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SEPA CARDS STANDARDISATION (SCS) "VOLUME"

STANDARDS' REQUIREMENTS

BOOK 3

DATA ELEMENTS

Payments and Cash Withdrawals with Cards in SEPA

Applicable Standards and Conformance Processes

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1 GENERAL

1.1 Book 3 - Executive summary

This book defines the required Data Elements needed to perform card transactions from "Acceptor to Acquirer" and "Acquirer to Issuer". These Data Elements are Mandatory, Conditional or Optional as explained in Chapter 3 of this document. The basis for the description of these Data Elements is the Acceptor to Acquirer messages as defined in CAPE. CAPE has been developed using ISO 20022 technology. The basic concepts for registered ISO 20022 Supplementary Data Extensions (for clearing[1]) are covering Card payment related messages between the acquirer and the issuer. Originally, ATICA version 2 (Acquirer to Issuer Card Messages) were also foreseen to be included in this document. However, as they are not available as of the publication of release v8.0 of this document, they will be included in a future release of Book 3. Therefore, some Data Elements which are not present in CAPE have been extracted from ISO 8583. The Data Elements are cross referenced to the Data Elements used in the different releases of ISO 8583 (1987, 1993 and 2003) as well as the Data Elements defined in EMV specifications.

The usage of these Data Elements is then described for the different card services defined within the other books of the Volume. Book 3 does not intend to describe the message flows for each service; only the Data Elements required to fulfil the service. As a transaction can pass through a number of systems before reaching the acquirer, different Data Elements can be populated by different systems (even if they are considered to be mandatory) or even by the acquirer, depending on the infrastructure under which the transaction is performed. The usage of each Data Element is described for Authorisation, Cancellation and Completion within the Terminal to Acquirer environment and Authorisation, Cancellation and Presentment in the Acquirer to Issuer one. In some implementations Authorisation and Completion/Presentments are combined.

This book also recommends a Data Element to be used as the reference to a specific transaction between all actors in the value chain for card transactions. This is referred to as *TransactionLifecycleIdentifier*. This Data Element was originally defined within ISO 8583 ver. 2003, named with 'Transaction life cycle identification data'.

The element tables contained within this book are found within a consolidated spreadsheet the 'Data Elements' which is recommended to be downloaded to accompany this document. The spreadsheet shall be used to assess conformance with other protocols.

[1] Promoted in the SEPA Cards Clearing (SCC) framework.

1.2 Description of changes since the last version of Book 3

This release of Book 3 has been modified in order to be aligned with the recent update to Book 2 for Pre-Authorisation. The main updates are located within section 3.4:

- Validity Date has been removed from tables
- Increased and Decreased amount update Pre-Authorisation has been included as well as a way to do so within T2A and A2I environments
- A Unique Identifier is introduced for the set of transactions within Pre-Authorisations depending on T2A or/and A2I environments.
- ElectronicProductIdentification has been added to address the IFR requirements as described in Book 2.

2 DATA ELEMENT REQUIREMENTS

The purpose of this chapter is to define usage requirements for the Data Elements needed to support the card services covered in the Volume.

Section 2.1 describes the purpose of these Data Elements to ensure a common understanding of the data used across the different domains (POI application, POI to acquirer exchanges, acquirer to issuer exchanges). The corresponding usage requirements for the different services and domains are provided in chapter 3.

Data Elements which shall be used to reference or identify transactions between all parties are illustrated as recommendations in chapter 4, of this book.

A spreadsheet version complementary to this is available to download within the EPC website. This spreadsheet covers the tables presented in chapter 2 and 3 and could be used for conformance issues. These tables are extracted directly from this spreadsheet without modification.

This document is based on the existing standards in ISO 20022, namely CAPE v2 (Acceptor to Acquirer) and the basic concepts for registered ISO 20022 Supplementary Data Extensions (for clearing) covering Card payment related messages between the Acquirer and the Issuer. In addition, there are cross references to the corresponding Data Elements in the different versions of ISO 8583 and EMV.

Some Data Elements which are not present in CAPE have been extracted from ISO 8583.

Originally, ATICA messages were also foreseen to be included within this document. However, as they are not available as of the publication of version 8.0 of the Volume, they will be included in a future release of Book 3.

2.1 Data Elements Description

The description of the Data Elements are named based on the CAPE version 2.0 messages in ISO 20022.

The table below provides a cross reference between CAPE Data Elements, registered ISO 20022 Supplementary Data Extensions (for clearing) and the Data Elements described in the different versions of ISO 8583 and the Data Elements used in EMV. At the time of publishing this document, CAPE is the existing ISO 20022 standard in the Terminal to Acquirer (T2A) domain. This is based on the existing CAPE messages in ISO 20022. The Data Element names do not reflect any structure, however the CAPE reference includes the message component this Data Element belongs to.

This document will be extended with the corresponding ATICA standards between Acquirer to Issuer (A2I) when available.

The table contains:

- The name of the Data Element

- A brief illustration of the purpose of the Data Element
- The domains for which it applies. The domains defined are A2I or T2A
- The reference to the relating standard. This is mapped between ATICA (for a future release of Book 3), CAPE, registered ISO 20022 Supplementary Data Extensions (for clearing), ISO 8583(v87/93/03) and EMV.
    - For CAPE and registered ISO 20022 Supplementary Data Extensions (for clearing), this is commonly referred to as the 'Name' and also as the 'Message Item', as described in the *'Message Definition Report'*
    - For the different versions of ISO 8583, the reference made is to the Data Element number e.g., DE43
        - The Data Element is defined in all versions ISO 8583 (ISO 8583-1987, ISO 8583-1993, ISO 8583-2003) with the same bit number: One ISO reference is mentioned in the table
        - The Data Element is defined in all versions ISO 8583 (ISO 8583-1987, ISO 8583-1993, ISO 8583-2003) with a different bit number: The ISO reference is mentioned for each version in the table
        - The Data Element is not defined in all ISO 8583 versions: only the ISO reference for versions containing the Data Element are mentioned in the table
    - For EMV, the Tag of the Data Element is referred to.
- The entity or party usually populating the Data Element (source)
    - In this column, Terminal is equivalent to any source of information on the acceptor side (e.g., ECR, Sale System,)
    - In this column, Issuer is equivalent to any source of information on the Issuing side (e.g., Card Data, ICC,)
- Any further comments which assist in understanding the purpose or usage of this Data Element

In the table, items not applicable are denoted with "N/A".

For the Data Elements SenderIdentifier and ReceiverIdentifier there are additional tables in sections 2.1.2.1 and 2.1.2.2, highlighting their use in CAPE and ISO 8583.

