271
	TimeCondition <TmCond>	[0..1]	±		271
	CompletionExchange <CmpltnXchg>	[0..1]			271
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		272
	MaximumNumber <MaxNb>	[0..1]	Quantity		272
	MaximumAmount <MaxAmt>	[0..1]	Amount		273
	ReTry <ReTry>	[0..1]	±		273
	TimeCondition <TmCond>	[0..1]	±		273
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		273
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		273
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		274
	ReconciliationExchange <RcncltnXchg>	[0..1]			274
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		274
	MaximumNumber <MaxNb>	[0..1]	Quantity		275
	MaximumAmount <MaxAmt>	[0..1]	Amount		275
	ReTry <ReTry>	[0..1]	±		275
	TimeCondition <TmCond>	[0..1]	±		275
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		276
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		276
	SplitTotals <SplTtls>	[0..1]	Indicator		276
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		276
	CompletionAdviceMandated <CmpltnAdvcmndtd>	[0..1]	Indicator		277
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		277
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		277
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		278
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		278
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		278
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		278
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		279

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageItem <MsgItm>	[0..*]	±		279
	ProtectCardData <PrctCardData>	[1..1]	Indicator		279
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		279
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		280

4.4.2.3.6.4 ServiceProviderParameters <SvcPrvdrParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a service provider.

ServiceProviderParameters <SvcPrvdrParams> contains the following elements (see "ServiceProviderParameters4" on page 310 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		311
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		311
	Version <Vrsn>	[1..1]	Text		311
	ApplicationIdentification <ApplId>	[0..*]	Text		311
	Host <Hst>	[0..*]			311
	HostIdentification <HstId>	[1..1]	Text		312
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		312
	ProtocolVersion <PrctlVrsn>	[0..1]	Text		313
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		313
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		313

4.4.2.3.6.5 MerchantParameters <MrchntParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the merchant.

MerchantParameters <MrchntParams> contains the following elements (see "MerchantConfigurationParameters6" on page 289 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		290
	MerchantIdentification <MrchntId>	[0..1]	Text		290
	Version <Vrsn>	[0..1]	Text		290
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		290
	Proxy <Prxy>	[0..1]			291
	Type <Tp>	[1..1]	CodeSet		291
	Access <Accs>	[1..1]	±		291
	OtherParametersLength <OthrParamsLngth>	[0..1]	Quantity		291
	OffsetStart <OffsetStart>	[0..1]	Quantity		292
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		292
	OtherParameters <OthrParams>	[0..1]	Binary		292

4.4.2.3.6.6 TerminalParameters <TermnlParams>

Presence: [0..*]

Definition: Manufacturer configuration parameters of the point of interaction.

TerminalParameters <TermnlParams> contains the following elements (see "PaymentTerminalParameters8" on page 280 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		280
	VendorIdentification <Vndrld>	[0..1]	Text		281
	Version <Vrsn>	[0..1]	Text		281
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		281
	ClockSynchronisation <ClckSynctn>	[0..1]			281
	POITimeZone <POITmZone>	[1..1]	Text		281
	SynchronisationServer <SynctnSvr>	[0..*]	±		281
	Delay <Dely>	[0..1]	Time		282
	TimeZoneLine <TmZoneLine>	[0..*]	Text		282
	LocalDateTime <LclDtTm>	[0..*]			282
	FromDateTime <FrDtTm>	[0..1]	DateTime		282
	ToDateTime <ToDtTm>	[0..1]	DateTime		283
	UTCOffset <UTCOffset>	[1..1]	Quantity		283
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		283
	OffsetStart <OffsetStart>	[0..1]	Quantity		283
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		283
	OtherParameters <OthrParams>	[0..1]	Binary		283

4.4.2.3.6.7 ApplicationParameters <ApplParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a payment application of the point of interaction.

ApplicationParameters <AppIParams> contains the following elements (see "ApplicationParameters13" on page 295 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		296
	ApplicationIdentification <ApplId>	[1..1]	Text		296
	Version <Vrsn>	[0..1]	Text		296
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		296
	ParametersLength <ParamsLngh>	[0..1]	Quantity		297
	OffsetStart <OffsetStart>	[0..1]	Quantity		297
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		297
	Parameters <Params>	[0..*]	Binary		297
	EncryptedParameters <NcrptdParams>	[0..1]	±		297

4.4.2.3.6.8 HostCommunicationParameters <HstComParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the communication with an acquirer host or a terminal manager host.

HostCommunicationParameters <HstComParams> contains the following elements (see "HostCommunicationParameter7" on page 303 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		304
	HostIdentification <Hstld>	[1..1]	Text		304
	Address <Adr>	[0..1]	±		305
	Key <Key>	[0..*]			305
	KeyIdentification <Keyld>	[1..1]	Text		305
	KeyVersion <KeyVrsn>	[1..1]	Text		306
	SequenceNumber <SeqNb>	[0..1]	Quantity		306
	DerivationIdentification <Derivtnld>	[0..1]	Binary		306
	Type <Tp>	[0..1]	CodeSet		306
	Function <Fctn>	[0..*]	CodeSet		306
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		307
	PhysicalInterface <PhysIntrfc>	[0..1]			308
	InterfaceName <IntrfcNm>	[1..1]	Text		308
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		308
	UserName <UsrNm>	[0..1]	Text		309
	AccessCode <AccsCd>	[0..1]	Binary		309
	SecurityProfile <SctyPrfl>	[0..1]	Text		309
	AdditionalParameters <AddtlParams>	[0..1]	Binary		309
	ExchangeMode <XchgMd>	[0..1]	CodeSet		310
	EncodingMode <NcodgMd>	[0..1]	CodeSet		310

4.4.2.3.6.9 SecurityParameters <SctyParams>

Presence: [0..*]

Definition: Point of interaction parameters related to the security of software application and application protocol.

SecurityParameters <SctyParams> contains the following elements (see "[SecurityParameters16](#)" on page 283 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		284
	Version <Vrsn>	[1..1]	Text		284
	POIChallenge <POIChllng>	[0..1]	Binary		284
	TMChallenge <TMChllng>	[0..1]	Binary		284
	SecurityElement <SctyElmt>	[0..*]	±		284

4.4.2.3.6.10 SaleToPOIParameters <SaleToPOIParams>

Presence: [0..*]

Definition: Parameters dedicated to protocols between a sale system and the POI.

SaleToPOIParameters <SaleToPOIParams> contains the following elements (see "[SaleToPOIProtocolParameter3](#)" on page 297 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		298
	MerchantIdentification <MrchntId>	[0..1]			298
	CommonName <CmonNm>	[1..1]	Text		299
	Address <Adr>	[0..1]	Text		299
	CountryCode <CtryCd>	[1..1]	CodeSet		299
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		299
	RegisteredIdentifier <Regldr>	[1..1]	Text		299
	Version <Vrsn>	[1..1]	Text		299
	HostIdentification <HstId>	[1..1]	Text		300
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		300
	SaleIdentification <SaleId>	[0..1]	Text		300
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		300
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		301
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		302
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		303
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		303

4.4.2.3.6.11 TerminalPackage <TermnIPackg>

Presence: [0..*]

Definition: Group of software packages to transfer to a group of POIComponent of the POI System.

TerminalPackage <TermnIPackg> contains the following elements (see "[TerminalPackageType5](#)" on page 285 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntld>	[0..*]			286
	ItemNumber <itmNb>	[0..1]	Text		286
	ProviderIdentification <PrvdrlId>	[0..1]	Text		287
	Identification <Id>	[0..1]	Text		287
	SerialNumber <SriNb>	[0..1]	Text		287
	Package <Packg>	[1..*]			287
	PackageIdentification <PackgId>	[0..1]	±		287
	PackageLength <PackgLngh>	[0..1]	Quantity		288
	OffsetStart <OffsetStart>	[0..1]	Quantity		288
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		288
	PackageBlock <PackgBlck>	[0..*]			288
	Identification <Id>	[1..1]	Text		289
	Value <Val>	[0..1]	Binary		289
	ProtectedValue <PrctcdVal>	[0..1]	±		289
	Type <Tp>	[0..1]	Text		289

4.4.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on page 509 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

5 catm.004.001.05 TerminalManagementRejectionV05

5.1 MessageDefinition Functionality

The TerminalManagementRejection message is sent by the terminal manager to reject a message request sent by an acceptor, to indicate that the received message could not be processed.

Outline

The TerminalManagementRejectionV05 MessageDefinition is composed of 2 MessageBuildingBlocks:

- A. Header
Rejection message management information.
- B. Reject
Information related to the reject.

5.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	<i>Message root <Document> <TermnlMgmtRjctn></i>	[1..1]			
	Header <Hdr>	[1..1]			74
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		74
	FormatVersion <FrmtVrsn>	[1..1]	Text		74
	ExchangeIdentification <XchgId>	[1..1]	Quantity		74
	CreationDateTime <CreDtTm>	[1..1]	DateTime		74
	InitiatingParty <InitgPty>	[1..1]	±		74
	RecipientParty <RcptPty>	[0..1]	±		75
	Traceability <Tracblt>	[0..*]	±		75
	Reject <Rjct>	[1..1]			76
	RejectReason <RjctRsn>	[1..1]	CodeSet		76
	AdditionalInformation <AddtlInf>	[0..1]	Text		77
	MessageInError <MsgInErr>	[0..1]	Binary		77

5.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

5.3.1 Header <Hdr>

Presence: [1..1]

Definition: Rejection message management information.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		74
	FormatVersion <FrmtVrsn>	[1..1]	Text		74
	Exchangeldentification <Xchgld>	[1..1]	Quantity		74
	CreationDateTime <CreDtTm>	[1..1]	DateTime		74
	InitiatingParty <InitgPty>	[1..1]	±		74
	RecipientParty <RcptPty>	[0..1]	±		75
	Traceability <Tracblt>	[0..*]	±		75

5.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

5.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 607

5.3.1.3 Exchangeldentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 600

5.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 599

5.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

5.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwr>	[1..1]	Text		319
	UTMNorthward <UTMNrthwr>	[1..1]	Text		320

5.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

5.3.2 Reject <Rjct>

Presence: [1..1]

Definition: Information related to the reject.

Reject <Rjct> contains the following **AcceptorRejection3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RejectReason <RjctRsn>	[1..1]	CodeSet		76
	AdditionalInformation <AddtlInf>	[0..1]	Text		77
	MessageInError <MsgInErr>	[0..1]	Binary		77

5.3.2.1 RejectReason <RjctRsn>

Presence: [1..1]

Definition: Reject reason of the request or the advice.

Datatype: "RejectReason2Code" on page 584

CodeName	Name	Definition
UNPR	UnableToProcess	Not possible to process the message, for instance the security module is unavailable, the hardware is unavailable, or there is a problem of resource.
IMSG	InvalidMessage	Invalid envelope of the message.
PARS	ParsingError	Invalid message: At least one of the data element or data structure is not present, the format, or the content of one data element or one data structure is not correct.
SECU	Security	Security error (for example an invalid key or an incorrect MAC value).
INTP	InitiatingParty	Invalid identification data for the sender.
RCPD	RecipientParty	Invalid identification data for the the receiver.
VERS	ProtocolVersion	Version of the protocol couldn't be supported by the recipient.

CodeName	Name	Definition
MSGT	MessageType	Type of message the recipient receives is unknow or unsupported.

5.3.2.2 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information related to the reject of the exchange.

Datatype: "Max500Text" on page 606

5.3.2.3 MessageInError <MsgInErr>

Presence: [0..1]

Definition: Original request that caused the recipient party to reject it.

Datatype: "Max100KBinary" on page 540

6 catm.005.001.11 MaintenanceDelegationRequestV11

6.1 MessageDefinition Functionality

The MaintenanceDelegationRequest message is sent by a terminal manager to the master terminal manager to request delegation of maintenance functions or maintenance operation on the terminal estate managed by the master terminal manager.

Outline

The MaintenanceDelegationRequestV11 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Information related to the protocol management.
- B. MaintenanceDelegationRequest
Information related to the request of maintenance delegations.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

6.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <MntncDlgtReq>	[1..1]			
	Header <Hdr>	[0..1]			81
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		82
	FormatVersion <FrmtVrsn>	[1..1]	Text		82
	ExchangeIdentification <XchgId>	[1..1]	Quantity		82
	CreationDateTime <CreDtTm>	[1..1]	DateTime		82
	InitiatingParty <InitgPty>	[1..1]	±		82
	RecipientParty <RcptPty>	[0..1]	±		83
	Traceability <Tracblt>	[0..*]	±		83
	MaintenanceDelegationRequest <MntncDlgtReq>	[1..1]			84
	TMIidentification <TMId>	[1..1]	±		86
	MasterTMIidentification <MstrTMId>	[0..1]	±		86
	TMDdateTime <TMDtTm>	[1..1]	DateTime		87
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		87
	RequestedDelegation <ReqdDlgtn>	[1..*]			87
	DelegationType <DlgtnTp>	[1..1]	CodeSet		89
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		89
	PartialDelegation <PrtlDlgtn>	[0..1]	Indicator		90
	POISubset <POISubset>	[0..*]	Text		90
	DelegatedAction <DlgtActn>	[0..1]	±	C8	90
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		92
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		92
	Certificate <Cert>	[0..*]	Binary		92
	POIIdentificationAssociation <POIIDAssocn>	[0..*]	±		92
	SymmetricKey <SmmtrcKey>	[0..*]			93
	KeyIdentification <KeyId>	[1..1]	Text		93
	KeyVersion <KeyVrsn>	[1..1]	Text		93
	SequenceNumber <SeqNb>	[0..1]	Quantity		93
	DerivationIdentification <DerivtnId>	[0..1]	Binary		93
	Type <Tp>	[0..1]	CodeSet		93

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Function <Fctn>	[0..*]	CodeSet		94
	ParameterDataSet <ParamDataSet>	[0..1]			95
	Identification <Id>	[1..1]	±		95
	SequenceCounter <SeqCntr>	[0..1]	Text		96
	LastSequence <LastSeq>	[0..1]	Indicator		96
	POIIdentification <POIID>	[0..*]	±		96
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		96
	Content <Cntt>	[1..1]		C12	97
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		97
	TMSProtocolParameters <TMSPrtolParams>	[0..*]	±		98
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		98
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		101
	MerchantParameters <MrchntParams>	[0..*]	±		101
	TerminalParameters <TermnlParams>	[0..*]	±		102
	ApplicationParameters <ApplParams>	[0..*]	±		103
	HostCommunicationParameters <HstComParams>	[0..*]	±		104
	SecurityParameters <SctyParams>	[0..*]	±		105
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		106
	TerminalPackage <TermnlPackg>	[0..*]	±		106
	SecurityTrailer <SctyTrlr>	[1..1]	±		107

6.3 Constraints

C1 ActiveCurrency

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

C2 ActiveOrHistoricCurrency

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

C3 AnyBIC

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

C4 Country

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

C5 IBAN

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

C6 IdentificationAndProxyGuideline

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

C7 IdentificationOrProxyPresenceRule

Identification must be present or Proxy must be present. Both may be present.

C8 OneElementPresenceRule

At least one of these subelements must be present.

C9 OneElementPresenceRule

At least one of these subelements must be present.

C10 OneElementPresenceRule

At least one of these subelements must be present.

C11 OneElementPresenceRule

At least one of these subelements must be present.

C12 OneElementPresenceRule

At least one of these subelements must be present.

C13 SupplementaryDataRule

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

C14 ValidationByTable

Must be a valid terrestrial language.

6.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

6.4.1 Header <Hdr>

Presence: [0..1]

Definition: Information related to the protocol management.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		82
	FormatVersion <FrmtVrsn>	[1..1]	Text		82
	ExchangeIdentification <XchgId>	[1..1]	Quantity		82
	CreationDateTime <CreDtTm>	[1..1]	DateTime		82
	InitiatingParty <InitgPty>	[1..1]	±		82
	RecipientParty <RcptPty>	[0..1]	±		83
	Traceability <Tracblt>	[0..*]	±		83

6.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 607

6.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 600

6.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 599

6.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

6.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwr>	[1..1]	Text		319
	UTMNorthward <UTMNrthwr>	[1..1]	Text		320

6.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

6.4.2 MaintenanceDelegationRequest <MntncDlgtNReq>

Presence: [1..1]

Definition: Information related to the request of maintenance delegations.

MaintenanceDelegationRequest <MntncDlgnReq> contains the following
MaintenanceDelegationRequest11 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMIdentification <TMId>	[1..1]	±		86
	MasterTMIdentification <MstrTMId>	[0..1]	±		86
	TMDateTime <TMDtTm>	[1..1]	DateTime		87
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		87
	RequestedDelegation <ReqdDlgn>	[1..*]			87
	DelegationType <DlgnTp>	[1..1]	CodeSet		89
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		89
	PartialDelegation <PrtlDlgn>	[0..1]	Indicator		90
	POISubset <POISubset>	[0..*]	Text		90
	DelegatedAction <DlgtActn>	[0..1]	±	C8	90
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		92
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		92
	Certificate <Cert>	[0..*]	Binary		92
	POIIdentificationAssociation <POIIDAssocn>	[0..*]	±		92
	SymmetricKey <SmmtrcKey>	[0..*]			93
	KeyIdentification <KeyId>	[1..1]	Text		93
	KeyVersion <KeyVrsn>	[1..1]	Text		93
	SequenceNumber <SeqNb>	[0..1]	Quantity		93
	DerivationIdentification <DerivtnId>	[0..1]	Binary		93
	Type <Tp>	[0..1]	CodeSet		93
	Function <Fctn>	[0..*]	CodeSet		94
	ParameterDataSet <ParamDataSet>	[0..1]			95
	Identification <Id>	[1..1]	±		95
	SequenceCounter <SeqCntr>	[0..1]	Text		96
	LastSequence <LastSeq>	[0..1]	Indicator		96
	POIIdentification <POIID>	[0..*]	±		96
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		96
	Content <Cntt>	[1..1]		C12	97
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		97
	TMSProtocolParameters <TMSPrctolParams>	[0..*]	±		98

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		98
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		101
	MerchantParameters <MrchntParams>	[0..*]	±		101
	TerminalParameters <TermnlParams>	[0..*]	±		102
	ApplicationParameters <ApplParams>	[0..*]	±		103
	HostCommunicationParameters <HstComParams>	[0..*]	±		104
	SecurityParameters <SctyParams>	[0..*]	±		105
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		106
	TerminalPackage <TermnlPackg>	[0..*]	±		106

6.4.2.1 TMIdentification <TMId>

Presence: [1..1]

Definition: Terminal manager identification.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

6.4.2.2 MasterTMIdentification <MstrTMId>

Presence: [0..1]

Definition: Master terminal manager identification.

MasterTMIdentification <MstrTMId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

6.4.2.3 TMDateTime <TMDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: "ISODatetime" on page 599

6.4.2.4 TMChallengeValue <TMChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: "Max140Binary" on page 541

6.4.2.5 RequestedDelegation <ReqdDlgn>

Presence: [1..*]

Definition: Information on the delegation of a maintenance action.

RequestedDelegation <ReqdDlgn> contains the following **MaintenanceDelegation19** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DelegationType <DlgnTp>	[1..1]	CodeSet		89
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		89
	PartialDelegation <PrtlDlgn>	[0..1]	Indicator		90
	POISubset <POISubset>	[0..*]	Text		90
	DelegatedAction <DlgtdActn>	[0..1]	±	C8	90
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		92
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		92
	Certificate <Cert>	[0..*]	Binary		92
	POIIdentificationAssociation <POIIDAssocn>	[0..*]	±		92
	SymmetricKey <SmmtrcKey>	[0..*]			93
	KeyIdentification <KeyId>	[1..1]	Text		93
	KeyVersion <KeyVrsn>	[1..1]	Text		93
	SequenceNumber <SeqNb>	[0..1]	Quantity		93
	DerivationIdentification <DerivtnId>	[0..1]	Binary		93
	Type <Tp>	[0..1]	CodeSet		93
	Function <Fctn>	[0..*]	CodeSet		94
	ParameterDataSet <ParamDataSet>	[0..1]			95
	Identification <Id>	[1..1]	±		95
	SequenceCounter <SeqCntr>	[0..1]	Text		96
	LastSequence <LastSeq>	[0..1]	Indicator		96
	POIIdentification <POIID>	[0..*]	±		96
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		96
	Content <Cntt>	[1..1]		C12	97
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		97
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		98
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		98
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		101
	MerchantParameters <MrchntParams>	[0..*]	±		101
	TerminalParameters <TermnlParams>	[0..*]	±		102
	ApplicationParameters <ApplParams>	[0..*]	±		103
	HostCommunicationParameters <HstComParams>	[0..*]	±		104

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityParameters <SctyParams>	[0..*]	±		105
	SaleToPOIPParameters <SaleToPOIPParams>	[0..*]	±		106
	TerminalPackage <TermnlPackg>	[0..*]	±		106

6.4.2.5.1 DelegationType <DlgtnTp>

Presence: [1..1]

Definition: Type of delegation action.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

6.4.2.5.2 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance service to be delegated.

Datatype: "DataSetCategory19Code" on page 564

CodeName	Name	Definition
ACQP	AcquirerProtocolParameters	Configuration parameters of the payment acquirer protocol.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
APSB	ApplicationParametersSubsetCreation	Creation of a subset of the configuration parameters of an application.
KDWL	KeyDownload	Download of cryptographic keys with the related information.
KMGT	KeyManagement	Activate, deactivate or revoke loaded cryptographic keys.
RPRT	Reporting	Reporting on activity, status and error of a point of interaction.
SWPK	SoftwareModule	Software module.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).

CodeName	Name	Definition
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
RPFL	ReportFile	Report file generated by the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
TPKG	TerminalPackages	Package (e.g. software library) related to a POIComponent or the POI System.

6.4.2.5.3 PartialDelegation <PrtlDlgtn>

Presence: [0..1]

Definition: Flag to indicate that the delegated maintenance must be performed on a subset of the terminal estate.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.2.5.4 POISubset <POISubset>

Presence: [0..*]

Definition: Subset of the terminal estate for the delegated actions, for instance for pilot or key deactivation). The subset may be expressed as a list of POI or terminal estate subset identifier.

Datatype: ["Max35Text"](#) on page 605

6.4.2.5.5 DelegatedAction <DlgtdActn>

Presence: [0..1]

Definition: Information for the MTM to build or include delegated actions in the management plan of the POI.

Impacted by: [C8 "OneElementPresenceRule"](#)

DelegatedAction <DlgtdActn> contains the following elements (see "[MaintenanceDelegateAction10](#)" on page 403 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PeriodicAction <PrdcActn>	[0..1]	Indicator		405
	TMRremoteAccess <TMRmotAccs>	[0..1]	±		405
	TMSProtocol <TMSPrtcol>	[0..1]	Text		406
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		406
	DataSetIdentification <DataSetId>	[0..1]	±		406
	ReTry <ReTry>	[0..1]	±		406
	AdditionalInformation <AddtlInf>	[0..*]	Binary		406
	Action <Actn>	[0..*]			406
	Type <Tp>	[1..1]	CodeSet		407
	RemoteAccess <RmotAccs>	[0..1]	±		408
	Key <Key>	[0..*]			409
	KeyIdentification <KeyId>	[1..1]	Text		409
	KeyVersion <KeyVrsn>	[1..1]	Text		409
	SequenceNumber <SeqNb>	[0..1]	Quantity		409
	DerivationIdentification <DerivtnId>	[0..1]	Binary		409
	Type <Tp>	[0..1]	CodeSet		409
	Function <Fctn>	[0..*]	CodeSet		410
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	±		411
	TMSProtocol <TMSPrtcol>	[0..1]	Text		411
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		411
	DataSetIdentification <DataSetId>	[0..1]	±		411
	ComponentType <CmpntTp>	[0..*]	CodeSet		412
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		413
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		413
	DelegationProof <DlgtnProof>	[0..1]	Binary		413
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		413
	Trigger <Trggr>	[1..1]	CodeSet		414
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		414
	ReTry <ReTry>	[0..1]	±		414
	TimeCondition <TmCond>	[0..1]	±		415

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMChallenge <TMChllng>	[0..1]	Binary		415
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		415
	ErrorAction <ErrActn>	[0..*]	±		415
	AdditionalInformation <AddtlInf>	[0..*]	Binary		416
	MessageItem <Msgltn>	[0..*]	±		416
	DeviceRequest <DvcReq>	[0..1]	±		416

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

6.4.2.5.6 DelegationScopeIdentification <DlgnScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 605

6.4.2.5.7 DelegationScopeDefinition <DlgnScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopeIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 541

6.4.2.5.8 Certificate <Cert>

Presence: [0..*]

Definition: Certificate path of the terminal manager.

Datatype: "Max10KBinary" on page 540

6.4.2.5.9 POIIdentificationAssociation <POIIdAssoctn>

Presence: [0..*]

Definition: Association of the TM identifier and the MTM identifier of a POI.

POIIdentificationAssociation <POIIdAssoctn> contains the following elements (see "MaintenanceIdentificationAssociation1" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		401
	TMIdentification <TMId>	[1..1]	Text		401

6.4.2.5.10 SymmetricKey <SmmtrcKey>

Presence: [0..*]

Definition: Identification of the key to manage or to download.

SymmetricKey <SmmtrcKey> contains the following **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		93
	KeyVersion <KeyVrsn>	[1..1]	Text		93
	SequenceNumber <SeqNb>	[0..1]	Quantity		93
	DerivationIdentification <DerivtnId>	[0..1]	Binary		93
	Type <Tp>	[0..1]	CodeSet		93
	Function <Fctn>	[0..*]	CodeSet		94

6.4.2.5.10.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 603

6.4.2.5.10.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 603

6.4.2.5.10.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 600

6.4.2.5.10.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

Definition: Identification used for derivation of a unique key from a master key provided for the data protection.

Datatype: "Min5Max16Binary" on page 542

6.4.2.5.10.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 563

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by

CodeName	Name	Definition
		the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).

6.4.2.5.10.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 571

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslatelInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).

CodeName	Name	Definition
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

6.4.2.5.11 ParameterDataSet <ParamDataSet>

Presence: [0..1]

Definition: Configuration parameters of the terminal manager to be sent by the MTM.

ParameterDataSet <ParamDataSet> contains the following **AcceptorConfigurationDataSet6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		95
	SequenceCounter <SeqCntr>	[0..1]	Text		96
	LastSequence <LastSeq>	[0..1]	Indicator		96
	POIIDentification <POIID>	[0..*]	±		96
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		96
	Content <Cntt>	[1..1]		C12	97
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		97
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		98
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		98
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		101
	MerchantParameters <MrchntParams>	[0..*]	±		101
	TerminalParameters <TermnlParams>	[0..*]	±		102
	ApplicationParameters <ApplParams>	[0..*]	±		103
	HostCommunicationParameters <HstComParams>	[0..*]	±		104
	SecurityParameters <SctyParams>	[0..*]	±		105
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		106
	TerminalPackage <TermnlPackg>	[0..*]	±		106

6.4.2.5.11.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set transferred.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

6.4.2.5.11.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "[Max9NumericText](#)" on page 608

6.4.2.5.11.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.2.5.11.4 POIdentification <POId>

Presence: [0..*]

Definition: Identification of the point of interactions involved by the configuration data set.

POIdentification <POId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

6.4.2.5.11.5 ConfigurationScope <CfgtnScp>

Presence: [0..1]

Definition: Scope of the configuration contained in the data set.

Datatype: "[PartyType15Code](#)" on page 577

CodeName	Name	Definition
PGRP	POIGroup	Configuration to apply to a subset of the whole POI system.
PSYS	POISystem	Configuration to apply to the whole POI system.
PSNG	SinglePOI	Configuration to apply to a single POI terminal.

6.4.2.5.11.6 Content <Cntt>

Presence: [1..1]

Definition: Content of the acceptor parameters.

Impacted by: C12 "OneElementPresenceRule"

Content <Cntt> contains the following **AcceptorConfigurationContent14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		97
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		98
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		98
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		101
	MerchantParameters <MrchntParams>	[0..*]	±		101
	TerminalParameters <TermnlParams>	[0..*]	±		102
	ApplicationParameters <AppIParams>	[0..*]	±		103
	HostCommunicationParameters <HstComParams>	[0..*]	±		104
	SecurityParameters <SctyParams>	[0..*]	±		105
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		106
	TerminalPackage <TermnlPackg>	[0..*]	±		106

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

6.4.2.5.11.6.1 ReplaceConfiguration <RplcCfgrn>

Presence: [0..1]

Definition: True if the whole configuration related to the terminal manager has to be replaced by the configuration included in the message content.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.2.5.11.6.2 TMSProtocolParameters <TMSPrctlParams>

Presence: [0..*]

Definition: Configuration parameters of the TMS protocol between a POI and a terminal manager.

TMSProtocolParameters <TMSPrctlParams> contains the following elements (see "TMSProtocolParameters7" on page 292 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		292
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		293
	ProtocolVersion <PrctlVrsn>	[0..1]	Text		293
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		293
	Version <Vrsn>	[1..1]	Text		294
	ApplicationIdentification <Applld>	[0..*]	Text		294
	HostIdentification <Hstld>	[1..1]	Text		294
	POIIdentification <POIld>	[0..1]	Text		294
	InitiatingPartyIdentification <InitgPtyld>	[0..1]	Text		294
	RecipientPartyIdentification <RcptPtyld>	[0..1]	Text		294
	FileTransfer <FileTrf>	[0..1]	Indicator		295
	MessageItem <Msgltn>	[0..*]	±		295
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		295

6.4.2.5.11.6.3 AcquirerProtocolParameters <AcqrrPrctlParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to an acquirer protocol.

AcquirerProtocolParameters <AcqrrPrtcolParams> contains the following elements (see "AcquirerProtocolParameters17" on page 257 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		260
	AcquirerIdentification <Acqrrld>	[1..*]	±		260
	Version <Vrsn>	[1..1]	Text		260
	ApplicationIdentification <Applld>	[0..*]	Text		260
	Host <Hst>	[0..*]			261
	HostIdentification <Hstld>	[1..1]	Text		261
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		261
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		262
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		262
	OnLineTransaction <OnLineTx>	[0..1]			262
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		263
	BatchTransfer <BtchTrf>	[0..1]			263
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		264
	MaximumNumber <MaxNb>	[0..1]	Quantity		264
	MaximumAmount <MaxAmt>	[0..1]	Amount		265
	ReTry <ReTry>	[0..1]	±		265
	TimeCondition <TmCond>	[0..1]	±		265
	CompletionExchange <CmpltnXchg>	[0..1]			265
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		266
	MaximumNumber <MaxNb>	[0..1]	Quantity		266
	MaximumAmount <MaxAmt>	[0..1]	Amount		267
	ReTry <ReTry>	[0..1]	±		267
	TimeCondition <TmCond>	[0..1]	±		267
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		267
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		267
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		268
	OffLineTransaction <OffLineTx>	[0..1]			268
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		269
	BatchTransfer <BtchTrf>	[0..1]			269
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		270

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		271
	ReTry <ReTry>	[0..1]	±		271
	TimeCondition <TmCond>	[0..1]	±		271
	CompletionExchange <CmpltnXchg>	[0..1]			271
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		272
	MaximumNumber <MaxNb>	[0..1]	Quantity		272
	MaximumAmount <MaxAmt>	[0..1]	Amount		273
	ReTry <ReTry>	[0..1]	±		273
	TimeCondition <TmCond>	[0..1]	±		273
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		273
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		273
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		274
	ReconciliationExchange <RcncltnXchg>	[0..1]			274
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		274
	MaximumNumber <MaxNb>	[0..1]	Quantity		275
	MaximumAmount <MaxAmt>	[0..1]	Amount		275
	ReTry <ReTry>	[0..1]	±		275
	TimeCondition <TmCond>	[0..1]	±		275
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		276
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		276
	SplitTotals <SplTtls>	[0..1]	Indicator		276
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		276
	CompletionAdviceMandated <CmpltnAdvcMndtd>	[0..1]	Indicator		277
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		277
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		277
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		278
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		278
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		278
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		278
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		279

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageItem <MsgItm>	[0..*]	±		279
	ProtectCardData <PrctCardData>	[1..1]	Indicator		279
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		279
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		280

6.4.2.5.11.6.4 ServiceProviderParameters <SvcPrvdrParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a service provider.

ServiceProviderParameters <SvcPrvdrParams> contains the following elements (see "[ServiceProviderParameters4](#)" on page 310 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		311
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		311
	Version <Vrsn>	[1..1]	Text		311
	ApplicationIdentification <ApplId>	[0..*]	Text		311
	Host <Hst>	[0..*]			311
	HostIdentification <HstId>	[1..1]	Text		312
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		312
	ProtocolVersion <PrctlVrsn>	[0..1]	Text		313
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		313
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		313

6.4.2.5.11.6.5 MerchantParameters <MrchntParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the merchant.

MerchantParameters <MrchntParams> contains the following elements (see "MerchantConfigurationParameters6" on page 289 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		290
	MerchantIdentification <MrchntId>	[0..1]	Text		290
	Version <Vrsn>	[0..1]	Text		290
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		290
	Proxy <Prxy>	[0..1]			291
	Type <Tp>	[1..1]	CodeSet		291
	Access <Accs>	[1..1]	±		291
	OtherParametersLength <OthrParamsLngth>	[0..1]	Quantity		291
	OffsetStart <OffsetStart>	[0..1]	Quantity		292
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		292
	OtherParameters <OthrParams>	[0..1]	Binary		292

6.4.2.5.11.6.6 TerminalParameters <TermnlParams>

Presence: [0..*]

Definition: Manufacturer configuration parameters of the point of interaction.

TerminalParameters <TermnlParams> contains the following elements (see
"PaymentTerminalParameters8" on page 280 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		280
	VendorIdentification <Vndrld>	[0..1]	Text		281
	Version <Vrsn>	[0..1]	Text		281
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		281
	ClockSynchronisation <ClckSynctn>	[0..1]			281
	POITimeZone <POITmZone>	[1..1]	Text		281
	SynchronisationServer <SynctnSvr>	[0..*]	±		281
	Delay <Dely>	[0..1]	Time		282
	TimeZoneLine <TmZoneLine>	[0..*]	Text		282
	LocalDateTime <LclDtTm>	[0..*]			282
	FromDateTime <FrDtTm>	[0..1]	DateTime		282
	ToDateTime <ToDtTm>	[0..1]	DateTime		283
	UTCOffset <UTCOffset>	[1..1]	Quantity		283
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		283
	OffsetStart <OffsetStart>	[0..1]	Quantity		283
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		283
	OtherParameters <OthrParams>	[0..1]	Binary		283

6.4.2.5.11.6.7 ApplicationParameters <ApplParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a payment application of the point of interaction.

ApplicationParameters <AppIParams> contains the following elements (see
"ApplicationParameters13" on page 295 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		296
	ApplicationIdentification <ApplId>	[1..1]	Text		296
	Version <Vrsn>	[0..1]	Text		296
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		296
	ParametersLength <ParamsLngh>	[0..1]	Quantity		297
	OffsetStart <OffsetStart>	[0..1]	Quantity		297
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		297
	Parameters <Params>	[0..*]	Binary		297
	EncryptedParameters <NcrptdParams>	[0..1]	±		297

6.4.2.5.11.6.8 HostCommunicationParameters <HstComParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the communication with an acquirer host or a terminal manager host.

HostCommunicationParameters <HstComParams> contains the following elements (see "HostCommunicationParameter7" on page 303 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		304
	HostIdentification <Hstld>	[1..1]	Text		304
	Address <Adr>	[0..1]	±		305
	Key <Key>	[0..*]			305
	KeyIdentification <Keyld>	[1..1]	Text		305
	KeyVersion <KeyVrsn>	[1..1]	Text		306
	SequenceNumber <SeqNb>	[0..1]	Quantity		306
	DerivationIdentification <Derivtnld>	[0..1]	Binary		306
	Type <Tp>	[0..1]	CodeSet		306
	Function <Fctn>	[0..*]	CodeSet		306
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		307
	PhysicalInterface <PhysIntrfc>	[0..1]			308
	InterfaceName <IntrfcNm>	[1..1]	Text		308
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		308
	UserName <UsrNm>	[0..1]	Text		309
	AccessCode <AccsCd>	[0..1]	Binary		309
	SecurityProfile <SctyPrfl>	[0..1]	Text		309
	AdditionalParameters <AddtlParams>	[0..1]	Binary		309
	ExchangeMode <XchgMd>	[0..1]	CodeSet		310
	EncodingMode <NcodgMd>	[0..1]	CodeSet		310

6.4.2.5.11.6.9 SecurityParameters <SctyParams>

Presence: [0..*]

Definition: Point of interaction parameters related to the security of software application and application protocol.

SecurityParameters <SctyParams> contains the following elements (see "[SecurityParameters16](#)" on page 283 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		284
	Version <Vrsn>	[1..1]	Text		284
	POIChallenge <POIChllng>	[0..1]	Binary		284
	TMChallenge <TMChllng>	[0..1]	Binary		284
	SecurityElement <SctyElmt>	[0..*]	±		284

6.4.2.5.11.6.10 SaleToPOIParameters <SaleToPOIParams>

Presence: [0..*]

Definition: Parameters dedicated to protocols between a sale system and the POI.

SaleToPOIParameters <SaleToPOIParams> contains the following elements (see "[SaleToPOIProtocolParameter3](#)" on page 297 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		298
	MerchantIdentification <MrchntId>	[0..1]			298
	CommonName <CmonNm>	[1..1]	Text		299
	Address <Adr>	[0..1]	Text		299
	CountryCode <CtryCd>	[1..1]	CodeSet		299
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		299
	RegisteredIdentifier <Regldr>	[1..1]	Text		299
	Version <Vrsn>	[1..1]	Text		299
	HostIdentification <HstId>	[1..1]	Text		300
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		300
	SaleIdentification <SaleId>	[0..1]	Text		300
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		300
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		301
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		302
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		303
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		303

6.4.2.5.11.6.11 TerminalPackage <TermnIPackg>

Presence: [0..*]

Definition: Group of software packages to transfer to a group of POIComponent of the POI System.

TerminalPackage <TermnIPackg> contains the following elements (see "[TerminalPackageType5](#)" on page 285 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntld>	[0..*]			286
	ItemNumber <itmNb>	[0..1]	Text		286
	ProviderIdentification <PrvdrlId>	[0..1]	Text		287
	Identification <Id>	[0..1]	Text		287
	SerialNumber <SriNb>	[0..1]	Text		287
	Package <Packg>	[1..*]			287
	PackageIdentification <PackgId>	[0..1]	±		287
	PackageLength <PackgLngh>	[0..1]	Quantity		288
	OffsetStart <OffsetStart>	[0..1]	Quantity		288
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		288
	PackageBlock <PackgBlck>	[0..*]			288
	Identification <Id>	[1..1]	Text		289
	Value <Val>	[0..1]	Binary		289
	ProtectedValue <PrctcdVal>	[0..1]	±		289
	Type <Tp>	[0..1]	Text		289

6.4.3 SecurityTrailer <SctyTrlr>

Presence: [1..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on page 509 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

7 **catm.006.001.08** **MaintenanceDelegationResponseV08**

7.1 **MessageDefinition Functionality**

The MaintenanceDelegationResponse message is sent by the master terminal manager to a terminal manager to provide the outcome of a maintenance delegation request.

Outline

The MaintenanceDelegationResponseV08 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Maintenance delegation response message management information.
- B. MaintenanceDelegationResponse
Information related to the request of maintenance delegations.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

7.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <MntncDlgnRspn>	[1..1]			
	Header <Hdr>	[1..1]			110
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		110
	FormatVersion <FrmtVrsn>	[1..1]	Text		110
	ExchangeIdentification <XchgId>	[1..1]	Quantity		110
	CreationDateTime <CreDtTm>	[1..1]	DateTime		110
	InitiatingParty <InitgPty>	[1..1]	±		110
	RecipientParty <RcptPty>	[0..1]	±		111
	Traceability <Tracblt>	[0..*]	±		111
	MaintenanceDelegationResponse <MntncDlgnRspn>	[1..1]			112
	TMIdentification <TMId>	[1..1]	±		112
	MasterTMIdentification <MstrTMId>	[0..1]	±		113
	TMDdateTime <TMDtTm>	[1..1]	DateTime		113
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		113
	DelegationResponse <DlgnRspn>	[1..*]			113
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		114
	Response <Rspn>	[1..1]	CodeSet		115
	ResponseReason <RspnRsn>	[0..1]	Text		115
	DelegationType <DlgnTp>	[1..1]	CodeSet		115
	POISubset <POISubset>	[0..*]	Text		115
	DelegationScopelidentification <DlgnScpld>	[0..1]	Text		116
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		116
	DelegationProof <DlgnProof>	[0..1]	Binary		116
	ProtectedDelegationProof <PrctcdDlgnProof>	[0..1]	±		116
	POIidentificationAssociation <POIIdAssoctn>	[0..*]	±		116
	SecurityTrailer <SctyTrlr>	[0..1]	±		117

7.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

7.3.1 Header <Hdr>

Presence: [1..1]

Definition: Maintenance delegation response message management information.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		110
	FormatVersion <FrmtVrsn>	[1..1]	Text		110
	Exchangeldentification <Xchgld>	[1..1]	Quantity		110
	CreationDateTime <CreDtTm>	[1..1]	DateTime		110
	InitiatingParty <InitgPty>	[1..1]	±		110
	RecipientParty <RcptPty>	[0..1]	±		111
	Traceability <Tracblt>	[0..*]	±		111

7.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

7.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 607

7.3.1.3 Exchangeldentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 600

7.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 599

7.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

7.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwr>	[1..1]	Text		319
	UTMNorthward <UTMNrthwr>	[1..1]	Text		320

7.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

7.3.2 MaintenanceDelegationResponse <MntncDlgtRspn>

Presence: [1..1]

Definition: Information related to the request of maintenance delegations.

MaintenanceDelegationResponse <MntncDlgtRspn> contains the following **MaintenanceDelegationResponse8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMIdentification <TMId>	[1..1]	±		112
	MasterTMIdentification <MstrTMId>	[0..1]	±		113
	TMDateTime <TMDtTm>	[1..1]	DateTime		113
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		113
	DelegationResponse <DlgtRspn>	[1..*]			113
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		114
	Response <Rspn>	[1..1]	CodeSet		115
	ResponseReason <RspnRsn>	[0..1]	Text		115
	DelegationType <DlgtTp>	[1..1]	CodeSet		115
	POISubset <POISubset>	[0..*]	Text		115
	DelegationScopeldentification <DlgtScpld>	[0..1]	Text		116
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		116
	DelegationProof <DlgtProof>	[0..1]	Binary		116
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		116
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		116

7.3.2.1 TMIdentification <TMId>

Presence: [1..1]

Definition: Terminal manager identification.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

7.3.2.2 MasterTMIdentification <MstrTMId>

Presence: [0..1]

Definition: Master terminal manager identification.

MasterTMIdentification <MstrTMId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

7.3.2.3 TMDateTime <TMDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: "[ISODatetime](#)" on page 599

7.3.2.4 TMChallengeValue <TMChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: "[Max140Binary](#)" on page 541

7.3.2.5 DelegationResponse <DlgtnRspn>

Presence: [1..*]

Definition: Information on the delegation of a maintenance action.

DelegationResponse <DlgtnRspn> contains the following **MaintenanceDelegation17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		114
	Response <Rspn>	[1..1]	CodeSet		115
	ResponseReason <RspnRsn>	[0..1]	Text		115
	DelegationType <DlgtnTp>	[1..1]	CodeSet		115
	POISubset <POISubset>	[0..*]	Text		115
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		116
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		116
	DelegationProof <DlgtnProof>	[0..1]	Binary		116
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		116
	POIIdentificationAssociation <POIIdAssoctn>	[0..*]	±		116

7.3.2.5.1 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance service to be delegated.

Datatype: "DataSetCategory19Code" on page 564

CodeName	Name	Definition
ACQP	AcquirerProtocolParameters	Configuration parameters of the payment acquirer protocol.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
APSB	ApplicationParametersSubsetCreation	Creation of a subset of the configuration parameters of an application.
KDWL	KeyDownload	Download of cryptographic keys with the related information.
KMGT	KeyManagement	Activate, deactivate or revoke loaded cryptographic keys.
RPRT	Reporting	Reporting on activity, status and error of a point of interaction.
SWPK	SoftwareModule	Software module.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.

CodeName	Name	Definition
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
RPFL	ReportFile	Report file generated by the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
TPKG	TerminalPackages	Package (e.g. software library) related to a POIComponent or the POI System.

7.3.2.5.2 Response <Rspn>

Presence: [1..1]

Definition: Response of the MTM to the delegation of the maintenance service.

Datatype: "Response2Code" on page 586

CodeName	Name	Definition
APPR	Approved	Service has been successfully provided.
DECL	Declined	Service is declined.

7.3.2.5.3 ResponseReason <RspnRsn>

Presence: [0..1]

Definition: Reason of the response of the MTM.

Datatype: "Max35Text" on page 605

7.3.2.5.4 DelegationType <DlgtTp>

Presence: [1..1]

Definition: Type of delegation action.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

7.3.2.5.5 POISubset <POISubset>

Presence: [0..*]

Definition: Subset of the terminal estate for the delegated actions, for instance for pilot or key deactivation). The subset may be expressed as a list of POI or terminal estate subset identifier.

Datatype: "Max35Text" on page 605

7.3.2.5.6 DelegationScopelIdentification <DlgtnScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 605

7.3.2.5.7 DelegationScopeDefinition <DlgtnScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopelIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 541

7.3.2.5.8 DelegationProof <DlgtnProof>

Presence: [0..1]

Definition: Contains the necessary information to secure the management of the Delegation. The format of this element is out of scope of this definition.

Datatype: "Max5000Binary" on page 542

7.3.2.5.9 ProtectedDelegationProof <PrtctdDlgtnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtnProof> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

7.3.2.5.10 POIIdentificationAssociation <POIIdAssoctn>

Presence: [0..*]

Definition: Association of the TM identifier and the MTM identifier of a POI.

POIIdentificationAssociation <POIIdAssoctn> contains the following elements (see "MaintenanceIdentificationAssociation1" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		401
	TMIdentification <TMId>	[1..1]	Text		401

7.3.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on [page 509](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

8 catm.007.001.07 CertificateManagementRequestV07

8.1 MessageDefinition Functionality

The CertificateManagementRequest message is sent by a POI terminal or any intermediary entity either to a terminal manager acting as a certificate authority for managing X.509 certificate of a public key owned by the initiating party, or for requesting the inclusion or the removal of the POI to a white list of the terminal manager.

Outline

The CertificateManagementRequestV07 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Information related to the protocol management.
- B. CertificateManagementRequest
Information related to the request of certificate management.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

8.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <CertMgmtReq>	[1..1]			
	Header <Hdr>	[1..1]			120
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		120
	FormatVersion <FrmtVrsn>	[1..1]	Text		121
	ExchangeIdentification <XchgId>	[1..1]	Quantity		121
	CreationDateTime <CreDtTm>	[1..1]	DateTime		121
	InitiatingParty <InitgPty>	[1..1]	±		121
	RecipientParty <RcptPty>	[0..1]	±		121
	Traceability <Tracblt>	[0..*]	±		122
	CertificateManagementRequest <CertMgmtReq>	[1..1]			122
	POIIdentification <POIID>	[1..1]	±		124
	TMIIdentification <TMID>	[0..1]	±		124
	CertificateService <CertSvc>	[1..1]	CodeSet		124
	SecurityDomain <SctyDomn>	[0..1]	Text		125
	KeyFunction <KeyFctn>	[0..*]	CodeSet		125
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		126
	POIDateTime <POIDtTm>	[1..1]	DateTime		126
	BinaryCertificationRequest <BinryCertfctnReq>	[0..1]	Text		126
	CertificationRequest <CertfctnReq>	[0..1]			126
	CertificateRequestInformation <CertReqInf>	[1..1]			127
	Version <Vrsn>	[0..1]	Quantity		128
	SubjectName <SbjtNm>	[0..1]			128
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129
	SubjectPublicKeyInformation <SbjtPblcKeyInf>	[1..1]			129
	Algorithm <Algo>	[0..1]	CodeSet		130
	PublicKeyValue <PblcKeyVal>	[1..1]			130
	Modulus <Mdlus>	[1..1]	Binary		130
	Exponent <Expnt>	[1..1]	Binary		130

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Attribute <Attr>	[1..*]			130
	AttributeType <AttrTp>	[1..1]	CodeSet		131
	AttributeValue <AttrVal>	[1..1]	Text		131
	KeyIdentification <KeyId>	[0..1]	Text		131
	KeyVersion <KeyVrsn>	[0..1]	Text		131
	ClientCertificate <ClntCert>	[0..1]	Binary		131
	WhiteListIdentification <WhtListId>	[0..1]			131
	ManufacturerIdentifier <Manfctrldr>	[1..1]	Text		132
	Model <Mdl>	[1..1]	Text		132
	SerialNumber <SrlNb>	[1..1]	Text		132
	SecurityTrailer <SctyTrlr>	[0..1]	±		132

8.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

8.3.1 Header <Hdr>

Presence: [1..1]

Definition: Information related to the protocol management.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		120
	FormatVersion <FrmtVrsn>	[1..1]	Text		121
	ExchangeIdentification <XchgId>	[1..1]	Quantity		121
	CreationDateTime <CreDtTm>	[1..1]	DateTime		121
	InitiatingParty <InitgPty>	[1..1]	±		121
	RecipientParty <RcptPty>	[0..1]	±		121
	Traceability <Tracblt>	[0..*]	±		122

8.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

8.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: "Max6Text" on page 607

8.3.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 600

8.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: "ISODatetime" on page 599

8.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

8.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrld>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrld>	[1..1]	Text		320

8.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "[Traceability8](#)" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

8.3.2 CertificateManagementRequest <CertMgmtReq>

Presence: [1..1]

Definition: Information related to the request of certificate management.

CertificateManagementRequest <CertMgmtReq> contains the following
CertificateManagementRequest3 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[1..1]	±		124
	TMIIdentification <TMID>	[0..1]	±		124
	CertificateService <CertSvc>	[1..1]	CodeSet		124
	SecurityDomain <SctyDomn>	[0..1]	Text		125
	KeyFunction <KeyFctn>	[0..*]	CodeSet		125
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		126
	POIDateTime <POIDtTm>	[1..1]	DateTime		126
	BinaryCertificationRequest <BinryCertfctnReq>	[0..1]	Text		126
	CertificationRequest <CertfctnReq>	[0..1]			126
	CertificateRequestInformation <CertReqInf>	[1..1]			127
	Version <Vrsn>	[0..1]	Quantity		128
	SubjectName <SbjtNm>	[0..1]			128
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129
	SubjectPublicKeyInformation <SbjtPbkcKeyInf>	[1..1]			129
	Algorithm <Algo>	[0..1]	CodeSet		130
	PublicKeyValue <PbkcKeyVal>	[1..1]			130
	Modulus <Mdlus>	[1..1]	Binary		130
	Exponent <Expnt>	[1..1]	Binary		130
	Attribute <Attr>	[1..*]			130
	AttributeType <AttrTp>	[1..1]	CodeSet		131
	AttributeValue <AttrVal>	[1..1]	Text		131
	KeyIdentification <KeyId>	[0..1]	Text		131
	KeyVersion <KeyVrsn>	[0..1]	Text		131
	ClientCertificate <ClntCert>	[0..1]	Binary		131
	WhiteListIdentification <WhlListId>	[0..1]			131
	ManufacturerIdentifier <Manfctrlr>	[1..1]	Text		132
	Model <Mdl>	[1..1]	Text		132
	SerialNumber <SrlNb>	[1..1]	Text		132

8.3.2.1 POIdentification <POId>

Presence: [1..1]

Definition: Identification of the terminal or system using the certificate management service.

POIdentification <POId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

8.3.2.2 TMIdentification <TMId>

Presence: [0..1]

Definition: Identification of the TM or the MTM providing the Certificate Authority service.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

8.3.2.3 CertificateService <CertSvc>

Presence: [1..1]

Definition: Requested certificate management service.

Datatype: "[CardPaymentServiceType10Code](#)" on page 561

CodeName	Name	Definition
CRTC	CreateCertificate	Creation of an X.509 certificate with the public key and the information of the owner of the asymmetric key provided by the requestor.
CRTR	RenewCerificate	Renewal of an X.509 certificate, protected by the certificate to renew.
CRTK	RevokeCertificate	Revocation of an active X.509 certificate.

CodeName	Name	Definition
WLSR	RemoveWhiteList	Remove a POI from the white list of the terminal manager.
WLSA	AddWhiteList	Add a POI in the white list of the terminal manager.

8.3.2.4 SecurityDomain <SctyDomn>

Presence: [0..1]

Definition: Identification of the client and server public key infrastructures containing the certificate. In addition, it may identify specific requirements of the customer.

Datatype: "Max70Text" on page 607

8.3.2.5 KeyFunction <KeyFctn>

Presence: [0..*]

Definition: Identifies type of function that could be used with the Key.

Datatype: "KeyUsage1Code" on page 571

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslatelInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

8.3.2.6 POIChallengeValue <POIChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: "Max140Binary" on page 541

8.3.2.7 POIDateTime <POIDtTm>

Presence: [1..1]

Definition: Date and Time of the POI.

Datatype: "ISODateTime" on page 599

8.3.2.8 BinaryCertificationRequest <BinryCertfctnReq>

Presence: [0..1]

Definition: PKCS#10 (Public Key Certificate Standard 10) certification request coded in base64 ASN.1/DER (Abstract Syntax Notation 1, Distinguished Encoding Rules) or PEM (Privacy Enhanced Message) format.

Datatype: "Max20000Text" on page 604

8.3.2.9 CertificationRequest <CertfctnReq>

Presence: [0..1]

Definition: Certification request PKCS#10 (Public Key Certificate Standard 10) for creation or renewal of an X.509 certificate.

CertificationRequest <CertfctnReq> contains the following **CertificationRequest1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CertificateRequestInformation <CertReqInf>	[1..1]			127
	Version <Vrsn>	[0..1]	Quantity		128
	SubjectName <SbjtNm>	[0..1]			128
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129
	SubjectPublicKeyInformation <SbjtPbkcKeyInf>	[1..1]			129
	Algorithm <Algo>	[0..1]	CodeSet		130
	PublicKeyValue <PbkcKeyVal>	[1..1]			130
	Modulus <Mdlus>	[1..1]	Binary		130
	Exponent <Expnt>	[1..1]	Binary		130
	Attribute <Attr>	[1..*]			130
	AttributeType <AttrTp>	[1..1]	CodeSet		131
	AttributeValue <AttrVal>	[1..1]	Text		131
	KeyIdentification <KeyId>	[0..1]	Text		131
	KeyVersion <KeyVrsn>	[0..1]	Text		131

8.3.2.9.1 CertificateRequestInformation <CertReqInf>

Presence: [1..1]

Definition: Information of the certificate to create.

CertificateRequestInformation <CertReqInf> contains the following **CertificationRequest2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		128
	SubjectName <SbjtNm>	[0..1]			128
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129
	SubjectPublicKeyInformation <SbjtPblcKeyInf>	[1..1]			129
	Algorithm <Algo>	[0..1]	CodeSet		130
	PublicKeyValue <PblcKeyVal>	[1..1]			130
	Modulus <Mdlus>	[1..1]	Binary		130
	Exponent <Expnt>	[1..1]	Binary		130
	Attribute <Attr>	[1..*]			130
	AttributeType <AttrTp>	[1..1]	CodeSet		131
	AttributeValue <AttrVal>	[1..1]	Text		131

8.3.2.9.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the certificate request information data structure.

Datatype: "Number" on page 600

8.3.2.9.1.2 SubjectName <SbjtNm>

Presence: [0..1]

Definition: Distinguished name of the certificate subject, the entity whose public key is to be certified.

SubjectName <SbjtNm> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129

8.3.2.9.1.2.1 RelativeDistinguishedName <RltvDstngshdNm>

Presence: [1..*]

Definition: Relative distinguished name inside a X.509 certificate.

RelativeDistinguishedName <RltvDstngshdNm> contains the following
RelativeDistinguishedName1 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129

8.3.2.9.1.2.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 553

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

8.3.2.9.1.2.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 603

8.3.2.9.1.3 SubjectPublicKeyInformation <SbjtPblicKeyInf>

Presence: [1..1]

Definition: Information about the public key being certified.

SubjectPublicKeyInformation <SbjtPblicKeyInf> contains the following **PublicRSAKey2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[0..1]	CodeSet		130
	PublicKeyValue <PblicKeyVal>	[1..1]			130
	Modulus <Mdlus>	[1..1]	Binary		130
	Exponent <Expnt>	[1..1]	Binary		130

8.3.2.9.1.3.1 Algorithm <Algo>

Presence: [0..1]

Definition: Asymmetric cryptographic algorithm.

Datatype: "Algorithm7Code" on page 552

CodeName	Name	Definition
ERSA	RSAEncryption	RSA encryption algorithm - (ASN.1 Object Identifier: rsaEncryption).
RSAO	RSAES-OAEP	RSA encryption scheme based on Optimal Asymmetric Encryption scheme (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-RSAES-OAEP).

8.3.2.9.1.3.2 PublicKeyValue <PblcKeyVal>

Presence: [1..1]

Definition: Public key value.

PublicKeyValue <PblcKeyVal> contains the following **PublicRSAKey1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Modulus <Mdlus>	[1..1]	Binary		130
	Exponent <Expnt>	[1..1]	Binary		130

8.3.2.9.1.3.2.1 Modulus <Mdlus>

Presence: [1..1]

Definition: Modulus of the RSA key.

Datatype: "Max5000Binary" on page 542

8.3.2.9.1.3.2.2 Exponent <Expnt>

Presence: [1..1]

Definition: Public exponent of the RSA key.

Datatype: "Max5000Binary" on page 542

8.3.2.9.1.4 Attribute <Attr>

Presence: [1..*]

Definition: Attribute of the certificate service to be put in the certificate extensions, or to be used for the request.

Attribute <Attr> contains the following **RelativeDistinguishedName2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		131
	AttributeValue <AttrVal>	[1..1]	Text		131

8.3.2.9.1.4.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType2Code" on page 553

CodeName	Name	Definition
EMAL	EmailAddress	Email address of the certificate subject.
CHLG	ChallengePassword	Password by which an entity may request certificate revocation.

8.3.2.9.1.4.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 603

8.3.2.9.2 KeyIdentification <KeyId>

Presence: [0..1]

Definition: Identification of the key.

Datatype: "Max140Text" on page 603

8.3.2.9.3 KeyVersion <KeyVrsn>

Presence: [0..1]

Definition: Version of the key.

Datatype: "Max140Text" on page 603

8.3.2.10 ClientCertificate <CIntCert>

Presence: [0..1]

Definition: Created certificate. The certificate is ASN.1/DER encoded, for renewal or revocation of certificate.

Datatype: "Max10KBinary" on page 540

8.3.2.11 WhiteListIdentification <WhtListId>

Presence: [0..1]

Definition: Identification of the white list element, for white list addition or removal.

WhiteListIdentification <WhtListId> contains the following **PointOfInteraction6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ManufacturerIdentifier <ManfctrId>	[1..1]	Text		132
	Model <Mdl>	[1..1]	Text		132
	SerialNumber <SrINb>	[1..1]	Text		132

8.3.2.11.1 ManufacturerIdentifier <Manfctrldr>

Presence: [1..1]

Definition: Identifier of the terminal manufacturer.

Datatype: "Max35Text" on page 605

8.3.2.11.2 Model <Mdl>

Presence: [1..1]

Definition: Identifier of the terminal model.

Datatype: "Max35Text" on page 605

8.3.2.11.3 SerialNumber <SrINb>

Presence: [1..1]

Definition: Serial number of the terminal manufacturer.

Datatype: "Max35Text" on page 605

8.3.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "ContentInformationType38" on page 509 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

9 catm.008.001.07 CertificateManagementResponseV07

9.1 MessageDefinition Functionality

The CertificateManagementResponse is sent by a terminal manager in response to a CertificateManagementRequest to provide the outcome of the requested service.

Outline

The CertificateManagementResponseV07 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Information related to the protocol management.
- B. CertificateManagementResponse
Information related to the result of the certificate management request.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

9.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <CertMgmtRspn>	[1..1]			
	Header <Hdr>	[1..1]			134
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		135
	FormatVersion <FrmtVrsn>	[1..1]	Text		135
	ExchangeIdentification <XchgId>	[1..1]	Quantity		135
	CreationDateTime <CreDtTm>	[1..1]	DateTime		135
	InitiatingParty <InitgPty>	[1..1]	±		135
	RecipientParty <RcptPty>	[0..1]	±		136
	Traceability <Tracblt>	[0..*]	±		136
	CertificateManagementResponse <CertMgmtRspn>	[1..1]			137
	POIIdentification <POIID>	[1..1]	±		137
	TMIIdentification <TMID>	[0..1]	±		138
	CertificateService <CertSvc>	[1..1]	CodeSet		138
	Result <Rslt>	[1..1]			139
	Response <Rspn>	[1..1]	CodeSet		139
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		139
	AdditionalResponse <AddtlRspn>	[0..1]	Text		139
	SecurityProfile <SctyPrfl>	[0..1]	Text		139
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		139
	TMSDateTime <TMSDtTm>	[1..1]	DateTime		140
	ClientCertificate <ClntCert>	[0..1]	Binary		140
	ClientCertificatePath <ClntCertPth>	[0..*]	Binary		140
	ServerCertificatePath <SvrCertPth>	[0..*]	Binary		140
	SecurityTrailer <SctyTrlr>	[0..1]	±		140

9.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

9.3.1 Header <Hdr>

Presence: [1..1]

Definition: Information related to the protocol management.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		135
	FormatVersion <FrmtVrsn>	[1..1]	Text		135
	ExchangeIdentification <XchgId>	[1..1]	Quantity		135
	CreationDateTime <CreDtTm>	[1..1]	DateTime		135
	InitiatingParty <InitgPty>	[1..1]	±		135
	RecipientParty <RcptPty>	[0..1]	±		136
	Traceability <Tracblt>	[0..*]	±		136

9.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

9.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 607

9.3.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 600

9.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 599

9.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

9.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrld>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrld>	[1..1]	Text		320

9.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 446 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

9.3.2 CertificateManagementResponse <CertMgmtRspn>

Presence: [1..1]

Definition: Information related to the result of the certificate management request.

CertificateManagementResponse <CertMgmtRspn> contains the following **CertificateManagementResponse3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[1..1]	±		137
	TMIIdentification <TMID>	[0..1]	±		138
	CertificateService <CertSvc>	[1..1]	CodeSet		138
	Result <Rslt>	[1..1]			139
	Response <Rspn>	[1..1]	CodeSet		139
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		139
	AdditionalResponse <AddtlRspn>	[0..1]	Text		139
	SecurityProfile <SctyPrfl>	[0..1]	Text		139
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		139
	TMSDateTime <TMSDtTm>	[1..1]	DateTime		140
	ClientCertificate <ClntCert>	[0..1]	Binary		140
	ClientCertificatePath <ClntCertPth>	[0..*]	Binary		140
	ServerCertificatePath <SvrCertPth>	[0..*]	Binary		140

9.3.2.1 POIIdentification <POIID>

Presence: [1..1]

Definition: Identification of the terminal or system using the certificate management service.

POIIdentification <POIID> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

9.3.2.2 TMIdentification <TMId>

Presence: [0..1]

Definition: Identification of the TM or the MTM providing the Certificate Authority service.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

9.3.2.3 CertificateService <CertSvc>

Presence: [1..1]

Definition: Requested certificate management service.

Datatype: "CardPaymentServiceType10Code" on page 561

CodeName	Name	Definition
CRTC	CreateCertificate	Creation of an X.509 certificate with the public key and the information of the owner of the asymmetric key provided by the requestor.
CRTR	RenewCerificate	Renewal of an X.509 certificate, protected by the certificate to renew.
CRTK	RevokeCertificate	Revocation of an active X.509 certificate.
WLSR	RemoveWhiteList	Remove a POI from the white list of the terminal manager.
WLSA	AddWhiteList	Add a POI in the white list of the terminal manager.

9.3.2.4 Result <Rslt>

Presence: [1..1]

Definition: Outcome of the certificate service processing.

Result <Rslt> contains the following **ResponseType6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		139
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		139
	AdditionalResponse <AddtlRspn>	[0..1]	Text		139

9.3.2.4.1 Response <Rspn>

Presence: [1..1]

Definition: Response of the terminal manager.

