

SEPA CARDS STANDARDISATION (SCS) “VOLUME”

BOOK 3

DATA ELEMENTS

PART OF THE APPROVED VERSION OF SCS VOLUME v7.0

Payments and 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" in accordance with the SEPA Cards Framework. 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 clearing¹) are covering Card payment related messages between the acquirer and the issuer. Originally, ATICA (Acquirer to Issuer Card Messages) was also foreseen to be included in this document. However, as ATICA will not be available as of 2014, this publication will include them in a future release. 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 Notification/Presentment. In some implementations Authorisation and 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 can be found within a consolidated spreadsheet the 'Data Elements' which is recommended to be downloaded to accompany this document. The spreadsheet can 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 is the first version of Book 3.

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 section 3.

Data Elements which can 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 (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 will not be available as of 2014, this publication will include them in a future release.

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		
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	
ValidityDate	Transaction authorisation deadline to complete the related payment.	A2I /T2A	Transaction.TransactionDetails.ValidityDate	N/A	N/A	DE57	DE57	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		
TransactionSuccess	Outcome of the transaction at the acceptor.	A2I /T2A	Transaction.TransactionSuccess	N/A	N/A	N/A	N/A	N/A	Terminal	
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	

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		
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	
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	

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		
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	
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	

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		
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	
AdditionalProduct Information	Additional information related to the product.	A2I /T2A	Transaction.TransactionDetails.Product.AdditionalProduct Information	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	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 2022 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
AuthorisationEntityType	Type of the Authorisation Entity.	A2I /T2A	TransactionResponse.AuthorisationEntityType or TransactionResult.AuthorisationEntityType	N/A	N/A	N/A	N/A	N/A	Issuer	
AuthorisationEntityTypeAssigner	Assigner of the Authorisation Entity Identifier.	A2I /T2A	TransactionResponse.AuthorisationEntityType.Issuer or TransactionResult.AuthorisationEntityType.Issuer	N/A	N/A	N/A	N/A	N/A	Issuer	
AuthorisationEntityTypeShortName	Name of the Authorisation Entity.	A2I /T2A	TransactionResponse.AuthorisationEntityType.Shortname or TransactionResult.AuthorisationEntityType.Shortname	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		
Response	Result of the authorisation.	A2I /T2A	TransactionResponse.AuthorisationResult.ResponseToAuthorisation.Response or TransactionResult.ResponseToAuthorisation.Response	N/A	DE39	DE39	DE39	N/A	Issuer	
ResponseReason	Detailed result of the authorisation.	A2I /T2A	TransactionResponse.AuthorisationResult.ResponseToAuthorisation.ResponseReason or TransactionResult.ResponseToAuthorisation.ResponseReason	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		
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	
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	

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		
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	
CurrencyOfBalance	Currency of the Balance Amount	A2I /T2A	TransactionResponse.Currency	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		
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	
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	

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		
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	
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	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 2002 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
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.AddressVerifications	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	

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		
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	
AccountTypeCode2	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	

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 Method	Method used to authenticate the cardholder	A2I / T2A	Environment.Cardholder.AuthenticationMethod	CardRemittanceInformation.TransactionDetails.PaymentContext.AuthenticationMethod.AuthenticationMethod	N/A	N/A	N/A	N/A	Acquirer	
Authentication Entity	Entity or object in charge of verifying the cardholder authenticity	A2I / T2A	Environment.Cardholder.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	

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		
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	
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.

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		
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.
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	
CardBrand	Brand name of the card	A2I / T2A	Environment.Card.CardBrand	CardRemittanceInformation.CardBrand	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		
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	
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 e.g. 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	

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	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	
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	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 2002 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
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	
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	

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		
SecurityRelatedControlInformation	Security related control information for encryption and authentication algorithms	A2I /T2A	ContentType	N/A	DE53	DE53	DE53	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	

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		
ValidityDate	Transaction authorisation deadline to complete the related payment.	A2I /T2A	Transaction.TransactionDetails.ValidityDate	N/A	N/A	DE57	DE57	N/A	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	
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	

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		
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	
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

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		
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	
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	

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		
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	
ProductCode	Product code of the item purchased.	A2I /T2A	Transaction.TransactionDetails.Product.ProductCode	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		
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		
AdditionalProduct Information	Additional information related to the product.	A2I /T2A	Transaction.TransactionDetails.Product.AdditionalProduct Information	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 2022 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.MandateIdentification	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	

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		
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	
AccountTypeCode2	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	

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 Method	Method used to authenticate the cardholder	A2I / T2A	Environment.Cardholder.AuthenticationMethod	CardRemittanceInformation.TransactionDetails.PaymentContext.AuthenticationMethod.AuthenticationMethod	N/A	N/A	N/A	N/A	Acquirer	
Authentication Entity	Entity or object in charge of verifying the cardholder authenticity	A2I / T2A	Environment.Cardholder.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	

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		
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	
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.