2.1.1 Data Elements Description Table

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
MessageFunction	Identifies the type of process related to the message	A2I /T2A	Header.MessageFunction	Message root	part of MTI	part of MTI	part of MTI	N/A	Terminal/Acquirer	
ProtocolVersion	Version of the protocol specifications.	T2A	Header.ProtocolVersion	N/A	part of MTI	part of MTI	part of MTI	N/A	Terminal/Acquirer	
ExchangeIdentification	Unique identification of an exchange occurrence	A2I /T2A	Header.ExchangeIdentification	GroupHeader.MessageIdentification	DE 11	DE 11	DE 21	N/A	Terminal/Acquirer	See Transaction Reference
RetransmissionCounter	Indicates the number of retransmissions of the message	A2I /T2A	Header.ReTransmissionCounter	N/A	part of MTI	part of MTI	part of MTI	N/A	Terminal/Acquirer	
TransmissionDateandTime	Indicates the date and time at which the message was created	A2I /T2A	Header.CreationDateTime	GroupHeader.CreationDateTime	DE 7	DE 7	DE 7	N/A	Terminal/Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
SenderIdentifier	Code identifying the forwarding institution	A2I /T2A	Header.InitiatingParty.Identification	GroupHeader.InitiatingParty.Identification.OrganisationIdentification.Other.Identification	DE 32 DE 33 DE 100	DE 32 DE 33 DE 100	DE 32 DE 33 DE 100	N/A	Terminal/Acquirer	Different use within 8583 and CAPE Within CAPE, the senderidentifier may be the merchantID which corresponds with ISO 8583 DE42 but if the sender identifier is an intermediate agent, then it is not DE42. see Annex 1
InitiatingPartyType	Type of identified entity	A2I /T2A	Header.InitiatingParty.Type	GroupHeader.InitiatingParty.Identification.OrganisationIdentification.Other.SchemeName	N/A	N/A	N/A	N/A	Terminal/Acquirer	
InitiatingPartyIdentifierAssigner	Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).	A2I /T2A	Header.InitiatingParty.Issuer	GroupHeader.InitiatingParty.Identification.Other.Issuer	N/A	N/A	N/A	N/A	Terminal/Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
InitiatingPartyShortName	Name of the entity.	A2I /T2A	Header.InitiatingParty.ShortName	GroupHeader.InitiatingParty.Name	N/A	N/A	N/A	N/A	Terminal/Acquirer	
ReceiverIdentifier	Code identifying the receiving institution (e.g., intermediary entity)	A2I /T2A	Header.RecipientParty.Identification	N/A	DE 2 DE 33 DE 100	DE 2 DE 33 DE 100	DE 2 DE 33 DE 100	N/A	Terminal/Acquirer	Different use within 8583 and CAPE. Within CAPE, the receiveridentifier may be the AcquirerID which corresponds with ISO 8583 DE32 but if the receiver identifier is an intermediate agent, then it is not DE32. see Annex 1
RecipientPartyType	Type of identified entity	A2I /T2A	Header.RecipientParty.Type	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
RecipientPartyAssigner	Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).	A2I /T2A	Header.RecipientParty.Issuer	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer	
RecipientPartyShortName	Name of the entity.	A2I /T2A	Header.RecipientParty.ShortName	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer	
RelayIdentifier	Identification of a partner of a message exchange.	A2I /T2A	Header.Traceability.RelayIdentification.Identification	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer/Issuer	
RelayIdentifierType	Type of identified entity	A2I /T2A	Header.Traceability.RelayIdentification.Type	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer/Issuer	
RelayIdentifierAssigner	Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).	A2I /T2A	Header.Traceability.RelayIdentification.Issuer	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer/Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
RelayShortName	Name of the entity.	A2I /T2A	Header.Traceability .RelayIdentification .ShortName	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer/Issuer	
TraceDateTimeIn	Date and time of incoming data exchange for relaying or processing.	A2I /T2A	Header.Traceability .TraceDateTimeIn	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer/Issuer	
TraceDateTimeOut	Date and time of the outgoing exchange for relaying or processing	A2I /T2A	Header.Traceability .TraceDateTimeOut	N/A	N/A	N/A	N/A	N/A	Terminal/Acquirer/Issuer	
AcquirerIdentifier	Code identifying the acquirer or delegated entity	A2I /T2A	Environment.Acquirer.Identification.Identification	PaymentInformation.CreditorSchemeIdentification.Identification.PrivateIdentification.Id	DE 32	DE 32	DE 32	9F01	Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AcquirerAddress	Information that locates and identifies a specific address of the Acquirer, as defined by postal services	A2I	N/A	PaymentInformation.Creditor.PostalAddress.AddressLine	N/A	N/A	N/A	N/A	Acquirer	
AcquirerCountry	Information that locates and identifies the country of the Acquirer	A2I	N/A	PaymentInformation.Creditor.PostalAddress.Country	N/A	N/A	N/A	N/A	Acquirer	
Acquirer Account	The account of the acquirer		N/A	PaymentInformation.CreditorAccount.Identification, PaymentInformation.CreditorAgent.FinancialInstitutionIdentification.	N/A	N/A	N/A	N/A	Acquirer	
AcquirerType	Type of identified entity	A2I /T2A	Environment.Acquirer.Identification.Type	N/A	N/A	N/A	N/A	N/A	Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AcquirerIdentifierAssigner	Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).	A2I /T2A	Environment.Acquirer.Identification.Issuer	N/A	N/A	N/A	N/A	N/A	Acquirer	
AcquirerShortName	Name of the entity.	A2I /T2A	Environment.Acquirer.Identification.ShortName	N/A	N/A	N/A	N/A	N/A	Acquirer	
AcquirerParametersVersion	Version of the payment acquirer parameters of the POI.	T2A	Environment.Acquirer.ParametersVersion	N/A	N/A	N/A	N/A	N/A	Terminal	
AcceptorIdentifier	Identification of the entity.	A2I /T2A	Environment.Merchant.Identification.Identification	PaymentInformation.UltimateCreditor.Identification	DE 42	DE 42	DE 42	9F16	Acquirer/merchant	
AcceptorType	Type of identified entity	A2I /T2A	Environment.Merchant.Identification.Type	N/A	N/A	N/A	N/A	N/A	Acquirer/merchant	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AcceptorIdentifierAssigner	Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).	A2I /T2A	Environment.Merchant.Identification.Issuer	N/A	N/A	N/A	N/A	N/A	Acquirer/merchant	
AcceptorShortName	Name of the entity.	A2I /T2A	Environment.Merchant.Identification.ShortName	PaymentInformation.UltimateCreditor.Name	N/A	N/A	N/A	N/A	Acquirer/merchant	
AcceptorNameLocation	The name of the card acceptor: Name of the merchant as appearing on the receipt.	A2I /T2A	Environment.Merchant.CommonName	N/A	DE 43	DE 43	DE 43	N/A	Acquirer/merchant	
AcceptorLocationCategory	Business location type (e.g., train, air-plane, etc.)	A2I /T2A	Environment.Merchant.LocationCategory	N/A	N/A	N/A	N/A	N/A	Acquirer/merchant	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AcceptorAddress	The name and location of the card acceptor: Location of the merchant where the transaction took place, as appearing on the receipt	A2I /T2A	Environment.Merchant.Address	Part of PaymentInformation.UltimateCreditor.Name	DE 43	DE 43	DE 43	9F4E	Acquirer/merchant	
AcceptorCountry	Country of the merchant where the transaction took place.	A2I /T2A	Environment.Merchant.CountryCode	Part of PaymentInformation.UltimateCreditor.Name	DE 43	DE 43	DE 43	9F1A	Acquirer/merchant	
AcceptorSchemeData	Additional merchant data required by a card scheme	A2I /T2A	Environment.Merchant.SchemeData	N/A	N/A	N/A	N/A	N/A	Acquirer/merchant	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
POIIdentifier	Unique code identifying a POI at the card acceptor location. This code might be structured and composed of different information, e.g., to include Terminal, POI system and Card acceptor system identifiers.	A2I /T2A	Environment.POI.Identification.Identification	CardRemittanceInformation.PointOfInteraction.Identification.Identification	DE 41	DE 41	DE 41	9F1C	Acquirer/merchant	
POIIdentifierType	Type of identified entity	A2I /T2A	Environment.POI.Identification.Type	CardRemittanceInformation.PointOfInteraction.Identification.Type	N/A	N/A	N/A	N/A	Acquirer	
POIIdentifierAssigner	Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).	A2I /T2A	Environment.POI.Identification.Issuer	CardRemittanceInformation.PointOfInteraction.Identification.Issuer	N/A	N/A	N/A	N/A	Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
POIShortName	Name of the entity.	A2I /T2A	Environment.POI.Identification.ShortName	CardRemittanceInformation.PointOfInteraction.Identification.ShortName	N/A	N/A	N/A	N/A	Acquirer	
POISystemName	Common name assigned by the acquirer to the POI system	A2I /T2A	Environment.POI.SystemName	CardRemittanceInformation.PointOfInteraction.SystemName	N/A	N/A	N/A	N/A	Acquirer	
POIGroupIdentifier	Identifier assigned by the merchant identifying a set of POI terminals performing some categories of transactions.	A2I /T2A	Environment.POI.GroupIdentification	CardRemittanceInformation.PointOfInteraction.GroupIdentification	N/A	N/A	N/A	N/A	Acquirer/merchant	
POICardReadingCapabilities	Permits to identify the POI capability and then which operational rules apply	A2I /T2A	Environment.POI.Capabilities.CardReadingCapabilities	CardRemittanceInformation.PointOfInteraction.Capabilities.CardReadingCapabilities	N/A	DE22-1	DE27-1	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
POICardholderVerificationCapabilities	Permits to identify the POI capability and then which operational rules apply	A2I /T2A	Environment.POI.Capabilities.CardholderVerificationCapabilities	CardRemittanceInformation.PointOfInteraction.Capabilities.CardholderVerificationCapabilities	DE22-2	DE22-2	DE27-2	N/A	Terminal	
POIOnLineCapabilities	On-line and off-line capabilities of the POI	A2I /T2A	Environment.POI.Capabilities.OnLineCapabilities	CardRemittanceInformation.PointOfInteraction.Capabilities.OnLineCapabilities	N/A	N/A	N/A	9F35	Terminal	9F35 contains more information than online capabilities
POIDisplayType	Permits to identify the POI capability and then which operational rules apply Capabilities of the display components performing the transaction	A2I /T2A	Environment.POI.Capabilities.DisplayCapabilities.DisplayType	CardRemittanceInformation.PointOfInteraction.Capabilities.DisplayCapabilities.DisplayType	N/A	DE22-11	DE27-6 DE27-7	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
POIDisplayNumberOfLines			Environment.POI.Capabilities.DisplayCapabilities.NumberOfLines	CardRemittanceInformation.PointOfInteraction.Capabilities.DisplayCapabilities.NumberOfLines	N/A	N/A	DE27-6 DE27-7	N/A		
POIDisplayLineWidth	Permits to identify the POI capability and then which operational rules apply Capabilities of the display components performing the transaction	A2I /T2A	Environment.POI.Capabilities.DisplayCapabilities.LineWidth	N/A: CardRemittanceInformation.PointOfInteraction.Capabilities.DisplayCapabilities.LineWidth	N/A	N/A	N/A	N/A	Terminal	
POIPrintLineWidth	Permits to identify the POI capability and then which operational rules apply Capabilities of the display components performing the transaction	A2I /T2A	Environment.POI.Capabilities.PrintLineWidth	N/A: CardRemittanceInformation.PointOfInteraction.Capabilities.PrintLineWidth	N/A	N/A	N/A	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
POIComponentType	Type of component belonging to a POI Terminal	A2I /T2A	Environment.POI.Component.POIComponentType	N/A: CardRemittanceInformation.PointOfInteraction.Component.POIComponentType	N/A	N/A	N/A	N/A	Terminal	
POIComponentProviderIdentifier	Identification of the software, hardware or system provider of the POI component	A2I /T2A	Environment.POI.Component.ProviderIdentification	N/A: CardRemittanceInformation.PointOfInteraction.Component.ManufacturerIdentification	N/A	N/A	N/A	N/A	Terminal	
POIComponentIdentifier	Identification of the component assigned by the provider	A2I /T2A	Environment.POI.Component.Identification.Identification	N/A: CardRemittanceInformation.PointOfInteraction.Component.Model	N/A	N/A	N/A	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
POIComponentSerialNumber	Serial number of a component.	A2I /T2A	Environment.POI.Component.Identification.SerialNumber	N/A: CardRemittanceInformation.PointOfInteraction.Component.SerialNumber	N/A	N/A	N/A	N/A	Terminal	
POIComponentVersionNumber	Current version of component that might include the release number.	A2I /T2A	Environment.POI.Component.Status.VersionNumber	N/A: CardRemittanceInformation.PointOfInteraction.Component.VersionNumber	N/A	N/A	N/A	N/A	Terminal	
POIComponentStandardComplianceIdentifier	Identification of the standard for which the component complies with	A2I /T2A	Environment.POI.Component.StandardCompliance.Identification	N/A	N/A	N/A	N/A	N/A	Terminal	
POIComponentStandardComplianceVersion	Version of the standard for which the component complies with	A2I /T2A	Environment.POI.Component.StandardCompliance.Version	N/A	N/A	N/A	N/A	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
POIComponentAssessmentlNumber	Unique number for the assessment of a component, delivered by a certification body.	A2I /T2A	Environment.POI.Component.Assessment.Number	N/A: CardRemittanceInformation.PointOfInteraction.Component.ApprovalNumber	N/A	N/A	N/A	N/A	Terminal	
CardPresenceIndicator	Indicate whether card was physically present at merchant location to initiate transaction.	T2A/ A2I	Context.PaymentContext.CardPresent	CardRemittanceInformation.TransactionDetails.PaymentContext.CardPresent	DE25	DE22-6	DE22-3	N/A	Terminal	
CardholderPresenceIndicator	Indicate whether the cardholder was physically present at merchant location to initiate transaction.	T2A/ A2I	Context.PaymentContext.CardholderPresent	CardRemittanceInformation.TransactionDetails.PaymentContext.CardholderPresent	DE25	DE22-5	DE22-3	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AttendanceTypeIdentifier	Identifies whether an attendant was present at the POI when the transaction was initiated.	T2A/A2I	Context.PaymentContext.AttendancePaymentContext	CardRemittanceInformation.TransactionDetails.PaymentContext.AttendanceContext	DE25	DE22-4	DE22-3	9F35	Terminal	May also be determined from MCC (e.g., 5542)
BusinessEnvironmentTypeIdentifier	Identifies in what type of business environment the transaction has taken place, e.g., private or public.	T2A/A2I	Context.PaymentContext.TransactionEnvironment	N/A: CardRemittanceInformation.TransactionDetails.PaymentContext.TransactionEnvironment	N/A	N/A	N/A	N/A	Terminal	
TransactionChannelIdentifier	Identifies by means of which communication channel the transaction was conducted e.g., e-commerce or telephone order.	T2A/A2I	Context.PaymentContext.TransactionChannel	CardRemittanceInformation.TransactionDetails.PaymentContext.TransactionChannel	N/A	N/A	DE22-3	N/A	Terminal	May also be determined from MCC (e.g., 5961)