Datatype: "Response2Code" on page 586

CodeName	Name	Definition
APPR	Approved	Service has been successfully provided.
DECL	Declined	Service is declined.

9.3.2.4.2 ResponseDetail <RspnDtl>

Presence: [0..1]

Definition: Detail of the response.

Datatype: "ResultDetail3Code" on page 586

CodeName	Name	Definition
CRTU	UnknownCertificate	The certificate is unknown.
SVSU	UnsupportedService	Requested service not supported.

9.3.2.4.3 AdditionalResponse <AddtlRspn>

Presence: [0..1]

Definition: Additional information on the response for further examination.

Datatype: "Max140Text" on page 603

9.3.2.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the security profile, for creation, renewal or revocation of certificate.

Datatype: "Max35Text" on page 605

9.3.2.6 POIChallengeValue <POIChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: ["Max140Binary" on page 541](#)

9.3.2.7 TMSDateTime <TMSDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: ["ISODatetime" on page 599](#)

9.3.2.8 ClientCertificate <ClntCert>

Presence: [0..1]

Definition: Created or renewed certificate. The certificate is ASN.1/DER encoded.

Datatype: ["Max3000Binary" on page 541](#)

9.3.2.9 ClientCertificatePath <ClntCertPth>

Presence: [0..*]

Definition: Certificate of the client certificate path, from the CA (Certificate Authority) certificate, to the root certificate, for renewal or revocation of certificate.

Datatype: ["Max10KBinary" on page 540](#)

9.3.2.10 ServerCertificatePath <SvrCertPth>

Presence: [0..*]

Definition: Certificate of the server certificate path, from the CA (Certificate Authority) certificate, to the root certificate, for renewal or revocation of certificate.

Datatype: ["Max10KBinary" on page 540](#)

9.3.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see ["ContentInformationType38" on page 509](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

10 Message Items Types

10.1 MessageComponents

10.1.1 Account

10.1.1.1 CashAccount40

Definition: Provides the details to identify an account.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

```
Following Must be True
  /Identification Must be present
Or    /Proxy Must be present
```

10.1.1.1.1 Identification <Id>

Presence: [0..1]

Definition: Unique and unambiguous identification for the account between the account owner and the account servicer.

Identification <Id> contains one of the following elements (see "[AccountIdentification4Choice](#)" on [page 145](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C5	145
Or}	Other <Othr>	[1..1]	±		146

10.1.1.1.2 Type <Tp>

Presence: [0..1]

Definition: Specifies the nature, or use of the account.

Type <Tp> contains one of the following elements (see "[CashAccountType2Choice](#)" on page 144 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		144
Or}	Proprietary <Prtry>	[1..1]	Text		144

10.1.1.1.3 Currency <Ccy>

Presence: [0..1]

Definition: Identification of the currency in which the account is held.

Usage: Currency should only be used in case one and the same account number covers several currencies

and the initiating party needs to identify which currency needs to be used for settlement on the account.

Impacted by: [C2 "ActiveOrHistoricCurrency"](#)

Datatype: "[ActiveOrHistoricCurrencyCode](#)" on page 543

Constraints

- **ActiveOrHistoricCurrency**

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

10.1.1.1.4 Name <Nm>

Presence: [0..1]

Definition: Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account.

Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number.

Datatype: "[Max70Text](#)" on page 607

10.1.1.1.5 Proxy <Prxy>

Presence: [0..1]

Definition: Specifies an alternate assumed name for the identification of the account.

Proxy <Prxy> contains the following elements (see "[ProxyAccountIdentification1](#)" on page 143 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]			143
{Or	Code <Cd>	[1..1]	CodeSet		143
Or}	Proprietary <Prtry>	[1..1]	Text		143
	Identification <Id>	[1..1]	Text		143

10.1.1.2 ProxyAccountIdentification1

Definition: Information related to a proxy identification of the account.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]			143
{Or	Code <Cd>	[1..1]	CodeSet		143
Or}	Proprietary <Prtry>	[1..1]	Text		143
	Identification <Id>	[1..1]	Text		143

10.1.1.2.1 Type <Tp>

Presence: [0..1]

Definition: Type of the proxy identification.

Type <Tp> contains one of the following **ProxyAccountType1Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		143
Or}	Proprietary <Prtry>	[1..1]	Text		143

10.1.1.2.1.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "[ExternalProxyAccountType1Code](#)" on page 569

10.1.1.2.1.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "[Max35Text](#)" on page 605

10.1.1.2.2 Identification <Id>

Presence: [1..1]

Definition: Identification used to indicate the account identification under another specified name.

Datatype: "Max2048Text" on page 604

10.1.1.3 CashAccountType2Choice

Definition: Nature or use of the account.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		144
Or}	Proprietary <Prtry>	[1..1]	Text		144

10.1.1.3.1 Code <Cd>

Presence: [1..1]

Definition: Account type, in a coded form.

Datatype: "ExternalCashAccountType1Code" on page 568

10.1.1.3.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Nature or use of the account in a proprietary form.

Datatype: "Max35Text" on page 605

10.1.1.4 GenericAccountIdentification1

Definition: Information related to a generic account identification.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		144
	SchemeName <SchmeNm>	[0..1]			144
{Or	Code <Cd>	[1..1]	CodeSet		145
Or}	Proprietary <Prtry>	[1..1]	Text		145
	Issuer <Issr>	[0..1]	Text		145

10.1.1.4.1 Identification <Id>

Presence: [1..1]

Definition: Identification assigned by an institution.

Datatype: "Max34Text" on page 605

10.1.1.4.2 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Name of the identification scheme.

SchemeName <SchmeNm> contains one of the following **AccountSchemeName1Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		145
Or}	Proprietary <Prtry>	[1..1]	Text		145

10.1.1.4.2.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "ExternalAccountIdentification1Code" on page 568

10.1.1.4.2.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "Max35Text" on page 605

10.1.1.4.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 605

10.1.2 Account Identification

10.1.2.1 AccountIdentification4Choice

Definition: Specifies the unique identification of an account as assigned by the account servicer.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C5	145
Or}	Other <Othr>	[1..1]	±		146

10.1.2.1.1 IBAN <IBAN>

Presence: [1..1]

Definition: International Bank Account Number (IBAN) - identifier used internationally by financial institutions to uniquely identify the account of a customer. Further specifications of the format and content of the IBAN can be found in the standard ISO 13616 "Banking and related financial services - International Bank Account Number (IBAN)" version 1997-10-01, or later revisions.

Impacted by: C5 "IBAN"

Datatype: "IBAN2007Identifier" on page 599

Constraints

- **IBAN**

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

10.1.2.1.2 Other <Othr>

Presence: [1..1]

Definition: Unique identification of an account, as assigned by the account servicer, using an identification scheme.

Other <Othr> contains the following elements (see "[GenericAccountIdentification1](#)" on page 144 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		144
	SchemeName <SchmeNm>	[0..1]			144
{Or	Code <Cd>	[1..1]	CodeSet		145
Or}	Proprietary <Prtry>	[1..1]	Text		145
	Issuer <Issr>	[0..1]	Text		145

10.1.3 Acquirer

10.1.3.1 Acquirer10

Definition: Acquirer involved in the card payment.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		146
	ParametersVersion <ParamsVrsn>	[0..1]	Text		147

10.1.3.1.1 Identification <Id>

Presence: [0..1]

Definition: Identification of the acquirer (for example the bank identification number BIN).

Identification <Id> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrld>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrld>	[1..1]	Text		320

10.1.3.1.2 ParametersVersion <ParamsVrsn>

Presence: [0..1]

Definition: Version of the payment acquirer parameters of the POI.

Datatype: "[Max256Text](#)" on page 604

10.1.3.2 KEKIdentifier7

Definition: Identification of a key encryption key (KEK), using previously distributed symmetric key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		147
	KeyVersion <KeyVrsn>	[1..1]	Text		148
	SequenceNumber <SeqNb>	[0..1]	Quantity		148
	DerivationIdentification <DerivtnId>	[0..1]	Binary		148

10.1.3.2.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "[Max140Text](#)" on page 603

10.1.3.2.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 603

10.1.3.2.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 600

10.1.3.2.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

Definition: Identification used for derivation of a unique key from a master key provided for the data protection.

Datatype: "Max500Binary" on page 542

10.1.4 Action

10.1.4.1 DeviceRequest8

Definition: Specifies the environment, the context and the services to be used with a device request message.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	153
	Context <Cntxt>	[0..1]		C10	159
	PaymentContext <PmtCntxt>	[0..1]			162
	CardPresent <CardPres>	[0..1]	Indicator		162
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		162
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		163
	AttendanceContext <AttndncCntxt>	[0..1]	CodeSet		163
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		163
	TransactionChannel <TxChanl>	[0..1]	CodeSet		163
	BusinessArea <BizArea>	[0..1]	CodeSet		164
	AttendantMessageCapable <AttndntMsgCpbl>	[0..1]	Indicator		164
	AttendantLanguage <AttndntLang>	[0..1]	CodeSet	C14	164
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		165
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		165
	SupportedOption <SpprtdOptn>	[0..*]	CodeSet		166
	SaleContext <SaleCntxt>	[0..1]			166
	SaleIdentification <SaleId>	[0..1]	Text		167
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		167
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		168
	CashierIdentification <CshrlId>	[0..1]	Text		168
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	168
	ShiftNumber <ShftNb>	[0..1]	Text		168
	CustomerOrderRequestFlag <CstmrOrdReqFlg>	[0..1]	Indicator		168
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		168
	InvoiceNumber <InvcNb>	[0..1]	Text		168
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		169
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			169
	CommonName <CmonNm>	[1..1]	Text		169
	Address <Adr>	[0..1]	Text		169
	CountryCode <CtryCd>	[1..1]	CodeSet		169
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		169

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RegisteredIdentifier <RegIddr>	[1..1]	Text		169
	SplitPayment <Spltpmt>	[0..1]	Indicator		170
	RemainingAmount <RmngAmt>	[0..1]	Amount		170
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		170
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		170
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		170
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		171
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		171
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	171
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		172
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		172
	SystemToNotify <SysToNtfy>	[0..1]	Text		172
	Debtor <Dbtr>	[0..1]	±		173
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	174
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		176
	DirectDebitContext <DrctDbtCntxt>	[0..1]			176
	Debtor <Dbtr>	[0..1]	±		177
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	178
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		179
	Creditor <Cdtr>	[0..1]	±		179
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	180
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		181
	MandateRelatedInformation <MndtRltdInf>	[1..1]			181
	MandateIdentification <Mndtld>	[1..1]	Text		182
	DateOfSignature <DtOfSgntr>	[0..1]	Date		182
	MandateImage <Mndtlmg>	[0..1]	Binary		182
	ProtectedMandateImage <PrctcdMndtlmg>	[0..1]	±		182
	ServiceContent <SvcCntt>	[1..1]	CodeSet		182

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayRequest <DispReq>	[0..1]			183
	DisplayOutput <DispOutpt>	[1..*]	±		183
	InputRequest <InptReq>	[0..1]			184
	DisplayOutput <DispOutpt>	[0..1]	±		185
	InputData <InptData>	[1..1]			186
	DeviceType <DvcTp>	[1..1]	CodeSet		187
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		187
	InputCommand <InptCmd>	[1..1]	CodeSet		188
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		189
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		189
	InputText <InptTxt>	[0..1]	±		189
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		190
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		190
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		190
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		191
	DisableCancelFlag <Dsb/CclFlg>	[0..1]	Indicator		191
	DisableCorrectFlag <Dsb/CrrctFlg>	[0..1]	Indicator		191
	DisableValidFlag <Dsb/VldFlg>	[0..1]	Indicator		191
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		191
	PrintRequest <PrtReq>	[0..1]			192
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		192
	ResponseMode <RspnMd>	[1..1]	CodeSet		192
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		193
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		193
	OutputContent <OutptCntt>	[1..1]	±		193
	PlayResourceRequest <PlayRsrcReq>	[0..1]			194
	ResponseMode <RspnMd>	[0..1]	CodeSet		195
	ResourceAction <RsrcActn>	[1..1]	CodeSet		195
	SoundVolume <SoundVol>	[0..1]	Rate		195
	DisplayResolution <DispRsltn>	[0..1]	Text		195
	Resource <Rsrc>	[0..1]			195

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResourceType <RsrcTp>	[1..1]	CodeSet		196
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		196
	Language <Lang>	[0..1]	CodeSet	C14	196
	ResourceReference <RsrcRef>	[0..1]	Text		196
	TimingSlot <TmgSlot>	[0..1]	CodeSet		197
	SecureInputRequest <ScrInptReq>	[0..1]			197
	PINRequestType <PINReqTp>	[1..1]	CodeSet		197
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		198
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		198
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		198
	CardholderPIN <CrhdlrPIN>	[0..1]			198
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		198
	PINFormat <PINFrmt>	[1..1]	CodeSet		199
	AdditionalInput <AddtlInpt>	[0..1]	Text		199
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			199
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		200
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		200
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		201
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		201
	DisplayOutput <DispOutpt>	[0..1]	±		201
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			202
	Class <Cls>	[1..1]	Binary		202
	Instruction <Instr>	[1..1]	Binary		202
	Parameter1 <Param1>	[1..1]	Binary		202
	Parameter2 <Param2>	[1..1]	Binary		202
	Data <Data>	[0..1]	Binary		202
	ExpectedLength <XpctdLngh>	[0..1]	Binary		202
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			203
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		203
	DisplayOutput <DispOutpt>	[0..1]	±		203
	TransmissionRequest <TrnsmssnReq>	[0..1]			204

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DestinationAddress <DstnAdr>	[1..1]	±		204
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		205
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		205
	MessageToSend <MsgToSnd>	[1..1]	Binary		205
	InputNotification <InptNtfctn>	[0..1]			205
	ExchangeIdentification <Xchgl>	[1..1]	Text		205
	OutputContent <OutptCntt>	[1..1]	±		206
	SupplementaryData <SplmtryData>	[0..*]	±	C13	206

10.1.4.1.1 Environment <Envt>

Presence: [0..1]

Definition: Environment of the transaction.

Impacted by: C9 "OneElementPresenceRule"

Environment <Envt> contains the following elements (see "[CardPaymentEnvironment81](#)" on page 322 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		328
	ServiceProvider <SvcPrvdr>	[0..1]	±		328
	Merchant <Mrchnt>	[0..1]			329
	Identification <Id>	[0..1]	±		329
	CommonName <CmonNm>	[0..1]	Text		329
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		329
	LocationAndContact <LctnAndCtct>	[0..1]	±		330
	SchemeData <SchmeData>	[0..1]	Text		330
	POI <POI>	[0..1]			330
	Identification <Id>	[1..1]	±		331
	SystemName <SysNm>	[0..1]	Text		331
	GroupIdentification <Grpld>	[0..1]	Text		332
	Capabilities <Cpblties>	[0..1]	±		332
	TimeZone <TmZone>	[0..1]	Text		332
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		332
	Component <Cmpnt>	[0..*]	±		333
	Card <Card>	[0..1]			335
	ProtectedCardData <PrctcdCardData>	[0..1]	±		336
	PrivateCardData <PrvtCardData>	[0..1]	Binary		337
	PlainCardData <PlainCardData>	[0..1]			337
	PAN <PAN>	[1..1]	Text		337
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		337
	EffectiveDate <FctvDt>	[0..1]	Text		337
	ExpiryDate <XpryDt>	[0..1]	Text		338
	ServiceCode <SvcCd>	[0..1]	Text		338
	Track1 <Trck1>	[0..1]	Text		338
	Track2 <Trck2>	[0..1]	Text		338
	Track3 <Trck3>	[0..1]	Text		338
	CardholderName <CrdhldrNm>	[0..1]	Text		338
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		338

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaskedPAN <MskdPAN>	[0..1]	Text		339
	IssuerBIN <IssrBIN>	[0..1]	Text		339
	CardCountryCode <CardCtryCd>	[0..1]	Text		339
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		339
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		339
	CardBrand <CardBrnd>	[0..1]	Text		339
	CardProductType <CardPdctTp>	[0..1]	CodeSet		339
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		340
	InternationalCard <IntrnlCard>	[0..1]	Indicator		340
	AllowedProduct <AllwdPdct>	[0..*]	Text		340
	ServiceOption <SvcOptn>	[0..1]	Text		340
	AdditionalCardData <AddtlCardData>	[0..1]	Text		340
	Check <Chck>	[0..1]			340
	BankIdentification <Bkld>	[0..1]	Text		341
	AccountNumber <AcctNb>	[0..1]	Text		341
	CheckNumber <ChckNb>	[0..1]	Text		341
	CheckCardNumber <ChckCardNb>	[0..1]	Text		341
	CheckTrackData2 <ChckTrckData2>	[0..1]			341
	TrackNumber <TrckNb>	[0..1]	Quantity		342
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		342
	TrackValue <TrckVal>	[1..1]	Text		342
	CheckType <ChckTp>	[0..1]	CodeSet		342
	Country <Ctry>	[0..1]	Text		343
	StoredValueAccount <StordValAcct>	[0..*]			343
	AccountType <AcctTp>	[0..1]	CodeSet		343
	IdentificationType <IdTp>	[0..1]	CodeSet		344
	Identification <Id>	[0..1]	Text		344
	Brand <Brnd>	[0..1]	Text		345
	Provider <Prvdr>	[0..1]	Text		345
	OwnerName <OwnrNm>	[0..1]	Text		345
	ExpiryDate <XpryDt>	[0..1]	Text		345

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EntryMode <NtryMd>	[0..1]	CodeSet		345
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	Balance <Bal>	[0..1]	Amount		346
	LoyaltyAccount <LltyAcct>	[0..*]	±		346
	CustomerDevice <CstmrDvc>	[0..1]	±		347
	Wallet <Wlft>	[0..1]	±		347
	PaymentToken <PmtTkn>	[0..1]	±		347
	MerchantToken <MrchntTkn>	[0..1]	±		348
	Cardholder <Crhdldr>	[0..1]			348
	Identification <Id>	[0..1]			352
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		352
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		352
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		353
	DriverIdentification <Drvrld>	[0..1]	Text		353
	CustomerNumber <CstmrNb>	[0..1]	Text		353
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		353
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		353
	PassportNumber <PsptNb>	[0..1]	Text		353
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		353
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		353
	EmployerIdentificationNumber <MplyrldNb>	[0..1]	Text		354
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		354
	JobNumber <JobNb>	[0..1]	Text		354
	Department <Dept>	[0..1]	Text		354
	EmailAddress <EmailAdr>	[0..1]	Text		354
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			354
	BirthDate <BirthDt>	[1..1]	Date		354
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		355
	CityOfBirth <CityOfBirth>	[1..1]	Text		355
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	355
	Other <Othr>	[0..*]	±		355

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		355
	Language <Lang>	[0..1]	CodeSet	C14	355
	BillingAddress <BillgAdr>	[0..1]	±		356
	ShippingAddress <ShppgAdr>	[0..1]	±		356
	TripNumber <TripNb>	[0..1]	Text		357
	Vehicle <Vhcl>	[0..1]	±		357
	Authentication <Authntcn>	[0..*]			358
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		360
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		361
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		362
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		362
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			362
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		362
	PINFormat <PINFrmt>	[1..1]	CodeSet		363
	AdditionalInput <AddtlInpt>	[0..1]	Text		363
	CardholderIdentification <CrdhldrId>	[0..1]			363
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		364
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		364
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		364
	DriverIdentification <DrvrId>	[0..1]	Text		365
	CustomerNumber <CstmrNb>	[0..1]	Text		365
	SocialSecurityNumber <ScIscyNb>	[0..1]	Text		365
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		365
	PassportNumber <PsptNb>	[0..1]	Text		365
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		365
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		365
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		365
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		366
	JobNumber <JobNb>	[0..1]	Text		366
	Department <Dept>	[0..1]	Text		366
	EmailAddress <EmailAdr>	[0..1]	Text		366

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			366
	BirthDate <BirthDt>	[1..1]	Date		366
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		366
	CityOfBirth <CityOfBirth>	[1..1]	Text		367
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	367
	Other <Othr>	[0..*]	±		367
	AddressVerification <AdrVrfctn>	[0..1]			367
	AddressDigits <AdrDgts>	[0..1]	Text		367
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		368
	AuthenticationType <AuthntcnTp>	[0..1]	Text		368
	AuthenticationLevel <AuthntcnLv>	[0..1]	Text		368
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		368
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			368
	Identification <Id>	[1..1]	Text		369
	Value <Val>	[0..1]	Binary		369
	ProtectedValue <PrctdVal>	[0..1]	±		369
	Type <Tp>	[0..1]	Text		369
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			369
	Method <Mtd>	[1..1]	CodeSet		370
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		371
	Result <Rslt>	[0..1]	CodeSet		371
	AdditionalResult <AddtlRslt>	[0..1]	Text		371
	PersonalData <PrsnlData>	[0..1]	Text		372
	MobileData <MobData>	[0..*]			372
	MobileCountryCode <MobCtryCd>	[0..1]	Text		372
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		372
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		373
	Geolocation <Glctn>	[0..1]			373
	GeographicCoordinates <GeogcCordints>	[0..1]			373
	Latitude <Lat>	[1..1]	Text		373
	Longitude <Long>	[1..1]	Text		373

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	UTMCoordinates <UTMCordints>	[0..1]			374
	UTMZone <UTMZone>	[1..1]	Text		374
	UTMEastward <UTMEstwr>	[1..1]	Text		374
	UTMNorthward <UTMnrthwr>	[1..1]	Text		374
	SensitiveMobileData <SnstvMobData>	[0..1]			374
	MSISDN <MSISDN>	[1..1]	Text		375
	IMSI <IMSI>	[0..1]	Text		375
	IMEI <IMEI>	[0..1]	Text		375
	ProtectedMobileData <PrctdMobData>	[0..1]	±		375
	ProtectedCardholderData <PrctdCrhdldrData>	[0..1]	±		375
	SaleEnvironment <SaleEnv>	[0..1]			376
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		376
	Currency <Ccy>	[0..1]	CodeSet	C1	377
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		377
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		377
	MinimumSplitAmount <MinSplAmt>	[0..1]	Amount		378
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		378
	LoyaltyHandling <LtyHdlg>	[0..1]	CodeSet		378

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.1.2 Context <Cntxt>

Presence: [0..1]

Definition: Context in which the transaction is performed (payment and sale).

Impacted by: C10 "OneElementPresenceRule"

Context <Cntxt> contains the following **PaymentContext30** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentContext <PmtCntxt>	[0..1]			162
	CardPresent <CardPres>	[0..1]	Indicator		162
	CardholderPresent <CrhdldrPres>	[0..1]	Indicator		162
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		163
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		163
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		163
	TransactionChannel <TxChanl>	[0..1]	CodeSet		163
	BusinessArea <BizArea>	[0..1]	CodeSet		164
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		164
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	164
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		165
	FallbackIndicator <FillbckInd>	[0..1]	CodeSet		165
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		166
	SaleContext <SaleCntxt>	[0..1]			166
	SaleIdentification <SaleId>	[0..1]	Text		167
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		167
	SaleReconciliationIdentification <SaleRcnclnId>	[0..1]	Text		168
	CashierIdentification <CshrlId>	[0..1]	Text		168
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	168
	ShiftNumber <ShftNb>	[0..1]	Text		168
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		168
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		168
	InvoiceNumber <InvcNb>	[0..1]	Text		168
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		169
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			169
	CommonName <CmonNm>	[1..1]	Text		169
	Address <Adr>	[0..1]	Text		169
	CountryCode <CtryCd>	[1..1]	CodeSet		169
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		169
	RegisteredIdentifier <Regdldr>	[1..1]	Text		169
	SplitPayment <Spltpmt>	[0..1]	Indicator		170

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RemainingAmount <RmngAmt>	[0..1]	Amount		170
	ForceOnlineFlag <ForceOnInFlg>	[0..1]	Indicator		170
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		170
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		170
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		171
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		171
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	171
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		172
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		172
	SystemToNotify <SysToNtfy>	[0..1]	Text		172
	Debtor <Dbtr>	[0..1]	±		173
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	174
	ProtectedDebtorAccount <PrtctdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrtctdCdtrAcct>	[0..1]	±		176
	DirectDebitContext <DrctDbtCntxt>	[0..1]			176
	Debtor <Dbtr>	[0..1]	±		177
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	178
	ProtectedDebtorAccount <PrtctdDbtrAcct>	[0..1]	±		179
	Creditor <Cdtr>	[0..1]	±		179
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	180
	ProtectedCreditorAccount <PrtctdCdtrAcct>	[0..1]	±		181
	MandateRelatedInformation <MndtRltdInf>	[1..1]			181
	MandateIdentification <MndtId>	[1..1]	Text		182
	DateOfSignature <DtOfSgntr>	[0..1]	Date		182
	MandateImage <MndtImg>	[0..1]	Binary		182
	ProtectedMandateImage <PrtctdMndtImg>	[0..1]	±		182

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.1.2.1 PaymentContext <PmtCntxt>

Presence: [0..1]

Definition: Context of the card payment transaction.

PaymentContext <PmtCntxt> contains the following **PaymentContext29** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardPresent <CardPres>	[0..1]	Indicator		162
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		162
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		163
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		163
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		163
	TransactionChannel <TxChanl>	[0..1]	CodeSet		163
	BusinessArea <BizArea>	[0..1]	CodeSet		164
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		164
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	164
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		165
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		165
	SupportedOption <SpprtdOptn>	[0..*]	CodeSet		166

10.1.4.1.2.1.1 CardPresent <CardPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated by a card physically present or not.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.2 CardholderPresent <CrdhldrPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated in presence of the cardholder or not.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.3 OnLineContext <OnLineCntxt>

Presence: [0..1]

Definition: On-line or off-line context of the transaction.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.4 AttendanceContext <AttndncCntxt>

Presence: [0..1]

Definition: Human attendance at the POI (Point Of Interaction) location during the transaction.

Datatype: ["AttendanceContext1Code"](#) on page 552

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.
UATT	Unattended	Unattended payment, no attendant present.

10.1.4.1.2.1.5 TransactionEnvironment <TxEnvnt>

Presence: [0..1]

Definition: Indicates the environment of the transaction.

Datatype: ["TransactionEnvironment1Code"](#) on page 597

CodeName	Name	Definition
MERC	Merchant	Merchant environment.
PRIV	Private	Private environment.
PUBL	Public	Public environment.

10.1.4.1.2.1.6 TransactionChannel <TxChanl>

Presence: [0..1]

Definition: Identifies the type of the communication channels used by the cardholder to the acceptor system.

Datatype: ["TransactionChannel5Code"](#) on page 597

CodeName	Name	Definition
MAIL	MailOrder	Mail order.
TLPH	TelephoneOrder	Telephone order.
ECOM	ElectronicCommerce	Electronic commerce.
TVPY	TelevisionPayment	Payment on television.

CodeName	Name	Definition
SECM	SecuredElectronicCommerce	Electronic commerce with cardholder authentication.
MOBL	MobilePayment	Payment performed through a cardholder mobile device.
MPOS	MobilePOS	Payment performed through a merchant mobile device.

10.1.4.1.2.1.7 BusinessArea <BizArea>

Presence: [0..1]

Definition: Defines the business context of this transaction that could imply specific scheme rules.

Datatype: "BusinessArea2Code" on page 557

CodeName	Name	Definition
AIBD	ArtificialIntelligenceBasedDecision	The payment is initiated by an artificial intelligence based decision.
PPAY	PlainPayment	The card is used to perform a plain payment.
TKNF	TransitKnownFare	The card is used in a Transit business case where the fare amount is known when the transaction is initiated.
EOPT	EnergyOpenPayment	Indicates when the card is used in an energy business case where the amount could not be assessed when the transaction is initiated.
TOPT	TransitOpenPayment	Indicates when the card is used in a transit business case where the fare amount is not known when the transaction is initiated.

10.1.4.1.2.1.8 AttendantMessageCapable <AttdntMsgCpbl>

Presence: [0..1]

Definition: Indicates whether a message can be sent or not on an attendant display (attendant display present or not).

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.9 AttendantLanguage <AttdntLang>

Presence: [0..1]

Definition: Language used to display messages to the attendant.

Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 572

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.1.2.1.10 CardDataEntryMode <CardDataNtryMd>

Presence: [0..1]

Definition: Entry mode of the card data.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.1.2.1.11 FallbackIndicator <FllbckInd>

Presence: [0..1]

Definition: Indicator of a card entry mode fallback.

Datatype: "CardFallback1Code" on page 560

CodeName	Name	Definition
FFLB	FallbackAfterFailure	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal failed.
SFLB	FallbackAfterSuccess	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal was successful.

CodeName	Name	Definition
NFLB	NoFallback	No card fall-back during the transaction in progress.

10.1.4.1.2.1.12 SupportedOption <SpptdOptn>

Presence: [0..*]

Definition: Payment options the card acceptor can support.

Datatype: "SupportedPaymentOption2Code" on page 593

CodeName	Name	Definition
PART	PartialApproval	The entity supports a partial approval of the payment transaction.
MSRV	PaymentApprovalOnly	The entity supports the approval of the payment service along with the decline of additional requested services (as cash-back).
INSI	IssuerInstalment	The sender support IssuerInstalment proposals to the Cardholder.
PINQ	PINRequest	The sender is able to support Single Tap transaction.

10.1.4.1.2.2 SaleContext <SaleCntxt>

Presence: [0..1]

Definition: Context of the sale involving the card payment transaction.

SaleContext <SaleCntxt> contains the following **SaleContext4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SaleIdentification <SaleId>	[0..1]	Text		167
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		167
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		168
	CashierIdentification <CshrlId>	[0..1]	Text		168
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	168
	ShiftNumber <ShftNb>	[0..1]	Text		168
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		168
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		168
	InvoiceNumber <InvNb>	[0..1]	Text		168
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		169
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			169
	CommonName <CmonNm>	[1..1]	Text		169
	Address <Adr>	[0..1]	Text		169
	CountryCode <CtryCd>	[1..1]	CodeSet		169
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		169
	RegisteredIdentifier <Regldr>	[1..1]	Text		169
	SplitPayment <SplitPmt>	[0..1]	Indicator		170
	RemainingAmount <RmngAmt>	[0..1]	Amount		170
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		170
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		170
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		170
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		171
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		171

10.1.4.1.2.2.1 SaleIdentification <SaleId>

Presence: [0..1]

Definition: Identification of the sale terminal (electronic cash register or point of sale terminal) or the sale system.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.2 SaleReferenceNumber <SaleRefNb>

Presence: [0..1]

Definition: Identify a sale transaction assigned by the sale system.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.3 SaleReconciliationIdentification <SaleRcncltnId>

Presence: [0..1]

Definition: Identifier of the reconciliation between the Sale system and the POI system.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.4 CashierIdentification <CshrlId>

Presence: [0..1]

Definition: Identification of the cashier who carried out the transaction.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.5 CashierLanguage <CshrLang>

Presence: [0..*]

Definition: Languages used by the cashier.

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 572

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.1.2.2.6 ShiftNumber <ShftNb>

Presence: [0..1]

Definition: Identifies the shift of the cashier.

Datatype: "Max2NumericText" on page 604

10.1.4.1.2.2.7 CustomerOrderRequestFlag <CstmrOrdrReqFlg>

Presence: [0..1]

Definition: Flag indicating that list of CustomerOrders should be returned in response.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.8 PurchaseOrderNumber <PurchsOrdrNb>

Presence: [0..1]

Definition: Identification of the purchase order.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.9 InvoiceNumber <InvcNb>

Presence: [0..1]

Definition: Identification of the invoice.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.10 DeliveryNoteNumber <DlvryNoteNb>

Presence: [0..1]

Definition: Identification allocated by the sale system and given to the customer.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.11 SponsoredMerchant <SpnsrdMrchnt>

Presence: [0..*]

Definition: Merchant using the payment services of a payment facilitator, acting as a card acceptor.

SponsoredMerchant <SpnsrdMrchnt> contains the following **Organisation26** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommonName <CmonNm>	[1..1]	Text		169
	Address <Adr>	[0..1]	Text		169
	CountryCode <CtryCd>	[1..1]	CodeSet		169
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		169
	RegisteredIdentifier <Regldlr>	[1..1]	Text		169

10.1.4.1.2.2.11.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 607

10.1.4.1.2.2.11.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 603

10.1.4.1.2.2.11.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 571

10.1.4.1.2.2.11.4 MerchantCategoryCode <MrchntCtgyCd>

Presence: [1..1]

Definition: Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.

Datatype: "Min3Max4Text" on page 608

10.1.4.1.2.2.11.5 RegisteredIdentifier <Regldlr>

Presence: [1..1]

Definition: Identifier of the sponsored merchant assigned by the payment facilitator of their acquirer.

Datatype: "Max35Text" on page 605

10.1.4.1.2.2.12 SplitPayment <SpltPmt>

Presence: [0..1]

Definition: True if the payment transaction is a partial payment of the sale transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.13 RemainingAmount <RmngAmt>

Presence: [0..1]

Definition: Remaining amount to complete the sale transaction, if a partial payment has been completed for the sale transaction.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.4.1.2.2.14 ForceOnlineFlag <ForceOnInFlg>

Presence: [0..1]

Definition: Indicates if the Cashier requires POI forces online access to the Acquirer.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.15 ReuseCardDataFlag <ReuseCardDataFlg>

Presence: [0..1]

Definition: Indicates if the card data has to be taken from a previous transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.16 AllowedEntryMode <AllwdNtryMd>

Presence: [0..*]

Definition: Type of card data reading.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.

CodeName	Name	Definition
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.1.2.2.17 SaleTokenScope <SaleTknScp>

Presence: [0..1]

Definition: Scope of the token that identifies the payment mean of the customer.

Datatype: "SaleTokenScope1Code" on page 592

CodeName	Name	Definition
MULT	MultipleUse	The token is generated to recognise a customer for a longer period.
SNGL	SingleUse	The token is generated to recognise a customer during the lifetime of a transaction.

10.1.4.1.2.2.18 AdditionalSaleData <AddtlSaleData>

Presence: [0..1]

Definition: Additional information associated with the sale transaction.

Datatype: "Max70Text" on page 607

10.1.4.1.2.3 CreditTransferContext <CdtTrfCntxt>

Presence: [0..1]

Definition: Context of the credit transfer transaction.

Impacted by: C11 "OneElementPresenceRule"

CreditTransferContext <CdtTrfCntxt> contains the following **CreditTransferContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		172
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		172
	SystemToNotify <SysToNtfy>	[0..1]	Text		172
	Debtor <Dbtr>	[0..1]	±		173
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	174
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		176

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.1.2.3.1 AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>

Presence: [0..1]

Definition: Indicator that specifies if a notification is expected after a credit transfer request.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.3.2 WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>

Presence: [0..1]

Definition: Indicator from the sale system to the accepting system to wait for notification before stating that the payment is done.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.3.3 SystemToNotify <SysToNtfy>

Presence: [0..1]

Definition: Reference of the system that should receive the notification of credit transfer.

Datatype: "Max1025Text" on page 602

10.1.4.1.2.3.4 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the payer.

Debtor <Dbtr> contains the following elements (see "PartyIdentification272" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer <Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.1.2.3.5 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the payer's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

DebtorAccount <DbtrAcct> contains the following elements (see "CashAccount40" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.3.6 ProtectedDebtorAccount <PrctcdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrctcdDbtrAcct> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.1.2.3.7 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the payee.

Creditor <Cdtr> contains the following elements (see "PartyIdentification272" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer <Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.1.2.3.8 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the payee's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.3.9 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.1.2.4 DirectDebitContext <DrctDbtCntxt>

Presence: [0..1]

Definition: Context of the direct debit transaction.

DirectDebitContext <DrctDbtCntxt> contains the following **DirectDebitContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Debtor <Dbtr>	[0..1]	±		177
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	178
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		179
	Creditor <Cdtr>	[0..1]	±		179
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	180
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		181
	MandateRelatedInformation <MndtRltdInf>	[1..1]			181
	MandatIdentification <MndtId>	[1..1]	Text		182
	DateOfSignature <DtOfSgntr>	[0..1]	Date		182
	MandatImage <MndtImg>	[0..1]	Binary		182
	ProtectedMandatImage <PrctcdMndtImg>	[0..1]	±		182

10.1.4.1.2.4.1 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the debtor.

Debtor <Dbtr> contains the following elements (see "[PartyIdentification272](#)" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer </Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer </Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.1.2.4.2 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the debtor's account.

Impacted by: [C7 "IdentificationOrProxyPresenceRule"](#), [C6 "IdentificationAndProxyGuideline"](#)

DebtorAccount <DbtrAcct> contains the following elements (see "[CashAccount40](#)" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.4.3 ProtectedDebtorAccount <PrctcdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrctcdDbtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.1.2.4.4 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the creditor.

Creditor <Cdtr> contains the following elements (see "[PartyIdentification272](#)" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer </Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer </Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.1.2.4.5 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the creditor's account.

Impacted by: [C7 "IdentificationOrProxyPresenceRule"](#), [C6 "IdentificationAndProxyGuideline"](#)

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.4.6 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.1.2.4.7 MandateRelatedInformation <MndtRltdInf>

Presence: [1..1]

Definition: Provides further details of the mandate signed between the creditor and the debtor.

MandateRelatedInformation <MndtRltdInf> contains the following **MandateRelatedInformation17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Mandateldentification <Mndtld>	[1..1]	Text		182
	DateOfSignature <DtOfSgntr>	[0..1]	Date		182
	Mandatelmage <Mndtlmg>	[0..1]	Binary		182
	ProtectedMandatelmage <PrctcdMndtlmg>	[0..1]	±		182

10.1.4.1.2.4.7.1 Mandateldentification <Mndtld>

Presence: [1..1]

Definition: Unique identification, as assigned by the creditor, to unambiguously identify the mandate.

Datatype: "Max35Text" on page 605

10.1.4.1.2.4.7.2 DateOfSignature <DtOfSgntr>

Presence: [0..1]

Definition: Date on which the direct debit mandate has been signed by the debtor.

Datatype: "ISODate" on page 598

10.1.4.1.2.4.7.3 Mandatelmage <Mndtlmg>

Presence: [0..1]

Definition: Image of scanned signed mandate.

Datatype: "Max2MBBinary" on page 541

10.1.4.1.2.4.7.4 ProtectedMandatelmage <PrctcdMndtlmg>

Presence: [0..1]

Definition: Secured image of scanned signed mandate.

ProtectedMandatelmage <PrctcdMndtlmg> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.1.3 ServiceContent <SvcCntt>

Presence: [1..1]

Definition: Define the type of service requested.

Datatype: "RetailerService8Code" on page 589

CodeName	Name	Definition
DDYQ	DeviceDisplayRequest	One System requests the other to display a message for cashier or customer.
DINQ	DeviceInputRequest	One system requests to the other System to get data input.
DPRQ	DevicePrintRequest	One system requests to the other System to print data.
DSOQ	DevicePlaySoundRequest	One system requests to the Other System to play a sound.
DSIQ	DeviceSecureInputRequest	One system requests to the Other System to securely get data input (e.g. for PIN).
DCIQ	DeviceInitialisationCardReaderRequest	Service to send parameters to use when card reader initializes a new communication with the card.
DCAQ	DeviceSendApplicationProtocolDataUnitCardReaderRequest	A service to send commands to a card.
DCPQ	DevicePowerOffCardReaderRequest	The Sale system requests to the POI System to power off the card reader.
DCOQ	DeviceTransmissionMessageRequest	The Sale system requests to the POI System to transmit a message (for instance to a mobile server).
DINO	DeviceInputNotification	One system sends a notification to the POI System to update a input request.

10.1.4.1.4 DisplayRequest <DispReq>

Presence: [0..1]

Definition: Content of the Display Request message.

DisplayRequest <DispReq> contains the following **DeviceDisplayRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayOutput <DispOutpt>	[1..*]	±		183

10.1.4.1.4.1 DisplayOutput <DispOutpt>

Presence: [1..*]

Definition: Message to be displayed.

DisplayOutput <DispOutput> contains the following elements (see "[ActionMessage11](#)" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.4.1.5 InputRequest <InptReq>

Presence: [0..1]

Definition: Content of the Input Request message.

InputRequest <InptReq> contains the following **DeviceInputRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayOutput <DispOutpt>	[0..1]	±		185
	InputData <InptData>	[1..1]			186
	DeviceType <DvcTp>	[1..1]	CodeSet		187
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		187
	InputCommand <InptCmd>	[1..1]	CodeSet		188
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		189
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		189
	InputText <InptTxt>	[0..1]	±		189
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		190
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		190
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		190
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		191
	DisableCancelFlag <DsbIcclFlg>	[0..1]	Indicator		191
	DisableCorrectFlag <DsbIcrrctFlg>	[0..1]	Indicator		191
	DisableValidFlag <DsbIvldFlg>	[0..1]	Indicator		191
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		191

10.1.4.1.5.1 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Information to display before input.

DisplayOutput <DispOutput> contains the following elements (see "[ActionMessage11](#)" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.4.1.5.2 InputData <InptData>

Presence: [1..1]

Definition: Information related to an Input request.

InputData <InptData> contains the following **InputData6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		187
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		187
	InputCommand <InptCmd>	[1..1]	CodeSet		188
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		189
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		189
	InputText <InptTxt>	[0..1]	±		189
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		190
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		190
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		190
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		191
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		191
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		191
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		191
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		191

10.1.4.1.5.2.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Type of logical device located on a Sale Terminal or a POI Terminal.

Datatype: "SaleCapabilities2Code" on page 591

CodeName	Name	Definition
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).

10.1.4.1.5.2.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualification of the information to output to the logical device.

Datatype: "InformationQualify1Code" on page 570

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.1.5.2.3 InputCommand <InptCmd>

Presence: [1..1]

Definition: Type of requested input.

Datatype: "InputCommand1Code" on page 570

CodeName	Name	Definition
DCSG	DecimalString	Wait for a string of digit characters with a decimal point, the length range could be specified.
DGSG	DigitString	Wait for a string of digit characters.
GAKY	GetAnyKey	Wait for a key pressed on the Terminal, to be able to read the message displayed on the Terminal.
GCNF	GetConfirmation	Wait for a confirmation Yes (Y) or No (N) on the Sale System. Wait for a confirmation (Valid or Cancel button) on

CodeName	Name	Definition
		the POI Terminal. The result of the command is a Boolean: True or False.
GFKY	GetFunctionKey	Wait for a function key pressed on the Terminal: From POI, Valid, Clear, Correct, Generic Function key number. From Sale, Generic Function key.
GMNE	GetMenuEntry	To choose an entry among a list of entries (all of them are not necessary selectable). The OutputFormat has to be MenuEntry.
PSWD	Password	Request to enter a password with masked characters while typing the password.
SITE	SiteManager	Wait for a confirmation Yes (Y) or No (N) of the Site Manager on the Sale System.
TXSG	TextString	Wait for a string of alphanumeric characters.
HTML	XHTMLText	Wait for a XHTML data.
SIGN	Signature	Request to wait for signature.

10.1.4.1.5.2.4 NotifyCardInputFlag <NtfyCardInptFlg>

Presence: [1..1]

Definition: Flag of notification of card to be entered in the POI card reader.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 600](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.5 MaximumInputTime <MaxInptTm>

Presence: [0..1]

Definition: Maximum input time in seconds.

Datatype: ["Number" on page 600](#)

10.1.4.1.5.2.6 InputText <InptTxt>

Presence: [0..1]

Definition: Text value set for an input command.

InputText <InptTxt> contains the following elements (see "[ActionMessage11](#)" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.4.1.5.2.7 ImmediateResponseFlag <ImdtRspnFlg>

Presence: [0..1]

Definition: Flag to request Immediate response without waiting for the completion of the command.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.8 WaitUserValidationFlag <WaitUsrVldtnFlg>

Presence: [0..1]

Definition: Flag to confirm by the user the entered characters, when the maximum allowed length is reached.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.9 BeepKeyFlag <BeepKeyFlg>

Presence: [0..1]

Definition: Flag to indicate that when the user press a key, a beep has to be generated.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.10 GlobalCorrectionFlag <GblCrrctnFlg>

Presence: [0..1]

Definition: Flag to correct all characters (True) or just the last one (False).

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 600](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.11 DisableCancelFlag <DsblCclFlg>

Presence: [0..1]

Definition: Flag to deactivate the "Cancel" function key.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 600](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.12 DisableCorrectFlag <DsblCrrctFlg>

Presence: [0..1]

Definition: Flag to deactivate the "Correct" function key.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 600](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.13 DisableValidFlag <DsblVldFlg>

Presence: [0..1]

Definition: Flag to disable the "Valid" function key.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 600](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.14 MenuBackFlag <MenuBckFlg>

Presence: [0..1]

Definition: Flag to enable the "Back" function key to go the upper level.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 600](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.6 PrintRequest <PrtReq>

Presence: [0..1]

Definition: Content of the Print Request message.

PrintRequest <PrtReq> contains the following **DevicePrintRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		192
	ResponseMode <RspnMd>	[1..1]	CodeSet		192
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		193
	RequiredSignatureFlag <ReqrdSgntFlg>	[0..1]	Indicator		193
	OutputContent <OutptCntt>	[1..1]	±		193

10.1.4.1.6.1 DocumentQualifier <DocQlfr>

Presence: [1..1]

Definition: Qualifies the type of document.

Datatype: "DocumentType7Code" on page 566

CodeName	Name	Definition
JNRL	Journal	When the POI or the Sale System wants to store a message on the journal printer or electronic journal of the Sale Terminal (it is sometimes a Sale Logging/Journal Printer).
CRCP	CustomerReceipt	When the Sale System requires the POI system to print the Customer receipt.
HRCP	CashierReceipt	When the Sale system print the Cashier copy of the Payment receipt.
SRCP	SaleReceipt	When the Sale System requires the POI system to print the Sale receipt.
RPIN	RelatedPaymentInstruction	Document is a linked payment instruction to which the current payment instruction is related, for example, in a cover scenario.
VCHR	Voucher	Document is an electronic payment document.

10.1.4.1.6.2 ResponseMode <RspnMd>

Presence: [1..1]

Definition: Type of awaited response (none, immediate, after printing, after sound).

Datatype: "ResponseMode2Code" on page 586

CodeName	Name	Definition
SEND	EndOfPlay	The Response is required at the end of play.

CodeName	Name	Definition
IMMD	Immediate	The Message Response is immediate, after taking into account the request.
NREQ	NotRequired	The Message Response is not required, except in case of error.
PEND	PrintEnd	The Print Response is required at the end of print.

10.1.4.1.6.3 IntegratedPrintFlag <IntgrtdPrtFlg>

Presence: [0..1]

Definition: Flag that the print is integrated to other prints.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.6.4 RequiredSignatureFlag <ReqrdSgntrFlg>

Presence: [0..1]

Definition: Flag to require a physical signature by the Customer.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.6.5 OutputContent <OutptCntt>

Presence: [1..1]

Definition: Content of the message to print.

OutputContent <OutptCntt> contains the following elements (see "[ActionMessage11](#)" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.4.1.7 PlayResourceRequest <PlayRsrcReq>

Presence: [0..1]

Definition: Content of the Resource Request message.

PlayResourceRequest <PlayRsrcReq> contains the following **DevicePlayResourceRequest1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResponseMode <RspnMd>	[0..1]	CodeSet		195
	ResourceAction <RsrcActn>	[1..1]	CodeSet		195
	SoundVolume <SoundVol>	[0..1]	Rate		195
	DisplayResolution <DispRsln>	[0..1]	Text		195
	Resource <Rsrc>	[0..1]			195
	ResourceType <RsrcTp>	[1..1]	CodeSet		196
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		196
	Language <Lang>	[0..1]	CodeSet	C14	196
	ResourceReference <RsrcRef>	[0..1]	Text		196
	TimingSlot <TmgSlot>	[0..1]	CodeSet		197

10.1.4.1.7.1 ResponseMode <RspnMd>

Presence: [0..1]

Definition: Message response awaited by the initiator of the Request.

Datatype: "ResponseMode2Code" on page 586

CodeName	Name	Definition
SEND	EndOfPlay	The Response is required at the end of play.
IMMD	Immediate	The Message Response is immediate, after taking into account the request.
NREQ	NotRequired	The Message Response is not required, except in case of error.
PEND	PrintEnd	The Print Response is required at the end of print.

10.1.4.1.7.2 ResourceAction <RsrcActn>

Presence: [1..1]

Definition: Requested Action: Start to play a media resource, Stop to play a media resource, Set the default volume.

Datatype: "ResourceAction1Code" on page 585

CodeName	Name	Definition
PAUS	Pause	Pause the media resource in progress as specified in the message.
STAS	Play	Start the media resource as specified in the message.
LOOP	PlayInLoop	Play in a loop the media resource as specified in the message.
RESU	Resume	Resume the progress of the media resource as specified in the message.
DVOL	SetDefaultVolume	Set the default volume of sounds.
STOS	Stop	Stop the media resource in progress.

10.1.4.1.7.3 SoundVolume <SoundVol>

Presence: [0..1]

Definition: Volume of a sound, either in a percentage of the maximum volume, or 0 to mute.

Datatype: "PercentageRate" on page 601

10.1.4.1.7.4 DisplayResolution <DispRsltn>

Presence: [0..1]

Definition: Resolution to use.

Datatype: "Max35Text" on page 605

10.1.4.1.7.5 Resource <Rsrc>

Presence: [0..1]

Definition: Identification of the resource to use.

Resource <Rsrc> contains the following **ResourceContent1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResourceType <RsrcTp>	[1..1]	CodeSet		196
	ResourceFormat <RsrcFmt>	[0..1]	CodeSet		196
	Language <Lang>	[0..1]	CodeSet	C14	196
	ResourceReference <RsrcRef>	[0..1]	Text		196

10.1.4.1.7.5.1 ResourceType <RsrcTp>

Presence: [1..1]

Definition: Type of media resource.

Datatype: "ResourceType1Code" on page 585

CodeName	Name	Definition
TEXT	TextToSpeech	Voice synthesis.
URLI	UniformResourceIdentifier	String of characters that unambiguously identifies a particular resource.

10.1.4.1.7.5.2 ResourceFormat <RsrcFmt>

Presence: [0..1]

Definition: Format of the media resource;

Datatype: "SoundFormat1Code" on page 592

CodeName	Name	Definition
MSGR	MessageRef	Reference of a preloaded text to play.
SNDR	SoundRef	Preloaded sound File.
TEXT	Text	Text to play.

10.1.4.1.7.5.3 Language <Lang>

Presence: [0..1]

Definition: Language of the media resource.

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 572

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.1.7.5.4 ResourceReference <RsrcRef>

Presence: [0..1]

Definition: Reference of a media resource.

Datatype: "Max1025Text" on page 602

10.1.4.1.7.6 TimingSlot <TmgSlot>

Presence: [0..1]

Definition: Identification of the moment to manage the media resource.

Datatype: "ProcessingPosition2Code" on page 583

CodeName	Name	Definition
AFTE	After	Specifies that the transaction/instruction is to be executed after the linked transaction/instruction.
WITH	With	Specifies that the transaction/instruction is to be executed with the linked transaction/instruction.
BEFO	Before	Specifies that the transaction/instruction is to be executed before the linked transaction/instruction.
INFO	Information	Specifies that the transactions/instructions are linked for information purposes only.

10.1.4.1.8 SecureInputRequest <ScrInptReq>

Presence: [0..1]

Definition: Request a secure input for a PIN.

SecureInputRequest <ScrInptReq> contains the following **DeviceSecureInputRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PINRequestType <PINReqTp>	[1..1]	CodeSet		197
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		198
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		198
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		198
	CardholderPIN <CrhdldrPIN>	[0..1]			198
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		198
	PINFormat <PINFrmt>	[1..1]	CodeSet		199
	AdditionalInput <AddtlInpt>	[0..1]	Text		199

10.1.4.1.8.1 PINRequestType <PINReqTp>

Presence: [1..1]

Definition: Type of PIN Service.

Datatype: "PINRequestType1Code" on page 580

CodeName	Name	Definition
PIAE	PINAcquisitionEncryption	The cardholder enters the PIN, the POI enciphers the PIN Block and provides it as a result to the Sale System.
PIAV	PINAcquisitionVerification	The Cardholder enters the PIN and the POI verifies it.
PIVO	PINVerifyOnly	The Sale System send a previous keyed PIN and the POI verifies it.

10.1.4.1.8.2 PINVerificationMethod <PINVrfctnMtd>

Presence: [0..1]

Definition: Identify the PIN verification method and keys.

Datatype: "Max35Text" on page 605

10.1.4.1.8.3 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Maximum time to wait for the request processing in seconds.

Datatype: "Number" on page 600

10.1.4.1.8.4 BeepKeyFlag <BeepKeyFig>

Presence: [0..1]

Definition: Indicates, when the user press a key, if a beep has to be generated.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.8.5 CardholderPIN <CrdhldrPIN>

Presence: [0..1]

Definition: Enciphered PIN and related information.

CardholderPIN <CrdhldrPIN> contains the following **OnLinePIN11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		198
	PINFormat <PINFrmt>	[1..1]	CodeSet		199
	AdditionalInput <AddtlInpt>	[0..1]	Text		199

10.1.4.1.8.5.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.4.1.8.5.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 580

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.1.4.1.8.5.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 605

10.1.4.1.9 InitialisationCardReaderRequest <InitlstnCardRdrReq>

Presence: [0..1]

Definition: A service to send parameters to Card Reader to initialize a new communication with a card.

InitialisationCardReaderRequest <InitIstnCardRdrReq> contains the following **DeviceInitialisationCardReaderRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		200
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		200
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		201
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		201
	DisplayOutput <DispOutpt>	[0..1]	±		201

10.1.4.1.9.1 WarmResetFlag <WarmRstFlg>

Presence: [0..1]

Definition: Flag to request a warm reset on a chip.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.9.2 ForceEntryMode <ForceNtryMd>

Presence: [0..*]

Definition: Payment instrument entry mode requested by the Sale System.

Datatype: ["CardDataReading8Code"](#) on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.

CodeName	Name	Definition
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.1.9.3 LeaveCardFlag <LeavCardFlg>

Presence: [0..1]

Definition: Flag to indicate the POI System to keep the card in the reader for a smart card.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.9.4 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Maximum time in seconds that the POI has to wait for a card response.

Datatype: ["Number"](#) on page 600

10.1.4.1.9.5 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Information to display.

DisplayOutput <DispOutpt> contains the following elements (see ["ActionMessage11"](#) on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.4.1.10 CardReaderAPDURequest <CardRdrAPDUReq>

Presence: [0..1]

Definition: Content of the APDU (Application Protocol Data Unit) to send to the Card.

CardReaderAPDURequest <CardRdrAPDUReq> contains the following **DeviceSendApplicationProtocolDataUnitCardReaderRequest1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Class <Clss>	[1..1]	Binary		202
	Instruction <Instr>	[1..1]	Binary		202
	Parameter1 <Param1>	[1..1]	Binary		202
	Parameter2 <Param2>	[1..1]	Binary		202
	Data <Data>	[0..1]	Binary		202
	ExpectedLength <XpctdLngth>	[0..1]	Binary		202

10.1.4.1.10.1 Class <Clss>

Presence: [1..1]

Definition: Class field of the Application Protocol Data Unit command (CLA).

Datatype: ["Min1Max256Binary" on page 542](#)

10.1.4.1.10.2 Instruction <Instr>

Presence: [1..1]

Definition: Instruction field of the Application Protocol Data Unit command (INS).

Datatype: ["Min1Max256Binary" on page 542](#)

10.1.4.1.10.3 Parameter1 <Param1>

Presence: [1..1]

Definition: Parameter 1 field of the Application Protocol Data Unit command

Datatype: ["Min1Max256Binary" on page 542](#)

10.1.4.1.10.4 Parameter2 <Param2>

Presence: [1..1]

Definition: Parameter 2 field of the Application Protocol Data Unit command

Datatype: ["Min1Max256Binary" on page 542](#)

10.1.4.1.10.5 Data <Data>

Presence: [0..1]

Definition: Data field of the Application Protocol Data Unit command to send including the length.

Datatype: ["Min1Max256Binary" on page 542](#)

10.1.4.1.10.6 ExpectedLength <XpctdLngth>

Presence: [0..1]

Definition: Expected length of the data field of the Application Protocol Data Unit response to the command.

Datatype: "Min1Max256Binary" on page 542

10.1.4.1.11 PowerOffCardReaderRequest <PwrOffCardRdrReq>

Presence: [0..1]

Definition: Content of the Power Off Card Reader Request message.

PowerOffCardReaderRequest <PwrOffCardRdrReq> contains the following **DevicePoweroffCardReaderRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		203
	DisplayOutput <DispOutpt>	[0..1]	±		203

10.1.4.1.11.1 PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>

Presence: [0..1]

Definition: Maximum time to wait for the request processing in seconds.

Datatype: "Number" on page 600

10.1.4.1.11.2 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Optional message before Power-Off.

DisplayOutput <DispOutput> contains the following elements (see "[ActionMessage11](#)" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.4.1.12 TransmissionRequest <TrnsmssnReq>

Presence: [0..1]

Definition: Content of the Request message to transmit.

TransmissionRequest <TrnsmssnReq> contains the following **DeviceTransmitMessageRequest2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DestinationAddress <DstnAdr>	[1..1]	±		204
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		205
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		205
	MessageToSend <MsgToSnd>	[1..1]	Binary		205

10.1.4.1.12.1 DestinationAddress <DstnAdr>

Presence: [1..1]

Definition: Transport address.

DestinationAddress <DstnAdr> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertldr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.4.1.12.2 MaximumTransmissionTime <MaxTrnsmssnTm>

Presence: [1..1]

Definition: Maximum time in seconds of transmission.

Datatype: "[Number](#)" on page 600

10.1.4.1.12.3 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Defines the timeout to receive an answer.

Datatype: "[Number](#)" on page 600

10.1.4.1.12.4 MessageToSend <MsgToSnd>

Presence: [1..1]

Definition: Content of the message to be transmitted.

Datatype: "[Max100KBinary](#)" on page 540

10.1.4.1.13 InputNotification <InptNtfctn>

Presence: [0..1]

Definition: Content of the Input notification message.

InputNotification <InptNtfctn> contains the following **DeviceInputNotification6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangeIdentification <Xchgld>	[1..1]	Text		205
	OutputContent <OutptCntt>	[1..1]	±		206

10.1.4.1.13.1 ExchangeIdentification <Xchgld>

Presence: [1..1]

Definition: Message main identifier.

Datatype: "Max35Text" on page 605

10.1.4.1.13.2 OutputContent <OutputCntt>

Presence: [1..1]

Definition: Updated content of the message to display before input.

OutputContent <OutputCntt> contains the following elements (see "ActionMessage11" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRcdBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRcdVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRcdNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRcdErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.4.1.14 SupplementaryData <SplmtryData>

Presence: [0..*]

Definition: Additional information incorporated as an extension to the message.

Impacted by: C13 "SupplementaryDataRule"

SupplementaryData <SplmtryData> contains the following elements (see "SupplementaryData1" on page 395 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		395
	Envelope <Envlp>	[1..1]	(External Schema)		395

Constraints

- **SupplementaryDataRule**

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

10.1.4.2 DeviceResponse8

Definition: Provides the response of a previous device request.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	211
	Context <Cntxt>	[0..1]		C10	217
	PaymentContext <PmtCntxt>	[0..1]			220
	CardPresent <CardPres>	[0..1]	Indicator		220
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		220
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		221
	AttendanceContext <AttndncCntxt>	[0..1]	CodeSet		221
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		221
	TransactionChannel <TxChanl>	[0..1]	CodeSet		221
	BusinessArea <BizArea>	[0..1]	CodeSet		222
	AttendantMessageCapable <AttndntMsgCpbl>	[0..1]	Indicator		222
	AttendantLanguage <AttndntLang>	[0..1]	CodeSet	C14	222
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		223
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		223
	SupportedOption <SpptdOptn>	[0..*]	CodeSet		224
	SaleContext <SaleCntxt>	[0..1]			224
	SaleIdentification <SaleId>	[0..1]	Text		225
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		225
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		226
	CashierIdentification <CshrlId>	[0..1]	Text		226
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	226
	ShiftNumber <ShftNb>	[0..1]	Text		226
	CustomerOrderRequestFlag <CstmrOrdReqFlg>	[0..1]	Indicator		226
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		226
	InvoiceNumber <InvcNb>	[0..1]	Text		226
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		227
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			227
	CommonName <CmonNm>	[1..1]	Text		227
	Address <Adr>	[0..1]	Text		227
	CountryCode <CtryCd>	[1..1]	CodeSet		227
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		227

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RegisteredIdentifier <RegIdr>	[1..1]	Text		227
	SplitPayment <SpltPmt>	[0..1]	Indicator		228
	RemainingAmount <RmngAmt>	[0..1]	Amount		228
	ForceOnlineFlag <ForceOnInFlg>	[0..1]	Indicator		228
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		228
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		228
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		229
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		229
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	229
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		230
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		230
	SystemToNotify <SysToNtfy>	[0..1]	Text		230
	Debtor <Dbtr>	[0..1]	±		231
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	232
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		234
	DirectDebitContext <DrctDbtCntxt>	[0..1]			234
	Debtor <Dbtr>	[0..1]	±		235
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	236
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		237
	Creditor <Cdtr>	[0..1]	±		237
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	238
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		239
	MandateRelatedInformation <MndtRltdInf>	[1..1]			239
	MandateIdentification <MndtId>	[1..1]	Text		240
	DateOfSignature <DtOfSgntr>	[0..1]	Date		240
	MandateImage <MndtImg>	[0..1]	Binary		240
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		240
	ServiceContent <SvcCntt>	[1..1]	CodeSet		240

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayResponse <DispRspn>	[0..1]			241
	OutputResult <OutptRslt>	[1..*]			241
	DeviceType <DvcTp>	[1..1]	CodeSet		242
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	Response <Rspn>	[1..1]	±		243
	InputResponse <InptRspn>	[0..1]			243
	OutputResult <OutptRslt>	[0..1]			244
	DeviceType <DvcTp>	[1..1]	CodeSet		244
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		245
	Response <Rspn>	[1..1]	±		246
	InputResult <InptRslt>	[1..1]			246
	DeviceType <DvcTp>	[1..1]	CodeSet		246
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		247
	InputResultData <InptRsltData>	[1..1]			247
	InputCommand <InptCmd>	[1..1]	CodeSet		248
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		249
	FunctionKey <FctnKey>	[0..1]	Quantity		249
	InputMessage <InptMsg>	[0..1]	Text		249
	Password <Pwd>	[0..1]	±		249
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			250
	ImageFormat <ImgFrmt>	[1..1]	Text		250
	ImageData <ImgData>	[0..1]	Binary		250
	ImageReference <ImgRef>	[0..1]	Text		250
	AdditionalInformation <AddtlInf>	[0..1]	Text		250
	PrintResponse <PrtRspn>	[0..1]			250
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		250
	SecureInputResponse <ScrInptRspn>	[0..1]			251
	CardholderPIN <CrhdldrPIN>	[0..1]			251
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		252
	PINFormat <PINFrmt>	[1..1]	CodeSet		252
	AdditionalInput <AddtlInpt>	[0..1]	Text		252

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InitialisationCardReaderResponse <InitlstrCardRdrRspn>	[0..1]			252
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		253
	ICCRResetData <ICCRstData>	[0..1]			253
	ATRValue <ATRVal>	[0..1]	Binary		254
	CardStatus <CardSts>	[0..1]	Binary		254
	AdditionalInformation <AddtlInf>	[0..1]	Binary		254
	CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>	[0..1]			254
	Data <Data>	[0..1]	Binary		254
	CardStatus <CardSts>	[1..1]	Binary		254
	TransmissionResponse <TrnsmssnRspn>	[0..1]			255
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		255
	Response <Rspn>	[1..1]	±		255
	SupplementaryData <SplmtryData>	[0..*]	±	C13	255

10.1.4.2.1 Environment <Envt>

Presence: [0..1]

Definition: Environment of the transaction.