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AttendantMessageCapabilityIndicator	Indicates whether the POI has capability of displaying a message to the attendant.	T2A/ A2I	Context.PaymentContext.AttendantMessageCapable	N/A: CardRemittanceInformation.TransactionDetails.PaymentContext.AttendantLanguage	N/A	DE22-11	DE27-7	9F40	Terminal	
AttendantLanguageIdentifier	Identifies the language used to display messages to the attendant.	T2A/ A2I	Context.PaymentContext.AttendantLanguage	N/A: CardRemittanceInformation.TransactionDetails.PaymentContext.AttendantMessageCapable	N/A	N/A	N/A	N/A	Terminal	
CardDataEntryModeIdentifier	Identifies the method used to enter card information into the transaction.	T2A/ A2I	Context.PaymentContext.CardDataEntryMode	CardRemittanceInformation.TransactionDetails.PaymentContext.CardDataEntryMode	DE22-1	DE22-7	DE22-1	9F39	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
FallbackIndicator	Indicates occurrence of fallback in card entry (i.e., primary/preferred entry method failed).	T2A/ A2I	Context.PaymentContext.FallbackIndicator	CardRemittanceInformation.TransactionDetails.PaymentContext.FallbackIndicator	N/A	N/A	DE22-1	N/A	Terminal	
SaleSystemIdentifier	Identifier of the electronic cash register and/or Sale system used by the acceptor to conduct the transaction.	T2A	Context.SaleContext.SaleIdentification	N/A	N/A	N/A	N/A	N/A	Terminal	
SaleReferenceIdentification	Identifier of the transaction assigned by the electronic cash register or Sale system of the acceptor.	T2A/ A2I	Context.SaleContext.SaleReferenceNumber	CardRemittanceInformation.TransactionDetails.SaleReferenceNumber	DE37	DE37	DE37	N/A	Terminal	
SaleSystemReconciliationIdentifier	Identifies the reconciliation period between the ECR or Sale system and POI.	T2A	Context.SaleContext.SaleReconciliationIdentification	N/A	N/A	DE28+29	DE28+29	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AttendantIdentification	Identifies the attendant person (e.g., cashier) who carried out the transaction.	T2A/ A2I	Context.SaleContext.CashierIdentification	N/A	N/A	N/A	N/A	N/A	Terminal	
AttendantShiftIdentifier	Shift identification of the attendant (e.g., cashier).	T2A/ A2I	Context.SaleContext.ShiftNumber	N/A	N/A	DE29	DE29	N/A	Terminal	
SaleSystemReferenceData	Additional reference data assigned to the transaction by the electronic cash register or Sale system of the acceptor.	T2A/ A2I	Context.SaleContext.AdditionalSaleData	N/A	DE104	DE104	DE104-71	N/A	Terminal	
Amount,Authorised(Numeric)	Authorised amount of the transaction (excluding adjustments)	T2A/ A2I	Part of ICC Related data	Part of ICC Related data	DE55	DE55	DE55	9F02	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
Amount,Other(Numeric)	Secondary amount associated with the transaction representing a cashback amount	T2A/ A2I	Part of ICC Related data	Part of ICC Related data	DE55	DE55	DE55	9F03	Terminal	
ApplicationCryptogram(AC)	Cryptogram returned by the ICC in response of the GENERATE AC command	T2A/ A2I	Part of ICC Related data	Part of ICC Related data	DE55	DE55	DE55	9F26	Card	
ApplicationEffectiveDate	Date from which the application may be used	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	5F25	Card	
ApplicationInterchangeProfile(AIP)	Indicates the capabilities of the card to support specific functions in the application	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	82	Card	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
ApplicationPriorityIndicator	Indicates the priority of a given application or group of applications in a directory	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	87	Card	
ApplicationTransactionCounter(ATC)	Counter maintained by the application in the ICC (incrementing the ATC is managed by the ICC)	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F36	Card	
ApplicationVersionNumber-Terminal	Version of the application specification used for implemention	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F09	Terminal	
CryptogramInformationData(CID)	Indicates the type of cryptogram and the actions to be performed by the terminal	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F27	Card	
CardholderVerificationMethod(CVM)Result	Indicates the results of the last CVM performed	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F34	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
DedicatedFile(DF) Name	Identifies the name of the DF as described in ISO/IEC 7816-4	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	84	Card	
InterfaceDevice(IFD)SerialNumber	Unique and permanent serial number assigned to the IFD by the manufacturer	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F1E	Terminal	
IssuerApplication Data(IAD)	Contains proprietary application data for transmission to the issuer in an online transaction.	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F10	Card	
TerminalCapabilities	Indicates the card data input, CVM, and security capabilities of the terminal	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F33	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
TerminalCountryCode	Indicates the country of the terminal, represented according to ISO 3166	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F1A	Terminal	
TerminalType	Indicates the environment of the terminal, its communications capability, and its operational control	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F35	Terminal	
TerminalVerificationResult(TVR)	Status of the different functions as seen from the terminal	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	95	Terminal	
TransactionCurrencyCode	Indicates the currency code of the transaction according to ISO 4217	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	5F2A	Terminal	
TransactionDate	Local date that the transaction was authorised	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
TransactionSequenceCounter	Counter maintained by the terminal that is incremented by one for each transaction	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F41	Terminal	
TransactionType	Indicates the type of financial transaction, represented by the first two digits of the ISO 8583:1987 Processing Code. The actual values to be used for the Transaction Type data element are defined by the relevant payment system	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9C	Terminal	
UnpredictableNumber	Value to provide variability and uniqueness to the generation of a cryptogram	T2A/ A2I	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F37	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
IssuerScriptResults	Indicates the result of the terminal script processing	T2A/ A2I	Part of ICC related data	N/A	DE55	DE55	DE55	N/A	Terminal	
IssuerAuthenticationData(IATD)	Data sent to the ICC for online issuer authentication	T2A/ A2I	Part of ICC related data	N/A	DE55	DE55	DE55	91	Issuer	
IssuerScriptTemplate1	Contains proprietary issuer data for transmission to the ICC before the second GENERATE AC command	T2A/ A2I	Part of ICC related data	N/A	DE55	DE55	DE55	71	Issuer	
IssuerScriptTemplate2	Contains proprietary issuer data for transmission to the ICC after the second GENERATE AC command	T2A/ A2I	Part of ICC related data	N/A	DE55	DE55	DE55	72	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
TransactionCapture	Indicator whether the present financial transaction shall be captured for clearing.	T2A	Transaction.TransactionCapture	N/A	part of MTI	part of MTI	part of MTI	N/A	Terminal	
ServiceType	Type of service being undertaken.	A2I /T2A	Transaction.TransactionType	DirectDebitTransactionInformation.Purpose.Code	DE03	DE03	DE03	N/A	Terminal or Acquirer	
AdditionalService	Service in addition to the main service.	A2I /T2A	Transaction.AdditionalService	CardRemittanceInformation.TransactionDetails.AdditionalService	N/A	N/A	DE22-3	N/A	Terminal or Acquirer	
ServiceAttribute	Additional attribute of the service type.	A2I /T2A	Transaction.AdditionalService	N/A	N/A	DE24	DE24	N/A	Terminal or Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
MerchantCategoryCode	Code assigned by the Acquirer, containing the ISO 18245-4 MCC code associated with the category of services or goods purchased in this transaction.	A2I /T2A	Transaction.MerchantCategoryCode	CardRemittanceInformation.TransactionDetails.MerchantCategoryCode	DE18	DE26	DE26	N/A	Terminal or Acquirer	
TransactionDateTime	Local date and time assigned by the initiator of the transaction.	A2I /T2A	Transaction.TransactionIdentification.TransactionDateTime	CardRemittanceInformation.TransactionDetails.TransactionDateTime	DE12	DE12	DE12	N/A	Terminal or Acquirer	
TransactionReference	Identification of the transaction that has to be unique in combination with TransactionDateTime for the merchant and the POI.	A2I /T2A	Transaction.TransactionIdentification.TransactionReference	CardRemittanceInformation.TransactionDetails.TransactionReference	DE11	DE11	DE11	N/A	Terminal or Acquirer	See Header Exchange Identification

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
RePresentmentReason	Reason for representment of a card transaction	A2I	N/A	CardRemittanceInformation.TransactionDetails.RePresentmentReason	N/A	N/A	N/A	N/A	Acquirer	
TransactionLifecycleIdentifier	Identification of the transaction for the whole lifecycle	A2I		Payment Information.DirectDebitTransactionInformation.PaymentIdentification.EndToEndIdentification	N/A	N/A	DE21	N/A		
OriginalTransactionDateTime	Local date and time assigned by the initiator of the original transaction.	T2A	Transaction.OriginalTransaction.TransactionIdentification.TransactionDateTime	N/A	DE90	DE56	DE56	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
OriginalTransactionReference	Identification of the original transaction that has to be unique in combination with TransactionDateTime for the merchant and the POI.	T2A	Transaction.OriginalTransaction.TransactionIdentification.TransactionReference	N/A	DE90	DE56	DE56	N/A	Terminal	
OrginalPOIIdentification	Identification of the POI (Point Of Interaction) that has performed the original transaction	T2A	Transaction.OriginalTransaction.POIIdentification	N/A	N/A	N/A	N/A	N/A	Terminal	
OrginalInitiatorTransactionIdentification	InitiatorTransactionIdentification of the original transaction	T2A	Transaction.OriginalTransaction.InitiatorTransactionIdentification	Appearance in Reversal Transactions: [..]OrigininalTransactionReference.Creditor.[Name/Postal Adress]	N/A	N/A	N/A	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
OrginalRecipientTransactionIdentification	RecipientTransactionIdentification of the original transaction	T2A	Transaction.OriginalTransaction.RecipientTransactionIdentification	Appearance in Reversal Transactions: [..].OriginalTransactionReference.Debtor.[Name/Identification]	N/A	N/A	N/A	N/A	Terminal	
OrginalTransactionType	Type of original transaction being undertaken for the main service.	T2A	Transaction.OriginalTransaction.TransactionType	Appearance in Reversal Transactions: OriginalGroupInformationOriginalMessageNameIdentification	DE90	DE56	DE56	N/A	Terminal	
OrginalAdditionalService	Service in addition to the main service of original transaction.	T2A	Transaction.OriginalTransaction.AdditionalService	N/A	N/A	N/A	N/A	N/A	Terminal	
OrginalServiceAttribute	Additional attribute of the service type of original transaction.	T2A	Transaction.OriginalTransaction.ServiceAttribute	N/A	N/A	N/A	N/A	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
OrginalAuthorisationEntity	Type of party that has delivered or declined the authorisation for the original transaction	T2A	Transaction.OriginalTransaction.TransactionResult.AuthorisationEntity	N/A	N/A	N/A	N/A	N/A	Terminal	
OrginalResponse	Result of the autorisation.	T2A	Transaction.OriginalTransaction.TransactionResult.ResponseToAuthorisation.Response	N/A	N/A	N/A	N/A	N/A	Terminal	
OrginalResponseReason	Detailed result of the transaction.	T2A	Transaction.OriginalTransaction.TransactionResult.ResponseToAuthorisation.ResponseReason	N/A	N/A	N/A	N/A	N/A	Terminal	
OrginalAuthorisationCode	Value assigned by the authorising party.	T2A	Transaction.OriginalTransaction.TransactionResult.AuthorisationCode	Appearance in Reversal Transactions: [...].OriginalTransactionReference.MandateIdentification	N/A	N/A	N/A	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
ReconciliationIdentification	Identification of the reconciliation period assigned to the transaction.	A2I/T2A	Transaction.ReconciliationIdentification	N/A	N/A	DE28	DE28	N/A	Terminal or Acquirer	
TransactionCurrency	Currency of TotalAmount and DetailedAmount	A2I/T2A	Transaction.TransactionDetails.Currency	CardRemittanceInformation.TransactionDetails.Amount.Amount (CardRemittanceInformation.TransactionDetails.Amount.CurrencyExchange.SourceCurrency)	DE49	DE49	DE04	5F2A	Terminal or Acquirer	
TotalAmount	Total amount for the transaction.	A2I/T2A	Transaction.TransactionDetails.TotalAmount	PaymentInformation.DirectDebitTransactionInformation.InstructedAmount	DE04	DE04	DE04	9F02	Terminal or Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
Currency Exchange	Reports on currency exchange information.	A2I	TBD	CardRemittanceInformation.TransactionDetails.Amount.CurrencyExchange.TargetCurrency	N/A	N/A	N/A	N/A	Terminal or Acquirer	
AmountQualifier	Qualifies the amount associated with the TransactionType	A2I /T2A	Transaction.TransactionDetails.AmountQualifier	N/A	N/A	DE24	DE24	N/A	Terminal or Acquirer	
TypeOfDetailedAmount	Type of amount like Cashback, Gratuity or Fees	A2I /T2A	Transaction.TransactionDetails.DetailedAmount.Type	CardRemittanceInformation.TransactionDetails.Amount.Type	DE54	DE54 DE46	DE54 DE46	N/A	Terminal or Acquirer	
ValueOfDetailedAmount	Amount value.	A2I /T2A	Transaction.TransactionDetails.DetailedAmount.Value	CardRemittanceInformation.TransactionDetails.Amount.Amount	DE54 DE28	DE54 DE46	DE54 DE46	9F03	Terminal or Acquirer	
TransactionSuccess	Outcome of the transaction at the acceptor.	A2I /T2A	Transaction.TransactionSuccess	N/A	N/A	N/A	N/A	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
Reversal	Notify that a previous transaction has to be reversed if this original transaction has been approved by the acquirer.	A2I /T2A	Transaction.Reversal	Message Root	part of MTI	part of MTI	part of MTI	N/A	Terminal or Acquirer	
MerchantOverride	Indicate that the acceptor has forced the transaction in spite of the authorisation result (online or offline), or incident to complete the transaction.	T2A	Transaction.MerchantOverride	MandateRelatedInformation.MandateIdentification	N/A	N/A	N/A	N/A	Terminal	
FailureReason	List of incidents during the transaction.	A2I /T2A	Transaction.FailureReason	N/A	N/A	DE25	DE25	N/A	Terminal or Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
OnlineReason	Indicates to the Acquirer the primary reason why the transaction has been sent online by the Card Acceptor.	A2I /T2A	Transaction.TransactionDetails.OnlineReason	N/A	N/A	DE25	DE25	N/A	Terminal or Acquirer	Named POS Condition Code in ISO 8583v87
UnattendedLevelCategory	The category level for the transaction of unattended POI terminals assigned by the POI application.	A2I /T2A	Transaction.TransactionDetails.UnattendedLevelCategory	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	
AccountType	Type of account used for the transaction selected by the cardholder.	A2I /T2A	Transaction.TransactionDetails.AccountType	N/A	DE03	DE03	DE03	N/A	Terminal or Acquirer	
SequenceNumber	Indicates the recurring/instalment occurrence of the transaction	A2I /T2A	Transaction.TransactionDetails.RecurringTransaction.SequenceNumber	PaymentInformation.PaymentTypeInformation.SequenceType	N/A	N/A	N/A	N/A	Terminal or Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
PeriodUnit	Period unit between consecutive payments (for example day, month, year).	A2I /T2A	Transaction.TransactionDetails.RecurringTransaction.PeriodUnit	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	
InstalmentPeriod	Number of period units between consecutive payments.	A2I /T2A	Transaction.TransactionDetails.RecurringTransaction.InstalmentPeriod	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	
TotalNumberOfPayments	Total number of instalment payments.	A2I /T2A	Transaction.TransactionDetails.RecurringTransaction.TotalNumberOfPayments	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	
InterestCharges	Interest charged in percentage for the total amount of payments.	A2I /T2A	Transaction.TransactionDetails.RecurringTransaction.InterestCharges	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
ProductCode	Product code of the item purchased.	A2I /T2A	Transaction.TransactionDetails.Product.ProductCode	N/A	DE104	DE104	DE104	N/A	Terminal	
UnitOfMeasure	Unit of measure of the item purchased.	A2I /T2A	Transaction.TransactionDetails.Product.UnitOfMeasure	N/A	DE104	DE104	DE104	N/A	Terminal	
ProductQuantity	Product quantity.	A2I /T2A	Transaction.TransactionDetails.Product.ProductQuantity	N/A	DE104	DE104	DE104	N/A	Terminal	
UnitPrice	Price per unit of product.	A2I /T2A	Transaction.TransactionDetails.Product.UnitPrice	N/A	DE104	DE104	DE104	N/A	Terminal	
ProductAmount	Monetary value of purchased product.	A2I /T2A	Transaction.TransactionDetails.Product.ProductAmount	N/A	DE104	DE104	DE104	N/A	Terminal	
TaxType	Information on tax paid on the product.	A2I /T2A	Transaction.TransactionDetails.Product.TaxType	N/A	DE104	DE104	DE104	N/A	Terminal	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AdditionalProductInformation	Additional information related to the product.	A2I /T2A	Transaction.TransactionDetails.Product.AdditionalProductInformation	N/A	DE104	DE104	DE104	N/A	Terminal	
AuthorisationEntityIdentifier	Identifier of the Authorisation Entity.	A2I /T2A	TransactionResponse.AuthorisationEntity.Identification or TransactionResult.AuthorisationEntity.Identification	N/A	N/A	DE58	DE58	N/A	Issuer	
AuthorisationEntityType	Type of the Authorisation Entity.	A2I /T2A	TransactionResponse.AuthorisationEntity.Type or TransactionResult.AuthorisationEntity.Type	N/A	N/A	N/A	N/A	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AuthorisationEntityAssigner	Assigner of the Authorisation Entity Identifier.	A2I /T2A	TransactionResponse.AuthorisationEntity.Issuer or TransactionResult.AuthorisationEntity.Issuer	N/A	N/A	N/A	N/A	N/A	Issuer	
AuthorisationEntityShortName	Name of the Authorisation Entity.	A2I /T2A	TransactionResponse.AuthorisationEntity.Shortname or TransactionResult.AuthorisationEntity.Shortname	N/A	N/A	N/A	N/A	N/A	Issuer	
Response	Result of the authorisation.	A2I /T2A	TransactionResponse.AuthorisationResult.ResponseToAuthorisation.Response or TransactionResult.ResponseToAuthorisation.Response	N/A	DE39	DE39	DE39	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
ResponseReason	Detailed result of the authorisation.	A2I /T2A	TransactionResponse.AuthorisationResult.ResponseToAuthorisation.ResponseReason or TransactionResult.ResponseToAuthorisation.ResponseReason	N/A	DE39	DE39	DE39	N/A	Issuer	
AuthorisationCode	Value assigned by the authorising party.	A2I /T2A	TransactionResponse.AuthorisationResult.AuthorisationCode or TransactionResult.AuthorisationCode	DirectDebitTransactionInformation.DirectDebitTransaction.MandateRelatedInformation.Mandate Identification	DE38	DE38	DE38	N/A	Issuer	
ElectronicCommerceAuthenticationResult	Result of an e-commerce authentication process.	A2I /T2A	TransactionResponse.TransactionVerificationResult.ElectronicCommerceAuthenticationResult	N/A	DE44	DE44	DE44	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
CSCResult	Result of the printed card security code (CSC) validation.	A2I /T2A	TransactionResponse.TransactionVerificationResult.CSCResult	N/A	DE44	DE44	DE44	N/A	Issuer	
DeclinedProductCode	Product code for which the authorisation was declined.	A2I /T2A	DeclinedProductCode	N/A	N/A	N/A	N/A	N/A	Issuer or Acquirer	
ActionTypeToBePerformed	Type of action to be performed by the POI (Point Of Interaction) system.	A2I /T2A	TransactionResponse.Action.ActionType	N/A	DE44	DE44	DE44	N/A	Issuer or Acquirer	
MessageToPresent	Message to be displayed to the cardholder or the cashier.	A2I /T2A	TransactionResponse.Action.MessageToPresent	N/A	N/A	DE44	DE44	N/A	Issuer or Acquirer	
RespondedBalance	Balance of the account, related to the payment.	A2I /T2A	TransactionResponse.Balance	N/A	DE54	DE54	DE54	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
CurrencyOfBalance	Currency of the Balance Amount	A2I / T2A	TransactionResponse.Currency	N/A	N/A	N/A	N/A	N/A	Issuer	
Track1Data	The information encoded on track 1 of the magnetic stripe as defined in ISO 7813, including field separators but excluding beginning and ending sentinels and longitudinal redundancy check characters as defined therein.	A2I / T2A	TrackData	N/A	DE45	DE45	DE45	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
Track2Data	The information encoded on track 2 of the magnetic stripe as defined in ISO 7813, excluding beginning and ending sentinels and longitudinal redundancy check characters as defined therein.	A2I / T2A	TrackData	N/A	DE35	DE35	DE35	N/A	Issuer	
Track3Data	The information encoded on track 3 of the magnetic stripe as defined in ISO 4909, including field separators, but excluding beginning and ending sentinels and longitudinal redundancy check characters as defined therein.	A2I / T2A	TrackData	N/A	DE36	DE36	DE36	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
CardSequenceNumber	A number distinguishing between separate cards with the same primary account number.	A2I / T2A	Environment.Card.PlainCardData.CardSequenceNumber	CardRemittanceInformation.CardData.CardSequenceNumber	DE23	DE23	DE23	5F34	Issuer	
CardVerificationData	A number that is only printed on the card which is not included in any other technology e.g., magnetic stripe or ICC.	A2I / T2A	Environment.Card.CardSecurityCode	N/A	N/A	N/A	DE49-71	N/A	Issuer	
CardholderBillingAddressCompressed	Numeric and postcode elements only of the cardholder/delivery address	A2I / T2A	Environment.Cardholder.AddressVerification.AddressDigits	N/A	N/A	N/A	DE49-71	N/A	Acquirer	
CardholderBillingPostalCode	Code allocated by postal authority	A2I / T2A	Environment.Cardholder.AddressVerification.PostalCodeDigits	N/A	N/A	N/A	DE49-71	N/A	Merchant	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AccountBasedDigitalSignature	A digital signature created by the private part of the private /public key pair supplied by a card issuer to a cardholder and linked to the cardholder's account on which the card is issued.	A2I / T2A	Environment.Cardholder.AuthenticationValue	N/A	N/A	N/A	DE34-71	N/A	Issuer	
AccountIdentification1	A series of digits and/or characters used to identify a customer account or relationship, e.g., for the "from" account.	A2I / T2A	N/A	N/A	DE103	DE103	DE103	N/A	Issuer	
AccountIdentification2	A series of digits and/or characters used to identify a customer account or relationship, e.g., for the "to" account.	A2I / T2A	N/A	N/A	DE103	DE103	DE103	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AccountTypeCode 2	Code which identifies the type of account to be updated. Used in conjunction with the Transaction type code as part of the Processing code.	A2I / T2A	N/A	CardRemittanceInformation.TransactionDetails.PrePaidAccount.Identification	DE03	DE03	DE03	N/A	Issuer	
AdditionalIdentificationType	Type of additional identification offered by cardholder.	A2I / T2A	RequestData	N/A	N/A	N/A	DE49-71	N/A	Cardholder	
AddressVerificationResultCode	Code which defines the result from the address verification process	A2I / T2A	Environment.CardholderAddressVerificationResult	N/A	N/A	N/A	DE49-72	N/A	Issuer	
Authentication Method	Method used to authenticate the cardholder	A2I / T2A	Environment.Cardholder.Authentication.AuthenticationMethod	CardRemittanceInformation.TransactionDetails.PaymentContext.AuthenticationMethod.AuthenticationMethod	N/A	N/A	N/A	N/A	Acquirer/merchant	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
Authentication Entity	Entity or object in charge of verifying the cardholder authenticity	A2I / T2A	Environment.Cardholder.Authentication.AuthenticationEntity	CardRemittanceInformation.TransactionDetails.PaymentContext.AuthenticationMethod.AuthenticationEntity	N/A	N/A	N/A	N/A	Acquirer	
Personal identification Number (PIN) data	Used to identify the cardholder at the point of service (see ISO 9564-1).	A2I / T2A	Environment.Card.CardHolder.Authentication.CardholderOnLinePIN	N/A	DE52	DE52	DE52	N/A	Cardholder	
PrimaryAccountNumber	A series of digits used to identify a customer account or relationship.	A2I / T2A	Environment.Card.PlainCardData.PAN	CardRemittanceInformation.CardData.PAN, DirectDebitTransactionInformation.DebtorAccount	DE02	DE02	DE02	N/A	Cardholder	
VerificationData	Additional Data required to support identification of the cardholder	A2I / T2A	N/A	N/A	N/A	N/A	DE49	N/A	Merchant	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
ProtectedCardData	Sensitive data of the card encrypted with a cryptographic key.	A2I / T2A	Environment.Card.ProtectedCardData	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	
ExpiryDate	Expiry date of the card	A2I / T2A	Environment.Card.PlainCardData.ExpiryDate	CardRemittanceInformation.CardData.ExpiryDate	DE14	DE14	DE14	5F24	Issuer	EMV Reference only valid for Chip txns.
EffectiveDate	Date as from which the card can be used	A2I / T2A	Environment.Card.PlainCardData.EffectiveDate	CardRemittanceInformation.CardData.EffectiveDate	N/A	DE13	DE13	5F25	Issuer	EMV Reference only valid for Chip txns.
ServiceCode	Services attached to the card, as defined in ISO 7813	A2I / T2A	Environment.Card.PlainCardData.ServiceCode	N/A	DE40	DE40	DE40	5F30	Issuer	Service Code is part of the Track data on the Mag Stripe or the Mag Stripe image on the Chip
CardCountryCode	Country code assigned to the card by the card issuer	A2I / T2A	Environment.Card.CardCountryCode	N/A	DE20	DE20	DE20	N/A	Issuer	EMV Reference only valid for Chip txns.