Impacted by: C9 "OneElementPresenceRule"

Environment <Envt> contains the following elements (see "[CardPaymentEnvironment81](#)" on page 322 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		328
	ServiceProvider <SvcPrvdr>	[0..1]	±		328
	Merchant <Mrchnt>	[0..1]			329
	Identification <Id>	[0..1]	±		329
	CommonName <CmonNm>	[0..1]	Text		329
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		329
	LocationAndContact <LctnAndCtct>	[0..1]	±		330
	SchemeData <SchmeData>	[0..1]	Text		330
	POI <POI>	[0..1]			330
	Identification <Id>	[1..1]	±		331
	SystemName <SysNm>	[0..1]	Text		331
	GroupIdentification <Grpld>	[0..1]	Text		332
	Capabilities <Cpblties>	[0..1]	±		332
	TimeZone <TmZone>	[0..1]	Text		332
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		332
	Component <Cmpnt>	[0..*]	±		333
	Card <Card>	[0..1]			335
	ProtectedCardData <PrctcdCardData>	[0..1]	±		336
	PrivateCardData <PrvtCardData>	[0..1]	Binary		337
	PlainCardData <PlainCardData>	[0..1]			337
	PAN <PAN>	[1..1]	Text		337
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		337
	EffectiveDate <FctvDt>	[0..1]	Text		337
	ExpiryDate <XpryDt>	[0..1]	Text		338
	ServiceCode <SvcCd>	[0..1]	Text		338
	Track1 <Trck1>	[0..1]	Text		338
	Track2 <Trck2>	[0..1]	Text		338
	Track3 <Trck3>	[0..1]	Text		338
	CardholderName <CrdhldrNm>	[0..1]	Text		338
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		338

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaskedPAN <MskdPAN>	[0..1]	Text		339
	IssuerBIN <IssrBIN>	[0..1]	Text		339
	CardCountryCode <CardCtryCd>	[0..1]	Text		339
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		339
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		339
	CardBrand <CardBrnd>	[0..1]	Text		339
	CardProductType <CardPdctTp>	[0..1]	CodeSet		339
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		340
	InternationalCard <IntrnlCard>	[0..1]	Indicator		340
	AllowedProduct <AllwdPdct>	[0..*]	Text		340
	ServiceOption <SvcOptn>	[0..1]	Text		340
	AdditionalCardData <AddtlCardData>	[0..1]	Text		340
	Check <Chck>	[0..1]			340
	BankIdentification <Bkld>	[0..1]	Text		341
	AccountNumber <AcctNb>	[0..1]	Text		341
	CheckNumber <ChckNb>	[0..1]	Text		341
	CheckCardNumber <ChckCardNb>	[0..1]	Text		341
	CheckTrackData2 <ChckTrckData2>	[0..1]			341
	TrackNumber <TrckNb>	[0..1]	Quantity		342
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		342
	TrackValue <TrckVal>	[1..1]	Text		342
	CheckType <ChckTp>	[0..1]	CodeSet		342
	Country <Ctry>	[0..1]	Text		343
	StoredValueAccount <StordValAcct>	[0..*]			343
	AccountType <AcctTp>	[0..1]	CodeSet		343
	IdentificationType <IdTp>	[0..1]	CodeSet		344
	Identification <Id>	[0..1]	Text		344
	Brand <Brnd>	[0..1]	Text		345
	Provider <Prvdr>	[0..1]	Text		345
	OwnerName <OwnrNm>	[0..1]	Text		345
	ExpiryDate <XpryDt>	[0..1]	Text		345

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EntryMode <NtryMd>	[0..1]	CodeSet		345
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	Balance <Bal>	[0..1]	Amount		346
	LoyaltyAccount <LltyAcct>	[0..*]	±		346
	CustomerDevice <CstmrDvc>	[0..1]	±		347
	Wallet <Wlft>	[0..1]	±		347
	PaymentToken <PmtTkn>	[0..1]	±		347
	MerchantToken <MrchntTkn>	[0..1]	±		348
	Cardholder <Crhdldr>	[0..1]			348
	Identification <Id>	[0..1]			352
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		352
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		352
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		353
	DriverIdentification <Drvrld>	[0..1]	Text		353
	CustomerNumber <CstmrNb>	[0..1]	Text		353
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		353
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		353
	PassportNumber <PsptNb>	[0..1]	Text		353
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		353
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		353
	EmployerIdentificationNumber <MplyrldNb>	[0..1]	Text		354
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		354
	JobNumber <JobNb>	[0..1]	Text		354
	Department <Dept>	[0..1]	Text		354
	EmailAddress <EmailAdr>	[0..1]	Text		354
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			354
	BirthDate <BirthDt>	[1..1]	Date		354
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		355
	CityOfBirth <CityOfBirth>	[1..1]	Text		355
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	355
	Other <Othr>	[0..*]	±		355

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		355
	Language <Lang>	[0..1]	CodeSet	C14	355
	BillingAddress <BillgAdr>	[0..1]	±		356
	ShippingAddress <ShppgAdr>	[0..1]	±		356
	TripNumber <TripNb>	[0..1]	Text		357
	Vehicle <Vhcl>	[0..1]	±		357
	Authentication <Authntcn>	[0..*]			358
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		360
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		361
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		362
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		362
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			362
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		362
	PINFormat <PINFrmt>	[1..1]	CodeSet		363
	AdditionalInput <AddtlInpt>	[0..1]	Text		363
	CardholderIdentification <CrdhldrId>	[0..1]			363
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		364
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		364
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		364
	DriverIdentification <DrvrId>	[0..1]	Text		365
	CustomerNumber <CstmrNb>	[0..1]	Text		365
	SocialSecurityNumber <ScIscyNb>	[0..1]	Text		365
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		365
	PassportNumber <PsptNb>	[0..1]	Text		365
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		365
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		365
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		365
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		366
	JobNumber <JobNb>	[0..1]	Text		366
	Department <Dept>	[0..1]	Text		366
	EmailAddress <EmailAdr>	[0..1]	Text		366

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			366
	BirthDate <BirthDt>	[1..1]	Date		366
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		366
	CityOfBirth <CityOfBirth>	[1..1]	Text		367
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	367
	Other <Othr>	[0..*]	±		367
	AddressVerification <AdrVrfctn>	[0..1]			367
	AddressDigits <AdrDgts>	[0..1]	Text		367
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		368
	AuthenticationType <AuthntcnTp>	[0..1]	Text		368
	AuthenticationLevel <AuthntcnLv>	[0..1]	Text		368
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		368
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			368
	Identification <Id>	[1..1]	Text		369
	Value <Val>	[0..1]	Binary		369
	ProtectedValue <PrctdVal>	[0..1]	±		369
	Type <Tp>	[0..1]	Text		369
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			369
	Method <Mtd>	[1..1]	CodeSet		370
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		371
	Result <Rslt>	[0..1]	CodeSet		371
	AdditionalResult <AddtlRslt>	[0..1]	Text		371
	PersonalData <PrsnlData>	[0..1]	Text		372
	MobileData <MobData>	[0..*]			372
	MobileCountryCode <MobCtryCd>	[0..1]	Text		372
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		372
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		373
	Geolocation <Glctn>	[0..1]			373
	GeographicCoordinates <GeogcCordints>	[0..1]			373
	Latitude <Lat>	[1..1]	Text		373
	Longitude <Long>	[1..1]	Text		373

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	UTMCoordinates <UTMCordints>	[0..1]			374
	UTMZone <UTMZone>	[1..1]	Text		374
	UTMEastward <UTMEstwr>	[1..1]	Text		374
	UTMNorthward <UTMNrthwr>	[1..1]	Text		374
	SensitiveMobileData <SnstvMobData>	[0..1]			374
	MSISDN <MSISDN>	[1..1]	Text		375
	IMSI <IMSI>	[0..1]	Text		375
	IMEI <IMEI>	[0..1]	Text		375
	ProtectedMobileData <PrctdMobData>	[0..1]	±		375
	ProtectedCardholderData <PrctdCrhdldrData>	[0..1]	±		375
	SaleEnvironment <SaleEnv>	[0..1]			376
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		376
	Currency <Ccy>	[0..1]	CodeSet	C1	377
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		377
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		377
	MinimumSplitAmount <MinSplAmt>	[0..1]	Amount		378
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		378
	LoyaltyHandling <LtyHdlg>	[0..1]	CodeSet		378

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.2.2 Context <Cntxt>

Presence: [0..1]

Definition: Context in which the transaction is performed (payment and sale).

Impacted by: C10 "OneElementPresenceRule"

Context <Cntxt> contains the following **PaymentContext30** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentContext <PmtCntxt>	[0..1]			220
	CardPresent <CardPres>	[0..1]	Indicator		220
	CardholderPresent <CrhldrPres>	[0..1]	Indicator		220
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		221
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		221
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		221
	TransactionChannel <TxChanl>	[0..1]	CodeSet		221
	BusinessArea <BizArea>	[0..1]	CodeSet		222
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		222
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	222
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		223
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		223
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		224
	SaleContext <SaleCntxt>	[0..1]			224
	SaleIdentification <SaleId>	[0..1]	Text		225
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		225
	SaleReconciliationIdentification <SaleRcnclnId>	[0..1]	Text		226
	CashierIdentification <CshrlId>	[0..1]	Text		226
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	226
	ShiftNumber <ShftNb>	[0..1]	Text		226
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		226
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		226
	InvoiceNumber <InvcNb>	[0..1]	Text		226
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		227
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			227
	CommonName <CmonNm>	[1..1]	Text		227
	Address <Adr>	[0..1]	Text		227
	CountryCode <CtryCd>	[1..1]	CodeSet		227
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		227
	RegisteredIdentifier <Regdldr>	[1..1]	Text		227
	SplitPayment <Spltpmt>	[0..1]	Indicator		228

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RemainingAmount <RmngAmt>	[0..1]	Amount		228
	ForceOnlineFlag <ForceOnInFlg>	[0..1]	Indicator		228
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		228
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		228
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		229
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		229
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	229
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		230
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		230
	SystemToNotify <SysToNtfy>	[0..1]	Text		230
	Debtor <Dbtr>	[0..1]	±		231
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	232
	ProtectedDebtorAccount <PrtctdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrtctdCdtrAcct>	[0..1]	±		234
	DirectDebitContext <DrctDbtCntxt>	[0..1]			234
	Debtor <Dbtr>	[0..1]	±		235
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	236
	ProtectedDebtorAccount <PrtctdDbtrAcct>	[0..1]	±		237
	Creditor <Cdtr>	[0..1]	±		237
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	238
	ProtectedCreditorAccount <PrtctdCdtrAcct>	[0..1]	±		239
	MandateRelatedInformation <MndtRltdInf>	[1..1]			239
	MandateIdentification <MndtId>	[1..1]	Text		240
	DateOfSignature <DtOfSgntr>	[0..1]	Date		240
	MandateImage <MndtImg>	[0..1]	Binary		240
	ProtectedMandateImage <PrtctdMndtImg>	[0..1]	±		240

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.2.2.1 PaymentContext <PmtCntxt>

Presence: [0..1]

Definition: Context of the card payment transaction.

PaymentContext <PmtCntxt> contains the following **PaymentContext29** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardPresent <CardPres>	[0..1]	Indicator		220
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		220
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		221
	AttendanceContext <AttndncCntxt>	[0..1]	CodeSet		221
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		221
	TransactionChannel <TxChanl>	[0..1]	CodeSet		221
	BusinessArea <BizArea>	[0..1]	CodeSet		222
	AttendantMessageCapable <AttndntMsgCpbl>	[0..1]	Indicator		222
	AttendantLanguage <AttndntLang>	[0..1]	CodeSet	C14	222
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		223
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		223
	SupportedOption <SpprtdOptn>	[0..*]	CodeSet		224

10.1.4.2.2.1.1 CardPresent <CardPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated by a card physically present or not.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.2 CardholderPresent <CrdhldrPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated in presence of the cardholder or not.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.3 OnLineContext <OnLineCntxt>

Presence: [0..1]

Definition: On-line or off-line context of the transaction.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.4 AttendanceContext <AttndncCntxt>

Presence: [0..1]

Definition: Human attendance at the POI (Point Of Interaction) location during the transaction.

Datatype: ["AttendanceContext1Code"](#) on page 552

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.
UATT	Unattended	Unattended payment, no attendant present.

10.1.4.2.2.1.5 TransactionEnvironment <TxEnvnt>

Presence: [0..1]

Definition: Indicates the environment of the transaction.

Datatype: ["TransactionEnvironment1Code"](#) on page 597

CodeName	Name	Definition
MERC	Merchant	Merchant environment.
PRIV	Private	Private environment.
PUBL	Public	Public environment.

10.1.4.2.2.1.6 TransactionChannel <TxChanl>

Presence: [0..1]

Definition: Identifies the type of the communication channels used by the cardholder to the acceptor system.

Datatype: ["TransactionChannel5Code"](#) on page 597

CodeName	Name	Definition
MAIL	MailOrder	Mail order.
TLPH	TelephoneOrder	Telephone order.
ECOM	ElectronicCommerce	Electronic commerce.
TVPY	TelevisionPayment	Payment on television.

CodeName	Name	Definition
SECM	SecuredElectronicCommerce	Electronic commerce with cardholder authentication.
MOBL	MobilePayment	Payment performed through a cardholder mobile device.
MPOS	MobilePOS	Payment performed through a merchant mobile device.

10.1.4.2.2.1.7 BusinessArea <BizArea>

Presence: [0..1]

Definition: Defines the business context of this transaction that could imply specific scheme rules.

Datatype: "BusinessArea2Code" on page 557

CodeName	Name	Definition
AIBD	ArtificialIntelligenceBasedDecision	The payment is initiated by an artificial intelligence based decision.
PPAY	PlainPayment	The card is used to perform a plain payment.
TKNF	TransitKnownFare	The card is used in a Transit business case where the fare amount is known when the transaction is initiated.
EOPT	EnergyOpenPayment	Indicates when the card is used in an energy business case where the amount could not be assessed when the transaction is initiated.
TOPT	TransitOpenPayment	Indicates when the card is used in a transit business case where the fare amount is not known when the transaction is initiated.

10.1.4.2.2.1.8 AttendantMessageCapable <AttdntMsgCpbl>

Presence: [0..1]

Definition: Indicates whether a message can be sent or not on an attendant display (attendant display present or not).

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.9 AttendantLanguage <AttdntLang>

Presence: [0..1]

Definition: Language used to display messages to the attendant.

Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 572

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.2.2.1.10 CardDataEntryMode <CardDataNtryMd>

Presence: [0..1]

Definition: Entry mode of the card data.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.2.2.1.11 FallbackIndicator <FlbckInd>

Presence: [0..1]

Definition: Indicator of a card entry mode fallback.

Datatype: "CardFallback1Code" on page 560

CodeName	Name	Definition
FFLB	FallbackAfterFailure	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal failed.
SFLB	FallbackAfterSuccess	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal was successful.

CodeName	Name	Definition
NFLB	NoFallback	No card fall-back during the transaction in progress.

10.1.4.2.2.1.12 SupportedOption <SpptdOptn>

Presence: [0..*]

Definition: Payment options the card acceptor can support.

Datatype: "SupportedPaymentOption2Code" on page 593

CodeName	Name	Definition
PART	PartialApproval	The entity supports a partial approval of the payment transaction.
MSRV	PaymentApprovalOnly	The entity supports the approval of the payment service along with the decline of additional requested services (as cash-back).
INSI	IssuerInstalment	The sender support IssuerInstalment proposals to the Cardholder.
PINQ	PINRequest	The sender is able to support Single Tap transaction.

10.1.4.2.2.2 SaleContext <SaleCntxt>

Presence: [0..1]

Definition: Context of the sale involving the card payment transaction.

SaleContext <SaleCntxt> contains the following **SaleContext4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SaleIdentification <SaleId>	[0..1]	Text		225
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		225
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		226
	CashierIdentification <CshrlId>	[0..1]	Text		226
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	226
	ShiftNumber <ShiftNb>	[0..1]	Text		226
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		226
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		226
	InvoiceNumber <InvNb>	[0..1]	Text		226
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		227
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			227
	CommonName <CmonNm>	[1..1]	Text		227
	Address <Adr>	[0..1]	Text		227
	CountryCode <CtryCd>	[1..1]	CodeSet		227
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		227
	RegisteredIdentifier <Regldr>	[1..1]	Text		227
	SplitPayment <SplitPmt>	[0..1]	Indicator		228
	RemainingAmount <RmngAmt>	[0..1]	Amount		228
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		228
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		228
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		228
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		229
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		229

10.1.4.2.2.2.1 SaleIdentification <SaleId>

Presence: [0..1]

Definition: Identification of the sale terminal (electronic cash register or point of sale terminal) or the sale system.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.2 SaleReferenceNumber <SaleRefNb>

Presence: [0..1]

Definition: Identify a sale transaction assigned by the sale system.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.3 SaleReconciliationIdentification <SaleRcncld>

Presence: [0..1]

Definition: Identifier of the reconciliation between the Sale system and the POI system.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.4 CashierIdentification <Cshrlid>

Presence: [0..1]

Definition: Identification of the cashier who carried out the transaction.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.5 CashierLanguage <CshrLang>

Presence: [0..*]

Definition: Languages used by the cashier.

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 572

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.2.2.2.6 ShiftNumber <ShftNb>

Presence: [0..1]

Definition: Identifies the shift of the cashier.

Datatype: "Max2NumericText" on page 604

10.1.4.2.2.2.7 CustomerOrderRequestFlag <CstmrOrdrReqFlg>

Presence: [0..1]

Definition: Flag indicating that list of CustomerOrders should be returned in response.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.8 PurchaseOrderNumber <PurchsOrdrNb>

Presence: [0..1]

Definition: Identification of the purchase order.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.9 InvoiceNumber <InvcNb>

Presence: [0..1]

Definition: Identification of the invoice.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.10 DeliveryNoteNumber <DlvryNoteNb>

Presence: [0..1]

Definition: Identification allocated by the sale system and given to the customer.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.11 SponsoredMerchant <SpnsrdMrchnt>

Presence: [0..*]

Definition: Merchant using the payment services of a payment facilitator, acting as a card acceptor.

SponsoredMerchant <SpnsrdMrchnt> contains the following **Organisation26** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommonName <CmonNm>	[1..1]	Text		227
	Address <Adr>	[0..1]	Text		227
	CountryCode <CtryCd>	[1..1]	CodeSet		227
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		227
	RegisteredIdentifier <Regldlr>	[1..1]	Text		227

10.1.4.2.2.2.11.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 607

10.1.4.2.2.2.11.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 603

10.1.4.2.2.2.11.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 571

10.1.4.2.2.2.11.4 MerchantCategoryCode <MrchntCtgyCd>

Presence: [1..1]

Definition: Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.

Datatype: "Min3Max4Text" on page 608

10.1.4.2.2.2.11.5 RegisteredIdentifier <Regldlr>

Presence: [1..1]

Definition: Identifier of the sponsored merchant assigned by the payment facilitator of their acquirer.

Datatype: "Max35Text" on page 605

10.1.4.2.2.2.12 SplitPayment <SplitPmt>

Presence: [0..1]

Definition: True if the payment transaction is a partial payment of the sale transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.13 RemainingAmount <RmngAmt>

Presence: [0..1]

Definition: Remaining amount to complete the sale transaction, if a partial payment has been completed for the sale transaction.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.4.2.2.2.14 ForceOnlineFlag <ForceOnInFlg>

Presence: [0..1]

Definition: Indicates if the Cashier requires POI forces online access to the Acquirer.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.15 ReuseCardDataFlag <ReuseCardDataFlg>

Presence: [0..1]

Definition: Indicates if the card data has to be taken from a previous transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.16 AllowedEntryMode <AllwdNtryMd>

Presence: [0..*]

Definition: Type of card data reading.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.

CodeName	Name	Definition
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.2.2.2.17 SaleTokenScope <SaleTknScp>

Presence: [0..1]

Definition: Scope of the token that identifies the payment mean of the customer.

Datatype: "SaleTokenScope1Code" on page 592

CodeName	Name	Definition
MULT	MultipleUse	The token is generated to recognise a customer for a longer period.
SNGL	SingleUse	The token is generated to recognise a customer during the lifetime of a transaction.

10.1.4.2.2.2.18 AdditionalSaleData <AddtlSaleData>

Presence: [0..1]

Definition: Additional information associated with the sale transaction.

Datatype: "Max70Text" on page 607

10.1.4.2.2.3 CreditTransferContext <CdtTrfCntxt>

Presence: [0..1]

Definition: Context of the credit transfer transaction.

Impacted by: C11 "OneElementPresenceRule"

CreditTransferContext <CdtTrfCntxt> contains the following **CreditTransferContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		230
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		230
	SystemToNotify <SysToNtfy>	[0..1]	Text		230
	Debtor <Dbtr>	[0..1]	±		231
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	232
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		234

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.2.2.3.1 AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>

Presence: [0..1]

Definition: Indicator that specifies if a notification is expected after a credit transfer request.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.3.2 WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>

Presence: [0..1]

Definition: Indicator from the sale system to the accepting system to wait for notification before stating that the payment is done.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.3.3 SystemToNotify <SysToNtfy>

Presence: [0..1]

Definition: Reference of the system that should receive the notification of credit transfer.

Datatype: "Max1025Text" on page 602

10.1.4.2.2.3.4 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the payer.

Debtor <Dbtr> contains the following elements (see "PartyIdentification272" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer <Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.2.2.3.5 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the payer's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

DebtorAccount <DbtrAcct> contains the following elements (see "CashAccount40" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.3.6 ProtectedDebtorAccount <PrctcdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrctcdDbtrAcct> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.2.2.3.7 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the payee.

Creditor <Cdtr> contains the following elements (see "PartyIdentification272" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer <Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.2.2.3.8 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the payee's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.3.9 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.2.2.4 DirectDebitContext <DrctDbtCntxt>

Presence: [0..1]

Definition: Context of the direct debit transaction.

DirectDebitContext <DrctDbtCntxt> contains the following **DirectDebitContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Debtor <Dbtr>	[0..1]	±		235
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	236
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		237
	Creditor <Cdtr>	[0..1]	±		237
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	238
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		239
	MandateRelatedInformation <MndtRltdInf>	[1..1]			239
	MandatIdentification <MndtId>	[1..1]	Text		240
	DateOfSignature <DtOfSgntr>	[0..1]	Date		240
	MandatImage <MndtImg>	[0..1]	Binary		240
	ProtectedMandatImage <PrctcdMndtImg>	[0..1]	±		240

10.1.4.2.2.4.1 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the debtor.

Debtor <Dbtr> contains the following elements (see "[PartyIdentification272](#)" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer </Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer </Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.2.2.4.2 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the debtor's account.

Impacted by: [C7 "IdentificationOrProxyPresenceRule"](#), [C6 "IdentificationAndProxyGuideline"](#)

DebtorAccount <DbtrAcct> contains the following elements (see "[CashAccount40](#)" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.4.3 ProtectedDebtorAccount <PrctcdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrctcdDbtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.2.2.4.4 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the creditor.

Creditor <Cdtr> contains the following elements (see "[PartyIdentification272](#)" on page 451 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer </Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer </Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.4.2.2.4.5 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the creditor's account.

Impacted by: [C7 "IdentificationOrProxyPresenceRule"](#), [C6 "IdentificationAndProxyGuideline"](#)

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 141 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		141
	Type <Tp>	[0..1]	±		141
	Currency <Ccy>	[0..1]	CodeSet	C2	142
	Name <Nm>	[0..1]	Text		142
	Proxy <Prxy>	[0..1]	±		142

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.4.6 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.2.2.4.7 MandateRelatedInformation <MndtRltdInf>

Presence: [1..1]

Definition: Provides further details of the mandate signed between the creditor and the debtor.

MandateRelatedInformation <MndtRltdInf> contains the following **MandateRelatedInformation17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Mandateldentification <Mndtld>	[1..1]	Text		240
	DateOfSignature <DtOfSgntr>	[0..1]	Date		240
	Mandatelmage <Mndtlmg>	[0..1]	Binary		240
	ProtectedMandatelmage <PrctcdMndtlmg>	[0..1]	±		240

10.1.4.2.2.4.7.1 Mandateldentification <Mndtld>

Presence: [1..1]

Definition: Unique identification, as assigned by the creditor, to unambiguously identify the mandate.

Datatype: "Max35Text" on page 605

10.1.4.2.2.4.7.2 DateOfSignature <DtOfSgntr>

Presence: [0..1]

Definition: Date on which the direct debit mandate has been signed by the debtor.

Datatype: "ISODate" on page 598

10.1.4.2.2.4.7.3 Mandatelmage <Mndtlmg>

Presence: [0..1]

Definition: Image of scanned signed mandate.

Datatype: "Max2MBBinary" on page 541

10.1.4.2.2.4.7.4 ProtectedMandatelmage <PrctcdMndtlmg>

Presence: [0..1]

Definition: Secured image of scanned signed mandate.

ProtectedMandatelmage <PrctcdMndtlmg> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.2.3 ServiceContent <SvcCntt>

Presence: [1..1]

Definition: Define the type of service answered.

Datatype: "RetailerService9Code" on page 590

CodeName	Name	Definition
DDYP	DeviceDisplayResponse	One system responds to the other system for a display request.
DINP	DeviceInputResponse	One system responds to the other System for a input request.
DPRP	DevicePrintResponse	One system responds to the other System for a print request.
DSOP	DevicePlaySoundResponse	One system responds to the other System for a play sound request.
DSIP	DeviceSecureInputResponse	One system responds to the other System for secure data input.
DCIP	DeviceInitialisationCardReaderResponse	The POI system responds to the Sale System for a card reader initialisation.
DCAP	DeviceSendApplicationProtocolDataUnitCardReaderResponse	The POI system responds to the Sale System for a card reader Application Protocol Data Unit sending.
DCPP	DevicePowerOffCardRequestResponse	The POI system responds to the Sale System for a card reader power off.
DCOP	DeviceTransmissionMessageResponse	The POI system responds to the Sale System after a message transmission.

10.1.4.2.4 DisplayResponse <DispRspn>

Presence: [0..1]

Definition: Content of the Display Response message.

DisplayResponse <DispRspn> contains the following DeviceDisplayResponse2 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	OutputResult <OutptRslt>	[1..*]			241
	DeviceType <DvcTp>	[1..1]	CodeSet		242
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	Response <Rspn>	[1..1]	±		243

10.1.4.2.4.1 OutputResult <OutptRslt>

Presence: [1..*]

Definition: Give result for display request.

OutputResult <OutptRslt> contains the following OutputResult2 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		242
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	Response <Rspn>	[1..1]	±		243

10.1.4.2.4.1.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Logical device located on a Sale Terminal or a POI Terminal, in term of class of information to output.

Datatype: "UserInterface4Code" on page 598

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.

10.1.4.2.4.1.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualification of the information to sent to an output logical device.

Datatype: "InformationQualify1Code" on page 570

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI

CodeName	Name	Definition
		request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.2.4.1.3 Response <Rspn>

Presence: [1..1]

Definition: Gives response for each peripheral.

Response <Rspn> contains the following elements (see "ResponseType11" on page 387 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		387
	ResponseReason <RspnRsn>	[0..1]	CodeSet		388
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		389

10.1.4.2.5 InputResponse <InptRspn>

Presence: [0..1]

Definition: Content of the Input Response message.

InputResponse <InptRspn> contains the following **DeviceInputResponse6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	OutputResult <OutptRslt>	[0..1]			244
	DeviceType <DvcTp>	[1..1]	CodeSet		244
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		245
	Response <Rspn>	[1..1]	±		246
	InputResult <InptRslt>	[1..1]			246
	DeviceType <DvcTp>	[1..1]	CodeSet		246
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		247
	InputResultData <InptRsltData>	[1..1]			247
	InputCommand <InptCmd>	[1..1]	CodeSet		248
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		249
	FunctionKey <FctnKey>	[0..1]	Quantity		249
	InputMessage <InptMsg>	[0..1]	Text		249
	Password <Pwd>	[0..1]	±		249
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			250
	ImageFormat <ImgFrmt>	[1..1]	Text		250
	ImageData <ImgData>	[0..1]	Binary		250
	ImageReference <ImgRef>	[0..1]	Text		250
	AdditionalInformation <AddtlInf>	[0..1]	Text		250

10.1.4.2.5.1 OutputResult <OutptRslt>

Presence: [0..1]

Definition: Result of display request.

OutputResult <OutptRslt> contains the following **OutputResult2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		244
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		245
	Response <Rspn>	[1..1]	±		246

10.1.4.2.5.1.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Logical device located on a Sale Terminal or a POI Terminal, in term of class of information to output.

Datatype: "UserInterface4Code" on page 598

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.

10.1.4.2.5.1.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualification of the information to sent to an output logical device.

Datatype: "InformationQualify1Code" on page 570

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.2.5.1.3 Response <Rspn>

Presence: [1..1]

Definition: Gives response for each peripheral.

Response <Rspn> contains the following elements (see "ResponseType11" on page 387 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		387
	ResponseReason <RspnRsn>	[0..1]	CodeSet		388
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		389

10.1.4.2.5.2 InputResult <InptRslt>

Presence: [1..1]

Definition: Result of input request.

InputResult <InptRslt> contains the following **InputResult6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		246
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		247
	InputResultData <InptRsltData>	[1..1]			247
	InputCommand <InptCmd>	[1..1]	CodeSet		248
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		249
	FunctionKey <FctnKey>	[0..1]	Quantity		249
	InputMessage <InptMsg>	[0..1]	Text		249
	Password <Pwd>	[0..1]	±		249
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			250
	ImageFormat <ImgFrmt>	[1..1]	Text		250
	ImageData <ImgData>	[0..1]	Binary		250
	ImageReference <ImgRef>	[0..1]	Text		250
	AdditionalInformation <AddtlInf>	[0..1]	Text		250

10.1.4.2.5.2.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Type of Input device.

Datatype: "SaleCapabilities2Code" on page 591

CodeName	Name	Definition
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI

CodeName	Name	Definition
		System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).

10.1.4.2.5.2.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualifies the type of given information.

Datatype: "InformationQualify1Code" on page 570

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.2.5.2.3 InputResultData <InptRsltData>

Presence: [1..1]

Definition: Data resulting of input after POI or Sale processing.

InputResultData <InptRsltData> contains the following **InputResultData6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InputCommand <InptCmd>	[1..1]	CodeSet		248
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		249
	FunctionKey <FctnKey>	[0..1]	Quantity		249
	InputMessage <InptMsg>	[0..1]	Text		249
	Password <Pwd>	[0..1]	±		249
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			250
	ImageFormat <ImgFrmt>	[1..1]	Text		250
	ImageData <ImgData>	[0..1]	Binary		250
	ImageReference <ImgRef>	[0..1]	Text		250
	AdditionalInformation <AddtlInf>	[0..1]	Text		250

10.1.4.2.5.2.3.1 InputCommand <InptCmd>

Presence: [1..1]

Definition: Type of processed input.

Datatype: "InputCommand1Code" on page 570

CodeName	Name	Definition
DCSG	DecimalString	Wait for a string of digit characters with a decimal point, the length range could be specified.
DGSG	DigitString	Wait for a string of digit characters.
GAKY	GetAnyKey	Wait for a key pressed on the Terminal, to be able to read the message displayed on the Terminal.
GCNF	GetConfirmation	Wait for a confirmation Yes (Y) or No (N) on the Sale System. Wait for a confirmation (Valid or Cancel button) on the POI Terminal. The result of the command is a Boolean: True or False.
GFKY	GetFunctionKey	Wait for a function key pressed on the Terminal: From POI, Valid, Clear, Correct, Generic Function key number. From Sale, Generic Function key.
GMNE	GetMenuEntry	To choose an entry among a list of entries (all of them are not necessary selectable). The OutputFormat has to be MenuEntry.
PSWD	Password	Request to enter a password with masked characters while typing the password.

CodeName	Name	Definition
SITE	SiteManager	Wait for a confirmation Yes (Y) or No (N) of the Site Manager on the Sale System.
TXSG	TextString	Wait for a string of alphanumeric characters.
HTML	XHTMLText	Wait for a XHTML data.
SIGN	Signature	Request to wait for signature.

10.1.4.2.5.2.3.2 ConfirmedFlag <ConfidFlg>

Presence: [0..1]

Definition: Flag of notification of card to be entered in the POI card reader.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.5.2.3.3 FunctionKey <FctnKey>

Presence: [0..1]

Definition: Specifies the number of the function key which is typed by the Customer on the POI system or the Cashier on the Sale System.

Datatype: "[Number](#)" on page 600

10.1.4.2.5.2.3.4 InputMessage <InptMsg>

Presence: [0..1]

Definition: Specifies the input text and data given by the POI or the Sale System.

Datatype: "[Max20000Text](#)" on page 604

10.1.4.2.5.2.3.5 Password <Pwd>

Presence: [0..1]

Definition: An enciphered password typed by the Customer on the POI system or the Cashier on the Sale system.

Password <Pwd> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.4.2.5.2.3.6 ImageCapturedSignature <ImgCaptrdSgnt>

Presence: [0..1]

Definition: Numeric value of a handwritten signature.

ImageCapturedSignature <ImgCaptrdSgnt> contains the following **CapturedSignature1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ImageFormat <ImgFrmt>	[1..1]	Text		250
	ImageData <ImgData>	[0..1]	Binary		250
	ImageReference <ImgRef>	[0..1]	Text		250
	AdditionalInformation <AddtlInf>	[0..1]	Text		250

10.1.4.2.5.2.3.6.1 ImageFormat <ImgFrmt>

Presence: [1..1]

Definition: Format of the image.

Datatype: "Max35Text" on page 605

10.1.4.2.5.2.3.6.2 ImageData <ImgData>

Presence: [0..1]

Definition: Data of the image.

Datatype: "Max2MBBinary" on page 541

10.1.4.2.5.2.3.6.3 ImageReference <ImgRef>

Presence: [0..1]

Definition: URL or name of the image.

Datatype: "Max500Text" on page 606

10.1.4.2.5.2.3.6.4 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information for the image.

Datatype: "Max140Text" on page 603

10.1.4.2.6 PrintResponse <PrtRspn>

Presence: [0..1]

Definition: Content of the Print Response message.

PrintResponse <PrtRspn> contains the following **DevicePrintResponse1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		250

10.1.4.2.6.1 DocumentQualifier <DocQlfr>

Presence: [1..1]

Definition: Qualification of the document printed to the Cashier or the Customer.

Datatype: "DocumentType7Code" on page 566

CodeName	Name	Definition
JNRL	Journal	When the POI or the Sale System wants to store a message on the journal printer or electronic journal of the Sale Terminal (it is sometimes a Sale Logging/Journal Printer).
CRCP	CustomerReceipt	When the Sale System requires the POI system to print the Customer receipt.
HRCP	CashierReceipt	When the Sale system print the Cashier copy of the Payment receipt.
SRCP	SaleReceipt	When the Sale System requires the POI system to print the Sale receipt.
RPIN	RelatedPaymentInstruction	Document is a linked payment instruction to which the current payment instruction is related, for example, in a cover scenario.
VCHR	Voucher	Document is an electronic payment document.

10.1.4.2.7 SecureInputResponse <ScrInptRspn>

Presence: [0..1]

Definition: Response to a secure input request.

SecureInputResponse <ScrInptRspn> contains the following **DeviceSecureInputResponse6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardholderPIN <CrdhldrPIN>	[0..1]			251
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		252
	PINFormat <PINFrmt>	[1..1]	CodeSet		252
	AdditionalInput <AddtlInpt>	[0..1]	Text		252

10.1.4.2.7.1 CardholderPIN <CrdhldrPIN>

Presence: [0..1]

Definition: Cardholder PIN data when needed.

CardholderPIN <CrdhldrPIN> contains the following **OnLinePIN11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		252
	PINFormat <PINFrmt>	[1..1]	CodeSet		252
	AdditionalInput <AddtlInpt>	[0..1]	Text		252

10.1.4.2.7.1.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.4.2.7.1.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 580

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.1.4.2.7.1.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 605

10.1.4.2.8 InitialisationCardReaderResponse <InitlStnCardRdrRspn>

Presence: [0..1]

Definition: Content received after a card initialisation.

InitialisationCardReaderResponse <InitIstnCardRdrRspn> contains the following **DeviceInitialisationCardReaderResponse2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		253
	ICCRResetData <ICCRstData>	[0..1]			253
	ATRValue <ATRVal>	[0..1]	Binary		254
	CardStatus <CardSts>	[0..1]	Binary		254
	AdditionalInformation <AddtlInf>	[0..1]	Binary		254

10.1.4.2.8.1 CardEntryMode <CardNtryMd>

Presence: [0..1]

Definition: Payment instrument entry mode requested by the Sale System.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.2.8.2 ICCResetData <ICCRstData>

Presence: [0..1]

Definition: Data of a Chip Card related to the reset of the chip.

ICCRstData <ICCRstData> contains the following **ICCRstData1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ATRValue <ATRVAl>	[0..1]	Binary		254
	CardStatus <CardSts>	[0..1]	Binary		254

10.1.4.2.8.2.1 ATRValue <ATRVAl>

Presence: [0..1]

Definition: Value of the Answer To Reset of a chip card.

Datatype: "Max140Binary" on page 541

10.1.4.2.8.2.2 CardStatus <CardSts>

Presence: [0..1]

Definition: Status of a smartcard response to a command (SW1-SW2).

Datatype: "Max35Binary" on page 541

10.1.4.2.8.3 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information about the Device Initialisation Card Reader Response.

Datatype: "Max10000Binary" on page 540

10.1.4.2.9 CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>

Presence: [0..1]

Definition: Content of the Card Reader APDU (Application Protocol Data Unit) response message.

CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn> contains the following **DeviceSendApplicationProtocolDataUnitCardReaderResponse1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Data <Data>	[0..1]	Binary		254
	CardStatus <CardSts>	[1..1]	Binary		254

10.1.4.2.9.1 Data <Data>

Presence: [0..1]

Definition: Class field of the Application Protocol Data Unit command (CLA).

Datatype: "Min1Max256Binary" on page 542

10.1.4.2.9.2 CardStatus <CardSts>

Presence: [1..1]

Definition: Status of a smartcard response to a command (SW1-SW2). Reference: ISO 7816-4.

Datatype: "Min1Max256Binary" on page 542

10.1.4.2.10 TransmissionResponse <TrnsmssnRspn>

Presence: [0..1]

Definition: Content of the Transmit Response message.

TransmissionResponse <TrnsmssnRspn> contains the following **DeviceTransmitMessageResponse1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		255

10.1.4.2.10.1 ReceivedMessage <RcvdMsg>

Presence: [0..1]

Definition: Content of a transmitted message.

Datatype: "Max100KBinary" on page 540

10.1.4.2.11 Response <Rspn>

Presence: [1..1]

Definition: Result of the processing of the request.

Response <Rspn> contains the following elements (see "ResponseType11" on page 387 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		387
	ResponseReason <RspnRsn>	[0..1]	CodeSet		388
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		389

10.1.4.2.12 SupplementaryData <SplmtryData>

Presence: [0..*]

Definition: Additional information incorporated as an extension to the message.

Impacted by: C13 "SupplementaryDataRule"

SupplementaryData <SplmtryData> contains the following elements (see "SupplementaryData1" on page 395 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		395
	Envelope <Envlp>	[1..1]	(External Schema)		395

Constraints

- **SupplementaryDataRule**

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

10.1.5 Address

10.1.5.1 CommunicationAddress9

Definition: Communication information.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PostalAddress <PstAdr>	[0..1]	±		256
	Email <Email>	[0..1]	Text		256
	URLAddress <URLAdr>	[0..1]	Text		257
	Phone <Phne>	[0..1]	Text		257
	CustomerService <CstmrSvc>	[0..1]	Text		257
	AdditionalContactInformation <AddtlCtctInf>	[0..1]	Text		257

10.1.5.1.1 PostalAddress <PstAdr>

Presence: [0..1]

Definition: Postal address of the entity.

PostalAddress <PstAdr> contains the following elements (see "[PostalAddress22](#)" on page 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		468
	Department <Dept>	[0..1]	Text		468
	SubDepartment <SubDept>	[0..1]	Text		468
	AddressLine <AdrLine>	[0..2]	Text		468
	StreetName <StrtNm>	[0..1]	Text		469
	BuildingNumber <BldgNb>	[0..1]	Text		469
	PostCode <PstCd>	[0..1]	Text		469
	TownName <TwnNm>	[0..1]	Text		469
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		469
	CountryCode <CtryCd>	[0..1]	Text		469

10.1.5.1.2 Email <Email>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 604

10.1.5.1.3 URLAddress <URLAdr>

Presence: [0..1]

Definition: Address for the Universal Resource Locator (URL), for example used over the www (HTTP) service.

Datatype: "Max256Text" on page 604

10.1.5.1.4 Phone <Phne>

Presence: [0..1]

Definition: Collection of information that identifies a phone number, as defined by telecom services.

Datatype: "PhoneNumber" on page 609

10.1.5.1.5 CustomerService <CstmrSvc>

Presence: [0..1]

Definition: Phone number of the customer service.

Datatype: "PhoneNumber" on page 609

10.1.5.1.6 AdditionalContactInformation <AddtlCtctInf>

Presence: [0..1]

Definition: Additional information used to facilitate contact with the card acceptor, for instance sales agent name, dispute manager name.

Datatype: "Max256Text" on page 604

10.1.6 Configuration

10.1.6.1 AcquirerProtocolParameters17

Definition: Acceptor parameters dedicated to the acquirer protocol.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		260
	AcquirerIdentification <Acqrrld>	[1..*]	±		260
	Version <Vrsn>	[1..1]	Text		260
	ApplicationIdentification <Applld>	[0..*]	Text		260
	Host <Hst>	[0..*]			261
	HostIdentification <Hstld>	[1..1]	Text		261
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		261
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		262
	ExternallyTypeSupported <XtrnlyTpSprrtd>	[0..*]	Text		262
	OnLineTransaction <OnLineTx>	[0..1]			262
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		263
	BatchTransfer <BtchTrf>	[0..1]			263
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		264
	MaximumNumber <MaxNb>	[0..1]	Quantity		264
	MaximumAmount <MaxAmt>	[0..1]	Amount		265
	ReTry <ReTry>	[0..1]	±		265
	TimeCondition <TmCond>	[0..1]	±		265
	CompletionExchange <CmpltnXchg>	[0..1]			265
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		266
	MaximumNumber <MaxNb>	[0..1]	Quantity		266
	MaximumAmount <MaxAmt>	[0..1]	Amount		267
	ReTry <ReTry>	[0..1]	±		267
	TimeCondition <TmCond>	[0..1]	±		267
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		267
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		267
	CancellationExchange <CxIXchg>	[0..1]	CodeSet		268
	OffLineTransaction <OffLineTx>	[0..1]			268
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		269
	BatchTransfer <BtchTrf>	[0..1]			269
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		270
	MaximumNumber <MaxNb>	[0..1]	Quantity		270

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumAmount <MaxAmt>	[0..1]	Amount		271
	ReTry <ReTry>	[0..1]	±		271
	TimeCondition <TmCond>	[0..1]	±		271
	CompletionExchange <CmpltnXchg>	[0..1]			271
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		272
	MaximumNumber <MaxNb>	[0..1]	Quantity		272
	MaximumAmount <MaxAmt>	[0..1]	Amount		273
	ReTry <ReTry>	[0..1]	±		273
	TimeCondition <TmCond>	[0..1]	±		273
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		273
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		273
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		274
	ReconciliationExchange <RcncltnXchg>	[0..1]			274
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		274
	MaximumNumber <MaxNb>	[0..1]	Quantity		275
	MaximumAmount <MaxAmt>	[0..1]	Amount		275
	ReTry <ReTry>	[0..1]	±		275
	TimeCondition <TmCond>	[0..1]	±		275
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		276
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		276
	SplitTotals <SplTtIs>	[0..1]	Indicator		276
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		276
	CompletionAdviceMandated <CmpltnAdvcmndtd>	[0..1]	Indicator		277
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		277
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		277
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		278
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		278
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		278
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		278
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		279
	MessageItem <MsgItm>	[0..*]	±		279

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectCardData <PrtctCardData>	[1..1]	Indicator		279
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		279
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		280

10.1.6.1.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.1.2 AcquirerIdentification <Acqrrld>

Presence: [1..*]

Definition: Identification of the acquirer using this protocol.

AcquirerIdentification <Acqrrld> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

10.1.6.1.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the acquirer protocol parameters.

Datatype: "Max256Text" on page 604

10.1.6.1.4 ApplicationIdentification <Applld>

Presence: [0..*]

Definition: Identification of the payment application, user of the acquirer protocol.

Datatype: "Max35Text" on page 605

10.1.6.1.5 Host <Hst>

Presence: [0..*]

Definition: Acquirer host configuration.

Host <Hst> contains the following **AcquirerHostConfiguration10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	HostIdentification <HstId>	[1..1]	Text		261
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		261
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		262
	ExternallyTypeSupported <XtrnlyTpSprtrd>	[0..*]	Text		262

10.1.6.1.5.1 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of a host.

Datatype: "Max35Text" on page 605

10.1.6.1.5.2 MessageToSend <MsgToSnd>

Presence: [0..*]

Definition: Types of message to sent to this host.

Datatype: "MessageFunction47Code" on page 574

CodeName	Name	Definition
FAUQ	FinancialAuthorisationRequest	Request for authorisation with financial capture.
CCAQ	CancellationRequest	Request for cancellation.
CMPV	CompletionAdvice	Advice for completion without financial capture.
DGNP	DiagnosticRequest	Request for diagnostic.
RCLQ	ReconciliationRequest	Request for reconciliation.
CCAV	CancellationAdvice	Advice for cancellation.
BTCH	BatchTransfer	Transfer the financial data as a collection of transaction.
FRVA	FinancialReversalAdvice	Advice for reversal with financial capture.
AUTQ	AuthorisationRequest	The initiator requests an authorisation without financial impact to complete the transaction.
FCMV	FinancialCompletionAdvice	Advice for completion with financial capture.
DCCQ	CurrencyConversionRequest	Request for dynamic currency conversion.
RVRA	ReversalAdvice	Advice for reversal without financial capture.

CodeName	Name	Definition
DCAV	CurrencyConversionAdvice	Advice for dynamic currency conversion.
TRNA	TransactionAdvice	Advise of the transaction's processing.
NFRQ	NonFinancialRequest	Initiator of the message requests additional information to the receiver.
TRPQ	TransactionReportRequest	Request to receive of a report of transaction from the issuer to the receiver.
ATAF	AcceptorToAcquirerBatchFileExchange	Concatenation of multiple exchanges in one file.

10.1.6.1.5.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Protocol version to use when using these parameters.

Datatype: "Max8Text" on page 607

10.1.6.1.5.4 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 602

10.1.6.1.6 OnLineTransaction <OnLineTx>

Presence: [0..1]

Definition: Acquirer protocol parameters of transactions performing an online authorisation.

OnLineTransaction <OnLineTx> contains the following **AcquirerProtocolExchangeBehavior2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		263
	BatchTransfer <BtchTrf>	[0..1]			263
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		264
	MaximumNumber <MaxNb>	[0..1]	Quantity		264
	MaximumAmount <MaxAmt>	[0..1]	Amount		265
	ReTry <ReTry>	[0..1]	±		265
	TimeCondition <TmCond>	[0..1]	±		265
	CompletionExchange <CmpltnXchg>	[0..1]			265
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		266
	MaximumNumber <MaxNb>	[0..1]	Quantity		266
	MaximumAmount <MaxAmt>	[0..1]	Amount		267
	ReTry <ReTry>	[0..1]	±		267
	TimeCondition <TmCond>	[0..1]	±		267
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		267
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		267
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		268

10.1.6.1.6.1 FinancialCapture <FinCaptr>

Presence: [1..1]

Definition: Mode for the financial capture of the transaction by the acquirer.

Datatype: "FinancialCapture1Code" on page 569

CodeName	Name	Definition
AUTH	Authorisation	Financial capture of the transaction is performed by the acquirer during the authorisation exchange.
COMP	Completion	Financial capture of the transaction is performed by the acquirer during the completion exchange.
BTCH	Batch	Financial capture of the transaction is performed by the acquirer at the reception of a batch transfer.

10.1.6.1.6.2 BatchTransfer <BtchTrf>

Presence: [0..1]

Definition: Configuration of the batch transfers.

BatchTransfer <BtchTrf> contains the following **ExchangeConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		264
	MaximumNumber <MaxNb>	[0..1]	Quantity		264
	MaximumAmount <MaxAmt>	[0..1]	Amount		265
	ReTry <ReTry>	[0..1]	±		265
	TimeCondition <TmCond>	[0..1]	±		265

10.1.6.1.6.2.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 567

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.6.2.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 600

10.1.6.1.6.2.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.6.1.6.2.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.6.1.6.2.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 535 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		535
	EndTime <EndTm>	[0..1]	DateTime		535
	Period <Prd>	[0..1]	Text		535
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		535

10.1.6.1.6.3 CompletionExchange <CmpltnXchg>

Presence: [0..1]

Definition: Configuration parameters of completion exchanges.

CompletionExchange <CmpltnXchg> contains the following **ExchangeConfiguration10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		266
	MaximumNumber <MaxNb>	[0..1]	Quantity		266
	MaximumAmount <MaxAmt>	[0..1]	Amount		267
	ReTry <ReTry>	[0..1]	±		267
	TimeCondition <TmCond>	[0..1]	±		267
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		267
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		267

10.1.6.1.6.3.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 567

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.6.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 600

10.1.6.1.6.3.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.6.1.6.3.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.6.1.6.3.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 535 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		535
	EndTime <EndTm>	[0..1]	DateTime		535
	Period <Prd>	[0..1]	Text		535
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		535

10.1.6.1.6.3.6 ExchangeFailed <XchgFaild>

Presence: [0..1]

Definition: Failed transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.6.3.7 ExchangeDeclined <XchgDclnd>

Presence: [0..1]

Definition: Indicates that declined transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.6.4 CancellationExchange <CxlXchg>

Presence: [0..1]

Definition: Configuration of the cancellation exchanges.

Datatype: "CancellationProcess2Code" on page 558

CodeName	Name	Definition
ADVC	Advice	Card payment transaction may be cancelled by an advice only before closure of the reconciliation period or before the capture by batch.
NALW	NotAllowed	Card payment transaction cannot be cancelled by the acquirer.
REQU	Request	Card payment transaction may also be cancelled after the closure of the reconciliation period or after the capture by batch. In this case a cancellation request exchange is required.
APPL	ApplicationLevel	Cancellation of the Card payment transaction is defined by the payment application.

10.1.6.1.7 OffLineTransaction <OffLineTx>

Presence: [0..1]

Definition: Acquirer protocol parameters of transactions performing an offline authorisation.

OfflineTransaction <OfflineTx> contains the following **AcquirerProtocolExchangeBehavior2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		269
	BatchTransfer <BtchTrf>	[0..1]			269
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		270
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		271
	ReTry <ReTry>	[0..1]	±		271
	TimeCondition <TmCond>	[0..1]	±		271
	CompletionExchange <CmpltnXchg>	[0..1]			271
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		272
	MaximumNumber <MaxNb>	[0..1]	Quantity		272
	MaximumAmount <MaxAmt>	[0..1]	Amount		273
	ReTry <ReTry>	[0..1]	±		273
	TimeCondition <TmCond>	[0..1]	±		273
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		273
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		273
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		274

10.1.6.1.7.1 FinancialCapture <FinCaptr>

Presence: [1..1]

Definition: Mode for the financial capture of the transaction by the acquirer.

Datatype: "FinancialCapture1Code" on page 569

CodeName	Name	Definition
AUTH	Authorisation	Financial capture of the transaction is performed by the acquirer during the authorisation exchange.
COMP	Completion	Financial capture of the transaction is performed by the acquirer during the completion exchange.
BTCH	Batch	Financial capture of the transaction is performed by the acquirer at the reception of a batch transfer.

10.1.6.1.7.2 BatchTransfer <BtchTrf>

Presence: [0..1]

Definition: Configuration of the batch transfers.

BatchTransfer <BtchTrf> contains the following **ExchangeConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		270
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		271
	ReTry <ReTry>	[0..1]	±		271
	TimeCondition <TmCond>	[0..1]	±		271

10.1.6.1.7.2.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 567

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.7.2.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 600

10.1.6.1.7.2.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.6.1.7.2.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.6.1.7.2.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 535 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		535
	EndTime <EndTm>	[0..1]	DateTime		535
	Period <Prd>	[0..1]	Text		535
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		535

10.1.6.1.7.3 CompletionExchange <CmpltnXchg>

Presence: [0..1]

Definition: Configuration parameters of completion exchanges.

CompletionExchange <CmpltnXchg> contains the following **ExchangeConfiguration10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		272
	MaximumNumber <MaxNb>	[0..1]	Quantity		272
	MaximumAmount <MaxAmt>	[0..1]	Amount		273
	ReTry <ReTry>	[0..1]	±		273
	TimeCondition <TmCond>	[0..1]	±		273
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		273
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		273

10.1.6.1.7.3.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 567

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.7.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 600

10.1.6.1.7.3.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.6.1.7.3.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.6.1.7.3.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 535 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		535
	EndTime <EndTm>	[0..1]	DateTime		535
	Period <Prd>	[0..1]	Text		535
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		535

10.1.6.1.7.3.6 ExchangeFailed <XchgFaild>

Presence: [0..1]

Definition: Failed transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.7.3.7 ExchangeDeclined <XchgDclnd>

Presence: [0..1]

Definition: Indicates that declined transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.7.4 CancellationExchange <CxlXchg>

Presence: [0..1]

Definition: Configuration of the cancellation exchanges.

Datatype: "CancellationProcess2Code" on page 558

CodeName	Name	Definition
ADVC	Advice	Card payment transaction may be cancelled by an advice only before closure of the reconciliation period or before the capture by batch.
NALW	NotAllowed	Card payment transaction cannot be cancelled by the acquirer.
REQU	Request	Card payment transaction may also be cancelled after the closure of the reconciliation period or after the capture by batch. In this case a cancellation request exchange is required.
APPL	ApplicationLevel	Cancellation of the Card payment transaction is defined by the payment application.

10.1.6.1.8 ReconciliationExchange <RcncltnXchg>

Presence: [0..1]

Definition: Configuration parameters of reconciliation exchanges.

ReconciliationExchange <RcncltnXchg> contains the following **ExchangeConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		274
	MaximumNumber <MaxNb>	[0..1]	Quantity		275
	MaximumAmount <MaxAmt>	[0..1]	Amount		275
	ReTry <ReTry>	[0..1]	±		275
	TimeCondition <TmCond>	[0..1]	±		275

10.1.6.1.8.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 567

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.

CodeName	Name	Definition
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.8.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 600

10.1.6.1.8.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.6.1.8.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.6.1.8.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "[ProcessTiming6](#)" on page 535 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		535
	EndTime <EndTm>	[0..1]	DateTime		535
	Period <Prd>	[0..1]	Text		535
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		535

10.1.6.1.9 ReconciliationByAcquirer <RcncltnByAcqrr>

Presence: [0..1]

Definition: Indicates the reconciliation period is assigned by the acquirer instead of the acceptor.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.10 TotalsPerCurrency <TtlsPerCcy>

Presence: [0..1]

Definition: Indicates the reconciliation total amounts are computed per currency.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.11 SplitTotals <SplTtIs>

Presence: [0..1]

Definition: Indicates that totals in reconciliation or batch must be split.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.12 SplitTotalCriteria <SplTtlCrit>

Presence: [0..*]

Definition: List of criterion to use when totals in reconciliation or batch must be split.

Datatype: "[ReconciliationCriteria1Code](#)" on page 584

CodeName	Name	Definition
BRND	CardBrand	The set is defined by transactions made with cards belonging to the same brand.
PROF	CardProductProfile	The set is defined by transactions made with cards sharing the same CardProductProfile.
GRUP	PoiGroup	The set is defined by transactions processed by POIs identified with the same POIGroup.

10.1.6.1.13 CompletionAdviceMandated <CmpltnAdvcmndtd>

Presence: [0..1]

Definition: To notify that the acquirer expect to receive a completion advice after each update of reservation.

The default value is True.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.14 AmountQualifierForReservation <AmtQlfrForRsvatn>

Presence: [0..*]

Definition: Identification of available amount qualifier for a reservation.

Datatype: "[TypeOfAmount8Code](#)" on page 597

CodeName	Name	Definition
ACTL	Actual	Actual amount.
ESTM	Estimated	Estimated amount (the final amount could be above or below).
MAXI	Maximum	Maximum amount (the final amount must be less or equal).
DFLT	Default	Default amount.
RPLT	Replacement	Replacement amount.
INCR	Incremental	Incremental amount for reservation.
DECR	Decremental	Decremental amount for reservation.
RESD	Reserved	Reserved or updated reserved amount for reservation.

10.1.6.1.15 ReconciliationError <RcncltnErr>

Presence: [0..1]

Definition: After an error in a totals of the Reconciliation, the POI sends transactions in error in the BatchTransfer messages.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.16 CardDataVerification <CardDataVrfctn>

Presence: [0..1]

Definition: Indicates whether the POI must send card data (protected or plain card data) in the `AccepterCompletionAdvice` message following an authorisation exchange.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.17 NotifyOffLineCancellation <NtfyOffLineCxl>

Presence: [0..1]

Definition: Send a cancellation advice for offline transactions not yet captured.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.18 BatchTransferContent <BtchTrfCntt>

Presence: [0..*]

Definition: Types of transaction to include in the batch.

Datatype: ["BatchTransactionType1Code"](#) on page 557

CodeName	Name	Definition
DTCT	DebitCredit	Debit and credit transactions.
CNCL	Cancellation	Cancellation of a previous transaction.
FAIL	Failed	Failed transactions.
DCLN	Declined	Declined transactions.

10.1.6.1.19 FileTransferBatch <FileTrfBtch>

Presence: [0..1]

Definition: BatchTransfer are exchanged per file transfer protocol rather than per message.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.20 BatchDigitalSignature <BtchDgtlSgntr>

Presence: [0..1]

Definition: BatchTransfer are authenticated by digital signature rather than a MAC (Message Authentication Code).

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.21 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see ["MessageItemCondition2"](#) on page 400 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		400
	Condition <Cond>	[1..1]	CodeSet		400
	Value <Val>	[0..*]	Text		400

10.1.6.1.22 ProtectCardData <PrctctCardData>

Presence: [1..1]

Definition: Indicator to require protection of sensitive card data in messages.

Usage: When absent, default value is True.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.23 PrivateCardData <PrvtCardData>

Presence: [0..1]

Definition: Indicator to require a private protection of sensitive card data in messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.24 MandatorySecurityTrailer <MndtrySctyTrlr>

Presence: [0..1]

Definition: A security trailer is mandatory in the messages.

Usage: When absent, default value is True.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.2 PaymentTerminalParameters8

Definition: Manufacturer configuration parameters of the point of interaction (POI).

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		280
	VendorIdentification <Vndrld>	[0..1]	Text		281
	Version <Vrsn>	[0..1]	Text		281
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		281
	ClockSynchronisation <ClckSynctn>	[0..1]			281
	POITimeZone <POITmZone>	[1..1]	Text		281
	SynchronisationServer <SynctnSvr>	[0..*]	±		281
	Delay <Dely>	[0..1]	Time		282
	TimeZoneLine <TmZoneLine>	[0..*]	Text		282
	LocalDateTime <LclDtTm>	[0..*]			282
	FromDateTime <FrDtTm>	[0..1]	DateTime		282
	ToDateTime <ToDtTm>	[0..1]	DateTime		283
	UTCOffset <UTCOffset>	[1..1]	Quantity		283
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		283
	OffsetStart <OffsetStart>	[0..1]	Quantity		283
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		283
	OtherParameters <OthrParams>	[0..1]	Binary		283

10.1.6.2.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.2.2 VendorIdentification <Vndrld>

Presence: [0..1]

Definition: Identification of the vendor for the MTM, if the POI manages various subsets of terminal parameters.

Datatype: "Max35Text" on page 605

10.1.6.2.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the terminal parameters.

Datatype: "Max256Text" on page 604

10.1.6.2.4 ParameterFormatIdentifier <ParamFrmtldr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 607

10.1.6.2.5 ClockSynchronisation <ClckSynctn>

Presence: [0..1]

Definition: Parameters to synchronise the real time clock of the POI (Point Of Interaction).

ClockSynchronisation <ClckSynctn> contains the following **ClockSynchronisation3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POITimeZone <POITmZone>	[1..1]	Text		281
	SynchronisationServer <SynctnSvr>	[0..*]	±		281
	Delay <Dely>	[0..1]	Time		282

10.1.6.2.5.1 POITimeZone <POITmZone>

Presence: [1..1]

Definition: Name of the time zone where is located the POI (Point Of Interaction), as defined by the IANA (Internet Assigned Number Authority) time zone data base.

Datatype: "Max70Text" on page 607

10.1.6.2.5.2 SynchronisationServer <SynctnSvr>

Presence: [0..*]

Definition: Parameters to contact a time server.

SynchronisationServer <SynctnSvr> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertldr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.6.2.5.3 Delay <Dely>

Presence: [0..1]

Definition: Delay between two contacts of the server.

Datatype: "[ISOTime](#)" on page 609

10.1.6.2.6 TimeZoneLine <TmZoneLine>

Presence: [0..*]

Definition: Time zone line to update in the time zone data base subset stored in the POI (Point Of Interaction). The format of the line is conform to the IANA (Internet Assigned Number Authority) time zone data base.

Datatype: "[Max70Text](#)" on page 607

10.1.6.2.7 LocalDateTime <LcIDtTm>

Presence: [0..*]

Definition: Local time offset to UTC (Coordinated Universal Time).

LocalDateTime <LcIDtTm> contains the following **LocalDateTime1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	FromDateTime <FrDtTm>	[0..1]	DateTime		282
	ToDateTime <ToDtTm>	[0..1]	DateTime		283
	UTCOffset <UTCOffset>	[1..1]	Quantity		283

10.1.6.2.7.1 FromDateTime <FrDtTm>

Presence: [0..1]

Definition: Date time of the beginning of the period (inclusive).

Datatype: "ISODatetime" on page 599

10.1.6.2.7.2 ToDateTime <ToDtTm>

Presence: [0..1]

Definition: Date time of the end of the period (exclusive).

Datatype: "ISODatetime" on page 599

10.1.6.2.7.3 UTCOffset <UTCOffset>

Presence: [1..1]

Definition: UTC offset in minutes, of the local time during the period. For instance, 120 for Central European Time, -720 for Central Standard Time (North America).

Datatype: "Number" on page 600

10.1.6.2.8 OtherParametersLength <OthrParamsLngth>

Presence: [0..1]

Definition: Full length of other parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.2.9 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full other parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.2.10 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full other parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.2.11 OtherParameters <OthrParams>

Presence: [0..1]

Definition: Others manufacturer configuration parameters of the point of interaction.

Datatype: "Max10000Binary" on page 540

10.1.6.3 SecurityParameters16

Definition: Parameters related to the security of software application and application protocol.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		284
	Version <Vrsn>	[1..1]	Text		284
	POIChallenge <POIChllng>	[0..1]	Binary		284
	TMChallenge <TMChllng>	[0..1]	Binary		284
	SecurityElement <SctyElmt>	[0..*]	±		284

10.1.6.3.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.3.2 Version <Vrsn>

Presence: [1..1]

Definition: Version of the security parameters.

Datatype: "Max256Text" on page 604

10.1.6.3.3 POIChallenge <POIChllng>

Presence: [0..1]

Definition: Point of interaction challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 541

10.1.6.3.4 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 541

10.1.6.3.5 SecurityElement <SctyElmt>

Presence: [0..*]

Definition: Key to inject in the point of interaction, protected by the temporary key previously sent.

SecurityElement <SctyElmt> contains the following elements (see "[CryptographicKey18](#)" on page 492 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		493
	AdditionalIdentification <AddtlId>	[0..1]	Binary		493
	Name <Nm>	[0..1]	Text		494
	SecurityProfile <SctyPrfl>	[0..1]	Text		494
	ItemNumber <ItmNb>	[0..1]	Text		494
	Version <Vrsn>	[1..1]	Text		494
	Type <Tp>	[0..1]	CodeSet		494
	Function <Fctn>	[0..*]	CodeSet		495
	ActivationDate <ActvtnDt>	[0..1]	DateTime		495
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		496
	KeyValue <KeyVal>	[0..1]	±		496
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			496
	Identification <Id>	[1..1]	Text		496
	Type <Tp>	[1..1]	CodeSet		496
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		497
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		497
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			497
	Name <Nm>	[1..1]	Text		497
	Value <Val>	[0..1]	Text		498

10.1.6.4 TerminalPackageType5

Definition: Group of software packages related to a group of POIComponent of the POI System.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntld>	[0..*]			286
	ItemNumber <ItmNb>	[0..1]	Text		286
	ProviderIdentification <Prvdrld>	[0..1]	Text		287
	Identification <Id>	[0..1]	Text		287
	SerialNumber <SriNb>	[0..1]	Text		287
	Package <Packg>	[1..*]			287
	PackageIdentification <Packgld>	[0..1]	±		287
	PackageLength <PackgLngh>	[0..1]	Quantity		288
	OffsetStart <OffsetStart>	[0..1]	Quantity		288
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		288
	PackageBlock <PackgBlck>	[0..*]			288
	Identification <Id>	[1..1]	Text		289
	Value <Val>	[0..1]	Binary		289
	ProtectedValue <PrctcdVal>	[0..1]	±		289
	Type <Tp>	[0..1]	Text		289

10.1.6.4.1 POIComponentIdentification <POICmpntld>

Presence: [0..*]

Definition: Identification of the POI (Point Of Interaction) component.