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
CardProductProfile	Defines a category of cards related to the acceptance processing rules defined by the acquirer	A2I / T2A	Environment.Card.CardProductProfile	N/A	N/A	N/A	N/A	N/A	Issuer/Terminal/Acquirer	
ElectronicProductIdentification	EEA Product Identification	A2I / T2A	Part of ICC related data	Part of ICC related data	DE55	DE55	DE55	9F0A	Card	Optional Use only for Chip Card Transactions
CardBrand	Brand name of the card	A2I / T2A	Environment.Card.CardBrand	CardRemittanceInformation.CardBrand	N/A	N/A	N/A	N/A	Issuer	
AdditionalCardData	Additional card issuer specific data	A2I / T2A	Environment.Card.AdditionalCardData	N/A	N/A	N/A	N/A	N/A	Issuer	
CardholderPersonalData	Identifies personal data related to the cardholder	A2I / T2A	Environment.Cardholder.PersonalData	N/A	N/A	N/A	N/A	N/A	Issuer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
CardholderIdentification	Identification of the cardholder involved in a transaction	N/A	Cardholder.Identification	N/A	N/A	N/A	N/A	N/A	Cardholder	Additional means of identifying the cardholder eg. Driving License no. etc.
ClosePeriod	Indicator for the closure of a reconciliation period.	A2I /T2A	Transaction.ClosePeriod	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	
POIGroupIdentification	Identifier used to split transaction totals per POI group	T2A	TransactionTotals.POIGroupIdentification	N/A	N/A	N/A	N/A	N/A	Merchant	
CardProductProfile	Identifier used to split transaction totals per category of cards	T2A	TransactionTotals.CardProductProfile	N/A	N/A	N/A	N/A	N/A	Merchant	
Currency	Criterion used to split transaction totals per currency	T2A	TransactionTotals.Currency	N/A	N/A	N/A	N/A	N/A	Merchant	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
Type	Criterion used to split transaction totals per type of the transaction (debit, debit reverse, credit or credit reverse)	A2I /T2A	TransactionTotals.Type	N/A	DE74-77	Part of DE74-89	Part of DE74	N/A	Terminal or Acquirer	
TotalNumber	Total number of transactions during a reconciliation period per splitting criteria.	A2I /T2A	TransactionTotals.TotalNumber	N/A	DE74-77	DE74-77	Part of DE74	N/A	Terminal or Acquirer	
CumulativeAmount	Total amount of a collection of transactions during a reconciliation period per splitting criteria.	A2I /T2A	TransactionTotals.CumulativeAmount	N/A	DE86-89	DE86-89	Part of DE74	N/A	Terminal or Acquirer	
SettlementInstitutionIdentifier	Identifier of the Settlement institution	A2I	N/A	N/A	DE99	DE99	DE99	N/A	Terminal or Acquirer	
MaintenanceTrigger	Used to inform the acceptor to call a maintenance session	T2A	TMSTrigger	N/A	N/A	N/A	N/A	N/A	Terminal or Acquirer	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 20022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
ConversionRate	Rate for conversion between local and billing currency	A2I/T2A	TBD	CardRemittanceInformation.TransactionDetails.Amount.CurrencyExchange.ExchangeRate	DE10	DE10	DE 10	N/A	Terminal or Acquirer	
CurrencyBilling	Currency of Cardholder Billing Amount	A2I/T2A	TBD	N/A	DE51	DE51	DE05	N/A	Terminal or Acquirer	
SecurityRelatedControlInformation	Security related control information for encryption and authentication algorithms	A2I/T2A	ContentType	N/A	DE53	DE53	DE53	N/A	Terminal or Acquirer	

2.1.2 Usage of ISO 8583 forwarding and receiving institution vs. ISO 20022 Initiating and Recipient parties

In a transaction between two entities, the contents of the relevant institution identifier data elements are indicated in the two following tables:

- one table for Terminal to Acquirer
- one table for Acquirer to Issuer,

both with two intermediary agents in between, named ‘A’ and ‘B’

Theses tables, allow comparing the usage of the CAPE data elements which are the basis for Terminal to Acquirer with ISO 8583 data elements currently used for Acquirer to Issuer domain.

2.1.2.1 T2A

T2A	Request	=> Acceptor to A		=> A to B		=> B to Acquirer	
	Response	<= A to Acceptor		<= B to A		<= Acquirer to B	
		Acceptor	A	A	B	B	Acquirer
CAPE	Request =>	Acceptor.Identification					Acquirer.Identification
		InitiatingParty (Type =Acceptor)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)	RecipientParty.Type =Acquirer
	Response <=	Acceptor					Acquirer
		InitiatingParty (Type =Acceptor)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)	RecipientParty.Type =Acquirer
8583	Request =>	Acceptor (DE 42)					Acquirer (DE 32)
		~~forwarding institution~~	Receiving Institution (DE 100)	Forwarding institution (DE 33)	Receiving Institution (DE 100)	Forwarding institution (DE 33)	~~receiving Institution~~
	Response <=	Acceptor (DE 42)					Acquirer (DE 32)
		~~receiving Institution~~	Forwarding institution (DE 33)	Receiving Institution (DE 100)	Forwarding institution (DE 33)	Receiving Institution (DE 100)	~~forwarding institution~~

Note that the standard ISO 8583 is not intended for this domain but in practise it is widely used to connect terminals to acquirer hosts and the table above reflects this practise.

2.1.2.2 A2I

A2I	Request	=> Acceptor to A		=> A to B		=> B to Acquirer	
	Response	<= A to Acceptor		<= B to A		<= Acquirer to B	
		Acceptor	A	A	B	B	Acquirer
ATICA	Request =>		Acquirer	A	A	B	B
		Request =>	Acquirer.Identification				
	Response <=		InitiatingParty (Type=Acquirer)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)
		Response <=	InitiatingParty (Type=Acquirer)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)	RecipientParty (Type=IntermediaryAgent)	InitiatingParty (Type=IntermediaryAgent)
8583	Request =>	Request =>	Acquirer (DE 32)				
			forwarding institution	Receiving Institution (DE 100)	Forwarding institution (DE 33)	Receiving Institution (DE 100)	Forwarding institution (DE 33)
	Response <=	Response <=	Acquirer (DE 32)				
			receiving Institution	Forwarding institution (DE 33)	Receiving Institution (DE 100)	Forwarding institution (DE 33)	Receiving Institution (DE 100)

3 DATA ELEMENT USAGE REQUIREMENTS

This section describes the usage of the Data Elements for the different card services defined within the other books of the Volume. It does not describe the message flows for each service, only the Data Elements required to fulfil the service. As a transaction can pass through a number of systems before reaching the acquirer, different Data Elements can be populated by different systems or even by the Acquirer depending on the infrastructure under which the transaction is performed. Book 2 describes the functionality of each service which is not repeated in this section. There is one table for all services. For each service there is a section highlighting the main difference between the actual service and the payment service. The usage of each Data Element is described for Authorisation, Cancellation and Completion for Terminal to Acquirer and Authorisation, Cancellation and Presentment for Acquirer to Issuer. In some implementations Authorisation and Completion/Presentments are combined. Presence in the messages should be filled in line with the corresponding data within the relevant table in section 3.1. This is also referred to as 'single message'. In some services cancellation is not applicable. Some additional Data Elements, used for specific services, are not specified, e.g., the product data for a purchasing card. Advices sent after the completion of a service by the Terminal to the Acquirer (which does not perform data capture) are not described here; however the contents of these messages are a subset of presentment messages. The Data Element usage requirement section contains:

- The name of the Data Elements
- T2A (Terminal to Acquirer) domain
    - Authorisation
        - Request /Advice
        - Response
    - Cancellation
        - Request /Advice
        - Response
    - Completion
        - Request /Advice
        - Response
- A2I (Acquirer to Issuer Domain)
    - Authorisation
        - Request /Advice

        - Response
    - Cancellation
        - Request /Advice
        - Response
    - Presentment
        - Request /Advice / Notification
        - Response
- Additional comments for the Data Element

An authorisation is mostly performed as an online request. However, in some specific environments, it could be sent as an advice e.g., deferred authorisation.

A cancellation is predominantly performed as an advice. However, in some specific environments it could be sent as a request.

Completions within the Terminal to Acquirer domain are mostly performed as an advice, either as a real-time message or in a batch file.

Presentments within the Acquirer to Issuer domain are mostly performed as a notification without response.

The following abbreviations are used:

M = Support of Data Element is Mandatory

C = Support of Data Element is mandatory for certain functional conditions

O = Optional

E = Echo from request, only in connection with M, C, O

G = Original value, only in connection with M, C, O

NP = Not Present

'Optional' Data Elements are not required to be supported for Volume conformance of a protocol.

3.1 Data Elements Usage Requirements table

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
MessageFunction	M	M	M	M	M	M	M	M	M	M	M	M	
ProtocolVersion	M	ME	M	ME	M	ME	M	ME	M	ME	M	ME	
ExchangeIdentification	M	ME	M	ME	M	ME	M	ME	M	ME	M	ME	
RetransmissionCounter	C	CE	C	CE	C	CE	C	CE	C	CE	C	CE	Usually this Data Element is not present in requests but if the authorisation is sent as an advice this advice may be repeated.
TransmissionDateandTime	M	M	M	M	M	M	M	M	M	M	M	M	
SenderIdentifier	M	ME	M	ME	M	ME	M	ME	M	ME	M	ME	
InitiatingPartyType	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	Mandatory for ISO 20022 Supplementary Data Extensions (Clearing)

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
InitiatingPartyIdentifierAssigner	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
InitiatingPartyShortName	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	Mandatory for ISO 20022 Supplementary Data Extensions (Clearing)
ReceiverIdentifier	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
RecipientPartyType	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
RecipientPartyAssigner	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
RecipientPartyShortName	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
RelayIdentifier	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
RelayIdentifierType	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
RelayIdentifierAssigner	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
RelayShortName	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
TraceDateTimeIn	O	O	O	O	O	O	O	O	O	O	O	O	
TraceDateTimeOut	O	O	O	O	O	O	O	O	O	O	O	O	
AcquirerIdentifier	O	OE	O	OE	O	OE	M	ME	M	ME	M	ME	
AcquirerAddress	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	C	NP	
AcquirerCountry	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	C	NP	
Acquirer Account	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	C	NP	
AcquirerType	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
AcquirerIdentifierAssigner	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
AcquirerShortName	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
AcquirerParametersVersion	M	CE	M	CE	M	CE	NP	NP	NP	NP	NP	NP	
AcceptorIdentifier	O	OE	O	OE	O	OE	M	ME	M	ME	M	ME	Populated by the Acquirer if not present in the T2A domain
AcceptorType	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
AcceptorIdentifierAssigner	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	
AcceptorShortName	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	Mandatory for ISO 20022 Supplementary Data Extensions (Clearing)
AcceptorNameLocation	O	NP	O	NP	O	NP	M	NP	O	NP	M	NP	Populated by the Acquirer if not present in the T2A domain.
AcceptorLocationCategory	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
AcceptorAddress	O	NP	O	NP	O	NP	C	NP	C	NP	C	NP	Mandatory for ISO 20022 Supplementary Data Extensions (Clearing). Street is Conditional. N/A for ver 87 and 93. Location is mandatory for 87, 93 and 2003.
AcceptorCountry	O	NP	O	NP	O	NP	M	NP	O	NP	M	NP	Populated by the Acquirer if not present in the T2A domain.
AcceptorSchemeData	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	If required by the card scheme
POIIdentifier	M	M	M	M	M	M	C	CE	C	CE	C	CE	
POIIdentifierType	O	O	O	O	O	O	O	O	O	O	O	O	
POIIdentifierAssigner	O	O	O	O	O	O	O	O	O	O	O	O	
POIShortName	O	O	O	O	O	O	O	O	O	O	O	O	
POISystemName	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIGroupIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
POICardReadingCapabilities	C	NP	O	NP	C	NP	C	NP	O	NP	C	NP	Populated by the Acquirer if not present in the T2A domain.
POICardholderVerificationCapabilities	C	NP	O	NP	C	NP	C	NP	O	NP	C	NP	
POIOnLineCapabilities	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIDisplayType	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIDisplayNumberOfLines	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIDisplayLineWidth	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIPrintLineWidth	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIComponentType	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIComponentProviderIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
POIComponentIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIComponentSerialNumber	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIComponentVersionNumber	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIComponentStandardComplianceIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIComponentStandardComplianceVersion	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
POIComponentAssessmentlNumber	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
CardPresenceIndicator	M	NP	M	NP	O	NP	M	NP	O	NP	M	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
CardholderPresenceIndicator	M	NP	M	NP	O	NP	M	NP	O	NP	M	NP	
AttendanceTypeIdentifier	O	NP	O	NP	O	NP	M	NP	O	NP	M	NP	
BusinessEnvironmentTypeIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
TransactionChannelIdentifier	O	NP	O	NP	O	NP	M	NP	O	NP	M	NP	
AttendantMessageCapabilityIndicator	O	NP	O	NP	O	NP	M	NP	O	NP	M	NP	
AttendantLanguageIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
CardDataEntryModeIdentifier	M	NP	M	NP	M	NP	M	NP	O	NP	MG	NP	
FallbackIndicator	C	NP	C	NP	C	NP	C	NP	C	NP	CG	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
SaleSystemIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
SaleReferenceIdentification	O	NP	O	NP	O	NP	C	CE	CG	CE	CG	CE	Retrieval Reference Number assigned by the Acceptor. Should be part of TransactionLifecycleIdentifier. Mandatory in Integrated systems.
SaleSystemReconciliationIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
AttendantIdentification	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
AttendantShiftIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
SaleSystemReferenceData	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	In case of Original Credit, this Data Element is mandatory and should include Sender data (PAN, Address, City, State & Country Code)
Amount,Authorised(Numeric)	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
Amount,Other(Numeric)	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
ApplicationCryptogram(AC)	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
ApplicationEffectiveDate	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
ApplicationInterchangeProfile(AIP)	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	Mandatory for Chip Transactions
ApplicationPriorityIndicator	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
ApplicationTransactionCounter(ATC)	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
ApplicationVersionNumber-Terminal	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	Mandatory for Chip Transactions

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
CryptogramInformationData(CID)	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions
CardholderVerificationMethod(CVM)Result	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions
DedicatedFile(DF)Name	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	Mandatory for Chip Transactions
InterfaceDevice(IFD)SerialNumber	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	
IssuerApplicationData (IAD)	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
TerminalCapabilities	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	Mandatory for Chip Transactions
TerminalCountryCode	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	Mandatory for Chip Transactions
TerminalType	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	Mandatory for Chip Transactions

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
TerminalVerificationResult(TVR)	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
TransactionCurrencyCode	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	
TransactionDate	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions
TransactionSequenceCounter	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions
TransactionType	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions
UnpredictableNumber	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions
IssuerScriptResults	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	C	NP	
IssuerAuthenticationData(IATD)	NP	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
IssuerScriptTemplate 1	NP	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	
IssuerScriptTemplate 2	NP	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	
TransactionCapture	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
ServiceType	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for Chip Transactions
AdditionalService	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
ServiceAttribute	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
MerchantCategoryCode	M	NP	M	NP	M	NP	M	NP	O	NP	O	NP	This is a transaction dependant Merchant Category.
TransactionDateTime	M	M	M	M	M	M	M	ME	M	ME	M	ME	Assigned by the Acceptor. Recommended in TransactionLifecycleIdentifier.
TransactionReference	M	M	M	M	M	M	M	ME	M	ME	M	ME	Assigned by the Acceptor. Recommended in TransactionLifecycleIdentifier.

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
RePresentmentReason	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	C	NP	
TransactionLifecycleIdentifier	NP	NP	NP	NP	NP	NP	M	ME	M	ME	M	ME	See Section 4
OriginalTransactionDateTime	NP	NP	MG	NP	NP	NP	NP	NP	MG	NP	NP	NP	
OriginalTransactionReference	NP	NP	G	NP	NP	NP	NP	NP	MG	NP	NP	NP	
OrginalPOIIdentification	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalInitiatorTransactionIdentification	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalRecipientTransactionIdentification	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
OrginalTransactionType	NP	NP	G	NP	NP	NP	NP	NP	MG	NP	NP	NP	
OrginalAdditionalService	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalServiceAttribute	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalAuthorisationEntity	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalResponse	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalResponseReason	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalAuthorisationCode	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
ReconciliationIdentification	O	OE	O	OE	O	NP	O	O	O	O	O	O	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
TransactionCurrency	M	M	M	M	M	O	M	M	M	M	M	O	
TotalAmount	M	M	M	M	M	O	M	M	M	M	M	O	Requested amount to be authorised, including DetailedAmount occurrences. In Authorisation response authorised amount and in completion is the transaction total amount.
Currency Exchange	O	NP	NP	NP	O	NP	O	NP	NP	NP	NP	NP	
AmountQualifier	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
TypeOfDetailedAmount	C	C	NP	NP	C	NP	C	C	NP	NP	C	NP	
ValueOfDetailedAmount	C	C	NP	NP	C	NP	C	C	NP	NP	C	NP	
TransactionSuccess	NP	NP	NP	NP	M	NP	NP	NP	NP	NP	M	NP	
Reversal	NP	NP	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	
MerchantOverride	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	NP	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
FailureReason	NP	NP	NP	NP	O	NP	NP	NP	O	NP	O	NP	
OnlineReason	O	NP	NP	NP	NP	NP	O	NP	NP	NP	NP	NP	
UnattendedLevelCategory	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	Mandatory for unattended
AccountType	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
SequenceNumber	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	Only used for Instalment payments
PeriodUnit	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	Only used for Instalment payments
InstalmentPeriod	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	Only used for Instalment payments
TotalNumberOfPayments	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	Only used for Instalment payments
InterestCharges	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	Only used for Instalment payments
ProductCode	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
UnitOfMeasure	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
ProductQuantity	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
UnitPrice	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
ProductAmount	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
TaxType	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
AdditionalProductInformation	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
AuthorisationEntityIdentifier	NP	O	OG	O	C	NP	NP	O	OG	O	C	NP	
AuthorisationEntityType	NP	M	O	O	C	NP	NP	M	O	O	C	NP	
AuthorisationEntityAssigner	NP	O	O	O	C	NP	NP	O	O	O	C	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
AuthorisationEntityShortName	NP	O	O	O	C	NP	NP	O	O	O	C	NP	
Response	NP	M	O	M	C	NP	NP	M	O	M	C	NP	
ResponseReason	NP	O	O	O	C	NP	NP	O	O	O	C	NP	
AuthorisationCode	NP	C	O	O	C	NP	NP	C	O	O	C	NP	
ElectronicCommerceAuthenticationResult	NP	C	NP	NP	C	NP	NP	C	NP	NP	C	NP	
CSCResult	NP	C	NP	NP	C	NP	NP	C	NP	NP	C	NP	
DeclinedProductCode	NP	C	NP	NP	C	NP	NP	C	NP	NP	C	NP	
ActionTypeToBePerformed	NP	O	NP	O	NP	NP	NP	O	NP	O	NP	NP	
MessageToPresent	NP	O	NP	O	NP	NP	NP	O	NP	O	NP	NP	
RespondedBalance	NP	O	NP	NP	NP	NP	NP	O	NP	NP	NP	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
CurrencyOfBalance	NP	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	
Track1Data	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
Track2Data	C	NP	O	NP	O	NP	C	NP	O	NP	O	NP	
Track3Data	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
CardSequenceNumber	C	NP	C	C	C	O	C	NP	C	C	C	O	
CardVerificationData	C	NP	C	NP	NP	NP	C	NP	C	NP	NP	NP	
CardholderBillingAddressCompressed	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
CardholderBillingPostalCode	C	NP	NP	NP	C	NP	C	NP	NP	NP	C	NP	
AccountBasedDigitalSignature	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
AccountIdentification 1	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	Card Fund Transfers Only
AccountIdentification 2	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	Card Fund Transfers Only
AccountTypeCode2	C	NP	NP	NP	NP	NP	C	NP	NP	NP	C	NP	Card Fund Transfers Only
AdditionalIdentificationType	O	NP	NP	NP	NP	NP	O	NP	NP	NP	NP	NP	
AddressVerificationResultCode	NP	O	NP	NP	NP	NP	NP	O	NP	NP	NP	NP	
Authentication Method	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
Authentication Entity	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
Personal identification Number (PIN) data	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	Encrypted PinBlock