POIComponentIdentification <POICmpntld> contains the following **PointOfInteractionComponentIdentification2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemNumber <ItmNb>	[0..1]	Text		286
	ProviderIdentification <Prvdrld>	[0..1]	Text		287
	Identification <Id>	[0..1]	Text		287
	SerialNumber <SriNb>	[0..1]	Text		287

10.1.6.4.1.1 ItemNumber <ItmNb>

Presence: [0..1]

Definition: Hierarchical identification of a hardware component inside all the hardware component of the POI. It is composed of all item numbers of the upper level components, separated by the '.' character, ended by the item number of the current component.

Datatype: "Max35Text" on page 605

10.1.6.4.1.2 ProviderIdentification <PrvdrId>

Presence: [0..1]

Definition: Identifies the provider of the software, hardware or parameters of the POI component.

Datatype: "Max35Text" on page 605

10.1.6.4.1.3 Identification <Id>

Presence: [0..1]

Definition: Identification of the POI component assigned by its provider.

Datatype: "Max256Text" on page 604

10.1.6.4.1.4 SerialNumber <SrINb>

Presence: [0..1]

Definition: Serial number identifying an occurrence of an hardware component.

Datatype: "Max256Text" on page 604

10.1.6.4.2 Package <Packg>

Presence: [1..*]

Definition: Chunk of a software package.

Package <Packg> contains the following **PackageType5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PackageIdentification <PackgId>	[0..1]	±		287
	PackageLength <PackgLngh>	[0..1]	Quantity		288
	OffsetStart <OffsetStart>	[0..1]	Quantity		288
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		288
	PackageBlock <PackgBlck>	[0..*]			288
	Identification <Id>	[1..1]	Text		289
	Value <Val>	[0..1]	Binary		289
	ProtectedValue <PrctcdVal>	[0..1]	±		289
	Type <Tp>	[0..1]	Text		289

10.1.6.4.2.1 PackageIdentification <PackgId>

Presence: [0..1]

Definition: Identification of the software packages of which the chunk belongs.

PackageIdentification <PackgId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

10.1.6.4.2.2 PackageLength <PackgLngh>

Presence: [0..1]

Definition: Full length of software package identified through PackageIdentification.

Datatype: "[PositiveNumber](#)" on page 601

10.1.6.4.2.3 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of the first following PackageBlock, beginning with 0, in the full software package identified through PackageIdentification.

Datatype: "[PositiveNumber](#)" on page 601

10.1.6.4.2.4 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of the last following PackageBlock in the full software package identified through PackageIdentification.

Datatype: "[PositiveNumber](#)" on page 601

10.1.6.4.2.5 PackageBlock <PackgBlck>

Presence: [0..*]

Definition: Consecutive slices of the full software package identified through PackageIdentification starting with first slice at the place identified with OffsetStart and ending with the last slice at the previous place identified with OffsetEnd.

PackageBlock <PackgBlck> contains the following **ExternallyDefinedData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		289
	Value <Val>	[0..1]	Binary		289
	ProtectedValue <PrctdVal>	[0..1]	±		289
	Type <Tp>	[0..1]	Text		289

10.1.6.4.2.5.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: ["Max1025Text" on page 602](#)

10.1.6.4.2.5.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: ["Max100KBinary" on page 540](#)

10.1.6.4.2.5.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see ["ContentInformationType39" on page 513](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.6.4.2.5.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: ["Max1025Text" on page 602](#)

10.1.6.5 MerchantConfigurationParameters6

Definition: Acceptor parameters dedicated to the merchant.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		290
	MerchantIdentification <Mrchntld>	[0..1]	Text		290
	Version <Vrsn>	[0..1]	Text		290
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		290
	Proxy <Prxy>	[0..1]			291
	Type <Tp>	[1..1]	CodeSet		291
	Access <Accs>	[1..1]	±		291
	OtherParametersLength <OthrParamsLngth>	[0..1]	Quantity		291
	OffsetStart <OffsetStart>	[0..1]	Quantity		292
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		292
	OtherParameters <OthrParams>	[0..1]	Binary		292

10.1.6.5.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.5.2 MerchantIdentification <Mrchntld>

Presence: [0..1]

Definition: Identification of the merchant for the MTM, if the POI manages several merchants.

Datatype: "Max35Text" on page 605

10.1.6.5.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the merchant parameters.

Datatype: "Max256Text" on page 604

10.1.6.5.4 ParameterFormatIdentifier <ParamFrmtldr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: ["Max8Text" on page 607](#)

10.1.6.5.5 Proxy <Prxy>

Presence: [0..1]

Definition: Local proxy configuration.

Proxy <Prxy> contains the following **NetworkParameters8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		291
	Access <Accs>	[1..1]	±		291

10.1.6.5.5.1 Type <Tp>

Presence: [1..1]

Definition: Type of proxy.

Datatype: ["NetworkType2Code" on page 576](#)

CodeName	Name	Definition
SCK5	Sock5	Sock5 proxy.
SCK4	Sock4	Sock4 proxy.
HTTP	HTTP	HTTP proxy.

10.1.6.5.5.2 Access <Accs>

Presence: [1..1]

Definition: Access information to the proxy.

Access <Accs> contains the following elements (see ["NetworkParameters7" on page 449](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertldr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.6.5.6 OtherParametersLength <OthrParamsLngth>

Presence: [0..1]

Definition: Full length of other parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.5.7 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full other parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.5.8 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full other parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.5.9 OtherParameters <OthrParams>

Presence: [0..1]

Definition: Other merchant parameters.

Datatype: "Max10000Binary" on page 540

10.1.6.6 TMSProtocolParameters7

Definition: Configuration parameters of the TMS protocol between a POI and a terminal manager.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		292
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		293
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		293
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		293
	Version <Vrsn>	[1..1]	Text		294
	ApplicationIdentification <AppIld>	[0..*]	Text		294
	HostIdentification <Hstld>	[1..1]	Text		294
	POIIdentification <POIld>	[0..1]	Text		294
	InitiatingPartyIdentification <InitgPtyld>	[0..1]	Text		294
	RecipientPartyIdentification <RcptPtyld>	[0..1]	Text		294
	FileTransfer <FileTrf>	[0..1]	Indicator		295
	MessageItem <Msgltn>	[0..*]	±		295
	ExternallyTypeSupported <XtrnlyTpSprtd>	[0..*]	Text		295

10.1.6.6.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.6.2 TerminalManagerIdentification <TermnIMgrId>

Presence: [1..1]

Definition: Identification of the master terminal manager or the terminal manager.

TerminalManagerIdentification <TermnIMgrId> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

10.1.6.6.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Protocol version to use when using these parameters.

Datatype: "Max8Text" on page 607

10.1.6.6.4 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance services provided by the terminal manager.

Datatype: "DataSetCategory10Code" on page 563

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
MTMG	MasterTerminalManager	The terminal manager is the master.

CodeName	Name	Definition
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
MTOR	Monitoring	Monitoring of the terminal estate.
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.

10.1.6.6.5 Version <Vrsn>

Presence: [1..1]

Definition: Version of the TMS protocol parameters.

Datatype: "Max256Text" on page 604

10.1.6.6.6 ApplicationIdentification <ApplId>

Presence: [0..*]

Definition: Identification of applications which may be managed by the TM, partially or globally.

Datatype: "Max35Text" on page 605

10.1.6.6.7 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of the terminal manager host.

Datatype: "Max35Text" on page 605

10.1.6.6.8 POIIdentification <POIId>

Presence: [0..1]

Definition: New identification of the POI for the terminal manager.

Datatype: "Max35Text" on page 605

10.1.6.6.9 InitiatingPartyIdentification <InitgPtyId>

Presence: [0..1]

Definition: New identification of the initiating party to set in TMS messages with this terminal manager.

Datatype: "Max35Text" on page 605

10.1.6.6.10 RecipientPartyIdentification <RcptPtyId>

Presence: [0..1]

Definition: New identification of the recipient party to set in TMS messages with this terminal manager.

Datatype: "Max35Text" on page 605

10.1.6.6.11 FileTransfer <FileTrf>

Presence: [0..1]

Definition: Configuration parameters are exchanged per file transfer protocol rather than per message.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.6.12 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see "MessageItemCondition2" on page 400 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		400
	Condition <Cond>	[1..1]	CodeSet		400
	Value <Val>	[0..*]	Text		400

10.1.6.6.13 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 602

10.1.6.7 ApplicationParameters13

Definition: Acceptor parameters dedicated to a payment application of the point of interaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		296
	ApplicationIdentification <ApplId>	[1..1]	Text		296
	Version <Vrsn>	[0..1]	Text		296
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		296
	ParametersLength <ParamsLngth>	[0..1]	Quantity		297
	OffsetStart <OffsetStart>	[0..1]	Quantity		297
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		297
	Parameters <Params>	[0..*]	Binary		297
	EncryptedParameters <NcrptdParams>	[0..1]	±		297

10.1.6.7.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.7.2 ApplicationIdentification <ApplId>

Presence: [1..1]

Definition: Identification of the payment application.

Datatype: "Max35Text" on page 605

10.1.6.7.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the payment application configuration parameters.

Datatype: "Max256Text" on page 604

10.1.6.7.4 ParameterFormatIdentifier <ParamFrmtldr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 607

10.1.6.7.5 ParametersLength <ParamsLngh>

Presence: [0..1]

Definition: Full length of parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.7.6 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.7.7 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full parameters.

Datatype: "PositiveNumber" on page 601

10.1.6.7.8 Parameters <Params>

Presence: [0..*]

Definition: Configuration parameters used by the related payment application.

Datatype: "Max100KBinary" on page 540

10.1.6.7.9 EncryptedParameters <NcrptdParams>

Presence: [0..1]

Definition: Sensitive parameters (sequence of parameters including the envelope) encrypted with a cryptographic key.

EncryptedParameters <NcrptdParams> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.6.8 SaleToPOIProtocolParameter3

Definition: Configuration parameters to communicate with a sale system.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		298
	MerchantIdentification <MrchntId>	[0..1]			298
	CommonName <CmonNm>	[1..1]	Text		299
	Address <Adr>	[0..1]	Text		299
	CountryCode <CtryCd>	[1..1]	CodeSet		299
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		299
	RegisteredIdentifier <RegIdlr>	[1..1]	Text		299
	Version <Vrsn>	[1..1]	Text		299
	HostIdentification <Hstld>	[1..1]	Text		300
	MerchantPOIIdentification <MrchntPOIID>	[0..1]	Text		300
	SaleIdentification <SaleId>	[0..1]	Text		300
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		300
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		301
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		302
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		303
	ExternallyTypeSupported <XtrnlyTpSprtd>	[0..*]	Text		303

10.1.6.8.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.8.2 MerchantIdentification <MrchntId>

Presence: [0..1]

Definition: Identification of the merchant.

MerchantIdentification <MrchntId> contains the following **Organisation26** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommonName <CmonNm>	[1..1]	Text		299
	Address <Adr>	[0..1]	Text		299
	CountryCode <CtryCd>	[1..1]	CodeSet		299
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		299
	RegisteredIdentifier <RegldIdr>	[1..1]	Text		299

10.1.6.8.2.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 607

10.1.6.8.2.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 603

10.1.6.8.2.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 571

10.1.6.8.2.4 MerchantCategoryCode <MrchntCtgyCd>

Presence: [1..1]

Definition: Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.

Datatype: "Min3Max4Text" on page 608

10.1.6.8.2.5 RegisteredIdentifier <RegldIdr>

Presence: [1..1]

Definition: Identifier of the sponsored merchant assigned by the payment facilitator of their acquirer.

Datatype: "Max35Text" on page 605

10.1.6.8.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the parameters.

Datatype: "Max256Text" on page 604

10.1.6.8.4 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification used to retrieve HostCommunicationParameters.

Datatype: "Max35Text" on page 605

10.1.6.8.5 MerchantPOIIdentification <MrchntPOIId>

Presence: [0..1]

Definition: Identification of the POI during communication with sale system.

Datatype: "Max35Text" on page 605

10.1.6.8.6 SaleIdentification <SaleId>

Presence: [0..1]

Definition: Identification of the SaleSystem connected to the POI.

Datatype: "Max35Text" on page 605

10.1.6.8.7 AllowedSaleMessage <AllwdSaleMsg>

Presence: [0..*]

Definition: Identify a message that a Sale system could send to the POI system.

Datatype: "RetailerMessage1Code" on page 587

CodeName	Name	Definition
SSAB	Abort	Abort the current process or the last request.
SAAQ	AdminRequest	To select and start customised administrative services provided by the POI, using a "menu" for an interactive or software interface, initiated by the Sale system.
SAAP	AdminResponse	Response to the Admin request.
SDDR	DeviceRequest	Request one or several functions of the device, from user Interface or payment peripherals on the POI system or on the Sale system. Functions can be Display, Input, Print, play sound, Card reader capabilities or Transmit a message.
SDDP	DeviceResponse	Response to a Device request.
SSEN	EventNotification	Notify the other party of an event that occurs on its side.
SSMQ	MessageStatusRequest	Request the status of a previous message for which the Sale system has no response.
SSMR	MessageStatusResponse	Response to a Message Status request.
SSRJ	Rejection	Reject a previous received message, for technical or functional reasons.

CodeName	Name	Definition
SARQ	ReportRequest	To request, by the Sale System, a report on a list of transactions on the POI system, or the status of a transaction.
SARP	ReportResponse	Response to a Report request.
SFRP	SaleFinancialReconciliationResponse	Response to a Reconciliation Request.
SFRQ	SaleFinancialReconciliationRequest	Request a reconciliation (different types) between Sale System and POI System.
SFSQ	SaleFinancialServiceRequest	Request a financial service like payment, reversal, loyalty, Balance Inquiry, etc.
SFSP	SaleFinancialServiceResponse	Response to a financial service request.
SASQ	SessionManagementRequest	Request the management of a session: login, logout and diagnosis services. Initiated by the Sale system.
SASP	SessionManagementResponse	Response to a session management request to initiate/terminate a session.

10.1.6.8.8 AllowedPOIMessage <AllwdPOIMsg>

Presence: [0..*]

Definition: Identify a message that a POI system could send to the Sale system.

Datatype: "RetailerMessage1Code" on page 587

CodeName	Name	Definition
SSAB	Abort	Abort the current process or the last request.
SAAQ	AdminRequest	To select and start customised administrative services provided by the POI, using a "menu" for an interactive or software interface, initiated by the Sale system.
SAAP	AdminResponse	Response to the Admin request.
SDDR	DeviceRequest	Request one or several functions of the device, from user Interface or payment peripherals on the POI system or on the Sale system. Functions can be Display, Input, Print, play sound, Card reader capabilities or Transmit a message.
SDDP	DeviceResponse	Response to a Device request.
SSEN	EventNotification	Notify the other party of an event that occurs on its side.
SSMQ	MessageStatusRequest	Request the status of a previous message for which the Sale system has no response.
SSMR	MessageStatusResponse	Response to a Message Status request.
SSRJ	Rejection	Reject a previous received message, for technical or functional reasons.

CodeName	Name	Definition
SARQ	ReportRequest	To request, by the Sale System, a report on a list of transactions on the POI system, or the status of a transaction.
SARP	ReportResponse	Response to a Report request.
SFRP	SaleFinancialReconciliationResponse	Response to a Reconciliation Request.
SFRQ	SaleFinancialReconciliationRequest	Request a reconciliation (different types) between Sale System and POI System.
SFSQ	SaleFinancialServiceRequest	Request a financial service like payment, reversal, loyalty, Balance Inquiry, etc.
SFSP	SaleFinancialServiceResponse	Response to a financial service request.
SASQ	SessionManagementRequest	Request the management of a session: login, logout and diagnosis services. Initiated by the Sale system.
SASP	SessionManagementResponse	Response to a session management request to initiate/terminate a session.

10.1.6.8.9 AllowedPOIService <AllwdPOISvc>

Presence: [0..*]

Definition: Identify a service that a POI system could support to the Sale system.

Datatype: "RetailerService2Code" on page 589

CodeName	Name	Definition
FSPQ	FinancialPaymentRequest	The Sale System requests to the POI System to perform a payment(Purchase/Refund/PWCB/MOTO Payment/...).
FSRQ	FinancialReversalRequest	The Sale System requests to the POI System to perform a reversal partial or complete to cancel a former payment service.
FSIQ	FinancialBalanceInquiryRequest	The Sale System requests to the POI System to perform balance inquiry on the main account.
FSBQ	FinancialBatchRequest	The Batch message pair is used to request or get the result of transactions (payment, loyalty and reversal) performed without connection to the Sale system (Payment delivery).
FSLQ	FinancialLoyaltyRequest	The Sale System requests to the POI System a loyalty service like loading or redeem.
FSVQ	FinancialStoredValueRequest	The Sale System requests to the POI System to manage a stored value card or account (eg. Load, Payment, Reimbursement).
FSEQ	FinancialEnableServiceRequest	The Sale System requests to the POI System to enable a service on its side.

CodeName	Name	Definition
FSAQ	FinancialCardAcquisitionRequest	The Sale System requests to the POI System to handle a card data acquisition on the card reader.
FSCQ	FinancialReconciliationRequest	The Sale System request to the POI System different kinds of transaction reconciliation.

10.1.6.8.10 AllowedSaleDevice <AllwdSaleDvc>

Presence: [0..*]

Definition: Identify a device request that a Sale system could ask to the POI system.

Datatype: "RetailerService8Code" on page 589

CodeName	Name	Definition
DDYQ	DeviceDisplayRequest	One System requests the other to display a message for cashier or customer.
DINQ	DeviceInputRequest	One system requests to the other System to get data input.
DPRQ	DevicePrintRequest	One system requests to the other System to print data.
DSOQ	DevicePlaySoundRequest	One system requests to the Other System to play a sound.
DSIQ	DeviceSecureInputRequest	One system requests to the Other System to securely get data input (e.g. for PIN).
DCIQ	DeviceInitialisationCardReaderRequest	Service to send parameters to use when card reader initializes a new communication with the card.
DCAQ	DeviceSendApplicationProtocolDataUnitCardReaderRequest	A service to send commands to a card.
DPCQ	DevicePowerOffCardReaderRequest	The Sale system requests to the POI System to power off the card reader.
DCOQ	DeviceTransmissionMessageRequest	The Sale system requests to the POI System to transmit a message (for instance to a mobile server).
DINO	DeviceInputNotification	One system sends a notification to the POI System to update a input request.

10.1.6.8.11 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 602

10.1.6.9 HostCommunicationParameter7

Definition: Configuration parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		304
	HostIdentification <Hstld>	[1..1]	Text		304
	Address <Adr>	[0..1]	±		305
	Key <Key>	[0..*]			305
	KeyIdentification <Keyld>	[1..1]	Text		305
	KeyVersion <KeyVrsn>	[1..1]	Text		306
	SequenceNumber <SeqNb>	[0..1]	Quantity		306
	DerivationIdentification <Derivtnld>	[0..1]	Binary		306
	Type <Tp>	[0..1]	CodeSet		306
	Function <Fctn>	[0..*]	CodeSet		306
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		307
	PhysicalInterface <PhysIntrfc>	[0..1]			308
	InterfaceName <IntrfcNm>	[1..1]	Text		308
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		308
	UserName <UsrNm>	[0..1]	Text		309
	AccessCode <AccsCd>	[0..1]	Binary		309
	SecurityProfile <SctyPrfl>	[0..1]	Text		309
	AdditionalParameters <AddtlParams>	[0..1]	Binary		309
	ExchangeMode <XchgMd>	[0..1]	CodeSet		310
	EncodingMode <NcodgMd>	[0..1]	CodeSet		310

10.1.6.9.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 593

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.9.2 HostIdentification <Hstld>

Presence: [1..1]

Definition: Identification of the host.

Datatype: ["Max35Text" on page 605](#)

10.1.6.9.3 Address <Adr>

Presence: [0..1]

Definition: Network parameters of the host.

Address <Adr> contains the following elements (see ["NetworkParameters7" on page 449](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.6.9.4 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		305
	KeyVersion <KeyVrsn>	[1..1]	Text		306
	SequenceNumber <SeqNb>	[0..1]	Quantity		306
	DerivationIdentification <DerivtnId>	[0..1]	Binary		306
	Type <Tp>	[0..1]	CodeSet		306
	Function <Fctn>	[0..*]	CodeSet		306

10.1.6.9.4.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: ["Max140Text" on page 603](#)

10.1.6.9.4.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 603

10.1.6.9.4.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 600

10.1.6.9.4.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

Definition: Identification used for derivation of a unique key from a master key provided for the data protection.

Datatype: "Min5Max16Binary" on page 542

10.1.6.9.4.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 563

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).

10.1.6.9.4.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 571

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslateInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

10.1.6.9.5 NetworkServiceProvider <NtwkSvcPrvdr>

Presence: [0..1]

Definition: Access information to reach an intermediate network service provider.

NetworkServiceProvider <NtwkSvcPrvdr> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertldr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.6.9.6 PhysicalInterface <PhysIntrfc>

Presence: [0..1]

Definition: Physical Interface where the host is connect Type of exchange supported by the host.ed.

PhysicalInterface <PhysIntrfc> contains the following **PhysicalInterfaceParameter1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InterfaceName <IntrfcNm>	[1..1]	Text		308
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		308
	UserName <UsrNm>	[0..1]	Text		309
	AccessCode <AccsCd>	[0..1]	Binary		309
	SecurityProfile <SctyPrfl>	[0..1]	Text		309
	AdditionalParameters <AddtlParams>	[0..1]	Binary		309

10.1.6.9.6.1 InterfaceName <IntrfcNm>

Presence: [1..1]

Definition: Identification of the interface.

Datatype: "[Max35Text](#)" on page 605

10.1.6.9.6.2 InterfaceType <IntrfcTp>

Presence: [0..1]

Definition: Identification of the physical link layer.

Datatype: "[POICommunicationType2Code](#)" on page 580

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.1.6.9.6.3 UserName <UsrNm>

Presence: [0..1]

Definition: Optional user name to provide to use this interface.

Datatype: "Max35Text" on page 605

10.1.6.9.6.4 AccessCode <AccsCd>

Presence: [0..1]

Definition: Optional access code to provide to use this interface.

Datatype: "Max35Binary" on page 541

10.1.6.9.6.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the optional security profile to use with this interface.

Datatype: "Max35Text" on page 605

10.1.6.9.6.6 AdditionalParameters <AddtlParams>

Presence: [0..1]

Definition: Any other parameters relevant for this interface.

Datatype: "Max2KBinary" on page 541

10.1.6.9.7 ExchangeMode <XchgMd>

Presence: [0..1]

Definition: Type of exchange supported by the host.

Datatype: "CAPEExchangeMode1Code" on page 558

CodeName	Name	Definition
APIE	ExchangeByAPI	With this protocol, the communication is done through calls to API.
MSGE	ExchangeByMessage	With this protocol, the communication is done through message exchanges.

10.1.6.9.8 EncodingMode <NcodgMd>

Presence: [0..1]

Definition: Type of encoding mode used by the exchange mode supported by the host.

Datatype: "CAPEEncodingMode1Code" on page 558

CodeName	Name	Definition
XMLE	XMLEncoding	Data exchanged with the protocol between both parties are encoded in XML.
JSON	JSONEncoding	Data exchanged with the protocol between both parties are encoded in JSON.

10.1.6.10 ServiceProviderParameters4

Definition: Service provider parameters of the point of interaction (POI).

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		311
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		311
	Version <Vrsn>	[1..1]	Text		311
	ApplicationIdentification <ApplId>	[0..*]	Text		311
	Host <Hst>	[0..*]			311
	HostIdentification <HstId>	[1..1]	Text		312
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		312
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		313
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		313
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		313

10.1.6.10.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: ["TerminalManagementAction3Code" on page 593](#)

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.10.2 ServiceProviderIdentification <SvcPrvdrId>

Presence: [1..*]

Definition: Identification of the service provider.

ServiceProviderIdentification <SvcPrvdrId> contains the following elements (see ["GenericIdentification176" on page 313](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

10.1.6.10.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the service provider parameters.

Datatype: ["Max256Text" on page 604](#)

10.1.6.10.4 ApplicationIdentification <ApplId>

Presence: [0..*]

Definition: Identification of payment application relevant for this service provider.

Datatype: ["Max35Text" on page 605](#)

10.1.6.10.5 Host <Hst>

Presence: [0..*]

Definition: Service provider host configuration.

Host <Hst> contains the following **AcquirerHostConfiguration10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	HostIdentification <HstId>	[1..1]	Text		312
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		312
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		313
	ExternallyTypeSupported <XtrnlyTpSprrtd>	[0..*]	Text		313

10.1.6.10.5.1 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of a host.

Datatype: "Max35Text" on page 605

10.1.6.10.5.2 MessageToSend <MsgToSnd>

Presence: [0..*]

Definition: Types of message to sent to this host.

Datatype: "MessageFunction47Code" on page 574

CodeName	Name	Definition
FAUQ	FinancialAuthorisationRequest	Request for authorisation with financial capture.
CCAQ	CancellationRequest	Request for cancellation.
CMPV	CompletionAdvice	Advice for completion without financial capture.
DGNP	DiagnosticRequest	Request for diagnostic.
RCLQ	ReconciliationRequest	Request for reconciliation.
CCAV	CancellationAdvice	Advice for cancellation.
BTCH	BatchTransfer	Transfer the financial data as a collection of transaction.
FRVA	FinancialReversalAdvice	Advice for reversal with financial capture.
AUTQ	AuthorisationRequest	The initiator requests an authorisation without financial impact to complete the transaction.
FCMV	FinancialCompletionAdvice	Advice for completion with financial capture.
DCCQ	CurrencyConversionRequest	Request for dynamic currency conversion.
RVRA	ReversalAdvice	Advice for reversal without financial capture.
DCAV	CurrencyConversionAdvice	Advice for dynamic currency conversion.
TRNA	TransactionAdvice	Advise of the transaction's processing.
NFRQ	NonFinancialRequest	Initiator of the message requests additional information to the receiver.

CodeName	Name	Definition
TRPQ	TransactionReportRequest	Request to receive of a report of transaction from the issuer to the receiver.
ATAF	AcceptorToAcquirerBatchFileExchange	Concatenation of multiple exchanges in one file.

10.1.6.10.5.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Protocol version to use when using these parameters.

Datatype: "Max8Text" on page 607

10.1.6.10.5.4 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 602

10.1.6.10.6 NonFinancialActionSupported <NonFinActnSpprtd>

Presence: [0..*]

Definition: Identification of non financial action supported by the Service Provider.

Datatype: "NonFinancialRequestType2Code" on page 576

CodeName	Name	Definition
ACQR	AcquirerSelection	According to several parameters of a transaction, an Intermediary Agent helps an Acceptor to identify the more relevant Acquirer to process the transaction.
PARQ	ParRequest	The Intermediary Agent or Acquirer provides the PaymentAccountReference to use to process the transaction.
RISK	RiskManagement	The Intermediary Agent or Acquirer helps the Acceptor to assess the risk management of the transaction.
TOKN	TokenRequest	The Intermediary Agent or Acquirer provides the token to use to process the transaction.
ADDR	AdditionalRequest	Indicates a request which implies to receive additional information.
INSM	InstalmentPlanRequest	Request to receive acquirer instalment plans.

10.1.7 Identification Information

10.1.7.1 GenericIdentification176

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

10.1.7.1.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 605

10.1.7.1.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType33Code" on page 578

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.7.1.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType33Code" on page 578

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.7.1.4 Country <Ctry>

Presence: [0..1]

Definition: Country of the entity (ISO 3166-1 alpha-2 or alpha-3).

Datatype: "Min2Max3AlphaText" on page 608

10.1.7.1.5 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 605

10.1.7.2 GenericIdentification177

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwr>	[1..1]	Text		319
	UTMNorthward <UTMnrthwr>	[1..1]	Text		320

10.1.7.2.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 605

10.1.7.2.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType33Code" on page 578

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.

CodeName	Name	Definition
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.7.2.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType33Code" on page 578

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.7.2.4 Country <Ctry>

Presence: [0..1]

Definition: Country of the entity (ISO 3166-1 alpha-2 or alpha-3).

Datatype: "Min2Max3AlphaText" on page 608

10.1.7.2.5 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 605

10.1.7.2.6 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Access information to reach the target host.

RemoteAccess <RmotAccs> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.7.2.7 Geolocation <Glctn>

Presence: [0..1]

Definition: Location of the entity.

Geolocation <Glctn> contains the following **Geolocation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrdr>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		320

10.1.7.2.7.1 GeographicCoordinates <GeogcCordints>

Presence: [0..1]

Definition: Geographic location specified by geographic coordinates.

GeographicCoordinates <GeogcCordints> contains the following **GeolocationGeographicCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319

10.1.7.2.7.1.1 Latitude <Lat>

Presence: [1..1]

Definition: Angular distance of a location on the earth south or north of the equator.

The latitude is measured in degrees, minutes and seconds, following by "N" for the north and "S" for the south of the equator. For example: 48°51'29" N the Eiffel Tower latitude.

Datatype: "Max35Text" on page 605

10.1.7.2.7.1.2 Longitude <Long>

Presence: [1..1]

Definition: Angular measurement of the distance of a location on the earth east or west of the Greenwich observatory.

The longitude is measured in degrees, minutes and seconds, following by "E" for the east and "W" for the west. For example: 23°27'30" E.

Datatype: "Max35Text" on page 605

10.1.7.2.7.2 UTMCoordinates <UTMCordints>

Presence: [0..1]

Definition: Geographic location specified by UTM coordinates.

UTMCoordinates <UTMCordints> contains the following **GeolocationUTMCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwr>	[1..1]	Text		319
	UTMNorthward <UTMNrthwr>	[1..1]	Text		320

10.1.7.2.7.2.1 UTMZone <UTMZone>

Presence: [1..1]

Definition: UTM grid zone combination of the longitude zone (1 to 60) and the latitude band (C to X, excluding I and O).

Datatype: "Max35Text" on page 605

10.1.7.2.7.2.2 UTMEastward <UTMEstwr>

Presence: [1..1]

Definition: X-coordinate of the Universal Transverse Mercator

coordinate system.

Datatype: "Max35Text" on page 605

10.1.7.2.7.2.3 UTMNorthward <UTMnrthwrd>

Presence: [1..1]

Definition: Y-coordinate of the Universal Transverse Mercator

coordinate system.

Datatype: "Max35Text" on page 605

10.1.7.3 GenericIdentification4

Definition: Information related to an identification, eg, party identification or account identification.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		320
	IdentificationType <IdTp>	[1..1]	Text		320

10.1.7.3.1 Identification <Id>

Presence: [1..1]

Definition: Identifier issued to a person for which no specific identifier has been defined.

Datatype: "Max35Text" on page 605

10.1.7.3.2 IdentificationType <IdTp>

Presence: [1..1]

Definition: Specifies the nature of the identifier.

Usage: IdentificationType is used to specify what kind of identifier is used. It should be used in case the identifier is different from the identifiers listed in the pre-defined identifier list.

Datatype: "Max35Text" on page 605

10.1.7.4 GenericIdentification32

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		320
	Type <Tp>	[0..1]	CodeSet		321
	Issuer <Issr>	[0..1]	CodeSet		321
	ShortName <ShrtNm>	[0..1]	Text		321

10.1.7.4.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 605

10.1.7.4.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType3Code" on page 578

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	DelegatIssuer	Party to whom the card issuer delegates to authorise card payment transactions.

10.1.7.4.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType4Code" on page 579

CodeName	Name	Definition
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
TAXH	TaxAuthority	Tax authority.

10.1.7.4.4 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 605

10.1.7.5 GenericIdentification30

Definition: Information related to an identification, for example, party identification or account identification.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		322
	Issuer <Issr>	[1..1]	Text		322
	SchemeName <SchmeNm>	[0..1]	Text		322

10.1.7.5.1 Identification <Id>

Presence: [1..1]

Definition: Proprietary information, often a code, issued by the data source scheme issuer.

Datatype: "Exact4AlphaNumericText" on page 602

10.1.7.5.2 Issuer <Issr>

Presence: [1..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 605

10.1.7.5.3 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Short textual description of the scheme.

Datatype: "Max35Text" on page 605

10.1.8 Miscellaneous

10.1.8.1 CardPaymentEnvironment81

Definition: Environment of the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		328
	ServiceProvider <SvcPrvdr>	[0..1]	±		328
	Merchant <Mrchnt>	[0..1]			329
	Identification <Id>	[0..1]	±		329
	CommonName <CmonNm>	[0..1]	Text		329
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		329
	LocationAndContact <LctnAndCtct>	[0..1]	±		330
	SchemeData <SchmeData>	[0..1]	Text		330
	POI <POI>	[0..1]			330
	Identification <Id>	[1..1]	±		331
	SystemName <SysNm>	[0..1]	Text		331
	GroupIdentification <Grpld>	[0..1]	Text		332
	Capabilities <Cpblties>	[0..1]	±		332
	TimeZone <TmZone>	[0..1]	Text		332
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		332
	Component <Cmpnt>	[0..*]	±		333
	Card <Card>	[0..1]			335
	ProtectedCardData <PrtctdCardData>	[0..1]	±		336
	PrivateCardData <PrvtCardData>	[0..1]	Binary		337
	PlainCardData <PlainCardData>	[0..1]			337
	PAN <PAN>	[1..1]	Text		337
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		337
	EffectiveDate <FctvDt>	[0..1]	Text		337
	ExpiryDate <XpryDt>	[0..1]	Text		338
	ServiceCode <SvcCd>	[0..1]	Text		338
	Track1 <Trck1>	[0..1]	Text		338
	Track2 <Trck2>	[0..1]	Text		338
	Track3 <Trck3>	[0..1]	Text		338
	CardholderName <CrdhldrNm>	[0..1]	Text		338
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		338
	MaskedPAN <MskdPAN>	[0..1]	Text		339

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	IssuerBIN <IssrBIN>	[0..1]	Text		339
	CardCountryCode <CardCtryCd>	[0..1]	Text		339
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		339
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		339
	CardBrand <CardBrnd>	[0..1]	Text		339
	CardProductType <CardPdctTp>	[0..1]	CodeSet		339
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		340
	InternationalCard <IntrnlCard>	[0..1]	Indicator		340
	AllowedProduct <AllwdPdct>	[0..*]	Text		340
	ServiceOption <SvcOptn>	[0..1]	Text		340
	AdditionalCardData <AddtlCardData>	[0..1]	Text		340
	Check <Chck>	[0..1]			340
	BankIdentification <BklId>	[0..1]	Text		341
	AccountNumber <AcctNb>	[0..1]	Text		341
	CheckNumber <ChckNb>	[0..1]	Text		341
	CheckCardNumber <ChckCardNb>	[0..1]	Text		341
	CheckTrackData2 <ChckTrckData2>	[0..1]			341
	TrackNumber <TrckNb>	[0..1]	Quantity		342
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		342
	TrackValue <TrckVal>	[1..1]	Text		342
	CheckType <ChckTp>	[0..1]	CodeSet		342
	Country <Ctry>	[0..1]	Text		343
	StoredValueAccount <StordValAcct>	[0..*]			343
	AccountType <AcctTp>	[0..1]	CodeSet		343
	IdentificationType <IdTp>	[0..1]	CodeSet		344
	Identification <Id>	[0..1]	Text		344
	Brand <Brnd>	[0..1]	Text		345
	Provider <Prvdr>	[0..1]	Text		345
	OwnerName <OwnrNm>	[0..1]	Text		345
	ExpiryDate <XpryDt>	[0..1]	Text		345
	EntryMode <NtryMd>	[0..1]	CodeSet		345

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	Balance <Bal>	[0..1]	Amount		346
	LoyaltyAccount <LtyAcct>	[0..*]	±		346
	CustomerDevice <CstmrDvc>	[0..1]	±		347
	Wallet <Wlt>	[0..1]	±		347
	PaymentToken <PmtTkn>	[0..1]	±		347
	MerchantToken <MrchntTkn>	[0..1]	±		348
	Cardholder <Crdhldr>	[0..1]			348
	Identification <Id>	[0..1]			352
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		352
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		352
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		353
	DriverIdentification <DrvrId>	[0..1]	Text		353
	CustomerNumber <CstmrNb>	[0..1]	Text		353
	SocialSecurityNumber <ScfSctyNb>	[0..1]	Text		353
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		353
	PassportNumber <PsptNb>	[0..1]	Text		353
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		353
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		353
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		354
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		354
	JobNumber <JobNb>	[0..1]	Text		354
	Department <Dept>	[0..1]	Text		354
	EmailAddress <EmailAdr>	[0..1]	Text		354
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			354
	BirthDate <BirthDt>	[1..1]	Date		354
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		355
	CityOfBirth <CityOfBirth>	[1..1]	Text		355
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	355
	Other <Othr>	[0..*]	±		355
	Name <Nm>	[0..1]	Text		355

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Language <Lang>	[0..1]	CodeSet	C14	355
	BillingAddress <BlgAdr>	[0..1]	±		356
	ShippingAddress <ShppgAdr>	[0..1]	±		356
	TripNumber <TripNb>	[0..1]	Text		357
	Vehicle <Vhcl>	[0..1]	±		357
	Authentication <Authntcn>	[0..*]			358
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		360
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		361
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		362
	ProtectedAuthenticationValue <PrctdAuthntcnVal>	[0..1]	±		362
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			362
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		362
	PINFormat <PINFrmt>	[1..1]	CodeSet		363
	AdditionalInput <AddtlInpt>	[0..1]	Text		363
	CardholderIdentification <CrdhldrId>	[0..1]			363
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		364
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		364
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		364
	DriverIdentification <DrvrId>	[0..1]	Text		365
	CustomerNumber <CstmrNb>	[0..1]	Text		365
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		365
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		365
	PassportNumber <PsptNb>	[0..1]	Text		365
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		365
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		365
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		365
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		366
	JobNumber <JobNb>	[0..1]	Text		366
	Department <Dept>	[0..1]	Text		366
	EmailAddress <EmailAdr>	[0..1]	Text		366
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			366

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BirthDate <BirthDt>	[1..1]	Date		366
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		366
	CityOfBirth <CityOfBirth>	[1..1]	Text		367
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	367
	Other <Othr>	[0..*]	±		367
	AddressVerification <AdrVrfctn>	[0..1]			367
	AddressDigits <AdrDgts>	[0..1]	Text		367
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		368
	AuthenticationType <AuthntcnTp>	[0..1]	Text		368
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		368
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		368
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			368
	Identification <Id>	[1..1]	Text		369
	Value <Val>	[0..1]	Binary		369
	ProtectedValue <PrctcdVal>	[0..1]	±		369
	Type <Tp>	[0..1]	Text		369
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			369
	Method <Mtd>	[1..1]	CodeSet		370
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		371
	Result <Rslt>	[0..1]	CodeSet		371
	AdditionalResult <AddtlRslt>	[0..1]	Text		371
	PersonalData <PrsnlData>	[0..1]	Text		372
	MobileData <MobData>	[0..*]			372
	MobileCountryCode <MobCtryCd>	[0..1]	Text		372
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		372
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		373
	Geolocation <Glctn>	[0..1]			373
	GeographicCoordinates <GeogcCordints>	[0..1]			373
	Latitude <Lat>	[1..1]	Text		373
	Longitude <Long>	[1..1]	Text		373
	UTMCoordinates <UTMCordints>	[0..1]			374

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	UTMZone <UTMZone>	[1..1]	Text		374
	UTMEastward <UTMEstwr>	[1..1]	Text		374
	UTMNorthward <UTMnrthwr>	[1..1]	Text		374
	SensitiveMobileData <SnstvMobData>	[0..1]			374
	MSISDN <MSISDN>	[1..1]	Text		375
	IMSI <IMSI>	[0..1]	Text		375
	IMEI <IMEI>	[0..1]	Text		375
	ProtectedMobileData <PrctdMobData>	[0..1]	±		375
	ProtectedCardholderData <PrctdCrhdrData>	[0..1]	±		375
	SaleEnvironment <SaleEnv>	[0..1]			376
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		376
	Currency <Ccy>	[0..1]	CodeSet	C1	377
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		377
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		377
	MinimumSplitAmount <MinSplAmt>	[0..1]	Amount		378
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		378
	LoyaltyHandling <LtyHdlg>	[0..1]	CodeSet		378

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.8.1.1 Acquirer <Acqrr>

Presence: [0..1]

Definition: Acquirer involved in the card payment.

Acquirer <Acqrr> contains the following elements (see "Acquirer10" on page 146 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		146
	ParametersVersion <ParamsVrsn>	[0..1]	Text		147

10.1.8.1.2 ServiceProvider <SvcPrvdr>

Presence: [0..1]

Definition: Third party agent which provides services.

ServiceProvider <SvcPrvdr> contains the following elements (see "[Acquirer10](#)" on page 146 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		146
	ParametersVersion <ParamsVrsn>	[0..1]	Text		147

10.1.8.1.3 Merchant <Mrchnt>

Presence: [0..1]

Definition: Merchant performing the card payment transaction.

Usage: In some cases, merchant and acceptor may be regarded as the same entity.

Merchant <Mrchnt> contains the following **Organisation41** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		329
	CommonName <CmonNm>	[0..1]	Text		329
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		329
	LocationAndContact <LctnAndCtct>	[0..1]	±		330
	SchemeData <SchmeData>	[0..1]	Text		330

10.1.8.1.3.1 Identification <Id>

Presence: [0..1]

Definition: Identification of the merchant.

Identification <Id> contains the following elements (see "[GenericIdentification32](#)" on page 320 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		320
	Type <Tp>	[0..1]	CodeSet		321
	Issuer <Issr>	[0..1]	CodeSet		321
	ShortName <ShrtNm>	[0..1]	Text		321

10.1.8.1.3.2 CommonName <CmonNm>

Presence: [0..1]

Definition: Name of the merchant as appearing on the receipt.

Datatype: "[Max70Text](#)" on page 607

10.1.8.1.3.3 LocationCategory <LctnCtgy>

Presence: [0..1]

Definition: Location category of the place where the merchant actually performed the transaction.

Datatype: "LocationCategory4Code" on page 573

CodeName	Name	Definition
ABRD	Aboard	Aboard is used when the sale is done in a vehicle (e.g a bus, train, ship, airplane, taxi, etc).
NMDC	Nomadic	Nomadic is used when the merchant is traveling to different locations (e.g fair or sport events, home delivery, food truck).
FIXD	PhysicalShop	Fixed location, for example in a shop.
VIRT	VirtualShop	Virtual Shop is used for any ecommerce solution.

10.1.8.1.3.4 LocationAndContact <LctnAndCtct>

Presence: [0..1]

Definition: Location and contact information of the merchant performing the transaction.

LocationAndContact <LctnAndCtct> contains the following elements (see "[CommunicationAddress9](#)" on page 256 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PostalAddress <PstlAdr>	[0..1]	±		256
	Email <Email>	[0..1]	Text		256
	URLAddress <URLAdr>	[0..1]	Text		257
	Phone <Phne>	[0..1]	Text		257
	CustomerService <CstmrSvc>	[0..1]	Text		257
	AdditionalContactInformation <AddtlCtctInf>	[0..1]	Text		257

10.1.8.1.3.5 SchemeData <SchmeData>

Presence: [0..1]

Definition: Additional merchant data required by a card scheme.

Datatype: "Max140Text" on page 603

10.1.8.1.4 POI <POI>

Presence: [0..1]

Definition: Point of interaction (POI) performing the transaction.

POI <POI> contains the following **PointOfInteraction15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		331
	SystemName <SysNm>	[0..1]	Text		331
	GroupIdentification <Grpld>	[0..1]	Text		332
	Capabilities <Cpblties>	[0..1]	±		332
	TimeZone <TmZone>	[0..1]	Text		332
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		332
	Component <Cmpnt>	[0..*]	±		333

10.1.8.1.4.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the POI (Point Of Interaction) for the acquirer or its agent.

Identification <Id> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrld>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrld>	[1..1]	Text		320

10.1.8.1.4.2 SystemName <SysNm>

Presence: [0..1]

Definition: Common name assigned by the acquirer to the POI (Point Of Interaction) system.

Datatype: "[Max70Text](#)" on page 607

10.1.8.1.4.3 GroupIdentification <Grpld>

Presence: [0..1]

Definition: Identifier assigned by the merchant identifying a set of POI (Point Of Interaction) terminals performing some categories of transactions.

Datatype: "Max35Text" on page 605

10.1.8.1.4.4 Capabilities <Cpblties>

Presence: [0..1]

Definition: Capabilities of the POI (Point Of Interaction) performing the transaction.

Capabilities <Cpblties> contains the following elements (see "PointOfInteractionCapabilities9" on page 395 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		396
	CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>	[0..*]	CodeSet		397
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		397
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		397
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		398
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		398
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		398
	MessageCapabilities <MsgCpblties>	[0..*]			398
	Destination <Dstn>	[1..*]	CodeSet		398
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		399
	NumberOfLines <NbOfLines>	[0..1]	Quantity		399
	LineWidth <LineWidth>	[0..1]	Quantity		399
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	399

10.1.8.1.4.5 TimeZone <TmZone>

Presence: [0..1]

Definition: Time zone name as defined by IANA (Internet Assigned Numbers Authority) in the time zone data base. America/Chicago or Europe/Paris are examples of time zone names.

Datatype: "Max70Text" on page 607

10.1.8.1.4.6 TerminalIntegration <TermnlIntgtn>

Presence: [0..1]

Definition: Indicates the type of integration of the POI terminal in the sale environment.

Datatype: "LocationCategory3Code" on page 572

CodeName	Name	Definition
INDR	Indoor	Indoor terminal.
IPMP	InsidePump	Terminal incorporated in the pump dispensing petrol.
MPOI	MultiplePOITerminal	Multiple terminals linked to a unique sale terminal.
MPMP	MultiplePump	Outdoor terminal serving several petrol pumps.
MSLE	MultipleSaleTerminal	Terminal serving multiple sale terminals.
SSLE	SingleSaleTerminal	Terminal linked to a unique sale terminal.
VNDG	VendingMachine	Terminal integrated in a vending machine.

10.1.8.1.4.7 Component <Cmpnt>

Presence: [0..*]

Definition: Data related to a component of the POI (Point Of Interaction) performing the transaction.

Component <Cmpnt> contains the following elements (see "[PointOfInteractionComponent17](#)" on page 421 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		423
	SubTypeInfo <SubTPlnf>	[0..1]	Text		424
	Identification <Id>	[1..1]			425
	ItemNumber <ItmNb>	[0..1]	Text		425
	ProviderIdentification <PrvdrlId>	[0..1]	Text		425
	Identification <Id>	[0..1]	Text		425
	SerialNumber <SriNb>	[0..1]	Text		425
	Status <Sts>	[0..1]			425
	VersionNumber <VrsnNb>	[0..1]	Text		426
	Status <Sts>	[0..1]	CodeSet		426
	ExpiryDate <XpryDt>	[0..1]	Date		426
	StandardCompliance <StdCmplc>	[0..*]			426
	Identification <Id>	[1..1]	Text		426
	Version <Vrsn>	[1..1]	Text		427
	Issuer <Issr>	[1..1]	Text		427
	Characteristics <Chrtcs>	[0..1]			427
	Memory <Mmry>	[0..*]			428
	Identification <Id>	[1..1]	Text		429
	TotalSize <TtlSz>	[1..1]	Quantity		429
	FreeSize <FreeSz>	[1..1]	Quantity		429
	Unit <Unit>	[1..1]	CodeSet		429
	Communication <Com>	[0..*]			429
	CommunicationType <ComTp>	[1..1]	CodeSet		430
	RemoteParty <RmotPty>	[1..*]	CodeSet		431
	Active <Actv>	[1..1]	Indicator		431
	Parameters <Params>	[0..1]	±		431
	PhysicalInterface <PhysIntrfc>	[0..1]			432
	InterfaceName <IntrfcNm>	[1..1]	Text		432
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		432
	UserName <UsrNm>	[0..1]	Text		433

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccessCode <AccsCd>	[0..1]	Binary		433
	SecurityProfile <SctyPrfl>	[0..1]	Text		433
	AdditionalParameters <AddtlParams>	[0..1]	Binary		433
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		434
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		434
	SecurityElement <SctyElmt>	[0..*]	±		434
	Assessment <Assmnt>	[0..*]			435
	Type <Tp>	[1..1]	CodeSet		436
	Assigner <Assgnr>	[1..*]	Text		436
	DeliveryDate <DlrvyDt>	[0..1]	DateTime		436
	ExpirationDate <XprtnDt>	[0..1]	DateTime		436
	Number <Nb>	[1..1]	Text		436
	Package <Packg>	[0..*]			437
	PackageIdentification <PackgId>	[0..1]	±		437
	PackageLength <PackgLngh>	[0..1]	Quantity		437
	OffsetStart <OffsetStart>	[0..1]	Quantity		437
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		438
	PackageBlock <PackgBlck>	[0..*]			438
	Identification <Id>	[1..1]	Text		438
	Value <Val>	[0..1]	Binary		438
	ProtectedValue <PrctcdVal>	[0..1]	±		438
	Type <Tp>	[0..1]	Text		439
	ProbeValue <PrbVal>	[0..1]	Binary		439

10.1.8.1.5 Card <Card>

Presence: [0..1]

Definition: Payment card performing the transaction.

Card <Card> contains the following **PaymentCard35** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectedCardData <PrtctdCardData>	[0..1]	±		336
	PrivateCardData <PrvtCardData>	[0..1]	Binary		337
	PlainCardData <PlainCardData>	[0..1]			337
	PAN <PAN>	[1..1]	Text		337
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		337
	EffectiveDate <FctvDt>	[0..1]	Text		337
	ExpiryDate <XpryDt>	[0..1]	Text		338
	ServiceCode <SvcCd>	[0..1]	Text		338
	Track1 <Trck1>	[0..1]	Text		338
	Track2 <Trck2>	[0..1]	Text		338
	Track3 <Trck3>	[0..1]	Text		338
	CardholderName <CrdhldrNm>	[0..1]	Text		338
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		338
	MaskedPAN <MskdPAN>	[0..1]	Text		339
	IssuerBIN <IssrBIN>	[0..1]	Text		339
	CardCountryCode <CardCtryCd>	[0..1]	Text		339
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		339
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		339
	CardBrand <CardBrnd>	[0..1]	Text		339
	CardProductType <CardPdctTp>	[0..1]	CodeSet		339
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		340
	InternationalCard <IntrnlCard>	[0..1]	Indicator		340
	AllowedProduct <AllwdPdct>	[0..*]	Text		340
	ServiceOption <SvcOptn>	[0..1]	Text		340
	AdditionalCardData <AddtlCardData>	[0..1]	Text		340

10.1.8.1.5.1 ProtectedCardData <PrtctdCardData>

Presence: [0..1]

Definition: Replacement of the message element PlainCardData by a digital envelope using a cryptographic key.

ProtectedCardData <PrctcdCardData> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.8.1.5.2 PrivateCardData <PrvtCardData>

Presence: [0..1]

Definition: Replacement of the message element PlainCardData by a private envelope.

Datatype: "Max100KBinary" on page 540

10.1.8.1.5.3 PlainCardData <PlainCardData>

Presence: [0..1]

Definition: Sensitive data associated with the card performing the transaction.

PlainCardData <PlainCardData> contains the following **PlainCardData22** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PAN <PAN>	[1..1]	Text		337
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		337
	EffectiveDate <FctvDt>	[0..1]	Text		337
	ExpiryDate <XpryDt>	[0..1]	Text		338
	ServiceCode <SvcCd>	[0..1]	Text		338
	Track1 <Trck1>	[0..1]	Text		338
	Track2 <Trck2>	[0..1]	Text		338
	Track3 <Trck3>	[0..1]	Text		338
	CardholderName <CrdhldrNm>	[0..1]	Text		338

10.1.8.1.5.3.1 PAN <PAN>

Presence: [1..1]

Definition: Primary Account Number (PAN) of the card, or surrogate of the PAN by a payment token.

Datatype: "Min8Max28NumericText" on page 608

10.1.8.1.5.3.2 CardSequenceNumber <CardSeqNb>

Presence: [0..1]

Definition: Identify a card or a payment token inside a set of cards with the same PAN or token.

Datatype: "Min2Max3NumericText" on page 608

10.1.8.1.5.3.3 EffectiveDate <FctvDt>

Presence: [0..1]

Definition: Date from which the card can be used, expressed either in the YYYY-MM format, or in the YYYY-MM-DD format.

Datatype: "Max10Text" on page 602

10.1.8.1.5.3.4 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiry date of the card or the payment token expressed either in the YYYY-MM format, or in the YYYY-MM-DD format.

Datatype: "Max10Text" on page 602

10.1.8.1.5.3.5 ServiceCode <SvcCd>

Presence: [0..1]

Definition: Services attached to the card, as defined in ISO 7813.

Datatype: "Exact3NumericText" on page 601

10.1.8.1.5.3.6 Track1 <Trck1>

Presence: [0..1]

Definition: ISO track 1 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The format is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max76Text" on page 607

10.1.8.1.5.3.7 Track2 <Trck2>

Presence: [0..1]

Definition: ISO track 2 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max37Text" on page 605

10.1.8.1.5.3.8 Track3 <Trck3>

Presence: [0..1]

Definition: ISO track 3 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 4909, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max104Text" on page 602

10.1.8.1.5.3.9 CardholderName <CrdhldrNm>

Presence: [0..1]

Definition: Name of the cardholder stored on the card.

Datatype: "Max45Text" on page 606

10.1.8.1.5.4 PaymentAccountReference <PmtAcctRef>

Presence: [0..1]

Definition: Unique reference to the card, used by both merchants and acquirers to link tokenized and non-tokenized transactions associated to the same underlying card.

Datatype: "Max70Text" on page 607

10.1.8.1.5.5 MaskedPAN <MskdPAN>

Presence: [0..1]

Definition: Masked PAN to be printed on payment receipts or displayed to the cardholder. Masked digits may be absent or replaced by another character as '*'.
Datatype: "Max30Text" on page 604

10.1.8.1.5.6 IssuerBIN <IssrBIN>

Presence: [0..1]

Definition: Bank identifier number of the issuer for routing purpose.

Datatype: "Max15NumericText" on page 603

10.1.8.1.5.7 CardCountryCode <CardCtryCd>

Presence: [0..1]

Definition: Country code assigned to the card by the card issuer.

Datatype: "Max3Text" on page 606

10.1.8.1.5.8 CardCurrencyCode <CardCcyCd>

Presence: [0..1]

Definition: Currency code of the card issuer (ISO 4217 numeric code).

Datatype: "Exact3AlphaNumericText" on page 601

10.1.8.1.5.9 CardProductProfile <CardPdctPrfl>

Presence: [0..1]

Definition: Defines a category of cards related to the acceptance processing rules defined by the acquirer.

Datatype: "Max35Text" on page 605

10.1.8.1.5.10 CardBrand <CardBrnd>

Presence: [0..1]

Definition: Brand name of the card.

Datatype: "Max35Text" on page 605

10.1.8.1.5.11 CardProductType <CardPdctTp>

Presence: [0..1]

Definition: Type of card product.

Datatype: "CardProductType1Code" on page 561

CodeName	Name	Definition
COMM	CommercialCard	Cards issued as a means of business expenditure, for instance business card or corporate card. The user could be a company, an individual for business

CodeName	Name	Definition
		expenses or a self employed for business purposes.
CONS	ConsumerCard	Cards issued as a means of personal expenditure. The user is always an individual.

10.1.8.1.5.12 CardProductSubType <CardPdctSubTp>

Presence: [0..1]

Definition: Additional information to identify CardProduct.

Datatype: "Max35Text" on page 605

10.1.8.1.5.13 InternationalCard <IntrnlCard>

Presence: [0..1]

Definition: True if the card may be used abroad.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.8.1.5.14 AllowedProduct <AllwdPdct>

Presence: [0..*]

Definition: Product that can be purchased with the card.

Datatype: "Max70Text" on page 607

10.1.8.1.5.15 ServiceOption <SvcOptn>

Presence: [0..1]

Definition: Options to the service provided by the card.

Datatype: "Max35Text" on page 605

10.1.8.1.5.16 AdditionalCardData <AddtlCardData>

Presence: [0..1]

Definition: Additional card issuer specific data.

Datatype: "Max70Text" on page 607

10.1.8.1.6 Check <Chck>

Presence: [0..1]

Definition: Check Payment instrument.

Check <Chck> contains the following **Check1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BankIdentification <Bkld>	[0..1]	Text		341
	AccountNumber <AcctNb>	[0..1]	Text		341
	CheckNumber <ChckNb>	[0..1]	Text		341
	CheckCardNumber <ChckCardNb>	[0..1]	Text		341
	CheckTrackData2 <ChckTrckData2>	[0..1]			341
	TrackNumber <TrckNb>	[0..1]	Quantity		342
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		342
	TrackValue <TrckVal>	[1..1]	Text		342
	CheckType <ChckTp>	[0..1]	CodeSet		342
	Country <Ctry>	[0..1]	Text		343

10.1.8.1.6.1 BankIdentification <Bkld>

Presence: [0..1]

Definition: Identification of the institution (bank) issuing the check.

Datatype: "Max35Text" on page 605

10.1.8.1.6.2 AccountNumber <AcctNb>

Presence: [0..1]

Definition: Identification of the account linked to the check.

Datatype: "Max35Text" on page 605

10.1.8.1.6.3 CheckNumber <ChckNb>

Presence: [0..1]

Definition: Identification of the check.

Datatype: "Max35Text" on page 605

10.1.8.1.6.4 CheckCardNumber <ChckCardNb>

Presence: [0..1]

Definition: Check guarantee card number.

The human readable number from the Check Guarantee Card that is presented during the check tendering process.

Datatype: "Max35Text" on page 605

10.1.8.1.6.5 CheckTrackData2 <ChckTrckData2>

Presence: [0..1]

Definition: Track Data of the check to digitally identify the data.

CheckTrackData2 <ChckTrckData2> contains the following **TrackData2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TrackNumber <TrckNb>	[0..1]	Quantity		342
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		342
	TrackValue <TrckVal>	[1..1]	Text		342

10.1.8.1.6.5.1 TrackNumber <TrckNb>

Presence: [0..1]

Definition: Track number of the card.

Datatype: "Number" on page 600

10.1.8.1.6.5.2 TrackFormat <TrckFrmt>

Presence: [0..1]

Definition: Card or check track format.

Datatype: "TrackFormat1Code" on page 596

CodeName	Name	Definition
AAMV	AAMVFormat	American driver license.
CMC7	CMC7CheckFormat	Magnetic Ink Character Recognition, using the CMC-7 font - ISO 1004 Line at the bottom of a check containing the bank account and the check number.
E13B	E13BCheckFormat	Magnetic Ink Character Recognition, using the E-13B font) Line at the bottom of a check containing the bank account and the check number.
ISOF	ISOFormat	ISO card track format - ISO 7813 - ISO 4909.
JIS1	JISIFormat	Japanese track format I.
JIS2	JISIIFormat	Japanese track format II.

10.1.8.1.6.5.3 TrackValue <TrckVal>

Presence: [1..1]

Definition: Card track content or equivalent.

Datatype: "Max140Text" on page 603

10.1.8.1.6.6 CheckType <ChckTp>

Presence: [0..1]

Definition: Type of the check (personal or professional).

Datatype: "CheckType1Code" on page 562

CodeName	Name	Definition
BANK	BankCheck	The check is guaranteed by a bank.

CodeName	Name	Definition
BUSI	BusinessCheck	The check belongs to a Company or a professional entity.
GOVC	GovernmentCheck	Check issued by Government.
PAYR	PayrollCheck	Check issued by a company for the employees.
PERS	PersonalCheck	The check belongs to an individual.

10.1.8.1.6.7 Country <Ctry>

Presence: [0..1]

Definition: Country of the check.

Datatype: "Max3Text" on page 606

10.1.8.1.7 StoredValueAccount <StordValAcct>

Presence: [0..*]

Definition: Store value account payment instrument.

StoredValueAccount <StordValAcct> contains the following **StoredValueAccount2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccountType <AcctTp>	[0..1]	CodeSet		343
	IdentificationType <IdTp>	[0..1]	CodeSet		344
	Identification <Id>	[0..1]	Text		344
	Brand <Brnd>	[0..1]	Text		345
	Provider <Prvdr>	[0..1]	Text		345
	OwnerName <OwnrNm>	[0..1]	Text		345
	ExpiryDate <XpryDt>	[0..1]	Text		345
	EntryMode <NtryMd>	[0..1]	CodeSet		345
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	Balance <Bal>	[0..1]	Amount		346

10.1.8.1.7.1 AccountType <AcctTp>

Presence: [0..1]

Definition: Type of stored value account.

Datatype: "StoredValueAccountType1Code" on page 592

CodeName	Name	Definition
BNKA	BankPrepaidAccount	Prepaid account managed by a financial institution for low income customers.
CWVC	CarwashVoucher	Car wash specific account.

CodeName	Name	Definition
CPYA	CompanyPrepaidAccount	Specific prepaid account for companies or professionals expenses.
ELMY	ElectronicMoneyAccount	Account supporting e-money issued by an electronic money issuer.
GIFT	GiftCard	Payment mean issued by retailers or banks as a substitute to a non-monetary gift. Usually, this Stored Value item is used only once.
GCER	GiftCertificate	Certificate to be given to a customer. Usually one shot voucher.
MLVC	MealVoucher	Meal and check voucher for restaurants.
OLVC	OnlineVoucher	Voucher that can be used online once or in several times.
MERC	MerchantAccount	Prepaid account open with a merchant or big retailers.
OTHR	OtherPrepaidAccount	Other non listed stored value instrument.
PHON	PhoneCard	Stored value instrument used to pay telephone services (e.g. card or identifier).
CARD	SmartCardTag	Stored value account hold on the chip of a smart card.
TRVL	Travel	Travel prepaid account.

10.1.8.1.7.2 IdentificationType <IdTp>

Presence: [0..1]

Definition: Type of identification for this Stored Value Account.

Datatype: "CardIdentificationType1Code" on page 561

CodeName	Name	Definition
ACCT	AccountNumber	Account identification.
BARC	BarCode	Bar-code with a specific form of identification.
ISO2	ISOTrack2	ISO Track 2 including identification.
PHON	PhoneNumber	A phone number identifies the account on which the phone card is assigned.
CPAN	PrimaryAccountNumber	Standard card identification (card number).
PRIV	PrivativeNumbering	An identification set by a privative application.
UUID	UniversalUniqueIdentification	A Universal Unique Identification code is set for identification.

10.1.8.1.7.3 Identification <Id>

Presence: [0..1]

Definition: Identification of Stored Value Account.

Datatype: "Max35Text" on page 605

10.1.8.1.7.4 Brand <Brnd>

Presence: [0..1]

Definition: Brand to which belong the account.

Datatype: "Max35Text" on page 605

10.1.8.1.7.5 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the Stored Value Account.

Datatype: "Max35Text" on page 605

10.1.8.1.7.6 OwnerName <OwnrNm>

Presence: [0..1]

Definition: Owner name of an account.

Datatype: "Max45Text" on page 606

10.1.8.1.7.7 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiry date of the account of card.

Datatype: "Max10Text" on page 602

10.1.8.1.7.8 EntryMode <NtryMd>

Presence: [0..1]

Definition: Standard or last entry mode to access the Stored Value account or card.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

CodeName	Name	Definition
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.8.1.7.9 Currency <Ccy>

Presence: [0..1]

Definition: Currency of the Stored Value account.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 543

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.1.8.1.7.10 Balance <Bal>

Presence: [0..1]

Definition: Current balance of the Stored Value account.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.8.1.8 LoyaltyAccount <LltyAcct>

Presence: [0..*]

Definition: Store value account associated to the payment.

LoyaltyAccount <LtyAcct> contains the following elements (see "[LoyaltyAccount3](#)" on page 378 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	LoyaltyIdentification <LtyId>	[1..1]	Text		379
	EntryMode <NtryMd>	[0..1]	CodeSet		379
	IdentificationType <IdTp>	[0..1]	CodeSet		380
	Brand <Brnd>	[0..1]	Text		380
	Provider <Prvdr>	[0..1]	Text		380
	OwnerName <OwnrNm>	[0..1]	Text		380
	Unit <Unit>	[0..1]	CodeSet		380
	Currency <Ccy>	[0..1]	CodeSet	C1	381
	Balance <Bal>	[0..1]	Amount		381

10.1.8.1.9 CustomerDevice <CstmrDvc>

Presence: [0..1]

Definition: Device used by the customer to perform the payment transaction.