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
PrimaryAccountNumber	M	OE	O	OE	C	OE	M	OE	O	OE	C	OE	
VerificationData	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	
ProtectedCardData	C	C	C	CE	C	O	C	C	C	CE	C	O	
ExpiryDate	M	OE	C	OE	C	O	C	NP	C	OE	C	OE	
EffectiveDate	C	NP	C	O	C	O	C	NP	C	O	C	O	
ServiceCode	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	
CardCountryCode	C	NP	C	NP	C	NP	C	NP	C	NP	C	NP	
CardProductProfile	C	OE	O	NP	C	OE	O	NP	O	NP	O	NP	
ElectronicProductIdentification	C	OE	O	NP	C	OE	O	NP	O	NP	O	NP	If the Chip provides the Data this should be included.
CardBrand	C	OE	O	NP	C	OE	O	NP	O	NP	O	NP	

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
AdditionalCardData	C	NP	O	NP	C	NP	C	NP	O	NP	C	NP	
Cardholder~~p~~Personal data	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
CardholderIdentification	O	NP	NP	NP	O	NP	O	NP	NP	NP	O	NP	
ClosePeriod	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	C	CE	DE is used also in T2A reconciliation messages.
POIGroupIdentification	O	NP	O	NP	O	NP	NP	NP	NP	NP	NP	NP	
CardProductProfile	O	NP	O	NP	O	NP	NP	NP	NP	NP	NP	NP	
Currency	O	NP	O	NP	O	NP	NP	NP	NP	NP	NP	NP	
Type	O	NP	O	NP	O	NP	NP	NP	NP	NP	NP	NP	
TotalNumber	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	DEs 192-194 are only be used for reconciliation messages.

Usage Requirements													
DataElementName	**T2A**						**A2I**						
	Authorisation		**Cancellation**		**Completion**		**Authorisation**		**Cancellation**		**Presentment**		
	Request/Advice	**Response**	**Request/Advice**	**Response**	**Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice**	**Response**	**Request/Advice/ Notification**	**Response**	**Message Comments**
CumulativeAmount	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
SettlementInstitutionIdentifier	NP	O	O	O	NP	O	NP	O	NP	NP	NP	NP	
MaintenanceTrigger	NP	C	NP	C	NP	C	NP	NP	NP	NP	NP	NP	
ConversionRate	C	C	C	C	C	C	C	CE	CG	GE	CG	CE	For Currency Conversion only, Currency of Authorisation is different from Currency of Presentment
CurrencyBilling	C	C	C	C	C	C	C	CE	CG	GE	CG	CE	For Currency Conversion only, Currency of Authorisation is different from Currency of Presentment (Billing)
SecurityRelatedControlInformation	C	C	C	C	C	C	C	C	C	C	C	C	

3.2 Payment

The Data Element *TransactionType* should be set to 'Payment'. The message table is presenting the rules for the presence of the message elements defining the card service payment (if not stated otherwise). The authorisation and the completion/presentment functionality may be combined in one message.

3.3 Refund

The Data Element *TransactionType* should be set to 'Refund'. The message table is used as defined for payment however the link to the original transaction is optional. No Cardholder verification has been performed.

3.4 Pre-Authorisation

The Pre-Authorisation in the card service consists of three different sub services:

1. Pre-Authorisation Service (Initial transaction Mandatory)
2. Update Pre-Authorisation Service (0 to n optional transactions)
3. Payment Completion Service or Cancellation (Final transaction Mandatory)

Update Pre-Authorisation shall either:

- Increase the previously authorised amount(s) to reserve funds or,
- Decrease the previously authorised amount(s) to release funds.

As soon as the final amount is known, then Payment Completion shall be used to finalise the transaction using the final amount.

In the event that the amount(s) pre-authorised is not used, the previously authorised amount(s) shall be released by the Cancellation Service. In this case Payment Completion shall not follow

3.4.1 Pre-Authorisation

The Data Element *TransactionType* should be set to 'Reservation' and the Data Element *ServiceAttribute* shall be set to 'InitialReservation'. There is no completion/presentment for a Pre-Authorisation. The Data Element *AmountQualifier* is set to ` Estimated`.

3.4.2 Update Pre-Authorisation

The Data Element *TransactionType* should be set to 'Reservation' and the Data Element *ServiceAttribute* shall be set to 'UpdateReservation'. There is no completion/presentment for an update Pre-Authorisation. The Update Pre-Authorisation can be used to increase or decrease the reserved amount.

Several or no Update Pre-Authorisations shall be submitted.

Depending on the environment where the transaction is taking place the way it is performed may vary, being the Acquirer in charge of assuring accurate translation from T2A to A2I environments:

- **T2A environment** - The Data Element *AmountQualifier* is set to Increase or Decrease. The link to the original transaction shall be present. As a reference, the Data Element *SaleReferenceIdentification* should be used. If not present, the Data Element *TransactionReference* together with the Data Element *POIIdentifier* shall be used.

- **A2I environment** - The Data Element *AmountQualifier* is set to Increase for incremental updates. For Decremental, partial reversals should be used. The link to the original transaction shall be present. As a reference, the Data Element *TransactionLifecycleIdentifier* should be used.

  As explained the reference in the different environment could be different, being the one within the Terminal to Acquirer typically is easier to enter as some Merchants are providing it manually. It is up to the Acquirer to correctly translate the unique identifier to the one used within A2I. (It could be the same, only part of it or a new one)

3.4.3 Payment Completion

The Data Element *TransactionType* should be set to 'Reservation' and the Data Element *ServiceAttribute* shall be set to 'PaymentReservation'. The authorisation shall already have been performed using the sub-services Pre-Authorisation or Update Pre-Authorisation.

The Data Element *AmountQualifier* is set to `Actual`. The link to the original transaction shall be present in the same way as explained in 3.4.2.

3.5 Deferred Payment

The Data Element *TransactionType* should be set to 'DeferredPayment'. The Data Element *AmountQualifier* is set to `Estimated` or 'Default' in the Authorisation. In the Authorisation response, the Data Element *AmountQualifier* is set to 'Maximum' and could be less than the requested amount.

The completion/presentment shall be sent separately within a limited timeframe. The Data Element *AmountQualifier* is set to `Actual` in the completion/presentment showing the actual amount used for delivery. The actual amount could be set to zero if no delivery where initiated or delivery of the amount of zero took place.

3.6 No-Show

The Data Element *TransactionType* should be set to 'Payment' and the Data Element *AdditionalService* is set to 'NoShow'. No Cardholder verification is performed.

3.7 Instalment Payments

For the first instalment transaction the Data Element *TransactionType* should be set to 'Payment', the Data Element *AdditionalService* is set to 'Instalment' and the Data Element *ServiceAttribute* is set to 'InitialInstalment'. The following Data Elements shall be present: *SequenceNumber, PeriodUnit, InstalmentPeriod, TotalNumberOfPayments* and optionally *InterestCharges.* Cardholder verification should be performed.

For the following recurring payments the Data Element *TransactionType* should be set to 'Payment', the Data Element *AdditionalService* is set to 'Instalment' and the Data Element *ServiceAttribute* is set to 'FollowingInstalment' . The following Data Elements shall be present *SequenceNumber* and *TotalNumberOfPayments*. No Cardholder verification is performed.

3.8 Recurring Payments

For the first Recurring Payment transaction the Data Element *TransactionType* should be set to 'Payment', the Data Element *AdditionalService* is set to 'RecurringPayment' and the Data Element *ServiceAttribute* is set to 'FirstRecurring'. Cardholder verification should be performed.

For the following instalment payments the Data Element *TransactionType* should be set to 'Payment', the Data Element *AdditionalService* is set to 'RecurringPayment' and the Data Element *ServiceAttribute* is set to 'FollowingRecurring'. No cardholder verification is performed.

3.9 Quasi-Cash

The Data Element *TransactionType* should be set to 'QuasiCash'.

3.10 ATM Cash Withdrawal

The Data Element *TransactionType* should be set to 'CashWithdrawal'.

The Data Elements POIIdentifier, Personal identification number (PIN) data and SECURITY-RELATED CONTROL INFORMATION are mandatory in the request

3.11 Cash Advance

The Data Element *TransactionType* should be set to 'CashAdvance'.

3.12 Card Validity Check

The Data Element *TransactionType* should be set to 'CardVerification'.

3.13 Balance Enquiry

The Data Element *TransactionType* should be set to 'Balance'.

3.14 Cards Funds Transfer

The Data Element *TransactionType* should be set to 'CardsFundTransfer'. Data Elements that are only applicable for this service are *Accountidentification1*, *Accountidentification2* and *Accounttypecode2*. The Data Element *AccountType* is also used for this service.

3.15 Original Credit

The Data Element *TransactionType* should be set to 'OriginalCredit'. The Data Element *SaleSystemReferenceData* shall be present and shall include Sender data (PAN, Address, City, State & Country Code).

3.16 Pre-Paid Card - Loading/Unloading

The Data Element *TransactionType* should be set to 'Loading' or 'Unloading'. Data Elements that are only applicable for this service are *Accountidentification1*, *Accountidentification2* and *Accounttypecode2*. The Data Element *AccountType* is also used for this service.

3.17 Additional Features

The Additional Features are in the sections below as defined in the Volume.

3.17.1 Payment with Increased Amount

For the Payment with Increased Amount Transaction, the Data Element *TransactionType* should be set to 'Payment', the Data Element *AdditionalService* is set to 'Gratuity'.

3.17.2 Payment with Cash Back

For the Payment with Cash Back transaction, the Data Element *TransactionType* should be set to 'CashBack'. The CashBack amount shall be present.