CustomerDevice <CstmrDvc> contains the following elements (see "[CustomerDevice3](#)" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		382
	Type <Tp>	[0..1]	Text		382
	Provider <Prvdr>	[0..1]	Text		382

10.1.8.1.10 Wallet <Wllt>

Presence: [0..1]

Definition: Container for tenders used by the customer to perform the payment transaction.

Wallet <Wllt> contains the following elements (see "[CustomerDevice3](#)" on page 382 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		382
	Type <Tp>	[0..1]	Text		382
	Provider <Prvdr>	[0..1]	Text		382

10.1.8.1.11 PaymentToken <PmtTkn>

Presence: [0..1]

Definition: Payment token information.

PaymentToken <PmtTkn> contains the following elements (see "Token1" on page 537 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentToken <PmtTkn>	[0..1]	Text		537
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		537
	TokenRequestorIdentification <TknRqstrld>	[0..1]	Text		537
	TokenAssuranceData <TknAssrncData>	[0..1]	Text		537
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		537
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		538

10.1.8.1.12 MerchantToken <MrchntTkn>

Presence: [0..1]

Definition: Merchant token information.

MerchantToken <MrchntTkn> contains the following elements (see "MerchantToken2" on page 538 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Token <Tkn>	[0..1]	Text		538
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		538
	TokenCharacteristic <TknChrtc>	[0..*]	Text		538
	TokenRequestor <TknRqstr>	[0..1]			539
	ProviderIdentification <Prvdrlld>	[1..1]	Text		539
	RequestorIdentification <Rqstrld>	[1..1]	Text		539
	TokenAssuranceLevel <TknAssrncLvl>	[0..1]	Quantity		539
	TokenAssuranceData <TknAssrncData>	[0..1]	Binary		539
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		539
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		539

10.1.8.1.13 Cardholder <Crdhldr>

Presence: [0..1]

Definition: Cardholder involved in the card payment.

Cardholder <Crhdldr> contains the following **Cardholder21** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]			352
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		352
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		352
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		353
	DriverIdentification <DrvrId>	[0..1]	Text		353
	CustomerNumber <CstmrNb>	[0..1]	Text		353
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		353
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		353
	PassportNumber <PsptNb>	[0..1]	Text		353
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		353
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		353
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		354
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		354
	JobNumber <JobNb>	[0..1]	Text		354
	Department <Dept>	[0..1]	Text		354
	EmailAddress <EmailAdr>	[0..1]	Text		354
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			354
	BirthDate <BirthDt>	[1..1]	Date		354
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		355
	CityOfBirth <CityOfBirth>	[1..1]	Text		355
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	355
	Other <Othr>	[0..*]	±		355
	Name <Nm>	[0..1]	Text		355
	Language <Lang>	[0..1]	CodeSet	C14	355
	BillingAddress <BllgAdr>	[0..1]	±		356
	ShippingAddress <ShppgAdr>	[0..1]	±		356
	TripNumber <TripNb>	[0..1]	Text		357
	Vehicle <Vhcl>	[0..1]	±		357
	Authentication <Authntcn>	[0..*]			358
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		360
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		361

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		362
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		362
	CardholderOnLinePIN <CrhdldrOnLinePIN>	[0..1]			362
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		362
	PINFormat <PINFrmt>	[1..1]	CodeSet		363
	AdditionalInput <AddtlInpt>	[0..1]	Text		363
	CardholderIdentification <CrhdldrId>	[0..1]			363
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		364
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		364
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		364
	DriverIdentification <DrvrId>	[0..1]	Text		365
	CustomerNumber <CstmrNb>	[0..1]	Text		365
	SocialSecurityNumber <ScIscTyNb>	[0..1]	Text		365
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		365
	PassportNumber <PsptNb>	[0..1]	Text		365
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		365
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		365
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		365
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		366
	JobNumber <JobNb>	[0..1]	Text		366
	Department <Dept>	[0..1]	Text		366
	EmailAddress <EmailAdr>	[0..1]	Text		366
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			366
	BirthDate <BirthDt>	[1..1]	Date		366
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		366
	CityOfBirth <CityOfBirth>	[1..1]	Text		367
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	367
	Other <Othr>	[0..*]	±		367
	AddressVerification <AdrVrfctn>	[0..1]			367
	AddressDigits <AdrDgts>	[0..1]	Text		367
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		368

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationType <AuthntcnTp>	[0..1]	Text		368
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		368
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		368
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			368
	Identification <Id>	[1..1]	Text		369
	Value <Val>	[0..1]	Binary		369
	ProtectedValue <PrctcdVal>	[0..1]	±		369
	Type <Tp>	[0..1]	Text		369
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			369
	Method <Mtd>	[1..1]	CodeSet		370
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		371
	Result <Rslt>	[0..1]	CodeSet		371
	AdditionalResult <AddtlRslt>	[0..1]	Text		371
	PersonalData <PrsnlData>	[0..1]	Text		372
	MobileData <MobData>	[0..*]			372
	MobileCountryCode <MobCtryCd>	[0..1]	Text		372
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		372
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		373
	Geolocation <Glctn>	[0..1]			373
	GeographicCoordinates <GeogcCordints>	[0..1]			373
	Latitude <Lat>	[1..1]	Text		373
	Longitude <Long>	[1..1]	Text		373
	UTMCoordinates <UTMCordints>	[0..1]			374
	UTMZone <UTMZone>	[1..1]	Text		374
	UTMEastward <UTMEstwrtd>	[1..1]	Text		374
	UTMNorthward <UTMNrthwrtd>	[1..1]	Text		374
	SensitiveMobileData <SnstvMobData>	[0..1]			374
	MSISDN <MSISDN>	[1..1]	Text		375
	IMSI <IMSI>	[0..1]	Text		375
	IMEI <IMEI>	[0..1]	Text		375
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		375

10.1.8.1.13.1 Identification <Id>

Presence: [0..1]

Definition: Identification of the cardholder involved in a transaction.

Identification <Id> contains the following **PersonIdentification15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		352
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		352
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		353
	DriverIdentification <DrvrId>	[0..1]	Text		353
	CustomerNumber <CstmrNb>	[0..1]	Text		353
	SocialSecurityNumber <ScIscTyNb>	[0..1]	Text		353
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		353
	PassportNumber <PsptNb>	[0..1]	Text		353
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		353
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		353
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		354
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		354
	JobNumber <JobNb>	[0..1]	Text		354
	Department <Dept>	[0..1]	Text		354
	EmailAddress <EmailAdr>	[0..1]	Text		354
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			354
	BirthDate <BirthDt>	[1..1]	Date		354
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		355
	CityOfBirth <CityOfBirth>	[1..1]	Text		355
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	355
	Other <Othr>	[0..*]	±		355

10.1.8.1.13.1.1 DriverLicenseNumber <DrvrLicNb>

Presence: [0..1]

Definition: Number assigned by a license authority to a driver's license.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.2 DriverLicenseLocation <DrvrLicLctn>

Presence: [0..1]

Definition: Country, state or province, issuer of the driver license.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.3 DriverLicenseName <DrvrLicNm>

Presence: [0..1]

Definition: Name or title of the driver license.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.4 DriverIdentification <DrvrId>

Presence: [0..1]

Definition: Identification of the driver in the fleet of vehicle.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.5 CustomerNumber <CstmrNb>

Presence: [0..1]

Definition: Number assigned by an agent to identify its customer.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.6 SocialSecurityNumber <SciSctyNb>

Presence: [0..1]

Definition: Number assigned by a social security agency.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.7 AlienRegistrationNumber <AlnRegnNb>

Presence: [0..1]

Definition: Number assigned by a government agency to identify foreign nationals.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.8 PassportNumber <PsptNb>

Presence: [0..1]

Definition: Number assigned by a passport authority to a passport.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.9 TaxIdentificationNumber <TaxIdNb>

Presence: [0..1]

Definition: Number assigned by a tax authority to an entity.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.10 IdentityCardNumber <IdntyCardNb>

Presence: [0..1]

Definition: Number assigned by a national authority to an identity card.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.11 EmployerIdentificationNumber <MplyrldNb>

Presence: [0..1]

Definition: Number assigned to an employer by a registration authority.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.12 EmployeeIdentificationNumber <MplyeeldNb>

Presence: [0..1]

Definition: Number assigned to an employee by a employer.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.13 JobNumber <JobNb>

Presence: [0..1]

Definition: Identification of the job.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.14 Department <Dept>

Presence: [0..1]

Definition: Identification of the department.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.15 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 604

10.1.8.1.13.1.16 DateAndPlaceOfBirth <DtAndPlcOfBirth>

Presence: [0..1]

Definition: Date and place of birth of a person.

DateAndPlaceOfBirth <DtAndPlcOfBirth> contains the following **DateAndPlaceOfBirth1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BirthDate <BirthDt>	[1..1]	Date		354
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		355
	CityOfBirth <CityOfBirth>	[1..1]	Text		355
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	355

10.1.8.1.13.1.16.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 598

10.1.8.1.13.1.16.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.16.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 605

10.1.8.1.13.1.16.4 CountryOfBirth <CtryOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 562

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.8.1.13.1.17 Other <Othr>

Presence: [0..*]

Definition: Unique identification of a person, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following elements (see "GenericIdentification4" on page 320 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		320
	IdentificationType <IdTp>	[1..1]	Text		320

10.1.8.1.13.2 Name <Nm>

Presence: [0..1]

Definition: Cardholder name associated with the card.

Datatype: "Max45Text" on page 606

10.1.8.1.13.3 Language <Lang>

Presence: [0..1]

Definition: Language selected for the cardholder interface during the transaction.

Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 572

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.8.1.13.4 BillingAddress <BllgAdr>

Presence: [0..1]

Definition: Postal address of the owner of the payment card.

BillingAddress <BllgAdr> contains the following elements (see "PostalAddress22" on page 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		468
	Department <Dept>	[0..1]	Text		468
	SubDepartment <SubDept>	[0..1]	Text		468
	AddressLine <AdrLine>	[0..2]	Text		468
	StreetName <StrtNm>	[0..1]	Text		469
	BuildingNumber <BldgNb>	[0..1]	Text		469
	PostCode <PstCd>	[0..1]	Text		469
	TownName <TwnNm>	[0..1]	Text		469
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		469
	CountryCode <CtryCd>	[0..1]	Text		469

10.1.8.1.13.5 ShippingAddress <ShppgAdr>

Presence: [0..1]

Definition: Postal address for delivery of goods or services.

ShippingAddress <ShppgAdr> contains the following elements (see "PostalAddress22" on page 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		468
	Department <Dept>	[0..1]	Text		468
	SubDepartment <SubDept>	[0..1]	Text		468
	AddressLine <AdrLine>	[0..2]	Text		468
	StreetName <StrtNm>	[0..1]	Text		469
	BuildingNumber <BldgNb>	[0..1]	Text		469
	PostCode <PstCd>	[0..1]	Text		469
	TownName <TwnNm>	[0..1]	Text		469
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		469
	CountryCode <CtryCd>	[0..1]	Text		469

10.1.8.1.13.6 TripNumber <TripNb>

Presence: [0..1]

Definition: Identification of the trip.

Datatype: "Max35Text" on page 605

10.1.8.1.13.7 Vehicle <Vhcl>

Presence: [0..1]

Definition: Information related to the vehicle used for the transaction.

Vehicle <Vhcl> contains the following elements (see "Vehicle1" on page 389 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	VehicleNumber <VhclNb>	[0..1]	Text		390
	TrailerNumber <TrlrNb>	[0..1]	Text		390
	VehicleTag <VhclTag>	[0..1]	Text		391
	VehicleTagEntryMode <VhclTagNtryMd>	[0..1]	CodeSet		391
	UnitNumber <UnitNb>	[0..1]	Text		391
	ReplacementCar <RplcmntCar>	[0..1]	Indicator		391
	Odometer <Odmtr>	[0..1]	Quantity		391
	Hubometer <Hbmtr>	[0..1]	Quantity		392
	TrailerHours <TrlrHrs>	[0..1]	Text		392
	ReferHours <RefrHrs>	[0..1]	Text		392
	Maintenanceldentification <Mntncld>	[0..1]	Text		392
	DriverOrVehicleCard <DrvrOrVhclCard>	[0..1]			392
	PAN <PAN>	[0..1]	Text		392
	Track1 <Trck1>	[0..1]	Text		393
	Track2 <Trck2>	[0..1]	Text		393
	Track3 <Trck3>	[0..1]	Text		393
	AdditionalCardData <AddtlCardData>	[0..*]	Text		393
	EntryMode <NtryMd>	[0..1]	CodeSet		393
	AdditionalVehicleData <AddtlVhclData>	[0..*]			394
	Type <Tp>	[0..1]	Text		394
	EntryMode <NtryMd>	[0..1]	CodeSet		394
	Data <Data>	[1..1]	Text		395

10.1.8.1.13.8 Authentication <Authntcn>

Presence: [0..*]

Definition: Method and data intended to be used for this transaction to authenticate the cardholder and its card.

Authentication <Authntcn> contains the following **CardholderAuthentication17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		360
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		361
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		362
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		362
	CardholderOnLinePIN <CrhdldrOnLinePIN>	[0..1]			362
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		362
	PINFormat <PINFrmt>	[1..1]	CodeSet		363
	AdditionalInput <AddtlInpt>	[0..1]	Text		363
	CardholderIdentification <CrhdldrId>	[0..1]			363
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		364
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		364
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		364
	DriverIdentification <DrvrId>	[0..1]	Text		365
	CustomerNumber <CstmrNb>	[0..1]	Text		365
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		365
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		365
	PassportNumber <PsptNb>	[0..1]	Text		365
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		365
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		365
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		365
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		366
	JobNumber <JobNb>	[0..1]	Text		366
	Department <Dept>	[0..1]	Text		366
	EmailAddress <EmailAdr>	[0..1]	Text		366
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			366
	BirthDate <BirthDt>	[1..1]	Date		366
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		366
	CityOfBirth <CityOfBirth>	[1..1]	Text		367
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	367
	Other <Othr>	[0..*]	±		367
	AddressVerification <AdrVrfctn>	[0..1]			367

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressDigits <AdrDgts>	[0..1]	Text		367
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		368
	AuthenticationType <AuthntcnTp>	[0..1]	Text		368
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		368
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		368
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			368
	Identification <Id>	[1..1]	Text		369
	Value <Val>	[0..1]	Binary		369
	ProtectedValue <PrctcdVal>	[0..1]	±		369
	Type <Tp>	[0..1]	Text		369

10.1.8.1.13.8.1 AuthenticationMethod <AuthntcnMtd>

Presence: [0..1]

Definition: Method and data intended to be used for this transaction to authenticate the cardholder or its card.

Datatype: "AuthenticationMethod8Code" on page 554

CodeName	Name	Definition
TOKA	AuthenticationToken	A token is used to verify an already performed authentication.
ADDB	BillingAddressVerification	Cardholder billing address verification.
BYPS	Bypass	Authentication bypassed by the merchant.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
MANU	ManualVerification	Manual verification, for example passport or drivers license.
MERC	MerchantAuthentication	Merchant-related authentication.
MOBL	Mobile	Customer mobile device.
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).

CodeName	Name	Definition
OTHR	Other	Other customer authentication.
PPSG	PaperSignature	Handwritten paper signature.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.
PSWD	Password	Authentication by a password.
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).
TOKN	TokenAuthentication	Cryptogram generated by the token requestor or a customer device to validate the authorised use of a token.
UKNW	UnknownMethod	Authentication method is performed unknown.

10.1.8.1.13.8.2 AuthenticationExemption <AuthntcnXmptn>

Presence: [0..1]

Definition: If Strong Customer Authentication is not mandated to process the transaction, this message element must identify the reason of exemption.

Datatype: "Exemption1Code" on page 567

CodeName	Name	Definition
LOWA	LowAmountExemption	Transaction's amount is low and could be processed without strong customer authentication.
MINT	MerchantInitiatedTransaction	Transaction is initiated by the Card Acceptor.
RECP	RecurringPayment	Transaction is one of a series of recurring payment.
SCPE	SecureCorporatePaymentExemption	Transaction is a secure corporate payment.
SCAD	StrongCustomerAuthenticationDelegation	Card Acceptor is a strong customer authentication delegate.

CodeName	Name	Definition
TRAE	TransactionRiskAnalysisExemption	According to the transaction risk analysis the strong customer authentication is not mandated.
PKGE	TransportFareOrParkingFeeUnattendedPaymentExemption	Payment is processed in a environment where strong customer authentication is inappropriate.
TMBE	TrustedMerchantBeneficiaryExemption	Cardholder has enrolled the Card Acceptor in the exemption list of strong customer authentication.

10.1.8.1.13.8.3 AuthenticationValue <AuthntcnVal>

Presence: [0..1]

Definition: Value used to authenticate the cardholder.

Datatype: "Max5000Binary" on page 542

10.1.8.1.13.8.4 ProtectedAuthenticationValue <PrctcdAuthntcnVal>

Presence: [0..1]

Definition: Protection of the authentication value.

ProtectedAuthenticationValue <PrctcdAuthntcnVal> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.8.1.13.8.5 CardholderOnLinePIN <CrhdldrOnLinePIN>

Presence: [0..1]

Definition: Encrypted personal identification number (PIN) and related information.

CardholderOnLinePIN <CrhdldrOnLinePIN> contains the following **OnLinePIN11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		362
	PINFormat <PINFrmt>	[1..1]	CodeSet		363
	AdditionalInput <AddtlInpt>	[0..1]	Text		363

10.1.8.1.13.8.5.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.8.1.13.8.5.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 580

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.1.8.1.13.8.5.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6 CardholderIdentification <Crhdldrid>

Presence: [0..1]

Definition: Identification of the cardholder to verify.

CardholderIdentification <CrdhldrId> contains the following **PersonIdentification15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		364
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		364
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		364
	DriverIdentification <DrvrId>	[0..1]	Text		365
	CustomerNumber <CstmrNb>	[0..1]	Text		365
	SocialSecurityNumber <ScIScTyNb>	[0..1]	Text		365
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		365
	PassportNumber <PsptNb>	[0..1]	Text		365
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		365
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		365
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		365
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		366
	JobNumber <JobNb>	[0..1]	Text		366
	Department <Dept>	[0..1]	Text		366
	EmailAddress <EmailAdr>	[0..1]	Text		366
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			366
	BirthDate <BirthDt>	[1..1]	Date		366
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		366
	CityOfBirth <CityOfBirth>	[1..1]	Text		367
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	367
	Other <Othr>	[0..*]	±		367

10.1.8.1.13.8.6.1 DriverLicenseNumber <DrvrLicNb>

Presence: [0..1]

Definition: Number assigned by a license authority to a driver's license.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.2 DriverLicenseLocation <DrvrLicLctn>

Presence: [0..1]

Definition: Country, state or province, issuer of the driver license.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.3 DriverLicenseName <DrvrLicNm>

Presence: [0..1]

Definition: Name or title of the driver license.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.4 DriverIdentification <DrvrlId>

Presence: [0..1]

Definition: Identification of the driver in the fleet of vehicle.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.5 CustomerNumber <CstmrNb>

Presence: [0..1]

Definition: Number assigned by an agent to identify its customer.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.6 SocialSecurityNumber <SciSctyNb>

Presence: [0..1]

Definition: Number assigned by a social security agency.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.7 AlienRegistrationNumber <AlnRegnNb>

Presence: [0..1]

Definition: Number assigned by a government agency to identify foreign nationals.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.8 PassportNumber <PsptNb>

Presence: [0..1]

Definition: Number assigned by a passport authority to a passport.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.9 TaxIdentificationNumber <TaxIdNb>

Presence: [0..1]

Definition: Number assigned by a tax authority to an entity.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.10 IdentityCardNumber <IdntyCardNb>

Presence: [0..1]

Definition: Number assigned by a national authority to an identity card.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.11 EmployerIdentificationNumber <MplyrIdNb>

Presence: [0..1]

Definition: Number assigned to an employer by a registration authority.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.12 EmployeeIdentificationNumber <MplyeIdNb>

Presence: [0..1]

Definition: Number assigned to an employee by a employer.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.13 JobNumber <JobNb>

Presence: [0..1]

Definition: Identification of the job.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.14 Department <Dept>

Presence: [0..1]

Definition: Identification of the department.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.15 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 604

10.1.8.1.13.8.6.16 DateAndPlaceOfBirth <DtAndPlcOfBirth>

Presence: [0..1]

Definition: Date and place of birth of a person.

DateAndPlaceOfBirth <DtAndPlcOfBirth> contains the following **DateAndPlaceOfBirth1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BirthDate <BirthDt>	[1..1]	Date		366
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		366
	CityOfBirth <CityOfBirth>	[1..1]	Text		367
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	367

10.1.8.1.13.8.6.16.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 598

10.1.8.1.13.8.6.16.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.16.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.6.16.4 CountryOfBirth <CtrOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 562

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.8.1.13.8.6.17 Other <Othr>

Presence: [0..*]

Definition: Unique identification of a person, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following elements (see "GenericIdentification4" on page 320 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		320
	IdentificationType <IdTp>	[1..1]	Text		320

10.1.8.1.13.8.7 AddressVerification <AdrVrfctn>

Presence: [0..1]

Definition: Numeric characters of the cardholder's billing or shipping address for verification.

AddressVerification <AdrVrfctn> contains the following **AddressVerification1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressDigits <AdrDgts>	[0..1]	Text		367
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		368

10.1.8.1.13.8.7.1 AddressDigits <AdrDgts>

Presence: [0..1]

Definition: Numeric characters from the cardholder's address excluding the postal code (that is street number).

Datatype: "Max5NumericText" on page 606

10.1.8.1.13.8.7.2 PostalCodeDigits <PstlCdDgts>

Presence: [0..1]

Definition: Numeric characters from the cardholder's postal code.

Datatype: "Max5NumericText" on page 606

10.1.8.1.13.8.8 AuthenticationType <AuthntcnTp>

Presence: [0..1]

Definition: Type of authentication for a given method - e.g. three-domain authentication, scheme-proprietary authentication, etc.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.9 AuthenticationLevel <AuthntcnLvl>

Presence: [0..1]

Definition: Level of authentication for a given type - e.g. value assigned by scheme rules or by bilateral agreements.

Datatype: "Max35Text" on page 605

10.1.8.1.13.8.10 AuthenticationResult <AuthntcnRslt>

Presence: [0..1]

Definition: Result of authentication.

Datatype: "AuthenticationResult1Code" on page 556

CodeName	Name	Definition
DENY	Denial	The authentication didn't succeed.
MRCH	MerchantNotEnroled	Merchant not enrolled in the authentication programme.
CARD	NonParticipation	The card does not participate in the authentication programme.
AUTH	UnableToAuthenticate	The authentication couldn't be carried out.
CRPT	WithCryptogram	Authentication succeeded with a cryptogram.
UCRP	WithoutCryptogram	Authentication succeeded without a cryptogram.

10.1.8.1.13.8.11 AuthenticationAdditionalInformation <AuthntcnAddtlInf>

Presence: [0..1]

Definition: Additional information related to the result of the authentication.

AuthenticationAdditionalInformation <AuthntcnAddtlInf> contains the following **ExternallyDefinedData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		369
	Value <Val>	[0..1]	Binary		369
	ProtectedValue <PrctcdVal>	[0..1]	±		369
	Type <Tp>	[0..1]	Text		369

10.1.8.1.13.8.11.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: "Max1025Text" on page 602

10.1.8.1.13.8.11.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: "Max100KBinary" on page 540

10.1.8.1.13.8.11.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.8.1.13.8.11.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "Max1025Text" on page 602

10.1.8.1.13.9 TransactionVerificationResult <TxVrfctnRslt>

Presence: [0..*]

Definition: Result of performed verifications for the transaction.

TransactionVerificationResult <TxVrfctnRsIt> contains the following **TransactionVerificationResult4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Method <Mtd>	[1..1]	CodeSet		370
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		371
	Result <RsIt>	[0..1]	CodeSet		371
	AdditionalResult <AddtlRsIt>	[0..1]	Text		371

10.1.8.1.13.9.1 Method <Mtd>

Presence: [1..1]

Definition: Method of verification that has been performed.

Datatype: "AuthenticationMethod6Code" on page 554

CodeName	Name	Definition
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).
PPSG	PaperSignature	Handwritten paper signature.
PSWD	Password	Authentication by a password.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).
ADDB	BillingAddressVerification	Cardholder billing address verification.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
MANU	ManualVerification	Manual verification, for example passport or drivers license.

CodeName	Name	Definition
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.

10.1.8.1.13.9.2 VerificationEntity <VrfctnNtty>

Presence: [0..1]

Definition: Entity or device that has performed the verification.

Datatype: "AuthenticationEntity2Code" on page 553

CodeName	Name	Definition
ICCD	ICC	Application in the chip card (Integrated Circuit Card), for instance an offline PIN verification.
AGNT	AuthorisedAgent	Authorisation agent of the issuer.
MERC	Merchant	Merchant (for example signature verification by the attendant).
ACQR	Acquirer	Acquirer of the transaction.
ISSR	Issuer	Card issuer.
TRML	Terminal	Secure application in the terminal.

10.1.8.1.13.9.3 Result <Rslt>

Presence: [0..1]

Definition: Result of the verification.

Datatype: "Verification1Code" on page 598

CodeName	Name	Definition
FAIL	Failed	Verification failed.
MISS	Missing	Information required to perform the verification was missing.
NOVF	NotPerformed	Verification has not been performed.
PART	PartialMatch	Verification was partially successful.
SUCC	Successful	Verification was successful.
ERRR	TechnicalError	Device or entity to perform the verification was unavailable.

10.1.8.1.13.9.4 AdditionalResult <AddtlRslt>

Presence: [0..1]

Definition: Additional result of the verification.

Datatype: "Max500Text" on page 606

10.1.8.1.13.10 PersonalData <PrsnIData>

Presence: [0..1]

Definition: Identifies personal data related to the cardholder.

Datatype: "Max70Text" on page 607

10.1.8.1.13.11 MobileData <MobData>

Presence: [0..*]

Definition: Data related to the mobile of stakeholder.

MobileData <MobData> contains the following **MobileData6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MobileCountryCode <MobCtryCd>	[0..1]	Text		372
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		372
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		373
	Geolocation <Glctn>	[0..1]			373
	GeographicCoordinates <GeogcCordints>	[0..1]			373
	Latitude <Lat>	[1..1]	Text		373
	Longitude <Long>	[1..1]	Text		373
	UTMCoordinates <UTMCordints>	[0..1]			374
	UTMZone <UTMZone>	[1..1]	Text		374
	UTMEastward <UTMEstwrdr>	[1..1]	Text		374
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		374
	SensitiveMobileData <SnstvMobData>	[0..1]			374
	MSISDN <MSISDN>	[1..1]	Text		375
	IMSI <IMSI>	[0..1]	Text		375
	IMEI <IMEI>	[0..1]	Text		375
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		375

10.1.8.1.13.11.1 MobileCountryCode <MobCtryCd>

Presence: [0..1]

Definition: Identifies the country of a mobile phone operator.

Datatype: "Min2Max3AlphaText" on page 608

10.1.8.1.13.11.2 MobileNetworkCode <MobNtwkCd>

Presence: [0..1]

Definition: Identifies the mobile phone operator inside a country.

Datatype: "Min2Max3NumericText" on page 608

10.1.8.1.13.11.3 MobileMaskedMSISDN <MobMskdMSISDN>

Presence: [0..1]

Definition: Masked Mobile Subscriber Integrated Service Digital Network.

Datatype: "Max35Text" on page 605

10.1.8.1.13.11.4 Geolocation <Glctn>

Presence: [0..1]

Definition: Geographic location specified by geographic or UTM coordinates.

Geolocation <Glctn> contains the following **Geolocation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	GeographicCoordinates <GeogcCordints>	[0..1]			373
	Latitude <Lat>	[1..1]	Text		373
	Longitude <Long>	[1..1]	Text		373
	UTMCoordinates <UTMCordints>	[0..1]			374
	UTMZone <UTMZone>	[1..1]	Text		374
	UTMEastward <UTMEstwr>	[1..1]	Text		374
	UTMNorthward <UTMNrthwr>	[1..1]	Text		374

10.1.8.1.13.11.4.1 GeographicCoordinates <GeogcCordints>

Presence: [0..1]

Definition: Geographic location specified by geographic coordinates.

GeographicCoordinates <GeogcCordints> contains the following **GeolocationGeographicCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Latitude <Lat>	[1..1]	Text		373
	Longitude <Long>	[1..1]	Text		373

10.1.8.1.13.11.4.1.1 Latitude <Lat>

Presence: [1..1]

Definition: Angular distance of a location on the earth south or north of the equator.

The latitude is measured in degrees, minutes and seconds, following by "N" for the north and "S" for the south of the equator. For example: 48°51'29" N the Eiffel Tower latitude.

Datatype: "Max35Text" on page 605

10.1.8.1.13.11.4.1.2 Longitude <Long>

Presence: [1..1]

Definition: Angular measurement of the distance of a location on the earth east or west of the Greenwich observatory.

The longitude is measured in degrees, minutes and seconds, following by "E" for the east and "W" for the west. For example: 23°27'30" E.

Datatype: "Max35Text" on page 605

10.1.8.1.13.11.4.2 UTMCoordinates <UTMCordints>

Presence: [0..1]

Definition: Geographic location specified by UTM coordinates.

UTMCoordinates <UTMCordints> contains the following **GeolocationUTMCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	UTMZone <UTMZone>	[1..1]	Text		374
	UTMEastward <UTMEstwrdr>	[1..1]	Text		374
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		374

10.1.8.1.13.11.4.2.1 UTMZone <UTMZone>

Presence: [1..1]

Definition: UTM grid zone combination of the longitude zone (1 to 60) and the latitude band (C to X, excluding I and O).

Datatype: "Max35Text" on page 605

10.1.8.1.13.11.4.2.2 UTMEastward <UTMEstwrdr>

Presence: [1..1]

Definition: X-coordinate of the Universal Transverse Mercator coordinate system.

Datatype: "Max35Text" on page 605

10.1.8.1.13.11.4.2.3 UTMNorthward <UTMNrthwrdr>

Presence: [1..1]

Definition: Y-coordinate of the Universal Transverse Mercator coordinate system.

Datatype: "Max35Text" on page 605

10.1.8.1.13.11.5 SensitiveMobileData <SnstvMobData>

Presence: [0..1]

Definition: Sensitive information related to the mobile phone.

SensitiveMobileData <SnstvMobData> contains the following **SensitiveMobileData1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MSISDN <MSISDN>	[1..1]	Text		375
	IMSI <IMSI>	[0..1]	Text		375
	IMEI <IMEI>	[0..1]	Text		375

10.1.8.1.13.11.5.1 MSISDN <MSISDN>

Presence: [1..1]

Definition: identifies the mobile - Mobile Subscriber Integrated Service Digital Network (The SIM identifier).

Datatype: "Max35NumericText" on page 605

10.1.8.1.13.11.5.2 IMSI <IMSI>

Presence: [0..1]

Definition: International Mobile Subscriber Identity is a unique number associated with the mobile phone user, containing the Mobile Country Code (MCC), the Mobile Network Code (MNC), and the Mobile Identification Number (MSIN).

Datatype: "Max35NumericText" on page 605

10.1.8.1.13.11.5.3 IMEI <IMEI>

Presence: [0..1]

Definition: International Mobile Equipment Identity is a number usually unique to identify a mobile phone.

Datatype: "Max35NumericText" on page 605

10.1.8.1.13.11.6 ProtectedMobileData <PrctcdMobData>

Presence: [0..1]

Definition: Sensitive information related to the mobile phone, protected by CMS.

ProtectedMobileData <PrctcdMobData> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.8.1.14 ProtectedCardholderData <PrctcdCrhdlrData>

Presence: [0..1]

Definition: Replacement of the message element Cardholder by a digital envelope using a cryptographic key.

ProtectedCardholderData <PrctcdCrhdldrData> contains the following elements (see "ContentInformationType40" on page 529 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.8.1.15 SaleEnvironment <SaleEnvt>

Presence: [0..1]

Definition: Sale Retailer Environment for this message.

SaleEnvironment <SaleEnvt> contains the following **RetailerSaleEnvironment2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		376
	Currency <Ccy>	[0..1]	CodeSet	C1	377
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		377
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		377
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		378
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		378
	LoyaltyHandling <LltyHdlg>	[0..1]	CodeSet		378

10.1.8.1.15.1 SaleCapabilities <SaleCpblties>

Presence: [0..*]

Definition: Capabilities of the Sale system.

Datatype: "SaleCapabilities1Code" on page 591

CodeName	Name	Definition
CHDI	CashierDisplay	Standard Cashier display interface (to ask question, or to show information).
CHER	CashierError	To display to the Cashier information related to an error situation occurring on the POI.
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CHST	CashierStatus	To display to the Cashier a new state on which the POI is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.

CodeName	Name	Definition
CUDI	CustomerDisplay	Standard Customer display interface used by the POI System to ask question, or to show information to the Customer inside a Service dialogue.
CUAS	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
CUER	CustomerError	To display to the Customer information is related to an error situation occurring on the Sale Terminal during a Sale transaction.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
PRDC	PrinterDocument	When the POI System wants to print specific document (check, dynamic currency conversion ...).
PRRP	PrinterReceipt	Printer for the Payment receipt.
PRVC	PrinterVoucher	Coupons, voucher or special ticket generated by the POI and to be printed.

10.1.8.1.15.2 Currency <Ccy>

Presence: [0..1]

Definition: Default currency associated with the sale system.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 543

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.1.8.1.15.3 MinimumAmountToDeliver <MinAmtToDlvr>

Presence: [0..1]

Definition: Minimum amount the Sale System is allowed to deliver for this payment.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.8.1.15.4 MaximumCashBackAmount <MaxCshBckAmt>

Presence: [0..1]

Definition: Maximum amount which could be requested for cash-back.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.8.1.15.5 MinimumSplitAmount <MinSpltAmt>

Presence: [0..1]

Definition: Minimum amount to split a sale transaction.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.8.1.15.6 DebitPreferredFlag <DbtPrefrdFlg>

Presence: [0..1]

Definition: Flag if preferred type of payment is a debit transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.8.1.15.7 LoyaltyHandling <LltyHdlg>

Presence: [0..1]

Definition: Way of Loyalty handling.

Datatype: "LoyaltyHandling1Code" on page 573

CodeName	Name	Definition
ALLO	Allowed	The loyalty is accepted, but the POI has not to require or ask a loyalty card. The loyalty is involved by the payment card (e.g. an hybrid or linked card).
DENY	Forbidden	No loyalty card to read and loyalty transaction to process. Any attempt to enter a pure loyalty card is rejected.
PRCS	Processed	The loyalty transaction is already processed, no loyalty card or loyalty transaction to process.
PROP	Proposed	The loyalty is accepted, and the POI has to ask a loyalty card. If the Customer does not enter a loyalty card, no loyalty transaction is realised.
REQU	Required	The loyalty is required, and the POI refuses the processing of the message request if the cardholder does not enter a loyalty card.

10.1.8.2 LoyaltyAccount3

Definition: Loyalty Account description.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	LoyaltyIdentification <Lltyld>	[1..1]	Text		379
	EntryMode <NtryMd>	[0..1]	CodeSet		379
	IdentificationType <IdTp>	[0..1]	CodeSet		380
	Brand <Brnd>	[0..1]	Text		380
	Provider <Prvdr>	[0..1]	Text		380
	OwnerName <OwnrNm>	[0..1]	Text		380
	Unit <Unit>	[0..1]	CodeSet		380
	Currency <Ccy>	[0..1]	CodeSet	C1	381
	Balance <Bal>	[0..1]	Amount		381

10.1.8.2.1 LoyaltyIdentification <Lltyld>

Presence: [1..1]

Definition: Identification of Loyalty Account.

Datatype: "Max35Text" on page 605

10.1.8.2.2 EntryMode <NtryMd>

Presence: [0..1]

Definition: Standard or last entry mode to access the Loyalty account or card.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.

CodeName	Name	Definition
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.8.2.3 IdentificationType <IdTp>

Presence: [0..1]

Definition: Type of identification for this Loyalty Account.

Datatype: "CardIdentificationType1Code" on page 561

CodeName	Name	Definition
ACCT	AccountNumber	Account identification.
BARC	BarCode	Bar-code with a specific form of identification.
ISO2	ISOTrack2	ISO Track 2 including identification.
PHON	PhoneNumber	A phone number identifies the account on which the phone card is assigned.
CPAN	PrimaryAccountNumber	Standard card identification (card number).
PRIV	PrivativeNumbering	An identification set by a privative application.
UUID	UniversalUniqueIdentification	A Universal Unique Identification code is set for identification.

10.1.8.2.4 Brand <Brnd>

Presence: [0..1]

Definition: Brand to which belong the account.

Datatype: "Max35Text" on page 605

10.1.8.2.5 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the Loyalty Account.

Datatype: "Max35Text" on page 605

10.1.8.2.6 OwnerName <OwnrNm>

Presence: [0..1]

Definition: Owner name of an account.

Datatype: "Max45Text" on page 606

10.1.8.2.7 Unit <Unit>

Presence: [0..1]

Definition: Unit of a Loyalty Account (Point or Currency).

Datatype: "AmountUnit1Code" on page 552

CodeName	Name	Definition
MONE	Monetary	The amount is expressed in a monetary value in a currency.
POIN	Point	The amount is expressed in point.

10.1.8.2.8 Currency <Ccy>

Presence: [0..1]

Definition: Currency of a Loyalty Account if any.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 543

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.1.8.2.9 Balance <Bal>

Presence: [0..1]

Definition: Balance of a Loyalty Account.

Datatype: "ImpliedCurrencyAndAmount" on page 540

10.1.8.3 EncapsulatedContent3

Definition: Data to authenticate.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		381
	Content <Cntt>	[0..1]	Binary		382

10.1.8.3.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data which have been authenticated.

Datatype: "ContentType2Code" on page 562

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).

CodeName	Name	Definition
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.8.3.2 Content <Cntt>

Presence: [0..1]

Definition: Actual data to authenticate.

Datatype: "Max100KBinary" on page 540

10.1.8.4 CustomerDevice3

Definition: Device used by the customer to perform the payment.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		382
	Type <Tp>	[0..1]	Text		382
	Provider <Prvdr>	[0..1]	Text		382

10.1.8.4.1 Identification <Id>

Presence: [0..1]

Definition: Identifier of the component.

Datatype: "Max35Text" on page 605

10.1.8.4.2 Type <Tp>

Presence: [0..1]

Definition: Type of component.

Datatype: "Max70Text" on page 607

10.1.8.4.3 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the component.

Datatype: "Max35Text" on page 605

10.1.8.5 ActionMessage11

Definition: Information to display, print or store.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		383
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		383
	Format <Frmt>	[0..1]	CodeSet		384
	MessageContent <MsgCntt>	[0..1]	Text		385
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		385
	OutputBarcode <OutptBrcd>	[0..1]			385
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRcdBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRcdVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRcdNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRcdErrCrrctn>	[0..1]	CodeSet		386
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		387
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		387

10.1.8.5.1 MessageDestination <MsgDstn>

Presence: [1..1]

Definition: Destination of the message.

Datatype: "UserInterface4Code" on page 598

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.

10.1.8.5.2 InformationQualifier <InfQlfr>

Presence: [0..1]

Definition: Qualification of the information to sent to an output logical device.

Datatype: "InformationQualify1Code" on page 570

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.

CodeName	Name	Definition
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.8.5.3 Format <Frmt>

Presence: [0..1]

Definition: Message format.

Datatype: "OutputFormat3Code" on page 577

CodeName	Name	Definition
BARC	Barcode	Barcode to output in several possible format.
MENT	MenuEntry	A text to display as a menu before requesting an input.
MREF	MessageReference	Predefined configured messages, identified by a reference.
SREF	ScreenReference	Screen to display identified by a reference.
TEXT	SimpleText	Text without format attributes.
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.1.8.5.4 MessageContent <MsgCntt>

Presence: [0..1]

Definition: Content or reference of the message.

Datatype: "Max20000Text" on page 604

10.1.8.5.5 MessageContentSignature <MsgCnttSgnt>

Presence: [0..1]

Definition: Digital signature of the message.

MessageContentSignature <MsgCnttSgnt> contains the following elements (see "ContentInformationType38" on page 509 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

10.1.8.5.6 OutputBarcode <OutptBrcd>

Presence: [0..1]

Definition: Content of message displayed or printed as Barcode.

OutputBarcode <OutptBrcd> contains the following **OutputBarcode2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BarcodeType <BrcdTp>	[1..1]	CodeSet		385
	BarcodeValue <BrcdVal>	[0..1]	Text		386
	QRCodeBinaryValue <QRcdBinryVal>	[0..1]	Binary		386
	QRCodeVersion <QRcdVrsn>	[0..1]	Text		386
	QRCodeEncodingMode <QRcdNcodgMd>	[0..1]	CodeSet		386
	QRCodeErrorCorrection <QRcdErrCrrctn>	[0..1]	CodeSet		386

10.1.8.5.6.1 BarcodeType <BrcdTp>

Presence: [1..1]

Definition: Type of Barcode coding.

Datatype: "BarcodeType1Code" on page 556

CodeName	Name	Definition
COQR	BarcodeEncodedAs2DQRCode	Barcode encoded according to the 2Dimensions Quick Response Code Standard.
C128	BarcodeEncodedAsCode128	Barcode encoded according to the Code 128 standard.

CodeName	Name	Definition
C025	BarcodeEncodedAsCode25	Barcode encoded according to the Code 25 standard.
C039	BarcodeEncodedAsCode39	Barcode encoded according to the Code 39 standard.
EA13	BarcodeEncodedAsEA13	Barcode encoded according to the EAN13 standard.
EAN8	BarcodeEncodedAsEAN8	Barcode encoded according to the EAN8 standard.
P417	BarcodeEncodedAsPDF417	Barcode encoded according to the PDF417 standard.
UPCA	BarcodeEncodedAsUPCA	Barcode encoded according to the UPCA standard.

10.1.8.5.6.2 BarcodeValue <BrcdVal>

Presence: [0..1]

Definition: Value with a Barcode coding.

Datatype: "Max8000Text" on page 607

10.1.8.5.6.3 QRCodeBinaryValue <QRcdBinryVal>

Presence: [0..1]

Definition: Use for binary and Kanji Quick Response Code.

Datatype: "Max3000Binary" on page 541

10.1.8.5.6.4 QRCodeVersion <QRcdVrsn>

Presence: [0..1]

Definition: Version of the Quick Response Code.

Datatype: "Max16Text" on page 603

10.1.8.5.6.5 QRCodeEncodingMode <QRcdNcodgMd>

Presence: [0..1]

Definition: Encoding Mode of Quick Response Code.

Datatype: "QRCodeEncodingMode1Code" on page 584

CodeName	Name	Definition
ALFA	Alphanumeric	Alphanumeric value provided in Barcode field.
BINA	Binary	Binary value provided in Quick Response Code Binary Value.
KANJ	Kanji	Kanji value provided in Quick Response Code Binary Value.
NUME	Numeric	Numeric value provided in Barcode field.

10.1.8.5.6.6 QRCodeErrorCorrection <QRcdErrCrrctn>

Presence: [0..1]

Definition: Error Correction mode of Quick Response Code.

Datatype: ["QRCodeErrorCorrection1Code"](#) on page 584

CodeName	Name	Definition
M015	ErrorCorrection15Percent	Reed-Solomon error correction 15%
Q025	ErrorCorrection25Percent	Reed-Solomon error correction 25%
H030	ErrorCorrection30Percent	Reed-Solomon error correction 30%
L007	ErrorCorrection7Percent	Reed-Solomon error correction 7%

10.1.8.5.7 ResponseRequiredFlag <RspnReqrFlg>

Presence: [0..1]

Definition: Flag to request a message response.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.8.5.8 MinimumDisplayTime <MinDispTm>

Presence: [0..1]

Definition: Number of seconds the message has to be displayed.

Datatype: ["Number"](#) on page 600

10.1.8.6 ResponseType11

Definition: Response of a requested service.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		387
	ResponseReason <RspnRsn>	[0..1]	CodeSet		388
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		389

10.1.8.6.1 Response <Rspn>

Presence: [1..1]

Definition: Result of the requested transaction.

Datatype: ["Response11Code"](#) on page 586

CodeName	Name	Definition
WARN	Warning	An additional Response Code, mainly a functional one, should be considered to identify the outcome of the request.
FAIL	Failure	Processing of the request fails for various reasons. Some further processing according to the type of requested service, the context of the process, and some additional precision

CodeName	Name	Definition
		about the failure notified in the ErrorCondition data element.
SUCC	Success	Processing OK. Information related to the result of the processing is contained in other parts of the response message.

10.1.8.6.2 ResponseReason <RspnRsn>

Presence: [0..1]

Definition: Detail of the response.

Datatype: "RetailerResultDetail1Code" on page 588

CodeName	Name	Definition
ABRT	Aborted	The Initiator of the request has sent an Abort message request, which was accepted and processed.
BUSY	Busy	The system is busy, try later.
CANC	Cancel	The user has aborted the transaction on the PED keyboard, for instance during PIN entering.
DEVO	DeviceOut	Device out of order.
WPIN	WrongPIN	The user has entered the PIN on the PED keyboard and the verification fails.
NHOS	UnreachableHost	Acquirer or any host is unreachable or has not answered to an online request, so is considered as temporary unavailable. Depending on the Sale context, the request could be repeated (to be compared with "Refusal").
UNVS	UnavailableService	The service is not available (not implemented, not configured, protocol version too old...).
UNVD	UnavailableDevice	The hardware is not available (absent, not configured...).
REFU	Refusal	The transaction is refused by the host or by the local rules associated to the card or the POI.
PAYR	PaymentRestriction	Some sale items are not payable by the card proposed by the Customer.
TNFD	NotFound	The transaction is not found (e.g. for a reversal or a repeat).
NALW	NotAllowed	A service request is sent during a Service dialogue. A combination of services not possible to provide. During the DeviceInitialisationCardReader message processing, the user has entered a card which has to be protected by the POI, and cannot be processed with this device request from the external, and then the Sale System.
LOUT	LoggedOut	Not logged in.

CodeName	Name	Definition
IVCA	InvalidCard	The card entered by the Customer cannot be processed by the POI because this card is not configured in the system.
ICAR	InsertedCard	If the Input Device request a NotifyCardInputFlag and the Customer enters a card in the card reader without answers to the Input command, the POI abort the Input command processing, and answer a dedicated ErrorCondition value in the Input response message.
WIPG	InProgress	The transaction is still in progress and then the command cannot be processed.

10.1.8.6.3 AdditionalResponseInformation <AddtlRspnInf>

Presence: [0..1]

Definition: Additional information to be logged for further examination.

Datatype: "Max140Text" on page 603

10.1.8.7 Vehicle1

Definition: Information related to a vehicle used during a transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	VehicleNumber <VhclNb>	[0..1]	Text		390
	TrailerNumber <TrlrNb>	[0..1]	Text		390
	VehicleTag <VhclTag>	[0..1]	Text		391
	VehicleTagEntryMode <VhclTagNtryMd>	[0..1]	CodeSet		391
	UnitNumber <UnitNb>	[0..1]	Text		391
	ReplacementCar <RplcmntCar>	[0..1]	Indicator		391
	Odometer <Odmttr>	[0..1]	Quantity		391
	Hubometer <Hbmtr>	[0..1]	Quantity		392
	TrailerHours <TrlrHrs>	[0..1]	Text		392
	ReferHours <RefrHrs>	[0..1]	Text		392
	Maintenanceldentification <Mntncld>	[0..1]	Text		392
	DriverOrVehicleCard <DrvrOrVhclCard>	[0..1]			392
	PAN <PAN>	[0..1]	Text		392
	Track1 <Trck1>	[0..1]	Text		393
	Track2 <Trck2>	[0..1]	Text		393
	Track3 <Trck3>	[0..1]	Text		393
	AdditionalCardData <AddtlCardData>	[0..*]	Text		393
	EntryMode <NtryMd>	[0..1]	CodeSet		393
	AdditionalVehicleData <AddtlVhclData>	[0..*]			394
	Type <Tp>	[0..1]	Text		394
	EntryMode <NtryMd>	[0..1]	CodeSet		394
	Data <Data>	[1..1]	Text		395

10.1.8.7.1 VehicleNumber <VhclNb>

Presence: [0..1]

Definition: Number assigned to the vehicle for identification.

Datatype: "Max35NumericText" on page 605

10.1.8.7.2 TrailerNumber <TrlrNb>

Presence: [0..1]

Definition: Number assigned to the vehicle trailer for identification.

Datatype: "Max35NumericText" on page 605

10.1.8.7.3 VehicleTag <VhclTag>

Presence: [0..1]

Definition: Registration tag of the vehicle.

Datatype: "Max35Text" on page 605

10.1.8.7.4 VehicleTagEntryMode <VhclTagNtryMd>

Presence: [0..1]

Definition: Entry mode of the registration tag.

Datatype: "CardDataReading5Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.1.8.7.5 UnitNumber <UnitNb>

Presence: [0..1]

Definition: Identification of the vehicle in the fleet.

Datatype: "Max35NumericText" on page 605

10.1.8.7.6 ReplacementCar <RpIcmntCar>

Presence: [0..1]

Definition: True if the car is a replacement car.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.8.7.7 Odometer <Odmtr>

Presence: [0..1]

Definition: Odometer reading value indicating the distance travelled by the vehicle.

Datatype: "DecimalNumber" on page 600

10.1.8.7.8 Hubometer <Hbmtr>

Presence: [0..1]

Definition: Hubometer reading value indicating the distance travelled by the trailer.

Datatype: "DecimalNumber" on page 600

10.1.8.7.9 TrailerHours <TrlrHrs>

Presence: [0..1]

Definition: Number of hours the trailer has been in operation.

Datatype: "Max35Text" on page 605

10.1.8.7.10 ReferHours <RefrHrs>

Presence: [0..1]

Definition: Number of hours the refer unit has been in operation.

Datatype: "Max35Text" on page 605

10.1.8.7.11 Maintenancelidentification <Mntncld>

Presence: [0..1]

Definition: Identification assigned to the vehicle related to maintenance.

Datatype: "Max35Text" on page 605

10.1.8.7.12 DriverOrVehicleCard <DrvrOrVhclCard>

Presence: [0..1]

Definition: Second card presented for the payment transaction.

DriverOrVehicleCard <DrvrOrVhclCard> contains the following **PlainCardData17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PAN <PAN>	[0..1]	Text		392
	Track1 <Trck1>	[0..1]	Text		393
	Track2 <Trck2>	[0..1]	Text		393
	Track3 <Trck3>	[0..1]	Text		393
	AdditionalCardData <AddtlCardData>	[0..*]	Text		393
	EntryMode <NtryMd>	[0..1]	CodeSet		393

10.1.8.7.12.1 PAN <PAN>

Presence: [0..1]

Definition: Primary Account Number (PAN) of the card.

Datatype: "Min8Max28NumericText" on page 608

10.1.8.7.12.2 Track1 <Trck1>

Presence: [0..1]

Definition: ISO track 1 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The format is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max76Text" on page 607

10.1.8.7.12.3 Track2 <Trck2>

Presence: [0..1]

Definition: ISO track 2 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max37Text" on page 605

10.1.8.7.12.4 Track3 <Trck3>

Presence: [0..1]

Definition: ISO track 3 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 4909, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max104Text" on page 602

10.1.8.7.12.5 AdditionalCardData <AddtlCardData>

Presence: [0..*]

Definition: Additional card issuer specific data.

Datatype: "Max35Text" on page 605

10.1.8.7.12.6 EntryMode <NtryMd>

Presence: [0..1]

Definition: Entry mode of the card.

Datatype: "CardDataReading5Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV

CodeName	Name	Definition
		(standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.1.8.7.13 AdditionalVehicleData <AddtlVhclData>

Presence: [0..*]

Definition: Additional information related to the vehicle.

AdditionalVehicleData <AddtlVhclData> contains the following **Vehicle2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]	Text		394
	EntryMode <NtryMd>	[0..1]	CodeSet		394
	Data <Data>	[1..1]	Text		395

10.1.8.7.13.1 Type <Tp>

Presence: [0..1]

Definition: Type of information related to the vehicle.

Datatype: "Max35Text" on page 605

10.1.8.7.13.2 EntryMode <NtryMd>

Presence: [0..1]

Definition: Entry mode of the information.

Datatype: "CardDataReading5Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.1.8.7.13.3 Data <Data>

Presence: [1..1]

Definition: Information related to the vehicle.

Datatype: "Max35Text" on page 605

10.1.8.8 SupplementaryData1

Definition: Additional information that can not be captured in the structured fields and/or any other specific block.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		395
	Envelope <Envlp>	[1..1]	(External Schema)		395

Constraints

- **SupplementaryDataRule**

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

10.1.8.8.1 PlaceAndName <PlcAndNm>

Presence: [0..1]

Definition: Unambiguous reference to the location where the supplementary data must be inserted in the message instance.

In the case of XML, this is expressed by a valid XPath.

Datatype: "Max350Text" on page 605

10.1.8.8.2 Envelope <Envlp>

Presence: [1..1]

Definition: Technical element wrapping the supplementary data.

Type: (External Schema)

Technical component that contains the validated supplementary data information. This technical envelope allows to segregate the supplementary data information from any other information.

10.1.8.9 PointOfInteractionCapabilities9

Definition: Capabilities of the POI (Point Of Interaction) performing the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		396
	CardholderVerificationCapabilities <CrdhldrVrfctn Cpblties>	[0..*]	CodeSet		397
	PINLengthCapabilities <PINLngh Cpblties>	[0..1]	Quantity		397
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		397
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		398
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		398
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		398
	MessageCapabilities <MsgCpblties>	[0..*]			398
	Destination <Dstn>	[1..*]	CodeSet		398
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		399
	NumberOfLines <NbOfLines>	[0..1]	Quantity		399
	LineWidth <LineWidth>	[0..1]	Quantity		399
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	399

10.1.8.9.1 CardReadingCapabilities <CardRdngCpblties>

Presence: [0..*]

Definition: Card reading capabilities of the POI (Point Of Interaction) performing the transaction.

Datatype: "CardDataReading8Code" on page 559

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.

CodeName	Name	Definition
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.8.9.2 CardholderVerificationCapabilities <CrhdldrVrfctnCpblties>

Presence: [0..*]

Definition: Cardholder verification capabilities of the POI (Point Of Interaction) performing the transaction.

Datatype: "CardholderVerificationCapability4Code" on page 560

CodeName	Name	Definition
APKI	AccountDigitalSignature	Account based digital signature.
CHDT	CardholderData	Cardholder authentication data.
MNSG	ManualSignature	Manual signature verification.
MNVR	ManualVerification	Other manual verification, for example passport or drivers license.
FBIG	OfflineBiographics	Offline biographics.
FBIO	OfflineBiometrics	Offline biometrics.
FDSG	OfflineDigitalSignature	Offline digital signature analysis.
FCPN	OfflinePINClear	Offline PIN in clear (Personal Identification Number).
FEPN	OfflinePINEncrypted	Offline PIN encrypted (Personal Identification Number).
NPIN	OnLinePIN	Online PIN (Personal Identification Number).
PKIS	PKISignature	PKI (Public Key Infrastructure) based digital signature.
SCEC	SecureElectronicCommerce	Three domain secure (three domain secure authentication of the cardholder).
NBIO	OnLineBiometrics	Online biometrics.
NOVF	NoCapabilities	No cardholder verification capability.
OTHR	Other	Other cardholder verification capabilities.

10.1.8.9.3 PINLengthCapabilities <PINLnghCpblties>

Presence: [0..1]

Definition: Maximum number of digits the POI is able to accept when the cardholder enters its PIN.

Datatype: "PositiveNumber" on page 601

10.1.8.9.4 ApprovalCodeLength <ApprvlCdLngh>

Presence: [0..1]

Definition: Maximum number of characters of the approval code the POI is able to manage.

Datatype: "PositiveNumber" on page 601

10.1.8.9.5 MaxScriptLength <MxScrpLngth>

Presence: [0..1]

Definition: Maximum data length in bytes that a card issuer can return to the ICC at the terminal.

Datatype: "PositiveNumber" on page 601

10.1.8.9.6 CardCaptureCapable <CardCaptrCpbl>

Presence: [0..1]

Definition: True if the POI is able to capture card.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.8.9.7 OnLineCapabilities <OnLineCpblties>

Presence: [0..1]

Definition: On-line and off-line capabilities of the POI (Point Of Interaction).

Datatype: "OnLineCapability1Code" on page 576

CodeName	Name	Definition
OFLN	OffLine	Off-line only capable.
ONLN	OnLine	On-line only capable.
SMON	SemiOffLine	Off-line capable with possible on-line requests to the acquirer.

10.1.8.9.8 MessageCapabilities <MsgCpblties>

Presence: [0..*]

Definition: Capabilities of the terminal to display or print message to the cardholder and the merchant.

MessageCapabilities <MsgCpblties> contains the following **DisplayCapabilities4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Destination <Dstn>	[1..*]	CodeSet		398
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		399
	NumberOfLines <NbOfLines>	[0..1]	Quantity		399
	LineWidth <LineWidth>	[0..1]	Quantity		399
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	399

10.1.8.9.8.1 Destination <Dstn>

Presence: [1..*]

Definition: Destination of the message to present.

Datatype: "UserInterface4Code" on page 598

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.

10.1.8.9.8.2 AvailableFormat <AvlblFrmt>

Presence: [0..*]

Definition: Available message format.

Datatype: "OutputFormat1Code" on page 577

CodeName	Name	Definition
MREF	MessageReference	Predefined configured messages, identified by a reference.
TEXT	SimpleText	Text without format attributes.
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.1.8.9.8.3 NumberOfLines <NbOfLines>

Presence: [0..1]

Definition: Number of lines of the display.

Datatype: "Number" on page 600

10.1.8.9.8.4 LineWidth <LineWidth>

Presence: [0..1]

Definition: Number of columns of the display or printer.

Datatype: "Number" on page 600

10.1.8.9.8.5 AvailableLanguage <AvlblLang>

Presence: [0..*]

Definition: Available language for the message. Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 572

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.8.10 MessageItemCondition2

Definition: Presence condition of a message item.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		400
	Condition <Cond>	[1..1]	CodeSet		400
	Value <Val>	[0..*]	Text		400

10.1.8.10.1 ItemIdentification <ItmId>

Presence: [1..1]

Definition: Unique identification of the message and the message item.

Datatype: "Max140Text" on page 603

10.1.8.10.2 Condition <Cond>

Presence: [1..1]

Definition: Condition of presence of the message item.

Datatype: "MessageItemCondition2Code" on page 575

CodeName	Name	Definition
MNDT	Mandatory	Message item must be present.
CFVL	ConfiguredValue	Message item must be present with the configured value.
DFLT	DefaultValue	Message item has the configured value if the item is absent.
ALWV	AllowedValues	Message item must have one of the configured values.
IFAV	IfAvailable	Message item has to be present if available.
COPY	Copy	Message item is present if it was present in a previous related message with the same value.
UNSP	NotSupported	Message item is not supported and has to be absent.
LMNV	ListMinimumValues	Minimum set of values to use in messages.

10.1.8.10.3 Value <Val>

Presence: [0..*]

Definition: Value to be used for the message item.

Datatype: "Max140Text" on page 603

10.1.8.11 MaintenanceIdentificationAssociation1

Definition: Association of the TM identifier and the MTM identifier of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		401
	TMIdentification <TMId>	[1..1]	Text		401

10.1.8.11.1 MasterTMIdentification <MstrTMId>

Presence: [1..1]

Definition: Identifier for the master terminal manager.

Datatype: "Max35Text" on page 605

10.1.8.11.2 TMIdentification <TMId>

Presence: [1..1]

Definition: Identifier for the terminal manager requesting the delegation.

Datatype: "Max35Text" on page 605

10.1.8.12 DataSetIdentification11

Definition: Identification of a data set.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

10.1.8.12.1 Name <Nm>

Presence: [0..1]

Definition: Name of the data set.

Datatype: "Max256Text" on page 604

10.1.8.12.2 Type <Tp>

Presence: [1..1]

Definition: Category of data set.

Datatype: "DataSetCategory20Code" on page 565

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.

CodeName	Name	Definition
PROB	Probe	Probe used to monitor a feature on the POI.

10.1.8.12.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data set.

Datatype: "Max256Text" on page 604

10.1.8.12.4 CreationDateTime <CreDtTm>

Presence: [0..1]

Definition: Date and time of creation of the data set.

Datatype: "ISODatetime" on page 599

10.1.8.13 MaintenanceDelegateAction10

Definition: Information for the MTM to build or include delegated actions in the management plan of the POI.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PeriodicAction <PrdcActn>	[0..1]	Indicator		405
	TMRremoteAccess <TMRmotAccs>	[0..1]	±		405
	TMSProtocol <TMSPrtcol>	[0..1]	Text		406
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		406
	DataSetIdentification <DataSetId>	[0..1]	±		406
	ReTry <ReTry>	[0..1]	±		406
	AdditionalInformation <AddtlInf>	[0..*]	Binary		406
	Action <Actn>	[0..*]			406
	Type <Tp>	[1..1]	CodeSet		407
	RemoteAccess <RmotAccs>	[0..1]	±		408
	Key <Key>	[0..*]			409
	KeyIdentification <KeyId>	[1..1]	Text		409
	KeyVersion <KeyVrsn>	[1..1]	Text		409
	SequenceNumber <SeqNb>	[0..1]	Quantity		409
	DerivationIdentification <DerivtnId>	[0..1]	Binary		409
	Type <Tp>	[0..1]	CodeSet		409
	Function <Fctn>	[0..*]	CodeSet		410
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		411
	TMSProtocol <TMSPrtcol>	[0..1]	Text		411
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		411
	DataSetIdentification <DataSetId>	[0..1]	±		411
	ComponentType <CmpntTp>	[0..*]	CodeSet		412
	DelegationScopelIdentification <DlgtnScpld>	[0..1]	Text		413
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		413
	DelegationProof <DlgtnProof>	[0..1]	Binary		413
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		413
	Trigger <Trggr>	[1..1]	CodeSet		414
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		414
	ReTry <ReTry>	[0..1]	±		414
	TimeCondition <TmCond>	[0..1]	±		415
	TMChallenge <TMChllng>	[0..1]	Binary		415

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		415
	ErrorAction <ErrActn>	[0..*]	±		415
	AdditionalInformation <AddttlInf>	[0..*]	Binary		416
	MessageItem <Msgltn>	[0..*]	±		416
	DeviceRequest <DvcReq>	[0..1]	±		416

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.8.13.1 PeriodicAction <PrdcActn>

Presence: [0..1]

Definition: Flag to indicate that the delegated actions have to be included in a periodic sequence of actions.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.8.13.2 TMRremoteAccess <TMRmotAccs>

Presence: [0..1]

Definition: Network address and parameters of the terminal manager host which will performs the delegated actions.

TMRremoteAccess <TMRmotAccs> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertldr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.8.13.3 TMSProtocol <TMSPrtcol>

Presence: [0..1]

Definition: TMS protocol to use to perform the maintenance action.

Datatype: "Max35Text" on page 605

10.1.8.13.4 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

Definition: Version of the TMS protocol to use to perform the maintenance action.

Datatype: "Max35Text" on page 605

10.1.8.13.5 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the delegated action has to be performed.

DataSetIdentification <DataSetId> contains the following elements (see "DataSetIdentification11" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

10.1.8.13.6 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process when activation of the action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.8.13.7 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information to include in the maintenance action.

Datatype: "Max3000Binary" on page 541

10.1.8.13.8 Action <Actn>

Presence: [0..*]

Definition: Sequence of action to include in the next MTM management plan.

Action <Actn> contains the following **TMSAction13** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		407
	RemoteAccess <RmotAccs>	[0..1]	±		408
	Key <Key>	[0..*]			409
	KeyIdentification <KeyId>	[1..1]	Text		409
	KeyVersion <KeyVrsn>	[1..1]	Text		409
	SequenceNumber <SeqNb>	[0..1]	Quantity		409
	DerivationIdentification <DerivtnId>	[0..1]	Binary		409
	Type <Tp>	[0..1]	CodeSet		409
	Function <Fctn>	[0..*]	CodeSet		410
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		411
	TMSProtocol <TMSPrtcol>	[0..1]	Text		411
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		411
	DataSetIdentification <DataSetId>	[0..1]	±		411
	ComponentType <CmpntTp>	[0..*]	CodeSet		412
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		413
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		413
	DelegationProof <DlgtnProof>	[0..1]	Binary		413
	ProtectedDelegationProof <PrtctdDlgtnProof>	[0..1]	±		413
	Trigger <Trggr>	[1..1]	CodeSet		414
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		414
	ReTry <ReTry>	[0..1]	±		414
	TimeCondition <TmCond>	[0..1]	±		415
	TMChallenge <TMChllng>	[0..1]	Binary		415
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		415
	ErrorAction <ErrActn>	[0..*]	±		415
	AdditionalInformation <AddtlInf>	[0..*]	Binary		416
	MessageItem <Msgltn>	[0..*]	±		416
	DeviceRequest <DvcReq>	[0..1]	±		416

10.1.8.13.8.1 Type <Tp>

Presence: [1..1]

Definition: Types of action to be performed by a point of interaction (POI).

Datatype: "TerminalManagementAction5Code" on page 594

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

10.1.8.13.8.2 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Host access information.

RemoteAccess <RmotAccs> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.8.13.8.3 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		409
	KeyVersion <KeyVrsn>	[1..1]	Text		409
	SequenceNumber <SeqNb>	[0..1]	Quantity		409
	DerivationIdentification <DerivtnId>	[0..1]	Binary		409
	Type <Tp>	[0..1]	CodeSet		409
	Function <Fctr>	[0..*]	CodeSet		410

10.1.8.13.8.3.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 603

10.1.8.13.8.3.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 603

10.1.8.13.8.3.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 600

10.1.8.13.8.3.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

Definition: Identification used for derivation of a unique key from a master key provided for the data protection.

Datatype: "Min5Max16Binary" on page 542

10.1.8.13.8.3.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 563

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by

CodeName	Name	Definition
		the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).

10.1.8.13.8.3.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 571

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslatelInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).

CodeName	Name	Definition
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

10.1.8.13.8.4 TerminalManagerIdentification <TermnlMgrId>

Presence: [0..1]

Definition: Identification of the master terminal manager or the terminal manager with which the POI has to perform the action.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see "GenericIdentification176" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

10.1.8.13.8.5 TMSProtocol <TMSPrtcol>

Presence: [0..1]

Definition: TMS protocol to use for performing the maintenance action.

Datatype: "Max35Text" on page 605

10.1.8.13.8.6 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

Definition: Version of the TMS protocol to use to perform the maintenance action.

Datatype: "Max35Text" on page 605

10.1.8.13.8.7 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the action has to be performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification11](#)" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

10.1.8.13.8.8 ComponentType <CmpntTp>

Presence: [0..*]

Definition: Type of POI components to send in a status report.

Datatype: "[DataSetCategory20Code](#)" on page 565

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).

CodeName	Name	Definition
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
PROB	Probe	Probe used to monitor a feature on the POI.

10.1.8.13.8.9 DelegationScopelIdentification <DIgtnScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 605

10.1.8.13.8.10 DelegationScopeDefinition <DIgtnScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopelIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 541

10.1.8.13.8.11 DelegationProof <DIgtnProof>

Presence: [0..1]

Definition: Contains the necessary information to secure the management of the Delegation. The format of this element is out of scope of this definition.

Datatype: "Max5000Binary" on page 542

10.1.8.13.8.12 ProtectedDelegationProof <PrtctdDIgtnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtnProof> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.8.13.8.13 Trigger <Trgr>

Presence: [1..1]

Definition: Event on which the action has to be activated by the point of interaction (POI).

Datatype: "TerminalManagementActionTrigger1Code" on page 595

CodeName	Name	Definition
DATE	DateTime	Date and time trigger the terminal management action.
HOST	HostEvent	Acquirer triggers the terminal management action.
MANU	Manual	Acceptor triggers the terminal management action.
SALE	SaleEvent	Sale system triggers the terminal management action.

10.1.8.13.8.14 AdditionalProcess <AddtlPrc>

Presence: [0..*]

Definition: Additional process to perform before starting or after completing the action by the point of interaction (POI).

Datatype: "TerminalManagementAdditionalProcess1Code" on page 595

CodeName	Name	Definition
MANC	ManualConfirmation	Manual confirmation of the merchant before the terminal management action.
RCNC	Reconciliation	Acquirer reconciliation to be performed before the terminal management action.
RSRT	RestartSystem	Restart the system after performing the terminal management action.

10.1.8.13.8.15 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of the action fails.

ReTry <ReTry> contains the following elements (see "[ProcessRetry3](#)" on page 536 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.8.13.8.16 TimeCondition <TmCond>

Presence: [0..1]

Definition: Date and time the action has to be performed.

TimeCondition <TmCond> contains the following elements (see "[ProcessTiming5](#)" on page 533 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		534
	StartTime <StartTm>	[0..1]	DateTime		534
	EndTime <EndTm>	[0..1]	DateTime		534
	Period <Prd>	[0..1]	Text		534
	MaximumNumber <MaxNb>	[0..1]	Quantity		534
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		534

10.1.8.13.8.17 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "[Max140Binary](#)" on page 541

10.1.8.13.8.18 KeyEnciphermentCertificate <KeyNcphrmntCert>

Presence: [0..*]

Definition: Certificate chain for the encryption of temporary transport key of the key to inject.

Datatype: "[Max10KBinary](#)" on page 540

10.1.8.13.8.19 ErrorAction <ErrActn>

Presence: [0..*]

Definition: Action to perform in case of error on the related action in progress.

ErrorAction <ErrActn> contains the following elements (see "[ErrorAction5](#)" on page 448 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRslt>	[1..*]	CodeSet		448
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		449

10.1.8.13.8.20 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information about the maintenance action.

Datatype: "Max3000Binary" on page 541

10.1.8.13.8.21 MessageItem <MsgItm>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <MsgItm> contains the following elements (see "[MessageItemCondition2](#)" on page 400 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		400
	Condition <Cond>	[1..1]	CodeSet		400
	Value <Val>	[0..*]	Text		400

10.1.8.13.8.22 DeviceRequest <DvcReq>

Presence: [0..1]

Definition: Information related to a device request of the POI.

DeviceRequest <DvcReq> contains the following elements (see "DeviceRequest8" on page 148 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	153
	Context <Cntxt>	[0..1]		C10	159
	PaymentContext <PmtCntxt>	[0..1]			162
	CardPresent <CardPres>	[0..1]	Indicator		162
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		162
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		163
	AttendanceContext <AttndncCntxt>	[0..1]	CodeSet		163
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		163
	TransactionChannel <TxChanl>	[0..1]	CodeSet		163
	BusinessArea <BizArea>	[0..1]	CodeSet		164
	AttendantMessageCapable <AttndntMsgCpbl>	[0..1]	Indicator		164
	AttendantLanguage <AttndntLang>	[0..1]	CodeSet	C14	164
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		165
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		165
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		166
	SaleContext <SaleCntxt>	[0..1]			166
	SaleIdentification <SaleId>	[0..1]	Text		167
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		167
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		168
	CashierIdentification <CshrlId>	[0..1]	Text		168
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	168
	ShiftNumber <ShftNb>	[0..1]	Text		168
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		168
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		168
	InvoiceNumber <InvcNb>	[0..1]	Text		168
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		169
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			169
	CommonName <CmonNm>	[1..1]	Text		169
	Address <Adr>	[0..1]	Text		169
	CountryCode <CtryCd>	[1..1]	CodeSet		169

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		169
	RegisteredIdentifier <Regldr>	[1..1]	Text		169
	SplitPayment <SpltPmt>	[0..1]	Indicator		170
	RemainingAmount <RmngAmt>	[0..1]	Amount		170
	ForceOnlineFlag <ForceOnInFlg>	[0..1]	Indicator		170
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		170
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		170
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		171
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		171
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	171
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		172
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		172
	SystemToNotify <SysToNtfy>	[0..1]	Text		172
	Debtor <Dbtr>	[0..1]	±		173
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	174
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		176
	DirectDebitContext <DrctDbtCntxt>	[0..1]			176
	Debtor <Dbtr>	[0..1]	±		177
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	178
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		179
	Creditor <Cdtr>	[0..1]	±		179
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	180
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		181
	MandateRelatedInformation <MndtRltdInf>	[1..1]			181
	MandateIdentification <Mndtld>	[1..1]	Text		182
	DateOfSignature <DtOfSgntr>	[0..1]	Date		182
	MandateImage <Mndtlmg>	[0..1]	Binary		182
	ProtectedMandateImage <PrctdMndtlmg>	[0..1]	±		182

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ServiceContent <SvcCntt>	[1..1]	CodeSet		182
	DisplayRequest <DispReq>	[0..1]			183
	DisplayOutput <DispOutpt>	[1..*]	±		183
	InputRequest <InptReq>	[0..1]			184
	DisplayOutput <DispOutpt>	[0..1]	±		185
	InputData <InptData>	[1..1]			186
	DeviceType <DvcTp>	[1..1]	CodeSet		187
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		187
	InputCommand <InptCmd>	[1..1]	CodeSet		188
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		189
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		189
	InputText <InptTxt>	[0..1]	±		189
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		190
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		190
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		190
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		191
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		191
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		191
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		191
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		191
	PrintRequest <PrtReq>	[0..1]			192
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		192
	ResponseMode <RspnMd>	[1..1]	CodeSet		192
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		193
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		193
	OutputContent <OutptCntt>	[1..1]	±		193
	PlayResourceRequest <PlayRsrcReq>	[0..1]			194
	ResponseMode <RspnMd>	[0..1]	CodeSet		195
	ResourceAction <RsrcActn>	[1..1]	CodeSet		195
	SoundVolume <SoundVol>	[0..1]	Rate		195
	DisplayResolution <DispRsltn>	[0..1]	Text		195

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Resource <Rsrc>	[0..1]			195
	ResourceType <RsrcTp>	[1..1]	CodeSet		196
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		196
	Language <Lang>	[0..1]	CodeSet	C14	196
	ResourceReference <RsrcRef>	[0..1]	Text		196
	TimingSlot <TmgSlot>	[0..1]	CodeSet		197
	SecureInputRequest <ScrInptReq>	[0..1]			197
	PINRequestType <PINReqTp>	[1..1]	CodeSet		197
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		198
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		198
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		198
	CardholderPIN <CrhdldrPIN>	[0..1]			198
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		198
	PINFormat <PINFrmt>	[1..1]	CodeSet		199
	AdditionalInput <AddtlInpt>	[0..1]	Text		199
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			199
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		200
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		200
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		201
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		201
	DisplayOutput <DispOutpt>	[0..1]	±		201
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			202
	Class <Clss>	[1..1]	Binary		202
	Instruction <Instr>	[1..1]	Binary		202
	Parameter1 <Param1>	[1..1]	Binary		202
	Parameter2 <Param2>	[1..1]	Binary		202
	Data <Data>	[0..1]	Binary		202
	ExpectedLength <XpctdLngth>	[0..1]	Binary		202
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			203
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		203
	DisplayOutput <DispOutpt>	[0..1]	±		203

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TransmissionRequest <TrnsmssnReq>	[0..1]			204
	DestinationAddress <DstnAdr>	[1..1]	±		204
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		205
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		205
	MessageToSend <MsgToSnd>	[1..1]	Binary		205
	InputNotification <InptNtfctn>	[0..1]			205
	ExchangeIdentification <XchglD>	[1..1]	Text		205
	OutputContent <OutptCntt>	[1..1]	±		206
	SupplementaryData <SplmtryData>	[0..*]	±	C13	206

10.1.8.14 PointOfInteractionComponent17

Definition: Data related to a component of the POI (Point Of Interaction) performing the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		423
	SubTypeInfoInformation <SubTpinf>	[0..1]	Text		424
	Identification <Id>	[1..1]			425
	ItemNumber <ItmNb>	[0..1]	Text		425
	ProviderIdentification <Prvdrlid>	[0..1]	Text		425
	Identification <Id>	[0..1]	Text		425
	SerialNumber <SrlNb>	[0..1]	Text		425
	Status <Sts>	[0..1]			425
	VersionNumber <VrsnNb>	[0..1]	Text		426
	Status <Sts>	[0..1]	CodeSet		426
	ExpiryDate <XpryDt>	[0..1]	Date		426
	StandardCompliance <StdCmplc>	[0..*]			426
	Identification <Id>	[1..1]	Text		426
	Version <Vrsn>	[1..1]	Text		427
	Issuer <Issr>	[1..1]	Text		427
	Characteristics <Chrtcs>	[0..1]			427
	Memory <Mmry>	[0..*]			428
	Identification <Id>	[1..1]	Text		429
	TotalSize <TtlSz>	[1..1]	Quantity		429
	FreeSize <FreeSz>	[1..1]	Quantity		429
	Unit <Unit>	[1..1]	CodeSet		429
	Communication <Com>	[0..*]			429
	CommunicationType <ComTp>	[1..1]	CodeSet		430
	RemoteParty <RmotPty>	[1..*]	CodeSet		431
	Active <Actv>	[1..1]	Indicator		431
	Parameters <Params>	[0..1]	±		431
	PhysicalInterface <PhysIntrfc>	[0..1]			432
	InterfaceName <IntrfcNm>	[1..1]	Text		432
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		432
	UserName <UsrNm>	[0..1]	Text		433
	AccessCode <AccsCd>	[0..1]	Binary		433

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityProfile <SctyPrfl>	[0..1]	Text		433
	AdditionalParameters <AddtlParams>	[0..1]	Binary		433
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		434
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		434
	SecurityElement <SctyElmt>	[0..*]	±		434
	Assessment <Assmnt>	[0..*]			435
	Type <Tp>	[1..1]	CodeSet		436
	Assigner <Assgnr>	[1..*]	Text		436
	DeliveryDate <DlvryDt>	[0..1]	DateTime		436
	ExpirationDate <XprtnDt>	[0..1]	DateTime		436
	Number <Nb>	[1..1]	Text		436
	Package <Packg>	[0..*]			437
	PackageIdentification <Packgld>	[0..1]	±		437
	PackageLength <PackgLngh>	[0..1]	Quantity		437
	OffsetStart <OffsetStart>	[0..1]	Quantity		437
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		438
	PackageBlock <PackgBlck>	[0..*]			438
	Identification <Id>	[1..1]	Text		438
	Value <Val>	[0..1]	Binary		438
	ProtectedValue <PrctcdVal>	[0..1]	±		438
	Type <Tp>	[0..1]	Text		439
	ProbeValue <PrbVal>	[0..1]	Binary		439

10.1.8.14.1 Type <Tp>

Presence: [1..1]

Definition: Type of component belonging to a POI (Point Of Interaction) Terminal.

Datatype: "POIComponentType7Code" on page 582

CodeName	Name	Definition
AQPP	AcquirerProtocolParameters	Parameters for acquirer interface of the point of interaction, including acquirer host configuration parameters.
APPR	ApplicationParameters	Parameters of a payment application running on the point of interaction.
TLPR	TerminalParameters	Manufacturer configuration parameters of the point of interaction.

CodeName	Name	Definition
SCPR	SecurityParameters	Security parameters of the point of interaction.
SERV	Server	Payment server of a point of interaction system.
TERM	Terminal	Payment terminal point of interaction.
DVCE	Device	Device sub-component of a component of the point of interaction.
SECM	SecureModule	Security module.
APLI	PaymentApplication	Payment application software.
EMVK	EMVKernel	EMV application kernel (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
EMVO	EMVLevel1	EMV physical interface (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
MDWR	Middleware	Software module of the point of interaction.
DRVR	Driver	Driver module of the point of interaction.
OPST	OperatingSystem	Software that manages hardware to provide common services to the applications.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
MDFL	MediaFile	Media file managed by an application of the POI.
SOFT	Soft	Payment or other software application.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
PROB	Probe	Probe used to monitor a feature on the POI.

10.1.8.14.2 SubTypeInfoInformation <SubTplnf>

Presence: [0..1]

Definition: Additional information regarding the type of the component.

Datatype: "Max70Text" on page 607

10.1.8.14.3 Identification <Id>

Presence: [1..1]

Definition: Identification of the POI (Point Of Interaction) component.

Identification <Id> contains the following **PointOfInteractionComponentIdentification2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemNumber <ItmNb>	[0..1]	Text		425
	ProviderIdentification <PrvdrId>	[0..1]	Text		425
	Identification <Id>	[0..1]	Text		425
	SerialNumber <SrINb>	[0..1]	Text		425

10.1.8.14.3.1 ItemNumber <ItmNb>

Presence: [0..1]

Definition: Hierarchical identification of a hardware component inside all the hardware component of the POI. It is composed of all item numbers of the upper level components, separated by the '.' character, ended by the item number of the current component.

Datatype: "Max35Text" on page 605

10.1.8.14.3.2 ProviderIdentification <PrvdrId>

Presence: [0..1]

Definition: Identifies the provider of the software, hardware or parameters of the POI component.

Datatype: "Max35Text" on page 605

10.1.8.14.3.3 Identification <Id>

Presence: [0..1]

Definition: Identification of the POI component assigned by its provider.

Datatype: "Max256Text" on page 604

10.1.8.14.3.4 SerialNumber <SrINb>

Presence: [0..1]

Definition: Serial number identifying an occurrence of an hardware component.

Datatype: "Max256Text" on page 604

10.1.8.14.4 Status <Sts>

Presence: [0..1]

Definition: Status of the POI (Point Of Interaction) component.

Status <Sts> contains the following **PointOfInteractionComponentStatus3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	VersionNumber <VrsnNb>	[0..1]	Text		426
	Status <Sts>	[0..1]	CodeSet		426
	ExpiryDate <XpryDt>	[0..1]	Date		426

10.1.8.14.4.1 VersionNumber <VrsnNb>

Presence: [0..1]

Definition: Current version of the component that might include the release number.

Datatype: "Max256Text" on page 604

10.1.8.14.4.2 Status <Sts>

Presence: [0..1]

Definition: Current status of the component.

Datatype: "POIComponentStatus1Code" on page 581

CodeName	Name	Definition
WAIT	WaitingActivation	Component not yet activated.
OUTD	OutOfOrder	Component not working properly.
OPER	InOperation	Component activated and in operation.
DACT	Deactivated	Component has been deactivated.

10.1.8.14.4.3 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiration date of the component.

Datatype: "ISODate" on page 598

10.1.8.14.5 StandardCompliance <StdCmplc>

Presence: [0..*]

Definition: Identification of the standard for which the component complies with.

StandardCompliance <StdCmplc> contains the following **GenericIdentification48** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		426
	Version <Vrsn>	[1..1]	Text		427
	Issuer <Issr>	[1..1]	Text		427

10.1.8.14.5.1 Identification <Id>

Presence: [1..1]

Definition: Proprietary information, often a code, issued by the data source scheme issuer.

Datatype: "Max35Text" on page 605

10.1.8.14.5.2 Version <Vrsn>

Presence: [1..1]

Definition: Version of the identification.

Datatype: "Max35Text" on page 605

10.1.8.14.5.3 Issuer <Issr>

Presence: [1..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 605

10.1.8.14.6 Characteristics <Chrtcs>

Presence: [0..1]

Definition: Characteristics of a POI (Point Of Interaction) component.

Characteristics <Chrtcs> contains the following **PointOfInteractionComponentCharacteristics10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Memory <Mmry>	[0..*]			428
	Identification <Id>	[1..1]	Text		429
	TotalSize <TtlSz>	[1..1]	Quantity		429
	FreeSize <FreeSz>	[1..1]	Quantity		429
	Unit <Unit>	[1..1]	CodeSet		429
	Communication <Com>	[0..*]			429
	CommunicationType <ComTp>	[1..1]	CodeSet		430
	RemoteParty <RmotPty>	[1..*]	CodeSet		431
	Active <Actv>	[1..1]	Indicator		431
	Parameters <Params>	[0..1]	±		431
	PhysicalInterface <PhysIntrfc>	[0..1]			432
	InterfaceName <IntrfcNm>	[1..1]	Text		432
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		432
	UserName <UsrNm>	[0..1]	Text		433
	AccessCode <AccsCd>	[0..1]	Binary		433
	SecurityProfile <SctyPrfl>	[0..1]	Text		433
	AdditionalParameters <AddtlParams>	[0..1]	Binary		433
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		434
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		434
	SecurityElement <SctyElmt>	[0..*]	±		434

10.1.8.14.6.1 Memory <Mmry>

Presence: [0..*]

Definition: Memory characteristics of the component.

Memory <Mmry> contains the following **MemoryCharacteristics1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		429
	TotalSize <TtlSz>	[1..1]	Quantity		429
	FreeSize <FreeSz>	[1..1]	Quantity		429
	Unit <Unit>	[1..1]	CodeSet		429

10.1.8.14.6.1.1 Identification <Id>

Presence: [1..1]

Definition: Identification or name of the memory.

Datatype: "Max35Text" on page 605

10.1.8.14.6.1.2 TotalSize <TtISz>

Presence: [1..1]

Definition: Total size of the memory unit.

Datatype: "DecimalNumber" on page 600

10.1.8.14.6.1.3 FreeSize <FreeSz>

Presence: [1..1]

Definition: Total size of the available memory.

Datatype: "DecimalNumber" on page 600

10.1.8.14.6.1.4 Unit <Unit>

Presence: [1..1]

Definition: Memory unit of the sizes.

Datatype: "MemoryUnit1Code" on page 574

CodeName	Name	Definition
BYTE	Byte	Byte.
EXAB	ExaByte	Exa byte.
GIGA	GigaByte	Giga byte.
KILO	KiloByte	Kilo byte.
MEGA	MegaByte	Mega byte.
PETA	PetaByte	Peta byte.
TERA	TeraByte	Tera byte.

10.1.8.14.6.2 Communication <Com>

Presence: [0..*]

Definition: Low level communication of the hardware or software component toward another component or an external entity.

Communication <Com> contains the following **CommunicationCharacteristics5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommunicationType <ComTp>	[1..1]	CodeSet		430
	RemoteParty <RmotPty>	[1..*]	CodeSet		431
	Active <Actv>	[1..1]	Indicator		431
	Parameters <Params>	[0..1]	±		431
	PhysicalInterface <PhysIntrfc>	[0..1]			432
	InterfaceName <IntrfcNm>	[1..1]	Text		432
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		432
	UserName <UsrNm>	[0..1]	Text		433
	AccessCode <AccsCd>	[0..1]	Binary		433
	SecurityProfile <SctyPrfl>	[0..1]	Text		433
	AdditionalParameters <AddtlParams>	[0..1]	Binary		433

10.1.8.14.6.2.1 CommunicationType <ComTp>

Presence: [1..1]

Definition: Type of low level communication.

Datatype: "POICommunicationType2Code" on page 580

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.

CodeName	Name	Definition
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.1.8.14.6.2.2 RemoteParty <RmotPty>

Presence: [1..*]

Definition: Entity that communicate with the current component, using this communication device.

Datatype: "PartyType7Code" on page 579

CodeName	Name	Definition
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
PCPT	POIComponent	Party component of a POI system or POI terminal (Point of Interaction).
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.
SALE	SaleSystem	Party selling goods and services.

10.1.8.14.6.2.3 Active <Actv>

Presence: [1..1]

Definition: Communication hardware is activated.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.8.14.6.2.4 Parameters <Params>

Presence: [0..1]

Definition: Network parameters of the communication link.

Parameters <Params> contains the following elements (see "[NetworkParameters7](#)" on page 449 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertldr>	[0..*]	Binary		450
	ClientCertificate <ClntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.8.14.6.2.5 PhysicalInterface <PhysIntrfc>

Presence: [0..1]

Definition: Physical Interface used by the communication link.

PhysicalInterface <PhysIntrfc> contains the following **PhysicalInterfaceParameter1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InterfaceName <IntrfcNm>	[1..1]	Text		432
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		432
	UserName <UsrNm>	[0..1]	Text		433
	AccessCode <AccsCd>	[0..1]	Binary		433
	SecurityProfile <SctyPrfl>	[0..1]	Text		433
	AdditionalParameters <AddtlParams>	[0..1]	Binary		433

10.1.8.14.6.2.5.1 InterfaceName <IntrfcNm>

Presence: [1..1]

Definition: Identification of the interface.

Datatype: "[Max35Text](#)" on page 605

10.1.8.14.6.2.5.2 InterfaceType <IntrfcTp>

Presence: [0..1]

Definition: Identification of the physical link layer.

Datatype: "[POICommunicationType2Code](#)" on page 580

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.1.8.14.6.2.5.3 UserName <UsrNm>

Presence: [0..1]

Definition: Optional user name to provide to use this interface.

Datatype: "Max35Text" on page 605

10.1.8.14.6.2.5.4 AccessCode <AccsCd>

Presence: [0..1]

Definition: Optional access code to provide to use this interface.

Datatype: "Max35Binary" on page 541

10.1.8.14.6.2.5.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the optional security profile to use with this interface.

Datatype: "Max35Text" on page 605

10.1.8.14.6.2.5.6 AdditionalParameters <AddtlParams>

Presence: [0..1]

Definition: Any other parameters relevant for this interface.

Datatype: "Max2KBinary" on page 541

10.1.8.14.6.3 SecurityAccessModules <SctyAccsMdls>

Presence: [0..1]

Definition: Number of security access modules (SAM).

Datatype: "Number" on page 600

10.1.8.14.6.4 SubscriberIdentityModules <SbcbrldntyMdls>

Presence: [0..1]

Definition: Number of subscriber identity modules (SIM).

Datatype: "Number" on page 600

10.1.8.14.6.5 SecurityElement <SctyElmt>

Presence: [0..*]

Definition: Security characteristics of the component.

SecurityElement <SctyElmt> contains the following elements (see "CryptographicKey18" on page 492 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		493
	AdditionalIdentification <AddtlId>	[0..1]	Binary		493
	Name <Nm>	[0..1]	Text		494
	SecurityProfile <SctyPrfl>	[0..1]	Text		494
	ItemNumber <ItmNb>	[0..1]	Text		494
	Version <Vrsn>	[1..1]	Text		494
	Type <Tp>	[0..1]	CodeSet		494
	Function <Fctn>	[0..*]	CodeSet		495
	ActivationDate <ActvtnDt>	[0..1]	DateTime		495
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		496
	KeyValue <KeyVal>	[0..1]	±		496
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			496
	Identification <Id>	[1..1]	Text		496
	Type <Tp>	[1..1]	CodeSet		496
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		497
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		497
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			497
	Name <Nm>	[1..1]	Text		497
	Value <Val>	[0..1]	Text		498

10.1.8.14.7 Assessment <Assmnt>

Presence: [0..*]

Definition: Assessments for the component of the point of interaction.

Assessment <Assmnt> contains the following **PointOfInteractionComponentAssessment1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		436
	Assigner <Assgnr>	[1..*]	Text		436
	DeliveryDate <DlvryDt>	[0..1]	DateTime		436
	ExpirationDate <XprtnDt>	[0..1]	DateTime		436
	Number <Nb>	[1..1]	Text		436

10.1.8.14.7.1 Type <Tp>

Presence: [1..1]

Definition: Type of assessment of the component.

Datatype: "POIComponentAssessment1Code" on page 581

CodeName	Name	Definition
APPL	Approval	Approval number delivered by an approval centre.
CERT	Certification	Certification number delivered by a certification body.
EVAL	Evaluation	Evaluation by a lab or a tool.

10.1.8.14.7.2 Assigner <Assgnr>

Presence: [1..*]

Definition: Body which has delivered the assessment.

Datatype: "Max35Text" on page 605

10.1.8.14.7.3 DeliveryDate <DlvryDt>

Presence: [0..1]

Definition: Date when the assessment has been delivered.

Datatype: "ISODatetime" on page 599

10.1.8.14.7.4 ExpirationDate <XprtnDt>

Presence: [0..1]

Definition: Date when the assessment will expire.

Datatype: "ISODatetime" on page 599

10.1.8.14.7.5 Number <Nb>

Presence: [1..1]

Definition: Unique assessment number for the component.

Datatype: "Max35Text" on page 605

10.1.8.14.8 Package <Packg>

Presence: [0..*]

Definition: Chunk of a software package.

Package <Packg> contains the following **PackageType5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PackageIdentification <PackgId>	[0..1]	±		437
	PackageLength <PackgLngh>	[0..1]	Quantity		437
	OffsetStart <OffsetStart>	[0..1]	Quantity		437
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		438
	PackageBlock <PackgBlck>	[0..*]			438
	Identification <Id>	[1..1]	Text		438
	Value <Val>	[0..1]	Binary		438
	ProtectedValue <PrctcdVal>	[0..1]	±		438
	Type <Tp>	[0..1]	Text		439

10.1.8.14.8.1 PackageIdentification <PackgId>

Presence: [0..1]

Definition: Identification of the software packages of which the chunk belongs.

PackageIdentification <PackgId> contains the following elements (see "[GenericIdentification176](#)" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Type <Tp>	[0..1]	CodeSet		314
	Issuer <Issr>	[0..1]	CodeSet		314
	Country <Ctry>	[0..1]	Text		315
	ShortName <ShrtNm>	[0..1]	Text		315

10.1.8.14.8.2 PackageLength <PackgLngh>

Presence: [0..1]

Definition: Full length of software package identified through PackageIdentification.

Datatype: "[PositiveNumber](#)" on page 601

10.1.8.14.8.3 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of the first following PackageBlock, beginning with 0, in the full software package identified through PackageIdentification.

Datatype: ["PositiveNumber" on page 601](#)

10.1.8.14.8.4 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of the last following PackageBlock in the full software package identified through PackageIdentification.

Datatype: ["PositiveNumber" on page 601](#)

10.1.8.14.8.5 PackageBlock <PackgBlck>

Presence: [0..*]

Definition: Consecutive slices of the full software package identified through PackageIdentification starting with first slice at the place identified with OffsetStart and ending with the last slice at the previous place identified with OffsetEnd.

PackageBlock <PackgBlck> contains the following **ExternallyDefinedData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		438
	Value <Val>	[0..1]	Binary		438
	ProtectedValue <PrtctdVal>	[0..1]	±		438
	Type <Tp>	[0..1]	Text		439

10.1.8.14.8.5.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: ["Max1025Text" on page 602](#)

10.1.8.14.8.5.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: ["Max100KBinary" on page 540](#)

10.1.8.14.8.5.3 ProtectedValue <PrtctdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "[ContentInformationType39](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.8.14.8.5.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "[Max1025Text](#)" on page 602

10.1.8.14.9 ProbeValue <PrbVal>

Presence: [0..1]

Definition: Provides the value recorded by this probe.

Datatype: "[Max35Binary](#)" on page 541

10.1.9 Monitoring

10.1.9.1 TMSEvent12

Definition: Result of an individual terminal management action performed by the point of interaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TimeStamp <TmStmp>	[1..1]	DateTime		439
	Result <Rslt>	[1..1]	CodeSet		440
	ActionIdentification <ActnId>	[1..1]			441
	ActionType <ActnTp>	[1..1]	CodeSet		441
	DataSetIdentification <DataSetId>	[0..1]	±		441
	AdditionalErrorInformation <AddtlErrInf>	[0..1]	Text		442
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	Text		442
	DeviceResponse <DvcRspn>	[0..1]	±		442

10.1.9.1.1 TimeStamp <TmStmp>

Presence: [1..1]

Definition: Date time of the terminal management action performed by the point of interaction.

Datatype: "ISODatetime" on page 599

10.1.9.1.2 Result <Rslt>

Presence: [1..1]

Definition: Final result of the processed terminal management action.

Datatype: "TerminalManagementActionResult5Code" on page 594

CodeName	Name	Definition
ACCD	AccessDenied	Access is denied while performing the action.
CNTE	ConnectionError	Problem to connect while performing the action.
FMTE	FormatError	Data transferred has a wrong format.
INVC	InvalidContent	Content of the data is invalid.
LENE	LengthError	Data transferred has a wrong length.
OVER	MemoryOverflow	Memory to store the date exceeded.
MISS	MissingFile	Data set to be maintained is missing.
NSUP	NotSupported	Action is not supported.
SIGE	SignatureError	Data transferred has a wrong digital signature.
WARN	SuccessWithWarning	Action was performed but some warnings arose.
SYNE	SyntaxError	Data transferred has a wrong syntax.
TIMO	Timeout	Timeout expired during the data transfer.
UKDT	UnknownData	Data set identification invalid.
UKRF	UnknownKeyReference	Cryptographic key reference used for the data signature is not valid.
INDP	InvalidDelegationProof	Delegation Proof transmitted by the delegated TMS is not the one expected.
IDMP	InvalidDelegationInManagementPlan	One action of the AcceptorManagementPlan refers to an update unauthorized by the delegation.
DPRU	DelegationParametersReceivedUnauthorized	The content analysis of the AcceptorConfigurationUpdate reveals unexpected parameters.
AERR	AnyError	This code value means all TerminalManagementActionResultCode except "Any Error" and "Unlisted Error".
CMER	CommunicationError	Error in communication once the connection has been established.
ULER	UnlistedError	Any error that is not defined by a code value inside the TerminalManagementActionResultCode.
SUCC	Success	Action was successfully performed.

10.1.9.1.3 ActionIdentification <ActnId>

Presence: [1..1]

Definition: Identification of the terminal management action performed by the point of interaction.

ActionIdentification <ActnId> contains the following **TMSActionIdentification10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		441
	DataSetIdentification <DataSetId>	[0..1]	±		441

10.1.9.1.3.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Types of terminal management action performed by a point of interaction.

Datatype: "TerminalManagementAction5Code" on page 594

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

10.1.9.1.3.2 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the action has been performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification11](#)" on page 401 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		401
	Type <Tp>	[1..1]	CodeSet		401
	Version <Vrsn>	[0..1]	Text		403
	CreationDateTime <CreDtTm>	[0..1]	DateTime		403

10.1.9.1.4 AdditionalErrorInformation <AddtlErrInf>

Presence: [0..1]

Definition: Additional information related to a failure.

Datatype: "[Max70Text](#)" on page 607

10.1.9.1.5 TerminalManagerIdentification <TermnlMgrId>

Presence: [0..1]

Definition: Identification of the terminal management system (TMS) used with the action.

Datatype: "[Max35Text](#)" on page 605

10.1.9.1.6 DeviceResponse <DvcRspn>

Presence: [0..1]

Definition: Response of a device request done previously.

DeviceResponse <DvcRspn> contains the following elements (see "DeviceResponse8" on page 207 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	211
	Context <Cntxt>	[0..1]		C10	217
	PaymentContext <PmtCntxt>	[0..1]			220
	CardPresent <CardPres>	[0..1]	Indicator		220
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		220
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		221
	AttendanceContext <AttndncCntxt>	[0..1]	CodeSet		221
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		221
	TransactionChannel <TxChanl>	[0..1]	CodeSet		221
	BusinessArea <BizArea>	[0..1]	CodeSet		222
	AttendantMessageCapable <AttndntMsgCpbl>	[0..1]	Indicator		222
	AttendantLanguage <AttndntLang>	[0..1]	CodeSet	C14	222
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		223
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		223
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		224
	SaleContext <SaleCntxt>	[0..1]			224
	SaleIdentification <SaleId>	[0..1]	Text		225
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		225
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		226
	CashierIdentification <CshrlId>	[0..1]	Text		226
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	226
	ShiftNumber <ShftNb>	[0..1]	Text		226
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		226
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		226
	InvoiceNumber <InvcNb>	[0..1]	Text		226
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		227
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			227
	CommonName <CmonNm>	[1..1]	Text		227
	Address <Adr>	[0..1]	Text		227
	CountryCode <CtryCd>	[1..1]	CodeSet		227

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		227
	RegisteredIdentifier <Regldr>	[1..1]	Text		227
	SplitPayment <SpltPmt>	[0..1]	Indicator		228
	RemainingAmount <RmngAmt>	[0..1]	Amount		228
	ForceOnlineFlag <ForceOnInFlg>	[0..1]	Indicator		228
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		228
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		228
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		229
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		229
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	229
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		230
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		230
	SystemToNotify <SysToNtfy>	[0..1]	Text		230
	Debtor <Dbtr>	[0..1]	±		231
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	232
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		234
	DirectDebitContext <DrctDbtCntxt>	[0..1]			234
	Debtor <Dbtr>	[0..1]	±		235
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	236
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		237
	Creditor <Cdtr>	[0..1]	±		237
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	238
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		239
	MandateRelatedInformation <MndtRltdInf>	[1..1]			239
	MandateIdentification <Mndtld>	[1..1]	Text		240
	DateOfSignature <DtOfSgntr>	[0..1]	Date		240
	MandateImage <Mndtlmg>	[0..1]	Binary		240
	ProtectedMandateImage <PrctdMndtlmg>	[0..1]	±		240

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ServiceContent <SvcCntt>	[1..1]	CodeSet		240
	DisplayResponse <DispRspn>	[0..1]			241
	OutputResult <OutptRslt>	[1..*]			241
	DeviceType <DvcTp>	[1..1]	CodeSet		242
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	Response <Rspn>	[1..1]	±		243
	InputResponse <InptRspn>	[0..1]			243
	OutputResult <OutptRslt>	[0..1]			244
	DeviceType <DvcTp>	[1..1]	CodeSet		244
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		245
	Response <Rspn>	[1..1]	±		246
	InputResult <InptRslt>	[1..1]			246
	DeviceType <DvcTp>	[1..1]	CodeSet		246
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		247
	InputResultData <InptRsltData>	[1..1]			247
	InputCommand <InptCmd>	[1..1]	CodeSet		248
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		249
	FunctionKey <FctnKey>	[0..1]	Quantity		249
	InputMessage <InptMsg>	[0..1]	Text		249
	Password <Pwd>	[0..1]	±		249
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			250
	ImageFormat <ImgFrmt>	[1..1]	Text		250
	ImageData <ImgData>	[0..1]	Binary		250
	ImageReference <ImgRef>	[0..1]	Text		250
	AdditionalInformation <AddtlInf>	[0..1]	Text		250
	PrintResponse <PrtRspn>	[0..1]			250
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		250
	SecureInputResponse <ScrInptRspn>	[0..1]			251
	CardholderPIN <CrhdldrPIN>	[0..1]			251
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		252
	PINFormat <PINFrmt>	[1..1]	CodeSet		252

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AdditionalInput <AddtlInpt>	[0..1]	Text		252
	InitialisationCardReaderResponse <InitlStnCardRdrRspn>	[0..1]			252
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		253
	ICCRResetData <ICCRstData>	[0..1]			253
	ATRValue <ATRVAl>	[0..1]	Binary		254
	CardStatus <CardSts>	[0..1]	Binary		254
	AdditionalInformation <AddtlInf>	[0..1]	Binary		254
	CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>	[0..1]			254
	Data <Data>	[0..1]	Binary		254
	CardStatus <CardSts>	[1..1]	Binary		254
	TransmissionResponse <TrnsmssnRspn>	[0..1]			255
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		255
	Response <Rspn>	[1..1]	±		255
	SupplementaryData <SplmtryData>	[0..*]	±	C13	255

10.1.9.2 Traceability⁸

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		446
	ProtocolName <PrtcolNm>	[0..1]	Text		447
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		447
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		447
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		447

10.1.9.2.1 RelayIdentification <RlayId>

Presence: [1..1]

Definition: Identification of a partner of a message exchange.

RelayIdentification <RlayId> contains the following elements (see "[GenericIdentification177](#)" on page 315 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		316
	Type <Tp>	[0..1]	CodeSet		316
	Issuer <Issr>	[0..1]	CodeSet		317
	Country <Ctry>	[0..1]	Text		317
	ShortName <ShrtNm>	[0..1]	Text		317
	RemoteAccess <RmotAccs>	[0..1]	±		318
	Geolocation <Glctn>	[0..1]			318
	GeographicCoordinates <GeogcCordints>	[0..1]			318
	Latitude <Lat>	[1..1]	Text		319
	Longitude <Long>	[1..1]	Text		319
	UTMCoordinates <UTMCordints>	[0..1]			319
	UTMZone <UTMZone>	[1..1]	Text		319
	UTMEastward <UTMEstwrld>	[1..1]	Text		319
	UTMNorthward <UTMNrthwrld>	[1..1]	Text		320

10.1.9.2.2 ProtocolName <PrtcolNm>

Presence: [0..1]

Definition: Name of the outgoing protocol used by the node.

Datatype: "[Max35Text](#)" on page 605

10.1.9.2.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Version of the protocol.

Datatype: "[Max6Text](#)" on page 607

10.1.9.2.4 TraceDateTimeln <TracDtTmln>

Presence: [1..1]

Definition: Date and time of incoming data exchange for relaying or processing.

Datatype: "[ISODatetime](#)" on page 599

10.1.9.2.5 TraceDateTimeOut <TracDtTmOut>

Presence: [1..1]

Definition: Date and time of the outgoing exchange for relaying or processing.

Datatype: "[ISODatetime](#)" on page 599

10.1.9.3 ErrorAction5

Definition: Action to perform in case of error on the related action in progress.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRsIt>	[1..*]	CodeSet		448
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		449

10.1.9.3.1 ActionResult <ActnRsIt>

Presence: [1..*]

Definition: List of error action result codes.

Datatype: "TerminalManagementActionResult5Code" on page 594

CodeName	Name	Definition
ACCD	AccessDenied	Access is denied while performing the action.
CNTE	ConnectionError	Problem to connect while performing the action.
FMTE	FormatError	Data transferred has a wrong format.
INVC	InvalidContent	Content of the data is invalid.
LENE	LengthError	Data transferred has a wrong length.
OVER	MemoryOverflow	Memory to store the date exceeded.
MISS	MissingFile	Data set to be maintained is missing.
NSUP	NotSupported	Action is not supported.
SIGE	SignatureError	Data transferred has a wrong digital signature.
WARN	SuccessWithWarning	Action was performed but some warnings arose.
SYNE	SyntaxError	Data transferred has a wrong syntax.
TIMO	Timeout	Timeout expired during the data transfer.
UKDT	UnknownData	Data set identification invalid.
UKRF	UnknownKeyReference	Cryptographic key reference used for the data signature is not valid.
INDP	InvalidDelegationProof	Delegation Proof transmitted by the delegated TMS is not the one expected.
IDMP	InvalidDelegationInManagementPlan	One action of the AcceptorManagementPlan refers to an update unauthorized by the delegation.
DPRU	DelegationParametersReceivedUnauthorized	The content analysis of the AcceptorConfigurationUpdate reveals unexpected parameters.
AERR	AnyError	This code value means all TerminalManagementActionResultCode except "Any Error" and "Unlisted Error".

CodeName	Name	Definition
CMER	CommunicationError	Error in communication once the connection has been established.
ULER	UnlistedError	Any error that is not defined by a code value inside the TerminalManagementActionResultCode.
SUCC	Success	Action was successfully performed.

10.1.9.3.2 ActionToProcess <ActnToPrc>

Presence: [1..1]

Definition: Action to be processed for the related errors.

Datatype: "TerminalManagementErrorAction2Code" on page 596

CodeName	Name	Definition
SDSR	SendStatusReport	Send a status report immediately.
STOP	StopSequence	Stop the current sequence of terminal management actions without any action, and do not notice the error with a status report.

10.1.10 Network Access

10.1.10.1 NetworkParameters7

Definition: Parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			449
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450
	UserName <UsrNm>	[0..1]	Text		450
	AccessCode <AccsCd>	[0..1]	Binary		450
	ServerCertificate <SvrCert>	[0..*]	Binary		450
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		450
	ClientCertificate <CIntCert>	[0..*]	Binary		451
	SecurityProfile <SctyPrfl>	[0..1]	Text		451

10.1.10.1.1 Address <Adr>

Presence: [1..*]

Definition: Network addresses of the host.

Address <Adr> contains the following **NetworkParameters9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NetworkType <NtwkTp>	[1..1]	CodeSet		450
	AddressValue <AdrVal>	[1..1]	Text		450

10.1.10.1.1.1 NetworkType <NtwkTp>

Presence: [1..1]

Definition: Type of communication network.

Datatype: "NetworkType1Code" on page 575

CodeName	Name	Definition
IPNW	InternetProtocol	Protocol of an IP network.
PSTN	PublicTelephone	Protocol of a Public Switched Telephone Network (PSTN).

10.1.10.1.1.2 AddressValue <AdrVal>

Presence: [1..1]

Definition: Value of the address. The value of an internet protocol address contains the IP address or the DNS (Domain Name Server) address, followed by the character ':' and the port number if the default port is not used. The value of a public telephone address contains the phone number with possible prefix and extensions.

Datatype: "Max500Text" on page 606

10.1.10.1.1.2 UserName <UsrNm>

Presence: [0..1]

Definition: User name identifying the client.

Datatype: "Max35Text" on page 605

10.1.10.1.1.3 AccessCode <AccsCd>

Presence: [0..1]

Definition: Password authenticating the client.

Datatype: "Max35Binary" on page 541

10.1.10.1.1.4 ServerCertificate <SvrCert>

Presence: [0..*]

Definition: X.509 Certificate required to authenticate the server.

Datatype: "Max10KBinary" on page 540

10.1.10.1.1.5 ServerCertificateIdentifier <SvrCertIdr>

Presence: [0..*]

Definition: Identification of the X.509 Certificates required to authenticate the server, for instance a digest of the certificate.

Datatype: "Max140Binary" on page 541

10.1.10.1.6 ClientCertificate <CIntCert>

Presence: [0..*]

Definition: X.509 Certificate required to authenticate the client.

Datatype: "Max10KBinary" on page 540

10.1.10.1.7 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the set of security elements to access the host.

Datatype: "Max35Text" on page 605

10.1.11 Party Identification

10.1.11.1 PartyIdentification272

Definition: Specifies the identification of a person or an organisation.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		452
	PostalAddress <PstlAdr>	[0..1]	±		453
	Identification <Id>	[0..1]			453
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer <Issr>	[0..1]	Text		459
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	459
	ContactDetails <CtctDtls>	[0..1]	±		459

10.1.11.1.1 Name <Nm>

Presence: [0..1]

Definition: Name by which a party is known and which is usually used to identify that party.

Datatype: "Max140Text" on page 603

10.1.11.1.2 PostalAddress <PstlAdr>

Presence: [0..1]

Definition: Information that locates and identifies a specific address, as defined by postal services.

PostalAddress <PstlAdr> contains the following elements (see "PostalAddress27" on page 464 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]			464
{Or	Code <Cd>	[1..1]	CodeSet		465
Or}	Proprietary <Prtry>	[1..1]	±		465
	CareOf <CareOf>	[0..1]	Text		465
	Department <Dept>	[0..1]	Text		465
	SubDepartment <SubDept>	[0..1]	Text		465
	StreetName <StrtNm>	[0..1]	Text		466
	BuildingNumber <BldgNb>	[0..1]	Text		466
	BuildingName <BldgNm>	[0..1]	Text		466
	Floor <Flr>	[0..1]	Text		466
	UnitNumber <UnitNb>	[0..1]	Text		466
	PostBox <PstBx>	[0..1]	Text		466
	Room <Room>	[0..1]	Text		466
	PostCode <PstCd>	[0..1]	Text		466
	TownName <TwnNm>	[0..1]	Text		467
	TownLocationName <TwnLctnNm>	[0..1]	Text		467
	DistrictName <DstrctNm>	[0..1]	Text		467
	CountrySubDivision <CtrySubDvsn>	[0..1]	Text		467
	Country <Ctry>	[0..1]	CodeSet	C4	467
	AddressLine <AdrLine>	[0..7]	Text		467

10.1.11.1.3 Identification <Id>

Presence: [0..1]

Definition: Unique and unambiguous identification of a party.

Identification <Id> contains one of the following **Party52Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	OrganisationIdentification <OrgId>	[1..1]			454
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456
Or}	PrivateIdentification <PrvtId>	[1..1]			456
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer <Issr>	[0..1]	Text		459

10.1.11.1.3.1 OrganisationIdentification <OrgId>

Presence: [1..1]

Definition: Unique and unambiguous way to identify an organisation.

OrganisationIdentification <OrgId> contains the following **OrganisationIdentification39** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	455
	LEI <LEI>	[0..1]	IdentifierSet		455
	Other <Othr>	[0..*]			455
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456

10.1.11.1.3.1.1 AnyBIC <AnyBIC>

Presence: [0..1]

Definition: Business identification code of the organisation.

Impacted by: C3 "AnyBIC"

Datatype: "AnyBICDec2014Identifier" on page 599

Constraints

- **AnyBIC**

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

10.1.11.1.3.1.2 LEI <LEI>

Presence: [0..1]

Definition: Legal entity identification as an alternate identification for a party.

Datatype: "LEIIdentifier" on page 600

10.1.11.1.3.1.3 Other <Othr>

Presence: [0..*]

Definition: Unique identification of an organisation, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following **GenericOrganisationIdentification3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		456
	SchemeName <SchmeNm>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456
	Issuer <Issr>	[0..1]	Text		456

10.1.11.1.3.1.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification assigned by an institution.

Datatype: "Max256Text" on page 604

10.1.11.1.3.1.3.2 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Name of the identification scheme.

SchemeName <SchmeNm> contains one of the following **OrganisationIdentificationSchemeName1Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		456
Or}	Proprietary <Prtry>	[1..1]	Text		456

10.1.11.1.3.1.3.2.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "ExternalOrganisationIdentification1Code" on page 568

10.1.11.1.3.1.3.2.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "Max35Text" on page 605

10.1.11.1.3.1.3.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 605

10.1.11.1.3.2 PrivateIdentification <PrvtId>

Presence: [1..1]

Definition: Unique and unambiguous identification of a person, for example a passport.

PrivateIdentification <PrvtId> contains the following **PersonIdentification18** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			457
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458
	Other <Othr>	[0..*]			458
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer </ssr>	[0..1]	Text		459

10.1.11.1.3.2.1 DateAndPlaceOfBirth <DtAndPlcOfBirth>

Presence: [0..1]

Definition: Date and place of birth of a person.

DateAndPlaceOfBirth <DtAndPlcOfBirth> contains the following **DateAndPlaceOfBirth1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BirthDate <BirthDt>	[1..1]	Date		457
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		457
	CityOfBirth <CityOfBirth>	[1..1]	Text		458
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	458

10.1.11.1.3.2.1.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 598

10.1.11.1.3.2.1.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 605

10.1.11.1.3.2.1.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 605

10.1.11.1.3.2.1.4 CountryOfBirth <CtryOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 562

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.11.1.3.2.2 Other <Othr>

Presence: [0..*]

Definition: Unique identification of a person, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following **GenericPersonIdentification2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		458
	SchemeName <SchmeNm>	[0..1]			458
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459
	Issuer <Issr>	[0..1]	Text		459

10.1.11.1.3.2.2.1 Identification <Id>

Presence: [1..1]

Definition: Unique and unambiguous identification of a person.

Datatype: "Max256Text" on page 604

10.1.11.1.3.2.2.2 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Name of the identification scheme.

SchemeName <SchmeNm> contains one of the following
PersonIdentificationSchemeName1Choice elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		459
Or}	Proprietary <Prtry>	[1..1]	Text		459

10.1.11.1.3.2.2.2.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "ExternalPersonIdentification1Code" on page 569

10.1.11.1.3.2.2.2.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "Max35Text" on page 605

10.1.11.1.3.2.2.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 605

10.1.11.1.4 CountryOfResidence <CtryOfRes>

Presence: [0..1]

Definition: Country in which a person resides (the place of a person's home). In the case of a company, it is the country from which the affairs of that company are directed.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 562

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.11.1.5 ContactDetails <CtctDtls>

Presence: [0..1]

Definition: Set of elements used to indicate how to contact the party.

ContactDetails <CtctDtls> contains the following elements (see "Contact13" on page 460 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NamePrefix <NmPrfx>	[0..1]	CodeSet		461
	Name <Nm>	[0..1]	Text		461
	PhoneNumber <PhneNb>	[0..1]	Text		461
	MobileNumber <MobNb>	[0..1]	Text		462
	FaxNumber <FaxNb>	[0..1]	Text		462
	URLAddress <URLAdr>	[0..1]	Text		462
	EmailAddress <EmailAdr>	[0..1]	Text		462
	EmailPurpose <EmailPurp>	[0..1]	Text		462
	JobTitle <JobTitl>	[0..1]	Text		462
	Responsibility <Rspnsblty>	[0..1]	Text		462
	Department <Dept>	[0..1]	Text		462
	Other <Othr>	[0..*]			463
	ChannelType <ChanlTp>	[1..1]	Text		463
	Identification <Id>	[0..1]	Text		463
	PreferredMethod <PrefrdMtd>	[0..1]	CodeSet		463

10.1.12 Person Identification

10.1.12.1 Contact13

Definition: Specifies the details of the contact person.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NamePrefix <NmPrfx>	[0..1]	CodeSet		461
	Name <Nm>	[0..1]	Text		461
	PhoneNumber <PhneNb>	[0..1]	Text		461
	MobileNumber <MobNb>	[0..1]	Text		462
	FaxNumber <FaxNb>	[0..1]	Text		462
	URLAddress <URLAdr>	[0..1]	Text		462
	EmailAddress <EmailAdr>	[0..1]	Text		462
	EmailPurpose <EmailPurp>	[0..1]	Text		462
	JobTitle <JobTitl>	[0..1]	Text		462
	Responsibility <Rspnsblty>	[0..1]	Text		462
	Department <Dept>	[0..1]	Text		462
	Other <Othr>	[0..*]			463
	ChannelType <ChanlTp>	[1..1]	Text		463
	Identification <Id>	[0..1]	Text		463
	PreferredMethod <PrefrdMtd>	[0..1]	CodeSet		463

10.1.12.1.1 NamePrefix <NmPrfx>

Presence: [0..1]

Definition: Specifies the terms used to formally address a person.

Datatype: "NamePrefix2Code" on page 575

CodeName	Name	Definition
DOCT	Doctor	Title of the person is Doctor or Dr.
MADM	Madam	Title of the person is Madam.
MISS	Miss	Title of the person is Miss.
MIST	Mister	Title of the person is Mister or Mr.
MIKS	GenderNeutral	Title of the person is gender neutral (Mx).

10.1.12.1.2 Name <Nm>

Presence: [0..1]

Definition: Name by which a party is known and which is usually used to identify that party.

Datatype: "Max140Text" on page 603

10.1.12.1.3 PhoneNumber <PhneNb>

Presence: [0..1]

Definition: Collection of information that identifies a phone number, as defined by telecom services.

Datatype: "PhoneNumber" on page 609

10.1.12.1.4 MobileNumber <MobNb>

Presence: [0..1]

Definition: Collection of information that identifies a mobile phone number, as defined by telecom services.

Datatype: "PhoneNumber" on page 609

10.1.12.1.5 FaxNumber <FaxNb>

Presence: [0..1]

Definition: Collection of information that identifies a FAX number, as defined by telecom services.

Datatype: "PhoneNumber" on page 609

10.1.12.1.6 URLAddress <URLAdr>

Presence: [0..1]

Definition: Address for the Universal Resource Locator (URL), for example an address used over the www (HTTP) service.

Datatype: "Max2048Text" on page 604

10.1.12.1.7 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 604

10.1.12.1.8 EmailPurpose <EmailPurp>

Presence: [0..1]

Definition: Purpose for which an email address may be used.

Datatype: "Max35Text" on page 605

10.1.12.1.9 JobTitle <JobTitl>

Presence: [0..1]

Definition: Title of the function.

Datatype: "Max35Text" on page 605

10.1.12.1.10 Responsibility <Rspnsbly>

Presence: [0..1]

Definition: Role of a person in an organisation.

Datatype: "Max35Text" on page 605

10.1.12.1.11 Department <Dept>

Presence: [0..1]

Definition: Identification of a division of a large organisation or building.

Datatype: "Max70Text" on page 607

10.1.12.1.12 Other <Othr>

Presence: [0..*]

Definition: Contact details in another form.

Other <Othr> contains the following **OtherContact1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ChannelType <ChanlTp>	[1..1]	Text		463
	Identification <Id>	[0..1]	Text		463

10.1.12.1.12.1 ChannelType <ChanlTp>

Presence: [1..1]

Definition: Method used to contact the financial institution's contact for the specific tax region.

Datatype: "Max4Text" on page 606

10.1.12.1.12.2 Identification <Id>

Presence: [0..1]

Definition: Communication value such as phone number or email address.

Datatype: "Max128Text" on page 603

10.1.12.1.13 PreferredMethod <PrefrdMtd>

Presence: [0..1]

Definition: Preferred method used to reach the contact.

Datatype: "PreferredContactMethod2Code" on page 583

CodeName	Name	Definition
MAIL	Email	Preferred method used to reach the contact is per email.
FAXX	Fax	Preferred method used to reach the contact is per fax.
LETT	Letter	Preferred method used to reach the contact is per letter.
CELL	MobileOrCellPhone	Preferred method used to reach the contact is per mobile or cell phone.
ONLI	Online	Preferred method used to reach the contact is online.
PHON	Phone	Preferred method used to reach the contact is per phone.

10.1.13 Postal Address

10.1.13.1 PostalAddress27

Definition: Information that locates and identifies a specific address, as defined by postal services.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]			464
{Or	Code <Cd>	[1..1]	CodeSet		465
Or}	Proprietary <Prtry>	[1..1]	±		465
	CareOf <CareOf>	[0..1]	Text		465
	Department <Dept>	[0..1]	Text		465
	SubDepartment <SubDept>	[0..1]	Text		465
	StreetName <StrtNm>	[0..1]	Text		466
	BuildingNumber <BldgNb>	[0..1]	Text		466
	BuildingName <BldgNm>	[0..1]	Text		466
	Floor <Flr>	[0..1]	Text		466
	UnitNumber <UnitNb>	[0..1]	Text		466
	PostBox <PstBx>	[0..1]	Text		466
	Room <Room>	[0..1]	Text		466
	PostCode <PstCd>	[0..1]	Text		466
	TownName <TwnNm>	[0..1]	Text		467
	TownLocationName <TwnLctnNm>	[0..1]	Text		467
	DistrictName <DstrctNm>	[0..1]	Text		467
	CountrySubDivision <CtrySubDvsn>	[0..1]	Text		467
	Country <Ctry>	[0..1]	CodeSet	C4	467
	AddressLine <AdrLine>	[0..7]	Text		467

10.1.13.1.1 AddressType <AdrTp>

Presence: [0..1]

Definition: Identifies the nature of the postal address.

AddressType <AdrTp> contains one of the following **AddressType3Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		465
Or}	Proprietary <Prtry>	[1..1]	±		465

10.1.13.1.1.1 Code <Cd>

Presence: [1..1]

Definition: Type of address expressed as a code.

Datatype: "AddressType2Code" on page 543

CodeName	Name	Definition
ADDR	Postal	Address is the complete postal address.
PBOX	POBox	Address is a postal office (PO) box.
HOME	Residential	Address is the home address.
BIZZ	Business	Address is the business address.
MLTO	MailTo	Address is the address to which mail is sent.
DLVY	DeliveryTo	Address is the address to which delivery is to take place.

10.1.13.1.1.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Type of address expressed as a proprietary code.

Proprietary <Prtry> contains the following elements (see "[GenericIdentification30](#)" on page 322 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		322
	Issuer <Issr>	[1..1]	Text		322
	SchemeName <SchemeNm>	[0..1]	Text		322

10.1.13.1.2 CareOf <CareOf>

Presence: [0..1]

Definition: Identifies an addressee that is accepting the correspondence for the intended recipient. Using care of ensures the correspondence reaches the right recipient rather than getting returned to the sender.

Datatype: "Max140Text" on page 603

10.1.13.1.3 Department <Dept>

Presence: [0..1]

Definition: Identification of a division of a large organisation or building.

Datatype: "Max70Text" on page 607

10.1.13.1.4 SubDepartment <SubDept>

Presence: [0..1]

Definition: Identification of a sub-division of a large organisation or building.

Datatype: "Max70Text" on page 607

10.1.13.1.5 StreetName <StrtNm>

Presence: [0..1]

Definition: Name of a street or thoroughfare.

Datatype: "Max140Text" on page 603

10.1.13.1.6 BuildingNumber <BldgNb>

Presence: [0..1]

Definition: Number that identifies the position of a building on a street.

Datatype: "Max16Text" on page 603

10.1.13.1.7 BuildingName <BldgNm>

Presence: [0..1]

Definition: Name of the building or house.

Datatype: "Max140Text" on page 603

10.1.13.1.8 Floor <Flr>

Presence: [0..1]

Definition: Floor or storey within a building.

Datatype: "Max70Text" on page 607

10.1.13.1.9 UnitNumber <UnitNb>

Presence: [0..1]

Definition: Identifies a flat or dwelling within the building.

Datatype: "Max16Text" on page 603

10.1.13.1.10 PostBox <PstBx>

Presence: [0..1]

Definition: Numbered box in a post office, assigned to a person or organisation, where letters are kept until called for.

Datatype: "Max16Text" on page 603

10.1.13.1.11 Room <Room>

Presence: [0..1]

Definition: Building room number.

Datatype: "Max70Text" on page 607

10.1.13.1.12 PostCode <PstCd>

Presence: [0..1]

Definition: Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail.

Datatype: "Max16Text" on page 603

10.1.13.1.13 **TownName <TwnNm>**

Presence: [0..1]

Definition: Name of a built-up area, with defined boundaries, and a local government.

Datatype: "Max140Text" on page 603

10.1.13.1.14 **TownLocationName <TwnLctnNm>**

Presence: [0..1]

Definition: Specific location name within the town.

Datatype: "Max140Text" on page 603

10.1.13.1.15 **DistrictName <DstrctNm>**

Presence: [0..1]

Definition: Identifies a subdivision within a country sub-division.

Datatype: "Max140Text" on page 603

10.1.13.1.16 **CountrySubDivision <CtrySubDvsn>**

Presence: [0..1]

Definition: Identifies a subdivision of a country such as state, region, county.

Datatype: "Max35Text" on page 605

10.1.13.1.17 **Country <Ctry>**

Presence: [0..1]

Definition: Nation with its own government.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 562

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.13.1.18 **AddressLine <AdrLine>**

Presence: [0..7]

Definition: Information that locates and identifies a specific address, as defined by postal services, presented in free format text.

Datatype: "Max70Text" on page 607

10.1.13.2 **PostalAddress22**

Definition: Information that locates and identifies a specific address, as defined by postal services.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		468
	Department <Dept>	[0..1]	Text		468
	SubDepartment <SubDept>	[0..1]	Text		468
	AddressLine <AdrLine>	[0..2]	Text		468
	StreetName <StrtNm>	[0..1]	Text		469
	BuildingNumber <BldgNb>	[0..1]	Text		469
	PostCode <PstCd>	[0..1]	Text		469
	TownName <TwnNm>	[0..1]	Text		469
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		469
	CountryCode <CtryCd>	[0..1]	Text		469

10.1.13.2.1 AddressType <AdrTp>

Presence: [0..1]

Definition: Identifies the nature of the postal address.

Datatype: "AddressType2Code" on page 543

CodeName	Name	Definition
ADDR	Postal	Address is the complete postal address.
PBOX	POBox	Address is a postal office (PO) box.
HOME	Residential	Address is the home address.
BIZZ	Business	Address is the business address.
MLTO	MailTo	Address is the address to which mail is sent.
DLVY	DeliveryTo	Address is the address to which delivery is to take place.

10.1.13.2.2 Department <Dept>

Presence: [0..1]

Definition: Identification of a division of a large organisation or building.

Datatype: "Max70Text" on page 607

10.1.13.2.3 SubDepartment <SubDept>

Presence: [0..1]

Definition: Identification of a sub-division of a large organisation or building.

Datatype: "Max70Text" on page 607

10.1.13.2.4 AddressLine <AdrLine>

Presence: [0..2]

Definition: Information that locates and identifies a specific address, as defined by postal services, presented in free format text.

Datatype: "Max70Text" on page 607

10.1.13.2.5 StreetName <StrtNm>

Presence: [0..1]

Definition: Name of a street or thoroughfare.

Datatype: "Max70Text" on page 607

10.1.13.2.6 BuildingNumber <BldgNb>

Presence: [0..1]

Definition: Number that identifies the position of a building on a street.

Datatype: "Max16Text" on page 603

10.1.13.2.7 PostCode <PstCd>

Presence: [0..1]

Definition: Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail.

Datatype: "Max16Text" on page 603

10.1.13.2.8 TownName <TwnNm>

Presence: [0..1]

Definition: Name of a built-up area, with defined boundaries, and a local government.

Datatype: "Max70Text" on page 607

10.1.13.2.9 CountrySubDivision <CtrySubDvsn>

Presence: [0..2]

Definition: Identifies a subdivision of a country such as state, region, county.