3.17.3 Payment with Purchasing or Corporate Card Data

For the Payment with Purchasing or Corporate Card Data Transaction, the Data Element *TransactionType* should be set to 'PurchaseCorporate'. The additional Data Elements needed to describe the purchasing or corporate card data shall be present

3.17.4 Payment with Aggregated Amount

For the Payment with Aggregated Amount transaction, the Data Element *TransactionType* should be set to 'Payment', the Data Element *AdditionalService* is set to 'Aggregation'.

3.17.5 Payment with Deferred Authorisation

For the Payment with Deferred Authorisation transaction, the Data Element *TransactionType* should be set to 'Payment'. The Data Element *AdditionalService* is set to 'DeferredAuthorisation'.

3.17.6 Dynamic Currency Conversion

For the Dynamic Currency Conversion transaction the Data Element *AdditionalService* is set to 'DCC'. The additional Data Elements for this service will be described in a future release of this Book.

3.17.7 Surcharging/Rebate

For transactions with Surcharging/Rebate there is no special requirement on the card transaction. The information on the surcharging/rebate shall be present on the receipt from the sale system.

4 REFERENCE AND IDENTIFICATIONS BETWEEN PARTIES

The diagram below illustrates the relations between the involved parties. All relations are not handled message exchanges. The diagram does not show intermediate agents or different infrastructures in the POI to acquirer domain.

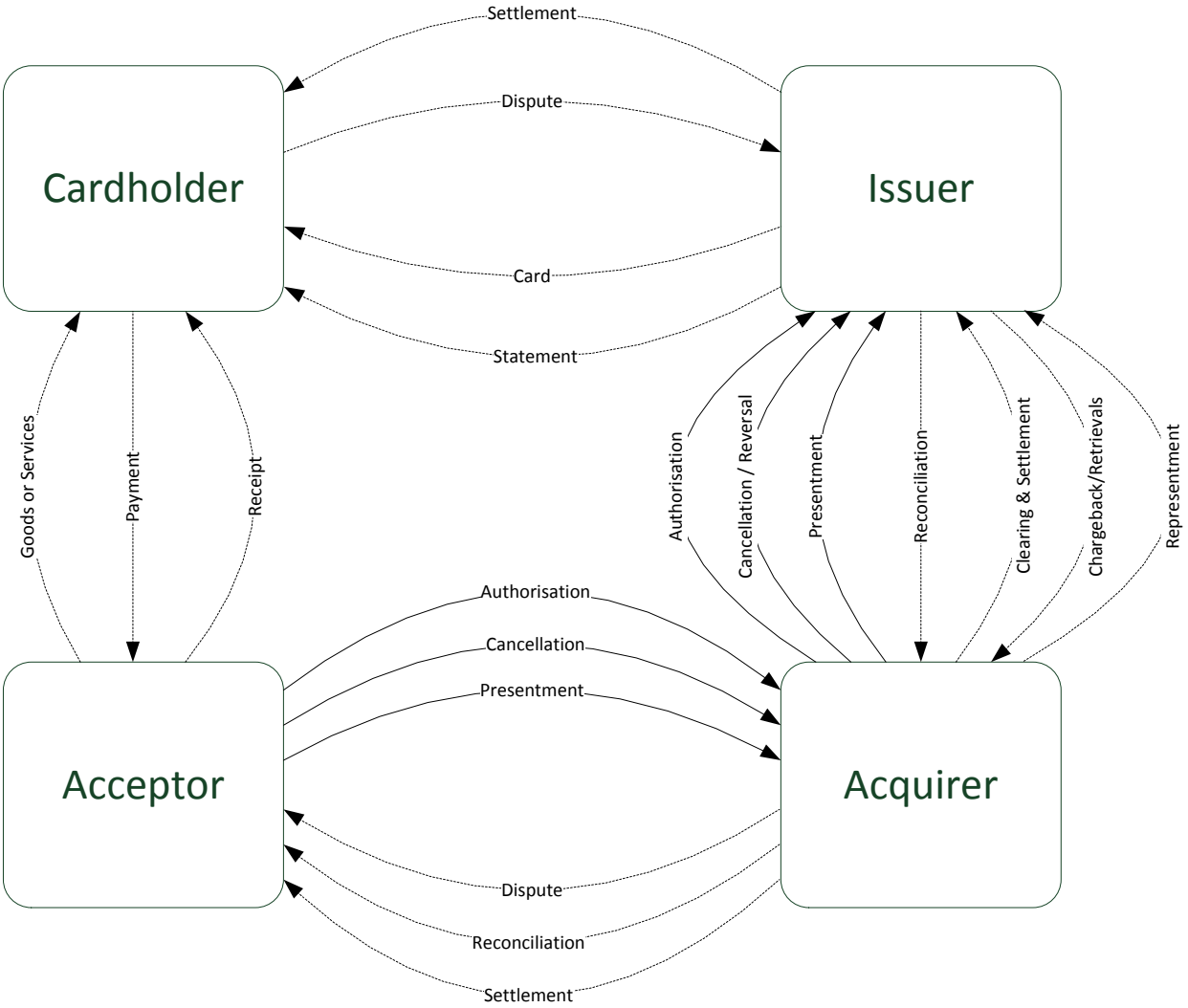

FIGURE 1: RELATIONS BETWEEN INVOLVED PARTIES

As described in the diagram below which shall be used as an illustration to show that a combination of different Data Elements are used to identify specific transactions between the different actors.

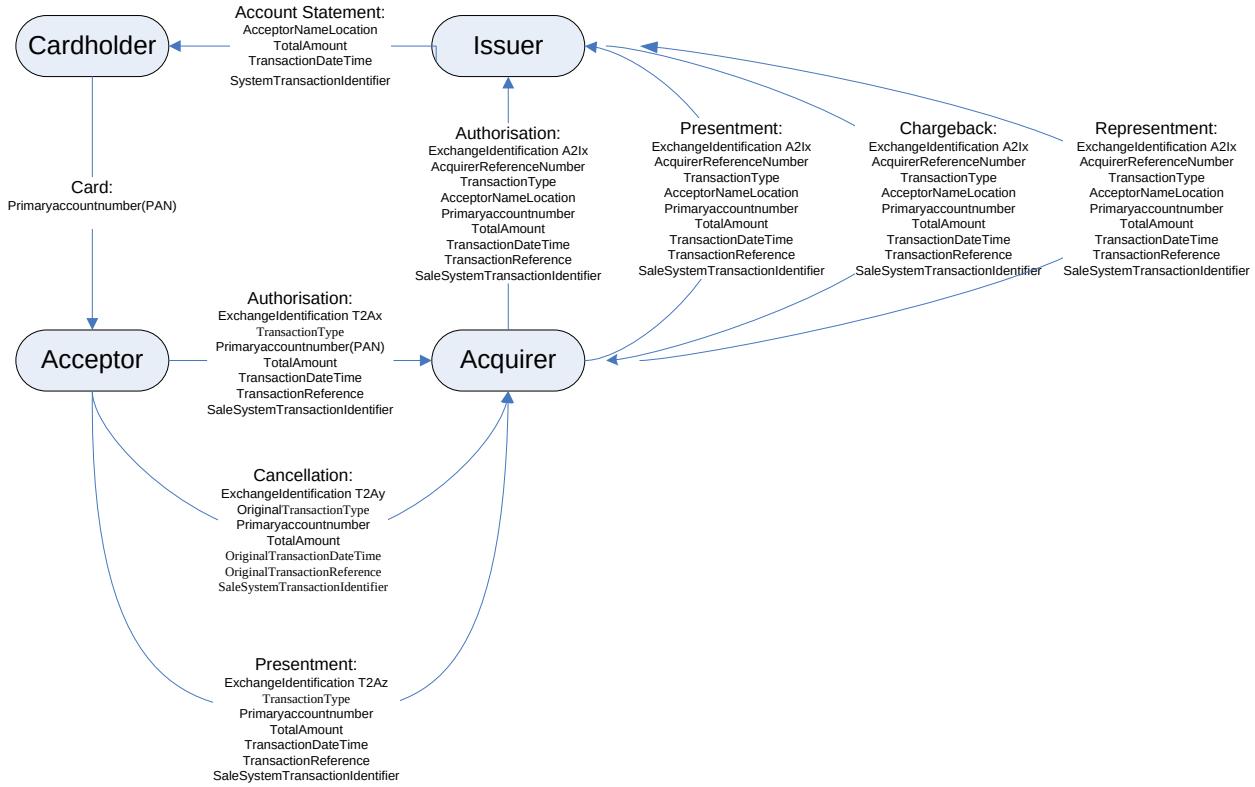

Figure 2: Combinations of Data Elements

To harmonise this, it is proposed to base an identification of a specific transaction, at least between the POI, acceptor, agents, acquirers and issuers on a modification of the transaction lifecycle identification Data Element introduced in the ISO 8583 version 2003 in section 6.4.8.

The *Transaction life cycle identification data* Data Element is a constructed Data Element consisting of 4 parts:

a) *Life cycle support indicator*

b) *Life cycle trace identifier*

c) *Life cycle transaction sequence number*

d) *Life cycle authentication token*

Transaction life cycle identification data is a unique identifier used to match transactions across message classes, e.g., Authorisation to Financial Presentment or Financial Presentment to Chargeback. It shall contain the same value in all message classes throughout a transaction's life cycle.

Life cycle support indicator is a one digit message class code indicating the point in a transaction's life when the *Life cycle trace identifier* was allocated, e.g., 1 for authorisation, 2 for financial presentment.

Life cycle trace identifier formatting and the institution that assigns it are defined by bilateral agreement.

Life cycle transaction sequence number shall be assigned by the acquirer following the receipt of an authorisation and prior to the submission of the financial presentment.

Based on the purpose the Data Element transaction lifecycle identifier as described within ISO 8583/2003 the proposal is to define the unique reference which at least includes the following information from the 'Data Elements Description Table' in section 2.1.1:

- *SaleReferenceIdentification*
- *TransactionDateTime*
- *AcceptorIdentifier*
- *AcquirerIdentifier*

As denoted in rows 1-4 within the below table, Table 3

The table below denotes how it is possible for the involved parties to obtain the unique reference for a specific transaction from the available Data Elements as stated.

Therefore the volume recommends using this modified unique life cycle reference indicator for identification of specific transactions between involved parties.

No.	Data Element	Assigned By	Populated by	Requirement	Purpose
1	SaleReferenceIdentification	Sale System	Sale System	Should be unique within the acceptor ID together with transactiondatetime. If not present, use POI ID and transaction reference	Acceptor can identify this transaction within their domain
2	TransactionDateTime	Sale System	Sale System	Local time of the transaction given by the sales system to the POI. If no sales system connected, use the local date and time of the POI	Timestamp
3	AcceptorIdentifier	Acquirer	Acquirer	Shall be unique within the Acquirer domain	Acquirer can identify this transaction within their domain based on the data from 1-3
4	AcquirerIdentifier	Scheme	Acquirer	Shall be unique within the Scheme domain	Issuer can identify this transaction within their domain, based on data from 1-4
5	(SchemeID/Issuer)	ANSI	Card Data	Implicit Identification of the Card Product (as defined by the contract between the acceptor and Acquirer) using the BIN and additional necessary information.	Differentiates the card transaction purposes. Implicit identification of the issuer.

TABLE 3: UNIQUE REFERENCE IDENTIFIER TABLE

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