Datatype: "Max35Text" on page 605

10.1.13.2.10 CountryCode <CtryCd>

Presence: [0..1]

Definition: Nation with its own government.

Datatype: "Min2Max3AlphaText" on page 608

10.1.14 Secure Element

10.1.14.1 EnvelopedData11

Definition: Encrypted data with encryption key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		471
	OriginatorInformation <OrgtrInf>	[0..1]			471
	Certificate <Cert>	[0..*]	Binary		471
	Recipient <Rcpt>	[1..*]			471
{Or	KeyTransport <KeyTrnsprt>	[1..1]			472
	Version <Vrsn>	[0..1]	Quantity		473
	RecipientIdentification <RcptId>	[1..1]			473
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			473
	Issuer <Issr>	[1..1]			474
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475
	SerialNumber <SrlNb>	[1..1]	Binary		475
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		475
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		475
	EncryptedKey <NcrptdKey>	[1..1]	Binary		475
Or	KEK <KEK>	[1..1]			476
	Version <Vrsn>	[0..1]	Quantity		476
	KEKIdentification <KEKId>	[1..1]	±		476
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			476
	Algorithm <Algo>	[1..1]	CodeSet		477
	Parameter <Param>	[0..1]			479
	EncryptionFormat <NcrptnFmt>	[0..1]	CodeSet		479
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		480
	BytePadding <BPddg>	[0..1]	CodeSet		480
	EncryptedKey <NcrptdKey>	[0..1]	Binary		480
Or}	KeyIdentifier <Keyldr>	[1..1]	±		480
	EncryptedContent <NcrptdCntt>	[0..1]			481
	ContentType <CnttTp>	[1..1]	CodeSet		481
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			481
	Algorithm <Algo>	[1..1]	CodeSet		482

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Parameter <Param>	[0..1]			484
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		484
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		485
	BytePadding <BPddg>	[0..1]	CodeSet		485
	EncryptedData <NcrptdData>	[1..1]	Binary		485

10.1.14.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.1.2 OriginatorInformation <OrgtrlInf>

Presence: [0..1]

Definition: Provides certificates of the originator.

OriginatorInformation <OrgtrlInf> contains the following **OriginatorInformation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Certificate <Cert>	[0..*]	Binary		471

10.1.14.1.2.1 Certificate <Cert>

Presence: [0..*]

Definition: It may contain originator certificates associated with several different key management algorithms.

Datatype: "Max5000Binary" on page 542

10.1.14.1.3 Recipient <Rcpt>

Presence: [1..*]

Definition: Session key or identification of the protection key used by the recipient.

Recipient <Rcpt> contains one of the following **Recipient15Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	KeyTransport <KeyTrnsprt>	[1..1]			472
	Version <Vrsn>	[0..1]	Quantity		473
	RecipientIdentification <RcptId>	[1..1]			473
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			473
	Issuer <Issr>	[1..1]			474
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475
	SerialNumber <SrlNb>	[1..1]	Binary		475
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		475
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		475
	EncryptedKey <NcrptdKey>	[1..1]	Binary		475
Or	KEK <KEK>	[1..1]			476
	Version <Vrsn>	[0..1]	Quantity		476
	KEKIdentification <KEKId>	[1..1]	±		476
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			476
	Algorithm <Algo>	[1..1]	CodeSet		477
	Parameter <Param>	[0..1]			479
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		479
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		480
	BytePadding <BPddg>	[0..1]	CodeSet		480
	EncryptedKey <NcrptdKey>	[0..1]	Binary		480
Or}	KeyIdentifier <Keyldr>	[1..1]	±		480

10.1.14.1.3.1 KeyTransport <KeyTrnsprt>

Presence: [1..1]

Definition: Encryption key using previously distributed asymmetric public key.

KeyTransport <KeyTrnsprt> contains the following **KeyTransport10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		473
	RecipientIdentification <Rcptld>	[1..1]			473
{Or	IssuerAndSerialNumber <IssrAndSriNb>	[1..1]			473
	Issuer <Issr>	[1..1]			474
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475
	SerialNumber <SriNb>	[1..1]	Binary		475
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		475
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		475
	EncryptedKey <NcrptdKey>	[1..1]	Binary		475

10.1.14.1.3.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.1.3.1.2 RecipientIdentification <Rcptld>

Presence: [1..1]

Definition: Identification of a cryptographic asymmetric key for the recipient.

RecipientIdentification <Rcptld> contains one of the following **Recipient13Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IssuerAndSerialNumber <IssrAndSriNb>	[1..1]			473
	Issuer <Issr>	[1..1]			474
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475
	SerialNumber <SriNb>	[1..1]	Binary		475
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		475

10.1.14.1.3.1.2.1 IssuerAndSerialNumber <IssrAndSriNb>

Presence: [1..1]

Definition: Certificate issuer name and serial number (see ITU X.509).

IssuerAndSerialNumber <IssrAndSriNb> contains the following **IssuerAndSerialNumber2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Issuer <Issr>	[1..1]			474
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475
	SerialNumber <SriNb>	[1..1]	Binary		475

10.1.14.1.3.1.2.1.1 Issuer <Issr>

Presence: [1..1]

Definition: Certificate issuer name (see X.509).

Issuer <Issr> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475

10.1.14.1.3.1.2.1.1.1 RelativeDistinguishedName <RltvDstngshdNm>

Presence: [1..*]

Definition: Relative distinguished name inside a X.509 certificate.

RelativeDistinguishedName <RltvDstngshdNm> contains the following **RelativeDistinguishedName1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475

10.1.14.1.3.1.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 553

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).

CodeName	Name	Definition
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.1.14.1.3.1.2.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 603

10.1.14.1.3.1.2.1.2 SerialNumber <SrINb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 542

10.1.14.1.3.1.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 541

10.1.14.1.3.1.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

Definition: Algorithm to encrypt the key encryption key (KEK).

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see "AlgorithmIdentification35" on page 490 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		490
	Parameter <Param>	[0..1]			491
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		491
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		491
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		492

10.1.14.1.3.1.4 EncryptedKey <NcrptdKey>

Presence: [1..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max5000Binary" on page 542

10.1.14.1.3.2 KEK <KEK>

Presence: [1..1]

Definition: Key encryption key using previously distributed symmetric key.

KEK <KEK> contains the following **KEK9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		476
	KEKIdentification <KEKId>	[1..1]	±		476
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			476
	Algorithm <Algo>	[1..1]	CodeSet		477
	Parameter <Param>	[0..1]			479
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		479
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		480
	BytePadding <BPddg>	[0..1]	CodeSet		480
	EncryptedKey <NcrptdKey>	[0..1]	Binary		480

10.1.14.1.3.2.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.1.3.2.2 KEKIdentification <KEKId>

Presence: [1..1]

Definition: Identification of the key encryption key (KEK).

KEKIdentification <KEKId> contains the following elements (see "[KEKIdentifier7](#)" on page 147 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		147
	KeyVersion <KeyVrsn>	[1..1]	Text		148
	SequenceNumber <SeqNb>	[0..1]	Quantity		148
	DerivationIdentification <DerivtnId>	[0..1]	Binary		148

10.1.14.1.3.2.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

Definition: Algorithm to encrypt the key encryption key (KEK).

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following **AlgorithmIdentification32** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		477
	Parameter <Param>	[0..1]			479
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		479
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		480
	BytePadding <BPddg>	[0..1]	CodeSet		480

10.1.14.1.3.2.3.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm28Code" on page 547

CodeName	Name	Definition
EA2C	AES128CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DC	DES112CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with double length key (112 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) algorithm, as specified in ANSI X9.24-2009 Annex A.
UKPT	UKPT	UKPT (Unique Key Per Transaction) or Master Session Key key encryption - (ASN.1 Object Identifier: id-ukpt-wrap).
UKA2	UKPTwithAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9C	AES192CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA5C	AES256CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption

CodeName	Name	Definition
		with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
DA12	AESDUKPT128ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A, With key length of 128 bits.
DA19	AESDUKPT192ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 192 bits.
DA25	AESDUKPT256ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 256 bits.
N108	Nist800-108KeyDerivation	Key Derivation according to the Special Publication from the NIST entitled 800-108.
EA5R	AES256CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9R	AES192CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA2R	AES128CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DR	DES112CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with double length key (112 Bit) as defined in FIPS SP 800-38a.
E36C	DES168CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with triple length key (168 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
E36R	DES168CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with triple length key (168 Bit) as defined in FIPS SP 800-38a.
SD5C	SDE056CBC	The DEPRECATED Simple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with simple length key (56 Bit) as defined in FIPS

CodeName	Name	Definition
		PUB 81 - (ASN.1 Object Identifier: des- cbc).
UKA1	UKPTwithAES128	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA3	UKPTwithAES256	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
SM4C	SM4CBC	ShangMi 4 enciphering method used in CBC mode.
SM4R	SM4CTR	ShangMi 4 enciphering method used in CTR mode.

10.1.14.1.3.2.3.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the encryption algorithm.

Parameter <Param> contains the following **Parameter12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		479
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		480
	BytePadding <BPddg>	[0..1]	CodeSet		480

10.1.14.1.3.2.3.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Datatype: "EncryptionFormat2Code" on page 566

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.1.14.1.3.2.3.2.2 InitialisationVector <InitlStnVctr>

Presence: [0..1]

Definition: Initialisation vector of a cipher block chaining (CBC) mode encryption.

Datatype: "Max500Binary" on page 542

10.1.14.1.3.2.3.2.3 BytePadding <BPddg>

Presence: [0..1]

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Datatype: "BytePadding1Code" on page 557

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.1.14.1.3.2.4 EncryptedKey <NcrptdKey>

Presence: [0..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max500Binary" on page 542

10.1.14.1.3.3 KeyIdentifier <Keyldr>

Presence: [1..1]

Definition: Identification of a protection key without a session key, shared and previously exchanged between the initiator and the recipient.

KeyIdentifier <Keyldr> contains the following elements (see "KEKIdentifier7" on page 147 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <Keyld>	[1..1]	Text		147
	KeyVersion <KeyVrsn>	[1..1]	Text		148
	SequenceNumber <SeqNb>	[0..1]	Quantity		148
	DerivationIdentification <Derivtnld>	[0..1]	Binary		148

10.1.14.1.4 EncryptedContent <NcrptdCntt>

Presence: [0..1]

Definition: Data protection by encryption (digital envelope), with an encryption key.

EncryptedContent <NcrptdCntt> contains the following **EncryptedContent7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		481
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			481
	Algorithm <Algo>	[1..1]	CodeSet		482
	Parameter <Param>	[0..1]			484
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		484
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		485
	BytePadding <BPddg>	[0..1]	CodeSet		485
	EncryptedData <NcrptdData>	[1..1]	Binary		485

10.1.14.1.4.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data which have been encrypted.

Datatype: "ContentType2Code" on page 562

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.14.1.4.2 ContentEncryptionAlgorithm <CnttNcrptnAlgo>

Presence: [0..1]

Definition: Algorithm used to encrypt the data.

ContentEncryptionAlgorithm <CnttNcrptnAlgo> contains the following **AlgorithmIdentification32** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		482
	Parameter <Param>	[0..1]			484
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		484
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		485
	BytePadding <BPddg>	[0..1]	CodeSet		485

10.1.14.1.4.2.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm28Code" on page 547

CodeName	Name	Definition
EA2C	AES128CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DC	DES112CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with double length key (112 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) algorithm, as specified in ANSI X9.24-2009 Annex A.
UKPT	UKPT	UKPT (Unique Key Per Transaction) or Master Session Key key encryption - (ASN.1 Object Identifier: id-ukpt-wrap).
UKA2	UKPTwithAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9C	AES192CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA5C	AES256CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption

CodeName	Name	Definition
		with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
DA12	AESDUKPT128ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A, With key length of 128 bits.
DA19	AESDUKPT192ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 192 bits.
DA25	AESDUKPT256ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 256 bits.
N108	Nist800-108KeyDerivation	Key Derivation according to the Special Publication from the NIST entitled 800-108.
EA5R	AES256CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9R	AES192CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA2R	AES128CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DR	DES112CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with double length key (112 Bit) as defined in FIPS SP 800-38a.
E36C	DES168CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with triple length key (168 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
E36R	DES168CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with triple length key (168 Bit) as defined in FIPS SP 800-38a.
SD5C	SDE056CBC	The DEPRECATED Simple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with simple length key (56 Bit) as defined in FIPS

CodeName	Name	Definition
		PUB 81 - (ASN.1 Object Identifier: des- cbc).
UKA1	UKPTwithAES128	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA3	UKPTwithAES256	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
SM4C	SM4CBC	ShangMi 4 enciphering method used in CBC mode.
SM4R	SM4CTR	ShangMi 4 enciphering method used in CTR mode.

10.1.14.1.4.2.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the encryption algorithm.

Parameter <Param> contains the following **Parameter12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		484
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		485
	BytePadding <BPddg>	[0..1]	CodeSet		485

10.1.14.1.4.2.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Datatype: "EncryptionFormat2Code" on page 566

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.1.14.1.4.2.2 InitialisationVector <InitlstnVctr>

Presence: [0..1]

Definition: Initialisation vector of a cipher block chaining (CBC) mode encryption.

Datatype: "Max500Binary" on page 542

10.1.14.1.4.2.3 BytePadding <BPddg>

Presence: [0..1]

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Datatype: "BytePadding1Code" on page 557

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.1.14.1.4.3 EncryptedData <NcrptdData>

Presence: [1..1]

Definition: Encrypted data, result of the content encryption.

Datatype: "Max100KBinary" on page 540

10.1.14.2 AlgorithmIdentification33

Definition: Identification of a cryptographic algorithm and parameters for digital signatures.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		486
	Parameter <Param>	[0..1]			488
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		489
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		489
	SaltLength <SaltLngh>	[0..1]	Quantity		490
	TrailerField <TrlrFld>	[0..1]	Quantity		490
	OIDCurveName <OIDCrvNm>	[0..1]	Text		490

10.1.14.2.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm29Code" on page 549

CodeName	Name	Definition
ERS2	SHA256WithRSA	Signature algorithms with RSA, using SHA-256 digest algorithm - (ASN.1 Object Identifier: sha256WithRSAEncryption).
ERS1	SHA1WithRSA	The DEPRECATED Signature algorithms with RSA (PKCS #1 version 2.1), using SHA-1 digest algorithm - (ASN.1 Object Identifier: sha1WithRSAEncryption).
RPSS	RSASSA-PSS	Signature algorithm with Appendix, Probabilistic Signature Scheme (PKCS #1 version 2.1), - (ASN.1 Object Identifier: id-RSASSA-PSS).
ERS3	SHA3-256WithRSA	Signature algorithms with RSA, using SHA3-256 digest algorithm. (ASN.1 Object Identifier: id-rsassa-pkcs1-v1-5-with-sha3-256).
ED32	EcdsaSha3-256	Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ED33	EcdsaSha3-384	Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
ED35	EcdsaSha3-512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ED23	EcdsaSha384	Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ED25	EcdsaSha512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ES22	EcsdsaSha256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
ES32	EcsdaSha3-256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ES33	EcsdsaSha3-384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
ES35	EcsdsaSha3-512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.

CodeName	Name	Definition
ES23	EcdsaSha384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ES25	EcdsaSha512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ED22	EcdsaSha256	Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EF32	EcfdsaSha3-256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EF22	EcfdsdaSha256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EF33	EcfdsdaSha3-384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF35	EcfdsdaSha3-512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EF23	EcfdsdaSha384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO33	EcosdsaSha3-384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF25	EcfdsdaSha512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
EO32	EcosdaSha3-256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EO22	EcosdsaSha256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EO35	EcosdsaSha3-512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EO23	EcosdsaSha384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO25	EcosdsaSha512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
DD22	EddsaSha256	Edward Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
DD32	EddsaSha3-256	Edward Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.

CodeName	Name	Definition
DD33	EddsaSha3-384	Edward Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
DD35	EddsaSha3-512	Edward Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
DD23	EddsaSha384	Edward Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
DD25	EddsaSha512	Edward Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
SM22	SM2Sha256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
SM33	SM2Sha3-384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
SM32	SM2Sha3-256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
SM35	SM2Sha3-512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
SM23	SM2Sha384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
SM25	SM2Sha512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
S2S3	SM2SM3	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with ShangMi3 Digest Algorithm.

10.1.14.2.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters of the RSASSA-PSS digital signature algorithm (RSA signature algorithm with appendix: Probabilistic Signature Scheme).

Parameter <Param> contains the following **Parameter16** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		489
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		489
	SaltLength <SaltLngth>	[0..1]	Quantity		490
	TrailerField <TrlrFld>	[0..1]	Quantity		490
	OIDCurveName <OIDCrvNm>	[0..1]	Text		490

10.1.14.2.2.1 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm26Code" on page 544

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.14.2.2.2 MaskGeneratorAlgorithm <MskGnrtrAlgo>

Presence: [0..1]

Definition: Mask generator function cryptographic algorithm and parameters.

MaskGeneratorAlgorithm <MskGnrtrAlgo> contains the following elements (see "AlgorithmIdentification34" on page 532 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		532
	Parameter <Param>	[0..1]			532
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		532

10.1.14.2.2.3 SaltLength <SaltLngth>

Presence: [0..1]

Definition: Length of the salt to include in the signature.

Datatype: "Number" on page 600

10.1.14.2.2.4 TrailerField <TrlrFld>

Presence: [0..1]

Definition: Trailer field number.

Datatype: "Number" on page 600

10.1.14.2.2.5 OIDCurveName <OIDCrvNm>

Presence: [0..1]

Definition: Name of the Elliptic Curve according to the OID notation.

Datatype: "Max140Text" on page 603

10.1.14.3 AlgorithmIdentification35

Definition: Cryptographic algorithms and parameters for the protection of transported keys by an asymmetric key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		490
	Parameter <Param>	[0..1]			491
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		491
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		491
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		492

10.1.14.3.1 Algorithm <Algo>

Presence: [1..1]

Definition: Asymmetric encryption algorithm of a transport key.

Datatype: "Algorithm7Code" on page 552

CodeName	Name	Definition
ERSA	RSAEncryption	RSA encryption algorithm - (ASN.1 Object Identifier: rsaEncryption).
RSAO	RSAES-OAEP	RSA encryption scheme based on Optimal Asymmetric Encryption scheme (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-RSAES-OAEP).

10.1.14.3.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters of the encryption algorithm.

Parameter <Param> contains the following **Parameter17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		491
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		491
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		492

10.1.14.3.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Datatype: "EncryptionFormat2Code" on page 566

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.1.14.3.2.2 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm26Code" on page 544

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).

CodeName	Name	Definition
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.14.3.2.3 MaskGeneratorAlgorithm <MskGnrtrAlgo>

Presence: [0..1]

Definition: Mask generator function cryptographic algorithm and parameters.

MaskGeneratorAlgorithm <MskGnrtrAlgo> contains the following elements (see "AlgorithmIdentification34" on page 532 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		532
	Parameter <Param>	[0..1]			532
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		532

10.1.14.4 CryptographicKey18

Definition: Cryptographic Key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		493
	AdditionalIdentification <AddtlId>	[0..1]	Binary		493
	Name <Nm>	[0..1]	Text		494
	SecurityProfile <SctyPrfl>	[0..1]	Text		494
	ItemNumber <ItmNb>	[0..1]	Text		494
	Version <Vrsn>	[1..1]	Text		494
	Type <Tp>	[0..1]	CodeSet		494
	Function <Fctn>	[0..*]	CodeSet		495
	ActivationDate <ActvtnDt>	[0..1]	DateTime		495
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		496
	KeyValue <KeyVal>	[0..1]	±		496
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			496
	Identification <Id>	[1..1]	Text		496
	Type <Tp>	[1..1]	CodeSet		496
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		497
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		497
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			497
	Name <Nm>	[1..1]	Text		497
	Value <Val>	[0..1]	Text		498

10.1.14.4.1 Identification <Id>

Presence: [1..1]

Definition: Name of the cryptographic key.

Datatype: "Max350Text" on page 605

10.1.14.4.2 AdditionalIdentification <AddtlId>

Presence: [0..1]

Definition: Additional identification of the key.

Usage

For derived unique key per transaction (DUKPT) keys, the key serial number (KSN) with the 21 bits of the transaction counter set to zero.

Datatype: "Max35Binary" on page 541

10.1.14.4.3 Name <Nm>

Presence: [0..1]

Definition: Name of the Cryptographic Element.

Datatype: "Max256Text" on page 604

10.1.14.4.4 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the set of security elements to which this element belongs.

Datatype: "Max35Text" on page 605

10.1.14.4.5 ItemNumber <ItmNb>

Presence: [0..1]

Definition: Hierarchical identification of a key inside all the key system. It is composed of all item numbers of the upper level components, separated by the '.' character, ended by the item number of the current component.

Datatype: "Max35Text" on page 605

10.1.14.4.6 Version <Vrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max256Text" on page 604

10.1.14.4.7 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 563

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal

CodeName	Name	Definition
		Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).

10.1.14.4.8 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 571

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslateInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

10.1.14.4.9 ActivationDate <ActvtnDt>

Presence: [0..1]

Definition: Date and time on which the key must be activated.

Datatype: "ISODateTime" on page 599

10.1.14.4.10 DeactivationDate <DeactvtnDt>

Presence: [0..1]

Definition: Date and time on which the key must be deactivated.

Datatype: "ISODateTime" on page 599

10.1.14.4.11 KeyValue <KeyVal>

Presence: [0..1]

Definition: Encrypted cryptographic key.

KeyValue <KeyVal> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstdData>	[0..1]	±		518

10.1.14.4.12 ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>

Presence: [0..*]

Definition: Identification of components which are allowed to access this cryptographic key.

ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs> contains the following **GenericIdentification186** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		496
	Type <Tp>	[1..1]	CodeSet		496

10.1.14.4.12.1 Identification <Id>

Presence: [1..1]

Definition: Identification of an element in the system.

Datatype: "Max256Text" on page 604

10.1.14.4.12.2 Type <Tp>

Presence: [1..1]

Definition: Type of actor in the system.

Datatype: "PartyType7Code" on page 579

CodeName	Name	Definition
ACQR	Acquirer	Entity acquiring card transactions.

CodeName	Name	Definition
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
PCPT	POIComponent	Party component of a POI system or POI terminal (Point of Interaction).
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.
SALE	SaleSystem	Party selling goods and services.

10.1.14.4.13 ProtectedComponentWithAuthorisedAccess <PrctcdCmpntWthAuthrsdAccs>

Presence: [0..*]

Definition: Protection of Identification of components which are allowed to access this cryptographic key.

ProtectedComponentWithAuthorisedAccess <PrctcdCmpntWthAuthrsdAccs> contains the following elements (see "ContentInformationType39" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <Dgstddata>	[0..1]	±		518

10.1.14.4.14 KeyCheckValue <KeyChckVal>

Presence: [0..1]

Definition: Value for checking a cryptographic key security parameter.

Datatype: "Max35Binary" on page 541

10.1.14.4.15 AdditionalManagementInformation <AddtlMgmtInf>

Presence: [0..*]

Definition: Additional Information needed by the receiver to securely process the management of the security element.

AdditionalManagementInformation <AddtlMgmtInf> contains the following **GenericInformation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[1..1]	Text		497
	Value <Val>	[0..1]	Text		498

10.1.14.4.15.1 Name <Nm>

Presence: [1..1]

Definition: Name of the generic information to exchange.

Datatype: "Max70Text" on page 607

10.1.14.4.15.2 Value <Val>

Presence: [0..1]

Definition: Value of the generic information to exchange.

Datatype: "Max140Text" on page 603

10.1.14.5 AuthenticatedData10

Definition: Message authentication code (MAC), computed on the data to protect with an encryption key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		499
	Recipient <Rcpt>	[1..*]			500
{Or	KeyTransport <KeyTrnsprt>	[1..1]			500
	Version <Vrsn>	[0..1]	Quantity		501
	RecipientIdentification <RcptId>	[1..1]			501
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			501
	Issuer <Issr>	[1..1]			502
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503
	SerialNumber <SrlNb>	[1..1]	Binary		503
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		503
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		503
	EncryptedKey <NcrptdKey>	[1..1]	Binary		503
Or	KEK <KEK>	[1..1]			504
	Version <Vrsn>	[0..1]	Quantity		504
	KEKIdentification <KEKId>	[1..1]	±		504
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			504
	Algorithm <Algo>	[1..1]	CodeSet		505
	Parameter <Param>	[0..1]			507
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		507
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		508
	BytePadding <BPddg>	[0..1]	CodeSet		508
	EncryptedKey <NcrptdKey>	[0..1]	Binary		508
Or}	KeyIdentifier <Keyldr>	[1..1]	±		508
	MACAlgorithm <MACAlgo>	[1..1]	±		509
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		509
	MAC <MAC>	[1..1]	Binary		509

10.1.14.5.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.5.2 Recipient <Rcpt>

Presence: [1..*]

Definition: Session key or protection key identification used by the recipient.

Recipient <Rcpt> contains one of the following **Recipient15Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	KeyTransport <KeyTrnsprt>	[1..1]			500
	Version <Vrsn>	[0..1]	Quantity		501
	RecipientIdentification <RcptId>	[1..1]			501
{Or	IssuerAndSerialNumber <IssrAndSrnNb>	[1..1]			501
	Issuer <Issr>	[1..1]			502
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503
	SerialNumber <SrnNb>	[1..1]	Binary		503
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		503
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		503
	EncryptedKey <NcrptdKey>	[1..1]	Binary		503
Or	KEK <KEK>	[1..1]			504
	Version <Vrsn>	[0..1]	Quantity		504
	KEKIdentification <KEKId>	[1..1]	±		504
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			504
	Algorithm <Algo>	[1..1]	CodeSet		505
	Parameter <Param>	[0..1]			507
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		507
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		508
	BytePadding <BPddg>	[0..1]	CodeSet		508
	EncryptedKey <NcrptdKey>	[0..1]	Binary		508
Or}	KeyIdentifier <Keyldr>	[1..1]	±		508

10.1.14.5.2.1 KeyTransport <KeyTrnsprt>

Presence: [1..1]

Definition: Encryption key using previously distributed asymmetric public key.

KeyTransport <KeyTrnsprt> contains the following **KeyTransport10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		501
	RecipientIdentification <Rcptld>	[1..1]			501
{Or	IssuerAndSerialNumber <IssrAndSrINb>	[1..1]			501
	Issuer <Issr>	[1..1]			502
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503
	SerialNumber <SrINb>	[1..1]	Binary		503
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		503
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		503
	EncryptedKey <NcrptdKey>	[1..1]	Binary		503

10.1.14.5.2.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.5.2.1.2 RecipientIdentification <Rcptld>

Presence: [1..1]

Definition: Identification of a cryptographic asymmetric key for the recipient.

RecipientIdentification <Rcptld> contains one of the following **Recipient13Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IssuerAndSerialNumber <IssrAndSrINb>	[1..1]			501
	Issuer <Issr>	[1..1]			502
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503
	SerialNumber <SrINb>	[1..1]	Binary		503
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		503

10.1.14.5.2.1.2.1 IssuerAndSerialNumber <IssrAndSrINb>

Presence: [1..1]

Definition: Certificate issuer name and serial number (see ITU X.509).

IssuerAndSerialNumber <IssrAndSriNb> contains the following **IssuerAndSerialNumber2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Issuer <Issr>	[1..1]			502
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503
	SerialNumber <SriNb>	[1..1]	Binary		503

10.1.14.5.2.1.2.1.1 Issuer <Issr>

Presence: [1..1]

Definition: Certificate issuer name (see X.509).

Issuer <Issr> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503

10.1.14.5.2.1.2.1.1.1 RelativeDistinguishedName <RltvDstngshdNm>

Presence: [1..*]

Definition: Relative distinguished name inside a X.509 certificate.

RelativeDistinguishedName <RltvDstngshdNm> contains the following **RelativeDistinguishedName1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503

10.1.14.5.2.1.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 553

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).

CodeName	Name	Definition
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.1.14.5.2.1.2.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 603

10.1.14.5.2.1.2.1.2 SerialNumber <SrINb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 542

10.1.14.5.2.1.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 541

10.1.14.5.2.1.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

Definition: Algorithm to encrypt the key encryption key (KEK).

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see "AlgorithmIdentification35" on page 490 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		490
	Parameter <Param>	[0..1]			491
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		491
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		491
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		492

10.1.14.5.2.1.4 EncryptedKey <NcrptdKey>

Presence: [1..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max5000Binary" on page 542

10.1.14.5.2.2 KEK <KEK>

Presence: [1..1]

Definition: Key encryption key using previously distributed symmetric key.

KEK <KEK> contains the following **KEK9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		504
	KEKIdentification <KEKId>	[1..1]	±		504
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			504
	Algorithm <Algo>	[1..1]	CodeSet		505
	Parameter <Param>	[0..1]			507
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		507
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		508
	BytePadding <BPddg>	[0..1]	CodeSet		508
	EncryptedKey <NcrptdKey>	[0..1]	Binary		508

10.1.14.5.2.2.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.5.2.2.2 KEKIdentification <KEKId>

Presence: [1..1]

Definition: Identification of the key encryption key (KEK).

KEKIdentification <KEKId> contains the following elements (see "[KEKIdentifier7](#)" on page 147 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		147
	KeyVersion <KeyVrsn>	[1..1]	Text		148
	SequenceNumber <SeqNb>	[0..1]	Quantity		148
	DerivationIdentification <DerivtnId>	[0..1]	Binary		148

10.1.14.5.2.2.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

Definition: Algorithm to encrypt the key encryption key (KEK).

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following **AlgorithmIdentification32** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		505
	Parameter <Param>	[0..1]			507
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		507
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		508
	BytePadding <BPddg>	[0..1]	CodeSet		508

10.1.14.5.2.2.3.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm28Code" on page 547

CodeName	Name	Definition
EA2C	AES128CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DC	DES112CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with double length key (112 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) algorithm, as specified in ANSI X9.24-2009 Annex A.
UKPT	UKPT	UKPT (Unique Key Per Transaction) or Master Session Key key encryption - (ASN.1 Object Identifier: id-ukpt-wrap).
UKA2	UKPTwithAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9C	AES192CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA5C	AES256CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption

CodeName	Name	Definition
		with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
DA12	AESDUKPT128ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A, With key length of 128 bits.
DA19	AESDUKPT192ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 192 bits.
DA25	AESDUKPT256ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 256 bits.
N108	Nist800-108KeyDerivation	Key Derivation according to the Special Publication from the NIST entitled 800-108.
EA5R	AES256CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9R	AES192CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA2R	AES128CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DR	DES112CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with double length key (112 Bit) as defined in FIPS SP 800-38a.
E36C	DES168CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with triple length key (168 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
E36R	DES168CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with triple length key (168 Bit) as defined in FIPS SP 800-38a.
SD5C	SDE056CBC	The DEPRECATED Simple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with simple length key (56 Bit) as defined in FIPS

CodeName	Name	Definition
		PUB 81 - (ASN.1 Object Identifier: des- cbc).
UKA1	UKPTwithAES128	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA3	UKPTwithAES256	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
SM4C	SM4CBC	ShangMi 4 enciphering method used in CBC mode.
SM4R	SM4CTR	ShangMi 4 enciphering method used in CTR mode.

10.1.14.5.2.3.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the encryption algorithm.

Parameter <Param> contains the following **Parameter12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		507
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		508
	BytePadding <BPddg>	[0..1]	CodeSet		508

10.1.14.5.2.3.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Datatype: "EncryptionFormat2Code" on page 566

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.1.14.5.2.3.2.2 InitialisationVector <InitlStnVctr>

Presence: [0..1]

Definition: Initialisation vector of a cipher block chaining (CBC) mode encryption.

Datatype: "Max500Binary" on page 542

10.1.14.5.2.3.2.3 BytePadding <BPddg>

Presence: [0..1]

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Datatype: "BytePadding1Code" on page 557

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.1.14.5.2.2.4 EncryptedKey <NcrptdKey>

Presence: [0..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max500Binary" on page 542

10.1.14.5.2.3 KeyIdentifier <Keyldr>

Presence: [1..1]

Definition: Identification of a protection key without a session key, shared and previously exchanged between the initiator and the recipient.

KeyIdentifier <Keyldr> contains the following elements (see "KEKIdentifier7" on page 147 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <Keyld>	[1..1]	Text		147
	KeyVersion <KeyVrsn>	[1..1]	Text		148
	SequenceNumber <SeqNb>	[0..1]	Quantity		148
	DerivationIdentification <Derivtnld>	[0..1]	Binary		148

10.1.14.5.3 MACAlgorithm <MACAlgo>

Presence: [1..1]

Definition: Algorithm to compute message authentication code (MAC).

MACAlgorithm <MACAlgo> contains the following elements (see "[AlgorithmIdentification31](#)" on page 526 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		526
	Parameter <Param>	[0..1]			528
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		529
	BytePadding <BPddg>	[0..1]	CodeSet		529

10.1.14.5.4 EncapsulatedContent <NcpsltdCntt>

Presence: [1..1]

Definition: Data to authenticate.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 381 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		381
	Content <Cntt>	[0..1]	Binary		382

10.1.14.5.5 MAC <MAC>

Presence: [1..1]

Definition: Message authentication code value.

Datatype: "[Max140Binary](#)" on page 541

10.1.14.6 ContentInformationType38

Definition: General cryptographic message syntax (CMS) containing data. protected by a MAC or a digital signature.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		509
	AuthenticatedData <AuthntcdData>	[0..1]	±		510
	SignedData <SgndData>	[0..1]	±		511

10.1.14.6.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "ContentType2Code" on page 562

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.14.6.2 AuthenticatedData <AuthntcdData>

Presence: [0..1]

Definition: Data protection by a message authentication code (MAC).

AuthenticatedData <AuthntcdData> contains the following elements (see "AuthenticatedData10" on page 498 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		499
	Recipient <Rcpt>	[1..*]			500
{Or	KeyTransport <KeyTrnsprt>	[1..1]			500
	Version <Vrsn>	[0..1]	Quantity		501
	RecipientIdentification <RcptId>	[1..1]			501
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			501
	Issuer <Issr>	[1..1]			502
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503
	SerialNumber <SrlNb>	[1..1]	Binary		503
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		503
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		503
	EncryptedKey <NcrptdKey>	[1..1]	Binary		503
Or	KEK <KEK>	[1..1]			504
	Version <Vrsn>	[0..1]	Quantity		504
	KEKIdentification <KEKId>	[1..1]	±		504
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			504
	Algorithm <Algo>	[1..1]	CodeSet		505
	Parameter <Param>	[0..1]			507
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		507
	InitialisationVector <InltstnVctr>	[0..1]	Binary		508
	BytePadding <BPddg>	[0..1]	CodeSet		508
	EncryptedKey <NcrptdKey>	[0..1]	Binary		508
Or}	KeyIdentifier <Keyldr>	[1..1]	±		508
	MACAlgorithm <MACAlgo>	[1..1]	±		509
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		509
	MAC <MAC>	[1..1]	Binary		509

10.1.14.6.3 SignedData <SgndData>

Presence: [0..1]

Definition: Data protected by a digital signatures.

SignedData <SgndData> contains the following elements (see "SignedData9" on page 519 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		519
	DigestAlgorithm <DgstAlgo>	[0..*]	±		520
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		520
	Certificate <Cert>	[0..*]	Binary		520
	Signer <Sgnr>	[0..*]			520
	Version <Vrsn>	[0..1]	Quantity		521
	SignerIdentification <SgnrId>	[0..1]			521
{Or	IssuerAndSerialNumber <IssrAndSrnNb>	[1..1]			522
	Issuer <Issr>	[1..1]			522
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			522
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523
	SerialNumber <SrnNb>	[1..1]	Binary		523
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		523
	DigestAlgorithm <DgstAlgo>	[1..1]	±		523
	SignedAttributes <SgndAttrbts>	[0..*]			524
	Name <Nm>	[1..1]	Text		524
	Value <Val>	[0..1]	Text		524
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		524
	Signature <Sgntr>	[1..1]	Binary		525

10.1.14.7 DigestedData6

Definition: Digest computed on the identified data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		513
	DigestAlgorithm <DgstAlgo>	[1..1]	±		513
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		513
	Digest <Dgst>	[1..1]	Binary		513

10.1.14.7.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.7.2 DigestAlgorithm <DgstAlgo>

Presence: [1..1]

Definition: Identification of the digest algorithm.

DigestAlgorithm <DgstAlgo> contains the following elements (see "[AlgorithmIdentification36](#)" on page 525 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		525

10.1.14.7.3 EncapsulatedContent <NcpsltdCntt>

Presence: [1..1]

Definition: Data on which the digest is computed.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 381 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		381
	Content <Cntt>	[0..1]	Binary		382

10.1.14.7.4 Digest <Dgst>

Presence: [1..1]

Definition: Result of data-digesting process.

Datatype: "Max140Binary" on page 541

10.1.14.8 ContentInformationType39

Definition: General cryptographic message syntax (CMS) containing protected data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		514
	EnvelopedData <EnvlpdData>	[0..1]	±		514
	AuthenticatedData <AuthntcdData>	[0..1]	±		516
	SignedData <SgndData>	[0..1]	±		517
	DigestedData <DgstddData>	[0..1]	±		518

10.1.14.8.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "ContentType2Code" on page 562

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.14.8.2 EnvelopedData <EnvlpdData>

Presence: [0..1]

Definition: Data protection by encryption, with a session key.

EnvelopedData <EnvlpdData> contains the following elements (see "EnvelopedData11" on page 469 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		471
	OriginatorInformation <OrgtrInf>	[0..1]			471
	Certificate <Cert>	[0..*]	Binary		471
	Recipient <Rcpt>	[1..*]			471
{Or	KeyTransport <KeyTrnsprt>	[1..1]			472
	Version <Vrsn>	[0..1]	Quantity		473
	RecipientIdentification <RcptId>	[1..1]			473
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			473
	Issuer <Issr>	[1..1]			474
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475
	SerialNumber <SrlNb>	[1..1]	Binary		475
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		475
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		475
	EncryptedKey <NcrptdKey>	[1..1]	Binary		475
Or	KEK <KEK>	[1..1]			476
	Version <Vrsn>	[0..1]	Quantity		476
	KEKIdentification <KEKId>	[1..1]	±		476
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			476
	Algorithm <Algo>	[1..1]	CodeSet		477
	Parameter <Param>	[0..1]			479
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		479
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		480
	BytePadding <BPddg>	[0..1]	CodeSet		480
	EncryptedKey <NcrptdKey>	[0..1]	Binary		480
Or}	KeyIdentifier <Keyldr>	[1..1]	±		480
	EncryptedContent <NcrptdCntt>	[0..1]			481
	ContentType <CnttTp>	[1..1]	CodeSet		481
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			481

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		482
	Parameter <Param>	[0..1]			484
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		484
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		485
	BytePadding <BPddg>	[0..1]	CodeSet		485
	EncryptedData <NcrptdData>	[1..1]	Binary		485

10.1.14.8.3 AuthntcdData <AuthntcdData>

Presence: [0..1]

Definition: Data protection by a message authentication code (MAC).

AuthenticatedData <AuthntcdData> contains the following elements (see "AuthenticatedData10" on page 498 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		499
	Recipient <Rcpt>	[1..*]			500
{Or	KeyTransport <KeyTrnsprt>	[1..1]			500
	Version <Vrsn>	[0..1]	Quantity		501
	RecipientIdentification <RcptId>	[1..1]			501
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			501
	Issuer <Issr>	[1..1]			502
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			502
	AttributeType <AttrTp>	[1..1]	CodeSet		502
	AttributeValue <AttrVal>	[1..1]	Text		503
	SerialNumber <SrlNb>	[1..1]	Binary		503
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		503
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		503
	EncryptedKey <NcrptdKey>	[1..1]	Binary		503
Or	KEK <KEK>	[1..1]			504
	Version <Vrsn>	[0..1]	Quantity		504
	KEKIdentification <KEKId>	[1..1]	±		504
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			504
	Algorithm <Algo>	[1..1]	CodeSet		505
	Parameter <Param>	[0..1]			507
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		507
	InitialisationVector <InltstnVctr>	[0..1]	Binary		508
	BytePadding <BPddg>	[0..1]	CodeSet		508
	EncryptedKey <NcrptdKey>	[0..1]	Binary		508
Or}	KeyIdentifier <Keyldr>	[1..1]	±		508
	MACAlgorithm <MACAlgo>	[1..1]	±		509
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		509
	MAC <MAC>	[1..1]	Binary		509

10.1.14.8.4 SignedData <SgndData>

Presence: [0..1]

Definition: Data protected by a digital signatures.

SignedData <SgndData> contains the following elements (see "[SignedData9](#)" on page 519 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		519
	DigestAlgorithm <DgstAlgo>	[0..*]	±		520
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		520
	Certificate <Cert>	[0..*]	Binary		520
	Signer <Sgnr>	[0..*]			520
	Version <Vrsn>	[0..1]	Quantity		521
	SignerIdentification <SgnrId>	[0..1]			521
{Or	IssuerAndSerialNumber <IssrAndSrnNb>	[1..1]			522
	Issuer <Issr>	[1..1]			522
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			522
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523
	SerialNumber <SrnNb>	[1..1]	Binary		523
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		523
	DigestAlgorithm <DgstAlgo>	[1..1]	±		523
	SignedAttributes <SgndAttrbts>	[0..*]			524
	Name <Nm>	[1..1]	Text		524
	Value <Val>	[0..1]	Text		524
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		524
	Signature <Sgntr>	[1..1]	Binary		525

10.1.14.8.5 DigestedData <DgstdData>

Presence: [0..1]

Definition: Data protected by a digest.

DigestedData <DgstdData> contains the following elements (see "DigestedData6" on page 512 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		513
	DigestAlgorithm <DgstAlgo>	[1..1]	±		513
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		513
	Digest <Dgst>	[1..1]	Binary		513

10.1.14.9 SignedData9

Definition: Digital signatures of data from one or several signers.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		519
	DigestAlgorithm <DgstAlgo>	[0..*]	±		520
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		520
	Certificate <Cert>	[0..*]	Binary		520
	Signer <Sgnr>	[0..*]			520
	Version <Vrsn>	[0..1]	Quantity		521
	SignerIdentification <SgnrId>	[0..1]			521
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			522
	Issuer <Issr>	[1..1]			522
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			522
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523
	SerialNumber <SrlNb>	[1..1]	Binary		523
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		523
	DigestAlgorithm <DgstAlgo>	[1..1]	±		523
	SignedAttributes <SgndAttrbts>	[0..*]			524
	Name <Nm>	[1..1]	Text		524
	Value <Val>	[0..1]	Text		524
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		524
	Signature <Sgntr>	[1..1]	Binary		525

10.1.14.9.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 600

10.1.14.9.2 DigestAlgorithm <DgstAlgo>

Presence: [0..*]

Definition: Identification of digest algorithm applied before signature.

DigestAlgorithm <DgstAlgo> contains the following elements (see "[AlgorithmIdentification36](#)" on page 525 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		525

10.1.14.9.3 EncapsulatedContent <NcpsltdCntt>

Presence: [0..1]

Definition: Data to sign.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 381 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		381
	Content <Cntt>	[0..1]	Binary		382

10.1.14.9.4 Certificate <Cert>

Presence: [0..*]

Definition: Chain of X.509 certificates.

Datatype: "Max5000Binary" on page 542

10.1.14.9.5 Signer <Sgnr>

Presence: [0..*]

Definition: Digital signature and identification of a signer.

Signer <Sgnr> contains the following **Signer8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		521
	SignerIdentification <SgnrId>	[0..1]			521
{Or	IssuerAndSerialNumber <IssrAndSriNb>	[1..1]			522
	Issuer <Issr>	[1..1]			522
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			522
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523
	SerialNumber <SriNb>	[1..1]	Binary		523
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		523
	DigestAlgorithm <DgstAlgo>	[1..1]	±		523
	SignedAttributes <SgndAttrbts>	[0..*]			524
	Name <Nm>	[1..1]	Text		524
	Value <Val>	[0..1]	Text		524
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		524
	Signature <Sgntr>	[1..1]	Binary		525

10.1.14.9.5.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the Cryptographic Message Syntax (CMS) data structure.

Datatype: "Number" on page 600

10.1.14.9.5.2 SignerIdentification <SgnrId>

Presence: [0..1]

Definition: Identification of the entity who has signed the data.

SignerIdentification <SgnrId> contains one of the following **Recipient13Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IssuerAndSerialNumber <IssrAndSrINb>	[1..1]			522
	Issuer <Issr>	[1..1]			522
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			522
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523
	SerialNumber <SrINb>	[1..1]	Binary		523
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		523

10.1.14.9.5.2.1 IssuerAndSerialNumber <IssrAndSrINb>

Presence: [1..1]

Definition: Certificate issuer name and serial number (see ITU X.509).

IssuerAndSerialNumber <IssrAndSrINb> contains the following **IssuerAndSerialNumber2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Issuer <Issr>	[1..1]			522
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			522
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523
	SerialNumber <SrINb>	[1..1]	Binary		523

10.1.14.9.5.2.1.1 Issuer <Issr>

Presence: [1..1]

Definition: Certificate issuer name (see X.509).

Issuer <Issr> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			522
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523

10.1.14.9.5.2.1.1.1 RelativeDistinguishedName <RltvDstngshdNm>

Presence: [1..*]

Definition: Relative distinguished name inside a X.509 certificate.

RelativeDistinguishedName <RltvDstngshdNm> contains the following
RelativeDistinguishedName1 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		523
	AttributeValue <AttrVal>	[1..1]	Text		523

10.1.14.9.5.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 553

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.1.14.9.5.2.1.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 603

10.1.14.9.5.2.1.2 SerialNumber <SrINb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 542

10.1.14.9.5.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 541

10.1.14.9.5.3 DigestAlgorithm <DgstAlgo>

Presence: [1..1]

Definition: Identification of a digest algorithm to apply before signature.

DigestAlgorithm <DgstAlgo> contains the following elements (see "[AlgorithmIdentification36](#)" on page 525 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		525

10.1.14.9.5.4 SignedAttributes <SgndAttrbts>

Presence: [0..*]

Definition: Collection of attributes that are signed.

SignedAttributes <SgndAttrbts> contains the following **GenericInformation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[1..1]	Text		524
	Value <Val>	[0..1]	Text		524

10.1.14.9.5.4.1 Name <Nm>

Presence: [1..1]

Definition: Name of the generic information to exchange.

Datatype: "[Max70Text](#)" on page 607

10.1.14.9.5.4.2 Value <Val>

Presence: [0..1]

Definition: Value of the generic information to exchange.

Datatype: "[Max140Text](#)" on page 603

10.1.14.9.5.5 SignatureAlgorithm <SgntrAlgo>

Presence: [1..1]

Definition: Cryptographic digital signature algorithm.

SignatureAlgorithm <SgntrAlgo> contains the following elements (see "[AlgorithmIdentification33](#)" on page 485 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		486
	Parameter <Param>	[0..1]			488
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		489
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		489
	SaltLength <SaltLngth>	[0..1]	Quantity		490
	TrailerField <TrlrFld>	[0..1]	Quantity		490
	OIDCurveName <OIDCrvNm>	[0..1]	Text		490

10.1.14.9.5.6 Signature <Sgntr>

Presence: [1..1]

Definition: Digital signature.

Datatype: "Max3000Binary" on page 541

10.1.14.10 AlgorithmIdentification36

Definition: Cryptographic algorithm and parameters of digests.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		525

10.1.14.10.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm26Code" on page 544

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).

CodeName	Name	Definition
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.14.11 AlgorithmIdentification31

Definition: Identification of a cryptographic algorithm and parameters for the MAC computation.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		526
	Parameter <Param>	[0..1]			528
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		529
	BytePadding <BPddg>	[0..1]	CodeSet		529

10.1.14.11.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the MAC algorithm.

Datatype: "Algorithm27Code" on page 544

CodeName	Name	Definition
MACC	RetailCBCMAC	Retail CBC (Chaining Block Cypher) MAC (Message Authentication Code) (cf. ISO 9807, ANSI X9.19) - (ASN.1 Object Identifier: id-retail-cbc-mac).
MCCS	RetailSHA256MAC	Retail-CBC-MAC with SHA-256 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-256).
CMA1	SHA256CMACwithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.
MCC1	RetailSHA1MAC	The DEPRECATED Retail-CBC-MAC with SHA-1 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-1).
CMA9	SHA384CMACwithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6,

CodeName	Name	Definition
		2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-384 digest of the message.
CMA5	SHA512CMACwithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-512 digest of the message.
CMA2	SHA256CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.
CM31	SHA3-256CMACWithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-256 digest of the message.
CM32	SHA3-384CMACWithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-384 digest of the message.
CM33	SHA3-512CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).

CodeName	Name	Definition
		The CMAC algorithm is computed on the SHA3-512 digest of the message.
MCS3	SHA3-256-3DESMAC	3DES CBC-MAC with SHA3-256 (SecureHash standard) and ISO/IEC9797-1 method 2 padding.
CCA1	CMACAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
CCA2	CMACAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
CCA3	CMACAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
S34C	SM3SM4CBC	ShangMi 4 enciphering method used in CBC mode coupled with ShangMi 3 hash function.
S34R	SM3SM4CTR	ShangMi 4 enciphering method used in CTR mode coupled with ShangMi 3 hash function.

10.1.14.11.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the MAC algorithm.

Parameter <Param> contains the following **Parameter7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InitialisationVector <InitIstnVctr>	[0..1]	Binary		529
	BytePadding <BPddg>	[0..1]	CodeSet		529

10.1.14.11.2.1 InitialisationVector <InitIstnVctr>

Presence: [0..1]

Definition: Initialisation vector of a cipher block chaining (CBC) mode encryption.

Datatype: "Max500Binary" on page 542

10.1.14.11.2.2 BytePadding <BPddg>

Presence: [0..1]

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Datatype: "BytePadding1Code" on page 557

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.1.14.12 ContentInformationType40

Definition: General cryptographic message syntax (CMS) containing encrypted data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		529
	EnvelopedData <EnvlpdData>	[1..1]	±		530

10.1.14.12.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "ContentType2Code" on page 562

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).

CodeName	Name	Definition
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.14.12.2 EnvelopedData <EnvlpdData>

Presence: [1..1]

Definition: Data protection by encryption or by a digital envelope, with an encryption key.

EnvelopedData <EnvlpdData> contains the following elements (see "EnvelopedData11" on page 469 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		471
	OriginatorInformation <OrgtrInf>	[0..1]			471
	Certificate <Cert>	[0..*]	Binary		471
	Recipient <Rcpt>	[1..*]			471
{Or	KeyTransport <KeyTrnsprt>	[1..1]			472
	Version <Vrsn>	[0..1]	Quantity		473
	RecipientIdentification <RcptId>	[1..1]			473
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			473
	Issuer <Issr>	[1..1]			474
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			474
	AttributeType <AttrTp>	[1..1]	CodeSet		474
	AttributeValue <AttrVal>	[1..1]	Text		475
	SerialNumber <SrlNb>	[1..1]	Binary		475
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		475
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		475
	EncryptedKey <NcrptdKey>	[1..1]	Binary		475
Or	KEK <KEK>	[1..1]			476
	Version <Vrsn>	[0..1]	Quantity		476
	KEKIdentification <KEKId>	[1..1]	±		476
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			476
	Algorithm <Algo>	[1..1]	CodeSet		477
	Parameter <Param>	[0..1]			479
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		479
	InitialisationVector <InitlstrVctr>	[0..1]	Binary		480
	BytePadding <BPddg>	[0..1]	CodeSet		480
	EncryptedKey <NcrptdKey>	[0..1]	Binary		480
Or}	KeyIdentifier <Keyldr>	[1..1]	±		480
	EncryptedContent <NcrptdCntt>	[0..1]			481
	ContentType <CnttTp>	[1..1]	CodeSet		481
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			481

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		482
	Parameter <Param>	[0..1]			484
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		484
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		485
	BytePadding <BPddg>	[0..1]	CodeSet		485
	EncryptedData <NcrptdData>	[1..1]	Binary		485

10.1.14.13 AlgorithmIdentification34

Definition: Mask generator function cryptographic algorithm and parameters.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		532
	Parameter <Param>	[0..1]			532
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		532

10.1.14.13.1 Algorithm <Algo>

Presence: [1..1]

Definition: Mask generator function cryptographic algorithm.

Datatype: "Algorithm8Code" on page 552

CodeName	Name	Definition
MGF1	MGF1	Generator Function, used for RSA encryption and RSA digital signature (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-mgf1).

10.1.14.13.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the mask generator function cryptographic algorithm.

Parameter <Param> contains the following **Parameter18** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		532

10.1.14.13.2.1 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Digest algorithm used in the mask generator function.

Datatype: "Algorithm26Code" on page 544

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.15 Synchronisation

10.1.15.1 ProcessTiming5

Definition: Parameters defining the timing conditions to process an action.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		534
	StartTime <StartTm>	[0..1]	DateTime		534
	EndTime <EndTm>	[0..1]	DateTime		534
	Period <Prd>	[0..1]	Text		534
	MaximumNumber <MaxNb>	[0..1]	Quantity		534
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		534

10.1.15.1.1 WaitingTime <WtgTm>

Presence: [0..1]

Definition: Waiting time after the previous action in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 608

10.1.15.1.2 StartTime <StartTm>

Presence: [0..1]

Definition: Date and time to start the action.

Datatype: "ISODatetime" on page 599

10.1.15.1.3 EndTime <EndTm>

Presence: [0..1]

Definition: Date and time after which the action cannot be processed.

Datatype: "ISODatetime" on page 599

10.1.15.1.4 Period <Prd>

Presence: [0..1]

Definition: Period delay between cyclic action activation in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 608

10.1.15.1.5 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of cyclic calls.

Datatype: "Number" on page 600

10.1.15.1.6 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 596

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOUR	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.
YEAR	Year	Time unit is year.

10.1.15.2 ProcessTiming6

Definition: Parameters defining the timing conditions to process an action.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		535
	EndTime <EndTm>	[0..1]	DateTime		535
	Period <Prd>	[0..1]	Text		535
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		535

10.1.15.2.1 StartTime <StartTm>

Presence: [0..1]

Definition: Date and time to start the action.

Datatype: "ISODatetime" on page 599

10.1.15.2.2 EndTime <EndTm>

Presence: [0..1]

Definition: Date and time after which the action cannot be processed.

Datatype: "ISODatetime" on page 599

10.1.15.2.3 Period <Prd>

Presence: [0..1]

Definition: Period delay between cyclic action activation in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 608

10.1.15.2.4 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 596

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOUR	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.
YEAR	Year	Time unit is year.

10.1.15.3 ProcessRetry3

Definition: Definition of retry process if activation of an action fails.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		536
	MaximumNumber <MaxNb>	[0..1]	Quantity		536
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		536

10.1.15.3.1 Delay <Dely>

Presence: [1..1]

Definition: Time period to wait for a retry in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 608

10.1.15.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of retries.

Datatype: "Number" on page 600

10.1.15.3.3 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 596

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOUR	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.

CodeName	Name	Definition
YEAR	Year	Time unit is year.

10.1.16 Token

10.1.16.1 Token1

Definition: Unencrypted sensitive data of a token.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentToken <PmtTkn>	[0..1]	Text		537
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		537
	TokenRequestorIdentification <TknRqstrld>	[0..1]	Text		537
	TokenAssuranceData <TknAssrncData>	[0..1]	Text		537
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		537
	TokenInitiatedIndicator <TknInittdInd>	[0..1]	Indicator		538

10.1.16.1.1 PaymentToken <PmtTkn>

Presence: [0..1]

Definition: Surrogate value of the PAN.

Datatype: "Max19NumericText" on page 603

10.1.16.1.2 TokenExpiryDate <TknXpryDt>

Presence: [0..1]

Definition: Expiry date of the payment token.

ISO 8583 bit 14.

Datatype: "Exact4NumericText" on page 602

10.1.16.1.3 TokenRequestorIdentification <TknRqstrld>

Presence: [0..1]

Definition: Identification of a party requesting a token.

Datatype: "Max11NumericText" on page 602

10.1.16.1.4 TokenAssuranceData <TknAssrncData>

Presence: [0..1]

Definition: Supporting information for the Token Assurance Method.

Datatype: "Max140Text" on page 603

10.1.16.1.5 TokenAssuranceMethod <TknAssrncMtd>

Presence: [0..1]

Definition: Value that allows a Token Service Provider to indicate the identification and verification performed representing the binding of the payment token to the underlying PAN and cardholder.

Datatype: "Max2NumericText" on page 604

10.1.16.1.6 TokenInitiatedIndicator <TknInittldInd>

Presence: [0..1]

Definition: Original transaction was initiated by Token.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 600):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.16.2 MerchantToken2

Definition: Merchant token information.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Token <Tkn>	[0..1]	Text		538
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		538
	TokenCharacteristic <TknChrtc>	[0..*]	Text		538
	TokenRequestor <TknRqstr>	[0..1]			539
	ProviderIdentification <PrvdrlId>	[1..1]	Text		539
	RequestorIdentification <Rqstrld>	[1..1]	Text		539
	TokenAssuranceLevel <TknAssrncLvl>	[0..1]	Quantity		539
	TokenAssuranceData <TknAssrncData>	[0..1]	Binary		539
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		539
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		539

10.1.16.2.1 Token <Tkn>

Presence: [0..1]

Definition: Surrogate value of the PAN.

Datatype: "Max35Text" on page 605

10.1.16.2.2 TokenExpiryDate <TknXpryDt>

Presence: [0..1]

Definition: Expiration date of the payment token that is generated by and maintained in the token vault.

Datatype: "Max10Text" on page 602

10.1.16.2.3 TokenCharacteristic <TknChrtc>

Presence: [0..*]

Definition: Additional payment token information.

Datatype: ["Max35Text" on page 605](#)

10.1.16.2.4 TokenRequestor <TknRqstr>

Presence: [0..1]

Definition: Identifier of a token provider requestor.

TokenRequestor <TknRqstr> contains the following **PaymentTokenIdentifiers1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProviderIdentification <PrvdrId>	[1..1]	Text		539
	RequestorIdentification <RqstrId>	[1..1]	Text		539

10.1.16.2.4.1 ProviderIdentification <PrvdrId>

Presence: [1..1]

Definition: Identifier of the token provider.

Datatype: ["Max35Text" on page 605](#)

10.1.16.2.4.2 RequestorIdentification <RqstrId>

Presence: [1..1]

Definition: Identifier of the token requestor.

Datatype: ["Max35Text" on page 605](#)

10.1.16.2.5 TokenAssuranceLevel <TknAssrncLvl>

Presence: [0..1]

Definition: Level of confidence resulting of the identification and authentication of the cardholder performed and the entity that performed it.

Datatype: ["Number" on page 600](#)

10.1.16.2.6 TokenAssuranceData <TknAssrncData>

Presence: [0..1]

Definition: Information about the identification and verification of the cardholder.

Datatype: ["Max500Binary" on page 542](#)

10.1.16.2.7 TokenAssuranceMethod <TknAssrncMtd>

Presence: [0..1]

Definition: Value that allows a Token Service Provider to indicate the identification and verification performed representing the binding of the payment token to the underlying PAN and cardholder.

Datatype: ["Max2NumericText" on page 604](#)

10.1.16.2.8 TokenInitiatedIndicator <TknInittIdnd>

Presence: [0..1]

Definition: Original transaction was initiated by Token.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 600](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.2 Message Datatypes

10.2.1 Amount

10.2.1.1 ImpliedCurrencyAndAmount

Definition: Number of monetary units specified in a currency where the unit of currency is implied by the context and compliant with ISO 4217. The decimal separator is a dot.

Note: a zero amount is considered a positive amount.

Type: Amount

Format

minInclusive	0
totalDigits	18
fractionDigits	5

10.2.2 Binary

10.2.2.1 Max10000Binary

Definition: Specifies a binary string with a maximum length of 10000 binary bytes.

Type: Binary

Format

minLength	1
maxLength	10000

10.2.2.2 Max100KBinary

Definition: Binary data of 100K maximum.

Type: Binary

Format

minLength	1
maxLength	102400

10.2.2.3 Max10KBinary

Definition: Binary data of 10K maximum.

Type: Binary

Format

minLength	1
maxLength	10240

10.2.2.4 Max140Binary

Definition: Specifies a binary string with a maximum length of 140 binary bytes.

Type: Binary

Format

minLength	1
maxLength	140

10.2.2.5 Max2KBinary

Definition: Binary data of 2K maximum.

Type: Binary

Format

minLength	1
maxLength	2048

10.2.2.6 Max2MBBinary

Definition: Binary data of 2MB maximum.

Type: Binary

Format

minLength	1
maxLength	2097152

10.2.2.7 Max3000Binary

Definition: Specifies a binary string with a maximum length of 3000 binary bytes.

Type: Binary

Format

minLength	1
maxLength	3000

10.2.2.8 Max35Binary

Definition: Specifies a binary string with a maximum length of 35 binary bytes.

Type: Binary

Format

minLength	1
maxLength	35

10.2.2.9 Max5000Binary

Definition: Specifies a binary string with a maximum length of 5000 binary bytes.

Type: Binary

Format

minLength	1
maxLength	5000

10.2.2.10 Max500Binary

Definition: Specifies a binary string with a maximum length of 500 binary bytes.

Type: Binary

Format

minLength	1
maxLength	500

10.2.2.11 Min1Max256Binary

Definition: Specifies a binary string with a minimum length of 1 byte, and a maximum length of 256 bytes.

Type: Binary

Format

minLength	1
maxLength	256

10.2.2.12 Min5Max16Binary

Definition: Specifies a binary string with a minimum length of 5 bytes, and a maximum length of 16 bytes.

Type: Binary

Format

minLength	5
maxLength	16

10.2.3 CodeSet

10.2.3.1 ActiveCurrencyCode

Definition: A code allocated to a currency by a Maintenance Agency under an international identification scheme as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

Type: CodeSet

Format

pattern [A-Z]{3,3}

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.2.3.2 ActiveOrHistoricCurrencyCode

Definition: A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

Type: CodeSet

Format

pattern [A-Z]{3,3}

Constraints

- **ActiveOrHistoricCurrency**

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

10.2.3.3 AddressType2Code

Definition: Specifies the type of address.

Type: CodeSet

CodeName	Name	Definition
ADDR	Postal	Address is the complete postal address.
PBOX	POBox	Address is a postal office (PO) box.
HOME	Residential	Address is the home address.
BIZZ	Business	Address is the business address.

CodeName	Name	Definition
MLTO	MailTo	Address is the address to which mail is sent.
DLVY	DeliveryTo	Address is the address to which delivery is to take place.

10.2.3.4 Algorithm26Code

Definition: Identification of a digest algorithm.

Type: CodeSet

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.2.3.5 Algorithm27Code

Definition: Cryptographic algorithms for the MAC (Message Authentication Code).

Type: CodeSet

CodeName	Name	Definition
MACC	RetailCBCMAC	Retail CBC (Chaining Block Cypher) MAC (Message Authentication Code) (cf. ISO 9807, ANSI X9.19) - (ASN.1 Object Identifier: id-retail-cbc-mac).
MCCS	RetailSHA256MAC	Retail-CBC-MAC with SHA-256 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-256).
CMA1	SHA256CMACwithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.
MCC1	RetailSHA1MAC	The DEPRECATED Retail-CBC-MAC with SHA-1 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-1).
CMA9	SHA384CMACwithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-384 digest of the message.
CMA5	SHA512CMACwithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-512 digest of the message.
CMA2	SHA256CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.

CodeName	Name	Definition
CM31	SHA3-256CMACWithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-256 digest of the message.
CM32	SHA3-384CMACWithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-384 digest of the message.
CM33	SHA3-512CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-512 digest of the message.
MCS3	SHA3-256-3DESMAC	3DES CBC-MAC with SHA3-256 (SecureHash standard) and ISO/IEC9797-1 method 2 padding.
CCA1	CMACAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
CCA2	CMACAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).

CodeName	Name	Definition
CCA3	CMACAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
S34C	SM3SM4CBC	ShangMi 4 enciphering method used in CBC mode coupled with ShangMi 3 hash function.
S34R	SM3SM4CTR	ShangMi 4 enciphering method used in CTR mode coupled with ShangMi 3 hash function.

10.2.3.6 Algorithm28Code

Definition: Cryptographic algorithms for the protection of transported keys.

Type: CodeSet

CodeName	Name	Definition
EA2C	AES128CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DC	DES112CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with double length key (112 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) algorithm, as specified in ANSI X9.24-2009 Annex A.
UKPT	UKPT	UKPT (Unique Key Per Transaction) or Master Session Key key encryption - (ASN.1 Object Identifier: id-ukpt-wrap).
UKA2	UKPTwithAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9C	AES192CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).

CodeName	Name	Definition
EA5C	AES256CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
DA12	AESDUKPT128ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A, With key length of 128 bits.
DA19	AESDUKPT192ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 192 bits.
DA25	AESDUKPT256ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 256 bits.
N108	Nist800-108KeyDerivation	Key Derivation according to the Special Publication from the NIST entitled 800-108.
EA5R	AES256CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9R	AES192CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA2R	AES128CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DR	DES112CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with double length key (112 Bit) as defined in FIPS SP 800-38a.
E36C	DES168CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with triple length key (168 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
E36R	DES168CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with triple length key (168 Bit) as defined in FIPS SP 800-38a.
SD5C	SDE056CBC	The DEPRECATED Simple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with simple

CodeName	Name	Definition
		length key (56 Bit) as defined in FIPS PUB 81 - (ASN.1 Object Identifier: des- cbc).
UKA1	UKPTwithAES128	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA3	UKPTwithAES256	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
SM4C	SM4CBC	ShangMi 4 enciphering method used in CBC mode.
SM4R	SM4CTR	ShangMi 4 enciphering method used in CTR mode.

10.2.3.7 Algorithm29Code

Definition: Cryptographic algorithms for digital signatures.

Type: CodeSet

CodeName	Name	Definition
ERS2	SHA256WithRSA	Signature algorithms with RSA, using SHA-256 digest algorithm - (ASN.1 Object Identifier: sha256WithRSAEncryption).
ERS1	SHA1WithRSA	The DEPRECATED Signature algorithms with RSA (PKCS #1 version 2.1), using SHA-1 digest algorithm - (ASN.1 Object Identifier: sha1WithRSAEncryption).
RPSS	RSASSA-PSS	Signature algorithm with Appendix, Probabilistic Signature Scheme (PKCS #1 version 2.1), - (ASN.1 Object Identifier: id-RSASSA-PSS).
ERS3	SHA3-256WithRSA	Signature algorithms with RSA, using SHA3-256 digest algorithm. (ASN.1 Object Identifier: id-rsassa-pkcs1-v1-5-with-sha3-256).
ED32	EcdsaSha3-256	Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ED33	EcdsaSha3-384	Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.

CodeName	Name	Definition
ED35	EcdsaSha3-512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ED23	EcdsaSha384	Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ED25	EcdsaSha512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ES22	EcsdsaSha256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
ES32	EcsdaSha3-256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ES33	EcsdsaSha3-384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
ES35	EcsdsaSha3-512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ES23	EcsdsaSha384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ES25	EcsdsaSha512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ED22	EcdsaSha256	Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EF32	EcfdsdaSha3-256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EF22	EcfdsdaSha256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EF33	EcfdsdaSha3-384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF35	EcfdsdaSha3-512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EF23	EcfdsdaSha384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO33	EcosdsaSha3-384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF25	EcfdsdaSha512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.

CodeName	Name	Definition
EO32	EcosdaSha3-256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EO22	EcosdsaSha256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EO35	EcosdsaSha3-512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EO23	EcosdsaSha384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO25	EcosdsaSha512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
DD22	EddsaSha256	Edward Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
DD32	EddsaSha3-256	Edward Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
DD33	EddsaSha3-384	Edward Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
DD35	EddsaSha3-512	Edward Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
DD23	EddsaSha384	Edward Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
DD25	EddsaSha512	Edward Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
SM22	SM2Sha256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
SM33	SM2Sha3-384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
SM32	SM2Sha3-256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
SM35	SM2Sha3-512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
SM23	SM2Sha384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
SM25	SM2Sha512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.

CodeName	Name	Definition
S2S3	SM2SM3	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with ShangMi3 Digest Algorithm.

10.2.3.8 Algorithm7Code

Definition: Asymmetric encryption algorithm of a transport key.

Type: CodeSet

CodeName	Name	Definition
ERSA	RSAEncryption	RSA encryption algorithm - (ASN.1 Object Identifier: rsaEncryption).
RSAO	RSAES-OAEP	RSA encryption scheme based on Optimal Asymmetric Encryption scheme (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-RSAES-OAEP).

10.2.3.9 Algorithm8Code

Definition: Mask generator functions of the RSAES-OAEP encryption algorithm (RSA Encryption Scheme: Optimal Asymmetric Encryption Padding).

Type: CodeSet

CodeName	Name	Definition
MGF1	MGF1	Generator Function, used for RSA encryption and RSA digital signature (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-mgf1).

10.2.3.10 AmountUnit1Code

Definition: Unit of a amount (for loyalty or account).

Type: CodeSet

CodeName	Name	Definition
MONE	Monetary	The amount is expressed in a monetary value in a currency.
POIN	Point	The amount is expressed in point.

10.2.3.11 AttendanceContext1Code

Definition: Human attendance at the POI location during the transaction.

Type: CodeSet

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.

CodeName	Name	Definition
UATT	Unattended	Unattended payment, no attendant present.

10.2.3.12 AttributeType1Code

Definition: Type of attribute of a distinguished name (DN).

Type: CodeSet

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.2.3.13 AttributeType2Code

Definition: Attributes of certificate extensions.

Type: CodeSet

CodeName	Name	Definition
EMAL	EmailAddress	Email address of the certificate subject.
CHLG	ChallengePassword	Password by which an entity may request certificate revocation.

10.2.3.14 AuthenticationEntity2Code

Definition: Entity or device that has performed the verification.

Type: CodeSet

CodeName	Name	Definition
ICCD	ICC	Application in the chip card (Integrated Circuit Card), for instance an offline PIN verification.
AGNT	AuthorisedAgent	Authorisation agent of the issuer.
MERC	Merchant	Merchant (for example signature verification by the attendant).
ACQR	Acquirer	Acquirer of the transaction.
ISSR	Issuer	Card issuer.
TRML	Terminal	Secure application in the terminal.

10.2.3.15 AuthenticationMethod6Code

Definition: Methods used to authenticate a person or a card.

Type: CodeSet

CodeName	Name	Definition
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).
PPSG	PaperSignature	Handwritten paper signature.
PSWD	Password	Authentication by a password.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).
ADDB	BillingAddressVerification	Cardholder billing address verification.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
MANU	ManualVerification	Manual verification, for example passport or drivers license.
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.

10.2.3.16 AuthenticationMethod8Code

Definition: Method to authenticate the customer or its card.

Type: CodeSet

CodeName	Name	Definition
TOKA	AuthenticationToken	A token is used to verify an already performed authentication.
ADDB	BillingAddressVerification	Cardholder billing address verification.
BYPS	Bypass	Authentication bypassed by the merchant.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
MANU	ManualVerification	Manual verification, for example passport or drivers license.
MERC	MerchantAuthentication	Merchant-related authentication.
MOBL	Mobile	Customer mobile device.
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).
OTHR	Other	Other customer authentication.
PPSG	PaperSignature	Handwritten paper signature.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.
PSWD	Password	Authentication by a password.
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).

CodeName	Name	Definition
TOKN	TokenAuthentication	Cryptogram generated by the token requestor or a customer device to validate the authorised use of a token.
UKNW	UnknownMethod	Authentication method is performed unknown.

10.2.3.17 AuthenticationResult1Code

Definition: Specifies the result of authentication done.

Type: CodeSet

CodeName	Name	Definition
DENY	Denial	The authentication didn't succeed.
MRCH	MerchantNotEnroled	Merchant not enrolled in the authentication programme.
CARD	NonParticipation	The card does not participate in the authentication programme.
AUTH	UnableToAuthenticate	The authentication couldn't be carried out.
CRPT	WithCryptogram	Authentication succeeded with a cryptogram.
UCRP	WithoutCryptogram	Authentication succeeded without a cryptogram.

10.2.3.18 BarcodeType1Code

Definition: Type of BarCode coding.

Type: CodeSet

CodeName	Name	Definition
COQR	BarcodeEncodedAs2DQRCode	Barcode encoded according to the 2Dimensions Quick Response Code Standard.
C128	BarcodeEncodedAsCode128	Barcode encoded according to the Code 128 standard.
C025	BarcodeEncodedAsCode25	Barcode encoded according to the Code 25 standard.
C039	BarcodeEncodedAsCode39	Barcode encoded according to the Code 39 standard.
EA13	BarcodeEncodedAsEA13	Barcode encoded according to the EAN13 standard.
EAN8	BarcodeEncodedAsEAN8	Barcode encoded according to the EAN8 standard.
P417	BarcodeEncodedAsPDF417	Barcode encoded according to the PDF417 standard.
UPCA	BarcodeEncodedAsUPCA	Barcode encoded according to the UPCA standard.

10.2.3.19 BatchTransactionType1Code

Definition: Type of transactions to include in a batch transfer.

Type: CodeSet

CodeName	Name	Definition
DTCT	DebitCredit	Debit and credit transactions.
CNCL	Cancellation	Cancellation of a previous transaction.
FAIL	Failed	Failed transactions.
DCLN	Declined	Declined transactions.

10.2.3.20 BusinessArea2Code

Definition: Specifies the business context of the transaction

Type: CodeSet

CodeName	Name	Definition
AIBD	ArtificialIntelligenceBasedDecision	The payment is initiated by an artificial intelligence based decision.
PPAY	PlainPayment	The card is used to perform a plain payment.
TKNF	TransitKnownFare	The card is used in a Transit business case where the fare amount is known when the transaction is initiated.
EOPT	EnergyOpenPayment	Indicates when the card is used in an energy business case where the amount could not be assessed when the transaction is initiated.
TOPT	TransitOpenPayment	Indicates when the card is used in a transit business case where the fare amount is not known when the transaction is initiated.

10.2.3.21 BytePadding1Code

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Type: CodeSet

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.

CodeName	Name	Definition
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.2.3.22 CancellationProcess2Code

Definition: Configuration of the exchanges to perform the cancellation of a payment transaction.

Type: CodeSet

CodeName	Name	Definition
ADVC	Advice	Card payment transaction may be cancelled by an advice only before closure of the reconciliation period or before the capture by batch.
NALW	NotAllowed	Card payment transaction cannot be cancelled by the acquirer.
REQU	Request	Card payment transaction may also be cancelled after the closure of the reconciliation period or after the capture by batch. In this case a cancellation request exchange is required.
APPL	ApplicationLevel	Cancellation of the Card payment transaction is defined by the payment application.

10.2.3.23 CAPEEncodingMode1Code

Definition: Mode of data encoding supported by exchanges.

Type: CodeSet

CodeName	Name	Definition
XMLE	XMLEncoding	Data exchanged with the protocol between both parties are encoded in XML.
JSON	JSONEncoding	Data exchanged with the protocol between both parties are encoded in JSON.

10.2.3.24 CAPEExchangeMode1Code

Definition: Type of exchange supported by a host.

Type: CodeSet

CodeName	Name	Definition
APIE	ExchangeByAPI	With this protocol, the communication is done through calls to API.
MSGE	ExchangeByMessage	With this protocol, the communication is done through message exchanges.

10.2.3.25 CardDataReading5Code

Definition: Type of reading of the card data.

Type: CodeSet

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.2.3.26 CardDataReading8Code

Definition: Type of reading of the card data.

Type: CodeSet

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.

CodeName	Name	Definition
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.2.3.27 CardFallback1Code

Definition: Information about card entry mode fallback.

Type: CodeSet

CodeName	Name	Definition
FFLB	FallbackAfterFailure	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal failed.
SFLB	FallbackAfterSuccess	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal was successful.
NFLB	NoFallback	No card fall-back during the transaction in progress.

10.2.3.28 CardholderVerificationCapability4Code

Definition: Cardholder verification capabilities by the terminal.

Type: CodeSet

CodeName	Name	Definition
APKI	AccountDigitalSignature	Account based digital signature.
CHDT	CardholderData	Cardholder authentication data.
MNSG	ManualSignature	Manual signature verification.
MNVR	ManualVerification	Other manual verification, for example passport or drivers license.
FBIG	OfflineBiographics	Offline biographics.
FBIO	OfflineBiometrics	Offline biometrics.
FDSG	OfflineDigitalSignature	Offline digital signature analysis.
FCPN	OfflinePINClear	Offline PIN in clear (Personal Identification Number).
FEPN	OfflinePINEncrypted	Offline PIN encrypted (Personal Identification Number).
NPIN	OnLinePIN	Online PIN (Personal Identification Number).
PKIS	PKISignature	PKI (Public Key Infrastructure) based digital signature.
SCEC	SecureElectronicCommerce	Three domain secure (three domain secure authentication of the cardholder).
NBIO	OnLineBiometrics	Online biometrics.

CodeName	Name	Definition
NOVF	NoCapabilities	No cardholder verification capability.
OTHR	Other	Other cardholder verification capabilities.

10.2.3.29 CardIdentificationType1Code

Definition: Type of account identification.

Type: CodeSet

CodeName	Name	Definition
ACCT	AccountNumber	Account identification.
BARC	BarCode	Bar-code with a specific form of identification.
ISO2	ISOTrack2	ISO Track 2 including identification.
PHON	PhoneNumber	A phone number identifies the account on which the phone card is assigned.
CPAN	PrimaryAccountNumber	Standard card identification (card number).
PRIV	PrivativeNumbering	An identification set by a privative application.
UUID	UniversalUniqueIdentification	A Universal Unique Identification code is set for identification.

10.2.3.30 CardPaymentServiceType10Code

Definition: Requested certificate management service.

Type: CodeSet

CodeName	Name	Definition
CRTC	CreateCertificate	Creation of an X.509 certificate with the public key and the information of the owner of the asymmetric key provided by the requestor.
CRTR	RenewCerificate	Renewal of an X.509 certificate, protected by the certificate to renew.
CRTK	RevokeCertificate	Revocation of an active X.509 certificate.
WLSR	RemoveWhiteList	Remove a POI from the white list of the terminal manager.
WLSA	AddWhiteList	Add a POI in the white list of the terminal manager.

10.2.3.31 CardProductType1Code

Definition: Type of card product.

Type: CodeSet

CodeName	Name	Definition
COMM	CommercialCard	Cards issued as a means of business expenditure, for instance business card

CodeName	Name	Definition
		or corporate card. The user could be a company, an individual for business expenses or a self employed for business purposes.
CONS	ConsumerCard	Cards issued as a means of personal expenditure. The user is always an individual.

10.2.3.32 CheckType1Code

Definition: Type of bank check.

Type: CodeSet

CodeName	Name	Definition
BANK	BankCheck	The check is guaranteed by a bank.
BUSI	BusinessCheck	The check belongs to a Company or a professional entity.
GOVC	GovernmentCheck	Check issued by Government.
PAYR	PayrollCheck	Check issued by a company for the employees.
PERS	PersonalCheck	The check belongs to an individual.

10.2.3.33 ContentType2Code

Definition: Identification of the type of a Cryptographic Message Syntax (CMS) data structure.

Type: CodeSet

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.2.3.34 CountryCode

Definition: Code to identify a country, a dependency, or another area of particular geopolitical interest, on the basis of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

Type: CodeSet

Format

pattern [A-Z]{2,2}

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.2.3.35 CryptographicKeyType3Code

Definition: Codes for qualifying the type of cryptographic keys.

Type: CodeSet

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).

10.2.3.36 DataSetCategory10Code

Definition: Maintenance services provided by a terminal manager.

Type: CodeSet

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
MTMG	MasterTerminalManager	The terminal manager is the master.

CodeName	Name	Definition
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
MTOR	Monitoring	Monitoring of the terminal estate.
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.

10.2.3.37 DataSetCategory19Code

Definition: Maintenance service to delegate.

Type: CodeSet

CodeName	Name	Definition
ACQP	AcquirerProtocolParameters	Configuration parameters of the payment acquirer protocol.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
APSB	ApplicationParametersSubsetCreation	Creation of a subset of the configuration parameters of an application.
KDWL	KeyDownload	Download of cryptographic keys with the related information.
KMGT	KeyManagement	Activate, deactivate or revoke loaded cryptographic keys.
RPRT	Reporting	Reporting on activity, status and error of a point of interaction.
SWPK	SoftwareModule	Software module.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.

CodeName	Name	Definition
LOGF	LogFile	Any repository used for recording log traces.
RPFL	ReportFile	Report file generated by the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
TPKG	TerminalPackages	Package (e.g. software library) related to a POIComponent or the POI System.

10.2.3.38 DataSetCategory20Code

Definition: Category of data set.

Type: CodeSet

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.

CodeName	Name	Definition
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
PROB	Probe	Probe used to monitor a feature on the POI.

10.2.3.39 DocumentType7Code

Definition: Specifies a type of financial or commercial document.

Type: CodeSet

CodeName	Name	Definition
JNRL	Journal	When the POI or the Sale System wants to store a message on the journal printer or electronic journal of the Sale Terminal (it is sometimes a Sale Logging/Journal Printer).
CRCP	CustomerReceipt	When the Sale System requires the POI system to print the Customer receipt.
HRCP	CashierReceipt	When the Sale system print the Cashier copy of the Payment receipt.
SRCP	SaleReceipt	When the Sale System requires the POI system to print the Sale receipt.
RPIN	RelatedPaymentInstruction	Document is a linked payment instruction to which the current payment instruction is related, for example, in a cover scenario.
VCHR	Voucher	Document is an electronic payment document.

10.2.3.40 EncryptionFormat2Code

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Type: CodeSet

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.2.3.41 ExchangePolicy2Code

Definition: Exchange policy between parties.

Type: CodeSet

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.2.3.42 Exemption1Code

Definition: Strong customer authentication exemption.

Type: CodeSet

CodeName	Name	Definition
LOWA	LowAmountExemption	Transaction's amount is low and could be processed without strong customer authentication.
MINT	MerchantInitiatedTransaction	Transaction is initiated by the Card Acceptor.

CodeName	Name	Definition
RECP	RecurringPayment	Transaction is one of a series of recurring payment.
SCPE	SecureCorporatePaymentExemption	Transaction is a secure corporate payment.
SCAD	StrongCustomerAuthenticationDelegation	Card Acceptor is a strong customer authentication delegate.
TRAE	TransactionRiskAnalysisExemption	According to the transaction risk analysis the strong customer authentication is not mandated.
PKGE	TransportFareOrParkingFeeUnattendedPaymentExemption	Payment is processed in a environment where strong customer authentication is inappropriate.
TMBE	TrustedMerchantBeneficiaryExemption	Cardholder has enrolled the Card Acceptor in the exemption list of strong customer authentication.

10.2.3.43 ExternalAccountIdentification1Code

Definition: Specifies the external account identification scheme name code in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.44 ExternalCashAccountType1Code

Definition: Specifies the nature, or use, of the cash account in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.45 ExternalOrganisationIdentification1Code

Definition: Specifies the external organisation identification scheme name code in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.46 ExternalPersonIdentification1Code

Definition: Specifies the external person identification scheme name code in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.47 ExternalProxyAccountType1Code

Definition: Specifies the external proxy account type code, as published in the proxy account type external code set.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.48 FinancialCapture1Code

Definition: Mode for the financial capture of the transaction by the acquirer.

Type: CodeSet

CodeName	Name	Definition
AUTH	Authorisation	Financial capture of the transaction is performed by the acquirer during the authorisation exchange.
COMP	Completion	Financial capture of the transaction is performed by the acquirer during the completion exchange.

CodeName	Name	Definition
BTCH	Batch	Financial capture of the transaction is performed by the acquirer at the reception of a batch transfer.

10.2.3.49 InformationQualify1Code

Definition: Qualification of the information to sent to an output logical device, to display or print to the Cashier or the Customer.

Type: CodeSet

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.2.3.50 InputCommand1Code

Definition: Type of requested input

Type: CodeSet

CodeName	Name	Definition
DCSG	DecimalString	Wait for a string of digit characters with a decimal point, the length range could be specified.
DGSG	DigitString	Wait for a string of digit characters.
GAKY	GetAnyKey	Wait for a key pressed on the Terminal, to be able to read the message displayed on the Terminal.
GCNF	GetConfirmation	Wait for a confirmation Yes (Y) or No (N) on the Sale System. Wait for a confirmation (Valid or Cancel button) on the POI Terminal. The result of the command is a Boolean: True or False.
GFKY	GetFunctionKey	Wait for a function key pressed on the Terminal: From POI, Valid, Clear, Correct, Generic Function key number. From Sale, Generic Function key.
GMNE	GetMenuEntry	To choose an entry among a list of entries (all of them are not necessary selectable). The OutputFormat has to be MenuEntry.
PSWD	Password	Request to enter a password with masked characters while typing the password.
SITE	SiteManager	Wait for a confirmation Yes (Y) or No (N) of the Site Manager on the Sale System.
TXSG	TextString	Wait for a string of alphanumeric characters.
HTML	XHTMLText	Wait for a XHTML data.
SIGN	Signature	Request to wait for signature.

10.2.3.51 ISO3NumericCountryCode

Definition: Code to identify a country, a dependency, or another area of particular geopolitical interest, on the basis of country names obtained from the United Nations (ISO 3166, Numeric-3 code). The code is checked against the list of country names coded with three digit characters, defined in the standard.

Type: CodeSet

Format

pattern [0-9]{3,3}

10.2.3.52 KeyUsage1Code

Definition: Allowed usages of the key.

Type: CodeSet

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.

CodeName	Name	Definition
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslateInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

10.2.3.53 LanguageCode

Definition: Specifies a language.

Type: CodeSet

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.2.3.54 LocationCategory3Code

Definition: Indicates the type of integration of the POI terminal in the sale environment.

Type: CodeSet

CodeName	Name	Definition
INDR	Indoor	Indoor terminal.
IPMP	InsidePump	Terminal incorporated in the pump dispensing petrol.
MPOI	MultiplePOITerminal	Multiple terminals linked to a unique sale terminal.

CodeName	Name	Definition
MPMP	MultiplePump	Outdoor terminal serving several petrol pumps.
MSLE	MultipleSaleTerminal	Terminal serving multiple sale terminals.
SSLE	SingleSaleTerminal	Terminal linked to a unique sale terminal.
VNDG	VendingMachine	Terminal integrated in a vending machine.

10.2.3.55 LocationCategory4Code

Definition: Indicates the type of integration of the POI terminal in the sale environment.

Type: CodeSet

CodeName	Name	Definition
ABRD	Aboard	Aboard is used when the sale is done in a vehicle (e.g a bus, train, ship, airplane, taxi, etc).
NMDC	Nomadic	Nomadic is used when the merchant is traveling to different locations (e.g fair or sport events, home delivery, food truck).
FIXD	PhysicalShop	Fixed location, for example in a shop.
VIRT	VirtualShop	Virtual Shop is used for any ecommerce solution.

10.2.3.56 LoyaltyHandling1Code

Definition: Possible types of Loyalty processing.

Type: CodeSet

CodeName	Name	Definition
ALLO	Allowed	The loyalty is accepted, but the POI has not to require or ask a loyalty card. The loyalty is involved by the payment card (e.g. an hybrid or linked card).
DENY	Forbidden	No loyalty card to read and loyalty transaction to process. Any attempt to enter a pure loyalty card is rejected.
PRCS	Processed	The loyalty transaction is already processed, no loyalty card or loyalty transaction to process.
PROP	Proposed	The loyalty is accepted, and the POI has to ask a loyalty card. If the Customer does not enter a loyalty card, no loyalty transaction is realised.
REQU	Required	The loyalty is required, and the POI refuses the processing of the message request if the cardholder does not enter a loyalty card.

10.2.3.57 MemoryUnit1Code

Definition: Unit of the memory size.

Type: CodeSet

CodeName	Name	Definition
BYTE	Byte	Byte.
EXAB	ExaByte	Exa byte.
GIGA	GigaByte	Giga byte.
KILO	KiloByte	Kilo byte.
MEGA	MegaByte	Mega byte.
PETA	PetaByte	Peta byte.
TERA	TeraByte	Tera byte.

10.2.3.58 MessageFunction47Code

Definition: Type of message supporting a service.

Type: CodeSet

CodeName	Name	Definition
FAUQ	FinancialAuthorisationRequest	Request for authorisation with financial capture.
CCAQ	CancellationRequest	Request for cancellation.
CMPV	CompletionAdvice	Advice for completion without financial capture.
DGNP	DiagnosticRequest	Request for diagnostic.
RCLQ	ReconciliationRequest	Request for reconciliation.
CCAV	CancellationAdvice	Advice for cancellation.
BTCH	BatchTransfer	Transfer the financial data as a collection of transction.
FRVA	FinancialReversalAdvice	Advice for reversal with financial capture.
AUTQ	AuthorisationRequest	The initiator requests an authorisation without financial impact to complete the transaction.
FCMV	FinancialCompletionAdvice	Advice for completion with financial capture.
DCCQ	CurrencyConversionRequest	Request for dynamic currency conversion.
RVRA	ReversalAdvice	Advice for reversal without financial capture.
DCAV	CurrencyConversionAdvice	Advice for dynamic currency conversion.
TRNA	TransactionAdvice	Advise of the transaction's processing.
NFRQ	NonFinancialRequest	Initiator of the message requests additional information to the receiver.

CodeName	Name	Definition
TRPQ	TransactionReportRequest	Request to receive of a report of transaction from the issuer to the receiver.
ATAF	AcceptorToAcquirerBatchFileExchange	Concatenation of multiple exchanges in one file.

10.2.3.59 MessageItemCondition2Code

Definition: Rule to apply for the presence of a message item.

Type: CodeSet

CodeName	Name	Definition
MNDT	Mandatory	Message item must be present.
CFVL	ConfiguredValue	Message item must be present with the configured value.
DFLT	DefaultValue	Message item has the configured value if the item is absent.
ALWV	AllowedValues	Message item must have one of the configured values.
IFAV	IfAvailable	Message item has to be present if available.
COPY	Copy	Message item is present if it was present in a previous related message with the same value.
UNSP	NotSupported	Message item is not supported and has to be absent.
LMNV	ListMinimumValues	Minimum set of values to use in messages.

10.2.3.60 NamePrefix2Code

Definition: Specifies the terms used to formally address a person.

Type: CodeSet

CodeName	Name	Definition
DOCT	Doctor	Title of the person is Doctor or Dr.
MADM	Madam	Title of the person is Madam.
MISS	Miss	Title of the person is Miss.
MIST	Mister	Title of the person is Mister or Mr.
MIKS	GenderNeutral	Title of the person is gender neutral (Mx).

10.2.3.61 NetworkType1Code

Definition: Type of communication network.

Type: CodeSet

CodeName	Name	Definition
IPNW	InternetProtocol	Protocol of an IP network.
PSTN	PublicTelephone	Protocol of a Public Switched Telephone Network (PSTN).

10.2.3.62 NetworkType2Code

Definition: Type of proxy.

Type: CodeSet

CodeName	Name	Definition
SCK5	Sock5	Sock5 proxy.
SCK4	Sock4	Sock4 proxy.
HTTP	HTTP	HTTP proxy.

10.2.3.63 NonFinancialRequestType2Code

Definition: Type of non financial request that could be processed between an Acceptor and an Intermediary Agent or an Acquirer.

Type: CodeSet

CodeName	Name	Definition
ACQR	AcquirerSelection	According to several parameters of a transaction, an Intermediary Agent helps an Acceptor to identify the more relevant Acquirer to process the transaction.
PARQ	ParRequest	The Intermediary Agent or Acquirer provides the PaymentAccountReference to use to process the transaction.
RISK	RiskManagement	The Intermediary Agent or Acquirer helps the Acceptor to assess the risk management of the transaction.
TOKN	TokenRequest	The Intermediary Agent or Acquirer provides the token to use to process the transaction.
ADDR	AdditionalRequest	Indicates a request which implies to receive additional information.
INSM	InstalmentPlanRequest	Request to receive acquirer instalment plans.

10.2.3.64 OnLineCapability1Code

Definition: On-line and off-line capabilities of the POI (Point Of Interaction).

Type: CodeSet

CodeName	Name	Definition
OFLN	OffLine	Off-line only capable.
ONLN	OnLine	On-line only capable.

CodeName	Name	Definition
SMON	SemiOffline	Off-line capable with possible on-line requests to the acquirer.

10.2.3.65 OutputFormat1Code

Definition: Message format.

Type: CodeSet

CodeName	Name	Definition
MREF	MessageReference	Predefined configured messages, identified by a reference.
TEXT	SimpleText	Text without format attributes.
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.2.3.66 OutputFormat3Code

Definition: Type of output format.

Type: CodeSet

CodeName	Name	Definition
BARC	Barcode	Barcode to output in several possible format.
MENT	MenuEntry	A text to display as a menu before requesting an input.
MREF	MessageReference	Predefined configured messages, identified by a reference.
SREF	ScreenReference	Screen to display identified by a reference.
TEXT	SimpleText	Text without format attributes.
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.2.3.67 PartyType15Code

Definition: Party involved by the data set.

Type: CodeSet

CodeName	Name	Definition
PGRP	POIGroup	Configuration to apply to a subset of the whole POI system.
PSYS	POISystem	Configuration to apply to the whole POI system.
PSNG	SinglePOI	Configuration to apply to a single POI terminal.

10.2.3.68 PartyType33Code

Definition: Identification of the type of entity involved in a transaction.

Type: CodeSet

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.2.3.69 PartyType3Code

Definition: Identification of the type of entity involved in a transaction.

Type: CodeSet

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.

10.2.3.70 PartyType4Code

Definition: Entity assigning an identification (for example merchant, acceptor, acquirer, tax authority, etc.).

Type: CodeSet

CodeName	Name	Definition
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
TAXH	TaxAuthority	Tax authority.

10.2.3.71 PartyType5Code

Definition: Identification of the type of entity involved in a maintenance operation.

Type: CodeSet

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.2.3.72 PartyType7Code

Definition: Party that communicate with a POI component (Point of Interaction), using a communication device.

Type: CodeSet

CodeName	Name	Definition
ACQR	Acquirer	Entity acquiring card transactions.

CodeName	Name	Definition
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
PCPT	POIComponent	Party component of a POI system or POI terminal (Point of Interaction).
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.
SALE	SaleSystem	Party selling goods and services.

10.2.3.73 PINFormat3Code

Definition: PIN (Personal Identification Number) format used before encryption.

Type: CodeSet

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.2.3.74 PINRequestType1Code

Definition: Type of PIN Service.

Type: CodeSet

CodeName	Name	Definition
PIAE	PINAcquisitionEncryption	The cardholder enters the PIN, the POI enciphers the PIN Block and provides it as a result to the Sale System.
PIAV	PINAcquisitionVerification	The Cardholder enters the PIN and the POI verifies it.
PIVO	PINVerifyOnly	The Sale System send a previous keyed PIN and the POI verifies it.

10.2.3.75 POICommunicationType2Code

Definition: Low level communication of the hardware or software component toward another component or an external entity.

Type: CodeSet

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.2.3.76 POIComponentAssessment1Code

Definition: Type of assessment of a POI component (Point of Interaction).

Type: CodeSet

CodeName	Name	Definition
APPL	Approval	Approval number delivered by an approval centre.
CERT	Certification	Certification number delivered by a certification body.
EVAL	Evaluation	Evaluation by a lab or a tool.

10.2.3.77 POIComponentStatus1Code

Definition: Status of a component belonging to a POI Terminal (Point of Interaction).

Type: CodeSet

CodeName	Name	Definition
WAIT	WaitingActivation	Component not yet activated.

CodeName	Name	Definition
OUTD	OutOfOrder	Component not working properly.
OPER	InOperation	Component activated and in operation.
DACT	Deactivated	Component has been deactivated.

10.2.3.78 POIComponentType7Code

Definition: Type of component belonging to a POI (Point of Interaction) Terminal.

Type: CodeSet

CodeName	Name	Definition
AQPP	AcquirerProtocolParameters	Parameters for acquirer interface of the point of interaction, including acquirer host configuration parameters.
APPR	ApplicationParameters	Parameters of a payment application running on the point of interaction.
TLPR	TerminalParameters	Manufacturer configuration parameters of the point of interaction.
SCPR	SecurityParameters	Security parameters of the point of interaction.
SERV	Server	Payment server of a point of interaction system.
TERM	Terminal	Payment terminal point of interaction.
DVCE	Device	Device sub-component of a component of the point of interaction.
SECM	SecureModule	Security module.
APLI	PaymentApplication	Payment application software.
EMVK	EMVKernel	EMV application kernel (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
EMVO	EMVLevel1	EMV physical interface (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
MDWR	Middleware	Software module of the point of interaction.
DRVR	Driver	Driver module of the point of interaction.
OPST	OperatingSystem	Software that manages hardware to provide common services to the applications.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
SACP	SaleComponent	Component of the Sale system.

CodeName	Name	Definition
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
MDFL	MediaFile	Media file managed by an application of the POI.
SOFT	Soft	Payment or other software application.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
PROB	Probe	Probe used to monitor a feature on the POI.

10.2.3.79 PreferredContactMethod2Code

Definition: Preferred method used to reach the individual contact within an organisation.

Type: CodeSet

CodeName	Name	Definition
MAIL	Email	Preferred method used to reach the contact is per email.
FAXX	Fax	Preferred method used to reach the contact is per fax.
LETT	Letter	Preferred method used to reach the contact is per letter.
CELL	MobileOrCellPhone	Preferred method used to reach the contact is per mobile or cell phone.
ONLI	Online	Preferred method used to reach the contact is online.
PHON	Phone	Preferred method used to reach the contact is per phone.

10.2.3.80 ProcessingPosition2Code

Definition: Specifies the processing position.

Type: CodeSet

CodeName	Name	Definition
AFTE	After	Specifies that the transaction/instruction is to be executed after the linked transaction/instruction.
WITH	With	Specifies that the transaction/instruction is to be executed with the linked transaction/instruction.
BEFO	Before	Specifies that the transaction/instruction is to be executed before the linked transaction/instruction.

CodeName	Name	Definition
INFO	Information	Specifies that the transactions/ instructions are linked for information purposes only.

10.2.3.81 QRCodeEncodingMode1Code

Definition: Encoding Mode of Quick Response Code.

Type: CodeSet

CodeName	Name	Definition
ALFA	Alphanumeric	Alphanumeric value provided in Barcode field.
BINA	Binary	Binary value provided in Quick Response Code Binary Value.
KANJ	Kanji	Kanji value provided in Quick Response Code Binary Value.
NUME	Numeric	Numeric value provided in Barcode field.

10.2.3.82 QRCodeErrorCorrection1Code

Definition: Error Correction mode of Quick Response Code.

Type: CodeSet

CodeName	Name	Definition
M015	ErrorCorrection15Percent	Reed-Solomon error correction 15%
Q025	ErrorCorrection25Percent	Reed-Solomon error correction 25%
H030	ErrorCorrection30Percent	Reed-Solomon error correction 30%
L007	ErrorCorrection7Percent	Reed-Solomon error correction 7%

10.2.3.83 ReconciliationCriteria1Code

Definition: Available criterion to group transactions when a reconciliation is made.

Type: CodeSet

CodeName	Name	Definition
BRND	CardBrand	The set is defined by transactions made with cards belonging to the same brand.
PROF	CardProductProfile	The set is defined by transactions made with cards sharing the same CardProductProfile.
GRUP	PoiGroup	The set is defined by transactions processed by POIs identified with the same POIGroup.

10.2.3.84 RejectReason2Code

Definition: Reason of transmission of a rejection message in response to a request or an advice.

Type: CodeSet

CodeName	Name	Definition
UNPR	UnableToProcess	Not possible to process the message, for instance the security module is unavailable, the hardware is unavailable, or there is a problem of resource.
IMSG	InvalidMessage	Invalid envelope of the message.
PARS	ParsingError	Invalid message: At least one of the data element or data structure is not present, the format, or the content of one data element or one data structure is not correct.
SECU	Security	Security error (for example an invalid key or an incorrect MAC value).
INTP	InitiatingParty	Invalid identification data for the sender.
RCPD	RecipientParty	Invalid identification data for the the receiver.
VERS	ProtocolVersion	Version of the protocol couldn't be supported by the recipient.
MSGT	MessageType	Type of message the recipient receives is unknow or unsupported.

10.2.3.85 ResourceAction1Code

Definition: Type of action to perform on a media resource.

Type: CodeSet

CodeName	Name	Definition
PAUS	Pause	Pause the media resource in progress as specified in the message.
STAS	Play	Start the media resource as specified in the message.
LOOP	PlayInLoop	Play in a loop the media resource as specified in the message.
RESU	Resume	Resume the progress of the media resource as specified in the message.
DVOL	SetDefaultVolume	Set the default volume of sounds.
STOS	Stop	Stop the media resource in progress.

10.2.3.86 ResourceType1Code

Definition: Type of resource.

Type: CodeSet

CodeName	Name	Definition
TEXT	TextToSpeech	Voice synthesis.
URLI	UniformResourceIdentifier	String of characters that unambiguously identifies a particular resource.

10.2.3.87 Response11Code

Definition: Result of the processing of the message

Type: CodeSet

CodeName	Name	Definition
WARN	Warning	An additional Response Code, mainly a functional one, should be considered to identify the outcome of the request.
FAIL	Failure	Processing of the request fails for various reasons. Some further processing according to the type of requested service, the context of the process, and some additional precision about the failure notified in the ErrorCondition data element.
SUCC	Success	Processing OK. Information related to the result of the processing is contained in other parts of the response message.

10.2.3.88 Response2Code

Definition: Response to a request of service.

Type: CodeSet

CodeName	Name	Definition
APPR	Approved	Service has been successfully provided.
DECL	Declined	Service is declined.

10.2.3.89 ResponseMode2Code

Definition: Message response awaited by the initiator of the Request.

Type: CodeSet

CodeName	Name	Definition
SEND	EndOfPlay	The Response is required at the end of play.
IMMD	Immediate	The Message Response is immediate, after taking into account the request.
NREQ	NotRequired	The Message Response is not required, except in case of error.
PEND	PrintEnd	The Print Response is required at the end of print.

10.2.3.90 ResultDetail3Code

Definition: Detail of the response.

Type: CodeSet

CodeName	Name	Definition
CRTU	UnknownCertificate	The certificate is unknown.

CodeName	Name	Definition
SVSU	UnsupportedService	Requested service not supported.

10.2.3.91 RetailerMessage1Code

Definition: Identifies the type of process related to the message.

Type: CodeSet

CodeName	Name	Definition
SSAB	Abort	Abort the current process or the last request.
SAAQ	AdminRequest	To select and start customised administrative services provided by the POI, using a "menu" for an interactive or software interface, initiated by the Sale system.
SAAP	AdminResponse	Response to the Admin request.
SDDR	DeviceRequest	Request one or several functions of the device, from user Interface or payment peripherals on the POI system or on the Sale system. Functions can be Display, Input, Print, play sound, Card reader capabilities or Transmit a message.
SDDP	DeviceResponse	Response to a Device request.
SSEN	EventNotification	Notify the other party of an event that occurs on its side.
SSMQ	MessageStatusRequest	Request the status of a previous message for which the Sale system has no response.
SSMR	MessageStatusResponse	Response to a Message Status request.
SSRJ	Rejection	Reject a previous received message, for technical or functional reasons.
SARQ	ReportRequest	To request, by the Sale System, a report on a list of transactions on the POI system, or the status of a transaction.
SARP	ReportResponse	Response to a Report request.
SFRP	SaleFinancialReconciliationResponse	Response to a Reconciliation Request.
SFRQ	SaleFinancialReconciliationRequest	Request a reconciliation (different types) between Sale System and POI System.
SFSQ	SaleFinancialServiceRequest	Request a financial service like payment, reversal, loyalty, Balance Inquiry, etc.
SFSP	SaleFinancialServiceResponse	Response to a financial service request.
SASQ	SessionManagementRequest	Request the management of a session: login, logout and diagnosis services. Initiated by the Sale system.
SASP	SessionManagementResponse	Response to a session management request to initiate/terminate a session.

10.2.3.92 RetailerResultDetail1Code

Definition: Result of the processing of the message

Type: CodeSet

CodeName	Name	Definition
ABRT	Aborted	The Initiator of the request has sent an Abort message request, which was accepted and processed.
BUSY	Busy	The system is busy, try later.
CANC	Cancel	The user has aborted the transaction on the PED keyboard, for instance during PIN entering.
DEVO	DeviceOut	Device out of order.
WPIN	WrongPIN	The user has entered the PIN on the PED keyboard and the verification fails.
NHOS	UnreachableHost	Acquirer or any host is unreachable or has not answered to an online request, so is considered as temporary unavailable. Depending on the Sale context, the request could be repeated (to be compared with "Refusal").
UNVS	UnavailableService	The service is not available (not implemented, not configured, protocol version too old...).
UNVD	UnavailableDevice	The hardware is not available (absent, not configured...).
REFU	Refusal	The transaction is refused by the host or by the local rules associated to the card or the POI.
PAYR	PaymentRestriction	Some sale items are not payable by the card proposed by the Customer.
TNFD	NotFound	The transaction is not found (e.g. for a reversal or a repeat).
NALW	NotAllowed	A service request is sent during a Service dialogue. A combination of services not possible to provide. During the DeviceInitialisationCardReader message processing, the user has entered a card which has to be protected by the POI, and cannot be processed with this device request from the external, and then the Sale System.
LOUT	LoggedOut	Not logged in.
IVCA	InvalidCard	The card entered by the Customer cannot be processed by the POI because this card is not configured in the system.
ICAR	InsertedCard	If the Input Device request a NotifyCardInputFlag and the Customer enters a card in the card reader without answers to the Input command, the POI abort the Input command processing,

CodeName	Name	Definition
		and answer a dedicated ErrorCondition value in the Input response message.
WIPG	InProgress	The transaction is still in progress and then the command cannot be processed.

10.2.3.93 RetailerService2Code

Definition: List of specific services for ServiceRequest

Type: CodeSet

CodeName	Name	Definition
FSPQ	FinancialPaymentRequest	The Sale System requests to the POI System to perform a payment(Purchase/Refund/PWCB/MOTO Payment/...).
FSRQ	FinancialReversalRequest	The Sale System requests to the POI System to perform a reversal partial or complete to cancel a former payment service.
FSIQ	FinancialBalanceInquiryRequest	The Sale System requests to the POI System to perform balance inquiry on the main account.
FSBQ	FinancialBatchRequest	The Batch message pair is used to request or get the result of transactions (payment, loyalty and reversal) performed without connection to the Sale system (Payment delivery).
FSLQ	FinancialLoyaltyRequest	The Sale System requests to the POI System a loyalty service like loading or redeem.
FSVQ	FinancialStoredValueRequest	The Sale System requests to the POI System to manage a stored value card or account (eg. Load, Payment, Reimbursement).
FSEQ	FinancialEnableServiceRequest	The Sale System requests to the POI System to enable a service on its side.
FSAQ	FinancialCardAcquisitionRequest	The Sale System requests to the POI System to handle a card data acquisition on the card reader.
FSCQ	FinancialReconciliationRequest	The Sale System request to the POI System different kinds of transaction reconciliation.

10.2.3.94 RetailerService8Code

Definition: List of specific services for DeviceRequest.

Type: CodeSet

CodeName	Name	Definition
DDYQ	DeviceDisplayRequest	One System requests the other to display a message for cashier or customer.

CodeName	Name	Definition
DINQ	DeviceInputRequest	One system requests to the other System to get data input.
DPRQ	DevicePrintRequest	One system requests to the other System to print data.
DSOQ	DevicePlaySoundRequest	One system requests to the Other System to play a sound.
DSIQ	DeviceSecureInputRequest	One system requests to the Other System to securely get data input (e.g. for PIN).
DCIQ	DeviceInitialisationCardReaderRequest	Service to send parameters to use when card reader initializes a new communication with the card.
DCAQ	DeviceSendApplicationProtocolDataUnitCardReaderRequest	A service to send commands to a card.
DCPQ	DevicePowerOffCardReaderRequest	The Sale system requests to the POI System to power off the card reader.
DCOQ	DeviceTransmissionMessageRequest	The Sale system requests to the POI System to transmit a message (for instance to a mobile server).
DINO	DeviceInputNotification	One system sends a notification to the POI System to update a input request.

10.2.3.95 RetailerService9Code

Definition: List of specific services for DeviceResponse.

Type: CodeSet

CodeName	Name	Definition
DDYP	DeviceDisplayResponse	One system responds to the other system for a display request.
DINP	DeviceInputResponse	One system responds to the other System for a input request.
DPRP	DevicePrintResponse	One system responds to the other System for a print request.
DSOP	DevicePlaySoundResponse	One system responds to the other System for a play sound request.
DSIP	DeviceSecureInputResponse	One system responds to the other System for secure data input.
DCIP	DeviceInitialisationCardReaderResponse	The POI system responds to the Sale System for a card reader initialisation.
DCAP	DeviceSendApplicationProtocolDataUnitCardReaderResponse	The POI system responds to the Sale System for a card reader Application Protocol Data Unit sending.
DCPP	DevicePowerOffCardRequestResponse	The POI system responds to the Sale System for a card reader power off.
DCOP	DeviceTransmissionMessageResponse	The POI system responds to the Sale System after a message transmission.

10.2.3.96 SaleCapabilities1Code

Definition: Hardware capabilities of the Sale Terminal.

Type: CodeSet

CodeName	Name	Definition
CHDI	CashierDisplay	Standard Cashier display interface (to ask question, or to show information).
CHER	CashierError	To display to the Cashier information related to an error situation occurring on the POI.
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CHST	CashierStatus	To display to the Cashier a new state on which the POI is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
CUDI	CustomerDisplay	Standard Customer display interface used by the POI System to ask question, or to show information to the Customer inside a Service dialogue.
CUAS	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
CUER	CustomerError	To display to the Customer information is related to an error situation occurring on the Sale Terminal during a Sale transaction.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
PRDC	PrinterDocument	When the POI System wants to print specific document (check, dynamic currency conversion ...).
PRRP	PrinterReceipt	Printer for the Payment receipt.
PRVC	PrinterVoucher	Coupons, voucher or special ticket generated by the POI and to be printed.

10.2.3.97 SaleCapabilities2Code

Definition: Type of the Logical device located on a Sale Terminal or a POI Terminal, in term of class of information to output (display, print or store), or input (keyboard) for the Cashier

or the Customer.

Type: CodeSet

CodeName	Name	Definition
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).

10.2.3.98 SaleTokenScope1Code

Definition: Scope of the token that identifies the payment mean of the customer.

Type: CodeSet

CodeName	Name	Definition
MULT	MultipleUse	The token is generated to recognise a customer for a longer period.
SNGL	SingleUse	The token is generated to recognise a customer during the lifetime of a transaction.

10.2.3.99 SoundFormat1Code

Definition: Type of sound to play.

Type: CodeSet

CodeName	Name	Definition
MSGR	MessageRef	Reference of a preloaded text to play.
SNDR	SoundRef	Preloaded sound File.
TEXT	Text	Text to play.

10.2.3.100 StoredValueAccountType1Code

Definition: Type of stored value account.

Type: CodeSet

CodeName	Name	Definition
BNKA	BankPrepaidAccount	Prepaid account managed by a financial institution for low income customers.
CWVC	CarwashVoucher	Car wash specific account.
CPYA	CompanyPrepaidAccount	Specific prepaid account for companies or professionals expenses.
ELMY	ElectronicMoneyAccount	Account supporting e-money issued by an electronic money issuer.
GIFT	GiftCard	Payment mean issued by retailers or banks as a substitute to a non-monetary

CodeName	Name	Definition
		gift. Usually, this Stored Value item is used only once.
GCER	GiftCertificate	Certificate to be given to a customer. Usually one shot voucher.
MLVC	MealVoucher	Meal and check voucher for restaurants.
OLVC	OnlineVoucher	Voucher that can be used online once or in several times.
MERC	MerchantAccount	Prepaid account open with a merchant or big retailers.
OTHR	OtherPrepaidAccount	Other non listed stored value instrument.
PHON	PhoneCard	Stored value instrument used to pay telephone services (e.g. card or identifier).
CARD	SmartCardTag	Stored value account hold on the chip of a smart card.
TRVL	Travel	Travel prepaid account.

10.2.3.101 SupportedPaymentOption2Code

Definition: Specifies the options supported for a payment transaction.

Type: CodeSet

CodeName	Name	Definition
PART	PartialApproval	The entity supports a partial approval of the payment transaction.
MSRV	PaymentApprovalOnly	The entity supports the approval of the payment service along with the decline of additional requested services (as cash-back).
INSI	IssuerInstalment	The sender support IssuerInstalment proposals to the Cardholder.
PINQ	PINRequest	The sender is able to support Single Tap transaction.

10.2.3.102 TerminalManagementAction3Code

Definition: Type of action to perform.

Type: CodeSet

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.2.3.103 TerminalManagementAction5Code

Definition: Types of terminal management action to be performed by a point of interaction.

Type: CodeSet

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

10.2.3.104 TerminalManagementActionResult5Code

Definition: Final result of the processed terminal management action.

Type: CodeSet

CodeName	Name	Definition
ACCD	AccessDenied	Access is denied while performing the action.
CNTE	ConnectionError	Problem to connect while performing the action.
FMTE	FormatError	Data transferred has a wrong format.
INVC	InvalidContent	Content of the data is invalid.
LENE	LengthError	Data transferred has a wrong length.
OVER	MemoryOverflow	Memory to store the date exceeded.
MISS	MissingFile	Data set to be maintained is missing.
NSUP	NotSupported	Action is not supported.

CodeName	Name	Definition
SIGE	SignatureError	Data transferred has a wrong digital signature.
WARN	SuccessWithWarning	Action was performed but some warnings arose.
SYNE	SyntaxError	Data transferred has a wrong syntax.
TIMO	Timeout	Timeout expired during the data transfer.
UKDT	UnknownData	Data set identification invalid.
UKRF	UnknownKeyReference	Cryptographic key reference used for the data signature is not valid.
INDP	InvalidDelegationProof	Delegation Proof transmitted by the delegated TMS is not the one expected.
IDMP	InvalidDelegationInManagementPlan	One action of the AcceptorManagementPlan refers to an update unauthorized by the delegation.
DPRU	DelegationParametersReceivedUnauthorized	The content analysis of the AcceptorConfigurationUpdate reveals unexpected parameters.
AERR	AnyError	This code value means all TerminalManagementActionResultCode except "Any Error" and "Unlisted Error".
CMER	CommunicationError	Error in communication once the connection has been established.
ULER	UnlistedError	Any error that is not defined by a code value inside the TerminalManagementActionResultCode.
SUCC	Success	Action was successfully performed.

10.2.3.105 TerminalManagementActionTrigger1Code

Definition: Event to start a terminal management action by the point of interaction (POI).

Type: CodeSet

CodeName	Name	Definition
DATE	DateTime	Date and time trigger the terminal management action.
HOST	HostEvent	Acquirer triggers the terminal management action.
MANU	Manual	Acceptor triggers the terminal management action.
SALE	SaleEvent	Sale system triggers the terminal management action.

10.2.3.106 TerminalManagementAdditionalProcess1Code

Definition: Additional process to perform before starting or after a terminal management action by the point of interaction (POI).

Type: CodeSet

CodeName	Name	Definition
MANC	ManualConfirmation	Manual confirmation of the merchant before the terminal management action.
RCNC	Reconciliation	Acquirer reconciliation to be performed before the terminal management action.
RSRT	RestartSystem	Restart the system after performing the terminal management action.

10.2.3.107 TerminalManagementErrorAction2Code

Definition: Action to perform in case of error during the maintenance action in progress.

Type: CodeSet

CodeName	Name	Definition
SDSR	SendStatusReport	Send a status report immediately.
STOP	StopSequence	Stop the current sequence of terminal management actions without any action, and do not notice the error with a status report.

10.2.3.108 TimeUnit1Code

Definition: Unit of time associated with the contract.

Type: CodeSet

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOUR	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.
YEAR	Year	Time unit is year.

10.2.3.109 TrackFormat1Code

Definition: Use to identify format of a track on a card or other documents like checks.

Type: CodeSet

CodeName	Name	Definition
AAMV	AAMVFormat	American driver license.
CMC7	CMC7CheckFormat	Magnetic Ink Character Recognition, using the CMC-7 font - ISO 1004 Line at the bottom of a check containing the bank account and the check number.
E13B	E13BCheckFormat	Magnetic Ink Character Recognition, using the E-13B font) Line at the bottom

CodeName	Name	Definition
		of a check containing the bank account and the check number.
ISOF	ISOFormat	ISO card track format - ISO 7813 - ISO 4909.
JIS1	JISIFormat	Japanese track format I.
JIS2	JISIIFormat	Japanese track format II.

10.2.3.110 TransactionChannel5Code

Definition: Identifies the type of the communication channels used by the cardholder to the acceptor system.

Type: CodeSet

CodeName	Name	Definition
MAIL	MailOrder	Mail order.
TLPH	TelephoneOrder	Telephone order.
ECOM	ElectronicCommerce	Electronic commerce.
TVPY	TelevisionPayment	Payment on television.
SECM	SecuredElectronicCommerce	Electronic commerce with cardholder authentication.
MOBL	MobilePayment	Payment performed through a cardholder mobile device.
MPOS	MobilePOS	Payment performed through a merchant mobile device.

10.2.3.111 TransactionEnvironment1Code

Definition: Indicates the environment of the transaction.

Type: CodeSet

CodeName	Name	Definition
MERC	Merchant	Merchant environment.
PRIV	Private	Private environment.
PUBL	Public	Public environment.

10.2.3.112 TypeOfAmount8Code

Definition: Qualifies the amount associated with the transaction.

Type: CodeSet

CodeName	Name	Definition
ACTL	Actual	Actual amount.
ESTM	Estimated	Estimated amount (the final amount could be above or below).
MAXI	Maximum	Maximum amount (the final amount must be less or equal).

CodeName	Name	Definition
DFLT	Default	Default amount.
RPLT	Replacement	Replacement amount.
INCR	Incremental	Incremental amount for reservation.
DECR	Decremental	Decremental amount for reservation.
RESA	Reserved	Reserved or updated reserved amount for reservation.

10.2.3.113 UserInterface4Code

Definition: Destination of the message.

Type: CodeSet

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.

10.2.3.114 Verification1Code

Definition: Result of the verification.

Type: CodeSet

CodeName	Name	Definition
FAIL	Failed	Verification failed.
MISS	Missing	Information required to perform the verification was missing.
NOVF	NotPerformed	Verification has not been performed.
PART	PartialMatch	Verification was partially successful.
SUCC	Successful	Verification was successful.
ERRR	TechnicalError	Device or entity to perform the verification was unavailable.

10.2.4 Date

10.2.4.1 ISODate

Definition: A particular point in the progression of time in a calendar year expressed in the YYYY-MM-DD format. This representation is defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" which is aligned with ISO 8601.

Type: Date

10.2.5 DateTime

10.2.5.1 ISODateTime

Definition: A particular point in the progression of time defined by a mandatory date and a mandatory time component, expressed in either UTC time format (YYYY-MM-DDThh:mm:ss.sssZ), local time with UTC offset format (YYYY-MM-DDThh:mm:ss.sss+/-hh:mm), or local time format (YYYY-MM-DDThh:mm:ss.sss). These representations are defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" which is aligned with ISO 8601.

Note on the time format:

1) beginning / end of calendar day

00:00:00 = the beginning of a calendar day

24:00:00 = the end of a calendar day

2) fractions of second in time format

Decimal fractions of seconds may be included. In this case, the involved parties shall agree on the maximum number of digits that are allowed.

Type: DateTime

10.2.6 IdentifierSet

10.2.6.1 AnyBICDec2014Identifier

Definition: Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362: 2014 - "Banking - Banking telecommunication messages - Business identifier code (BIC)".

Type: IdentifierSet

Identification scheme: SWIFT; AnyBICIdentifier

Format

pattern [A-Z0-9]{4,4}[A-Z]{2,2}[A-Z0-9]{2,2}([A-Z0-9]{3,3}){0,1}

Constraints

- **AnyBIC**

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

10.2.6.2 IBAN2007Identifier

Definition: The International Bank Account Number is a code used internationally by financial institutions to uniquely identify the account of a customer at a financial institution as described in the 2007 edition of the ISO 13616 standard "Banking and related financial services - International Bank Account Number (IBAN)" and replaced by the more recent edition of the standard.

Type: IdentifierSet

Identification scheme: National Banking Association; International Bank Account Number (ISO 13616)

Format

pattern [A-Z]{2,2}[0-9]{2,2}[a-zA-Z0-9]{1,30}

Constraints

- **IBAN**

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

10.2.6.3 LEIIdentifier

Definition: Legal Entity Identifier is a code allocated to a party as described in ISO 17442 "Financial Services - Legal Entity Identifier (LEI)".

Type: IdentifierSet

Identification scheme: Global LEI System; LEIIdentifier

Format

pattern [A-Z0-9]{18,18}[0-9]{2,2}

10.2.7 Indicator

10.2.7.1 TrueFalseIndicator

Definition: A flag indicating a True or False value.

Type: Indicator

Meaning When True: True

Meaning When False: False

10.2.8 Quantity

10.2.8.1 DecimalNumber

Definition: Number of objects represented as a decimal number, for example 0.75 or 45.6.

Type: Quantity

Format

totalDigits 18

fractionDigits 17

10.2.8.2 Number

Definition: Number of objects represented as an integer.

Type: Quantity

Format

totalDigits	18
fractionDigits	0

10.2.8.3 PositiveNumber

Definition: Number of objects represented as a positive integer.

Type: Quantity

Format

minInclusive	1
totalDigits	18
fractionDigits	0

10.2.9 Rate

10.2.9.1 PercentageRate

Definition: Rate expressed as a percentage, that is, in hundredths, for example, 0.7 is 7/10 of a percent, and 7.0 is 7%.

Type: Rate

Format

totalDigits	11
fractionDigits	10
baseValue	100.0

10.2.10 Text

10.2.10.1 Exact3AlphaNumericText

Definition: Specifies an alphanumeric string with a length of exact 3 characters.

Type: Text

Format

pattern	[a-zA-Z0-9]{3}
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10.2.10.2 Exact3NumericText

Definition: Specifies a numeric string with an exact length of 3 digits.

Type: Text

Format

pattern	[0-9]{3}
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10.2.10.3 Exact4AlphaNumericText

Definition: Specifies an alphanumeric string with a length of 4 characters.

Type: Text

Format

pattern [a-zA-Z0-9]{4}

10.2.10.4 Exact4NumericText

Definition: Specifies a numeric string with an exact length of 4 digits.

Type: Text

Format

pattern [0-9]{4}

10.2.10.5 Max1025Text

Definition: Specifies a character string with a maximum length of 1025 characters.

Type: Text

Format

minLength 1
maxLength 1025

10.2.10.6 Max104Text

Definition: Specifies a character string with a maximum length of 104 characters.

Type: Text

Format

minLength 1
maxLength 104

10.2.10.7 Max10Text

Definition: Specifies a character string with a maximum length of 10 characters.

Type: Text

Format

minLength 1
maxLength 10

10.2.10.8 Max11NumericText

Definition: Specifies a numeric string with a maximum length of 11 digits.

Type: Text

Format

pattern [0-9]{1,11}

10.2.10.9 Max128Text

Definition: Specifies a character string with a maximum length of 128 characters.

Type: Text

Format

minLength 1
maxLength 128

10.2.10.10 Max140Text

Definition: Specifies a character string with a maximum length of 140 characters.

Type: Text

Format

minLength 1
maxLength 140

10.2.10.11 Max15NumericText

Definition: Specifies a numeric string with a maximum length of 15 digits.

Type: Text

Format

pattern [0-9]{1,15}

10.2.10.12 Max16Text

Definition: Specifies a character string with a maximum length of 16 characters.

Type: Text

Format

minLength 1
maxLength 16

10.2.10.13 Max19NumericText

Definition: Specifies a numeric string with a maximum length of 19 digits.

Type: Text

Format

pattern [0-9]{1,19}

10.2.10.14 Max20000Text

Definition: Specifies a character string with a maximum length of 20, 000 characters.

Type: Text

Format

minLength 1
maxLength 20000

10.2.10.15 Max2048Text

Definition: Specifies a character string with a maximum length of 2048 characters.

Type: Text

Format

minLength 1
maxLength 2048

10.2.10.16 Max256Text

Definition: Specifies a character string with a maximum length of 256 characters.

Type: Text

Format

minLength 1
maxLength 256

10.2.10.17 Max2NumericText

Definition: Specifies a numeric string with a maximum length of 2 digits.

Type: Text

Format

pattern [0-9]{1,2}

10.2.10.18 Max30Text

Definition: Specifies a character string with a maximum length of 30 characters.

Type: Text

Format

maxLength 30

10.2.10.19 Max34Text

Definition: Specifies a character string with a maximum length of 34 characters.

Type: Text

Format

minLength	1
maxLength	34

10.2.10.20 Max350Text

Definition: Specifies a character string with a maximum length of 350 characters.

Type: Text

Format

minLength	1
maxLength	350

10.2.10.21 Max35NumericText

Definition: Specifies a numeric string with a maximum length of 35 digits.

Type: Text

Format

pattern	[0-9]{1,35}
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10.2.10.22 Max35Text

Definition: Specifies a character string with a maximum length of 35 characters.

Type: Text

Format

minLength	1
maxLength	35

10.2.10.23 Max37Text

Definition: Specifies a character string with a maximum length of 37 characters.

Type: Text

Format

minLength	1
maxLength	37

10.2.10.24 Max3Text

Definition: Specifies a character string with a maximum length of 3 characters.

Type: Text

Format

minLength	1
maxLength	3

10.2.10.25 Max45Text

Definition: Specifies a character string with a maximum length of 45 characters.

Type: Text

Format

minLength	1
maxLength	45

10.2.10.26 Max4Text

Definition: Specifies a character string with a maximum length of 4 characters.

Type: Text

Format

minLength	1
maxLength	4

10.2.10.27 Max500Text

Definition: Specifies a character string with a maximum length of 500 characters.

Type: Text

Format

minLength	1
maxLength	500

10.2.10.28 Max5NumericText

Definition: Specifies a numeric string with a maximum length of 5 digits.

Type: Text

Format

pattern	[0-9]{1,5}
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10.2.10.29 Max6Text

Definition: Specifies a character string with a maximum length of 6 characters.

Type: Text

Format

minLength	1
maxLength	6

10.2.10.30 Max70Text

Definition: Specifies a character string with a maximum length of 70characters.

Type: Text

Format

minLength	1
maxLength	70

10.2.10.31 Max76Text

Definition: Specifies a character string with a maximum length of 76 characters.

Type: Text

Format

minLength	1
maxLength	76

10.2.10.32 Max8000Text

Definition: Specifies a character string with a maximum length of 8000 characters.

Type: Text

Format

minLength	1
maxLength	8000

10.2.10.33 Max8Text

Definition: Specifies a character string with a maximum length of 8 characters.

Type: Text

Format

minLength	1
maxLength	8

10.2.10.34 Max9NumericText

Definition: Specifies a numeric string with a maximum length of 9 digits.

Type: Text

Format

pattern [0-9]{1,9}

10.2.10.35 Min2Max3AlphaText

Definition: Specifies an alpha string with a minimum length of 2 characters and a maximum length of 3 characters.

Type: Text

Format

pattern [a-zA-Z]{2,3}

10.2.10.36 Min2Max3NumericText

Definition: Specifies a numeric string with a minimum length of 2 digits, and a maximum length of 3 digits.

Type: Text

Format

pattern [0-9]{2,3}

10.2.10.37 Min3Max4Text

Definition: Specifies a character string with a minimum length of 3 characters, and a maximum length of 4 characters.

Type: Text

Format

minLength 3

maxLength 4

10.2.10.38 Min8Max28NumericText

Definition: Specifies a numeric string with a minimum length of 8 digits, and a maximum length of 28 digits.

Type: Text

Format

pattern [0-9]{8,28}

10.2.10.39 PhoneNumber

Definition: The collection of information which identifies a specific phone or FAX number as defined by telecom services.

It consists of a "+" followed by the country code (from 1 to 3 characters) then a "-" and finally, any combination of numbers, "(", ")", "+ and "-" (up to 30 characters).

Type: Text

Format

pattern \+[0-9]{1,3}-[0-9()+\-]{1,30}

10.2.11 Time

10.2.11.1 ISOTime

Definition: A particular point in the progression of time in a calendar day expressed in either UTC time format (hh:mm:ss.sssZ), local time with UTC offset format (hh:mm:ss.sss+/-hh:mm), or local time format (hh:mm:ss.sss). These representations are defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" which is aligned with ISO 8601.

Note on the time format:

1) beginning / end of calendar day

00:00:00 = the beginning of a calendar day

24:00:00 = the end of a calendar day

2) fractions of second in time format

Decimal fractions of seconds may be included. In this case, the involved parties shall agree on the maximum number of digits that are allowed.

Type: Time