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		
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.
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	
CardBrand	Brand name of the card	A2I / T2A	Environment.Card.CardBrand	CardRemittanceInformation.CardBrand	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		
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	
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 e.g. 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	

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	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	
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	

Data Element Name	Purpose	Domain(s)	Reference						Source	Data Element Comments
			CAPE	Registered ISO 2002 Supplementary Data Extensions for clearing (Only applicable for Presentments and Reversals A2I)	ISO 8583v87	ISO 8583v93	ISO 8583v03	EMV		
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	
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	

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		
SecurityRelatedControlInformation	Security related control information for encryption and authentication algorithms	A2I /T2A	ContentType	N/A	DE53	DE53	DE53	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 2002 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	

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		
ValidityDate	Transaction authorisation deadline to complete the related payment.	A2I /T2A	Transaction.TransactionDetails.ValidityDate	N/A	N/A	DE57	DE57	N/A	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	
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	

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		
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	
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

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		
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	
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	

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		
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	
ProductCode	Product code of the item purchased.	A2I /T2A	Transaction.TransactionDetails.Product.ProductCode	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		
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		
AdditionalProduct Information	Additional information related to the product.	A2I /T2A	Transaction.TransactionDetails.Product.AdditionalProduct Information	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 2022 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.MandateIdentification	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	

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'

These 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 Notification/Presentment. In some implementations Authorisation and Presentments are combined. 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

3.1 Data Elements Usage Requirements table

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
SenderIdIdentifier	M	ME	M	ME	M	ME	M	ME	M	ME	M	ME	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
InitiatingPartyType	O	OE	O	OE	O	OE	O	OE	O	OE	O	OE	Mandatory for ISO 20022 Supplementary Data Extensions (Clearing)
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/ Notification	Response	
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	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
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.

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
AcceptorLocationCategory	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
POIComponentAssessmentIdentifier	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	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
AttendantLanguageIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
CardDataEntryModelIdentifier	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	
SaleSystemIdentifier	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
SaleSystemTransactionIdentifier	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	

Usage Requirements													
DataElementName	T2A						A2I						
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/ Notification	Response	Message Comments
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
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

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/ Notification	Response	
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
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

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
IssuerScriptTemplate1	NP	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	
IssuerScriptTemplate2	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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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.
RePresentmentReason	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	C	NP	
TransactionLifecycleIdentifier	M	ME	M	ME	M	ME	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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/ Notification	Response	
OrginalPOIIDentificati on	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalInitiatorTransa ctionIdentification	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalRecipientTrans actionIdentification	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalTransactionTy pe	NP	NP	G	NP	NP	NP	NP	NP	MG	NP	NP	NP	
OrginalAdditionalServ ice	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalServiceAttribu te	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	
OrginalAuthorisationE ntity	NP	NP	O	NP	NP	NP	NP	NP	NP	NP	NP	NP	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
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	


Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
ValidityDate	NP	NP	C	NP	O	NP	NP	NP	C	NP	O	NP	Mandatory for Pre-Authorisation.
TransactionSuccess	NP	NP	NP	NP	M	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	
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

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/ Notification	Response	
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	
AuthorisationEntityAsigner	NP	O	O	O	C	NP	NP	O	O	O	C	NP	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
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	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
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	
AccountIdentification1	C	NP	NP	NP	NP	NP	C	NP	NP	NP	NP	NP	Card Fund Transfers Only

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
AccountIdentification2	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	
AuthenticationMethod	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	
AuthenticationEntity	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						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/ Notification	Response	
PrimaryAccountNum ber	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	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
CardBrand	O	NP	O	NP	O	NP	O	NP	O	NP	O	NP	
AdditionalCardData	C	NP	O	NP	C	NP	C	NP	O	NP	C	NP	

Usage Requirements													
DataElementName	T2A						A2I						Message Comments
	Authorisation		Cancellation		Completion		Authorisation		Cancellation		Presentment		
	Request/Advice	Response	Request/Advice	Response	Advice	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	
CardholderPersonal 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.
CumulativeAmount	NP	NP	NP	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	Advice	Request/Advice	Response	Request/Advice	Response	Request/Advice/Notification	Response	Message Comments
SettlementInstitutionIdentifier	NP	O	O	O	NP	O	NP	O			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 presentment functionality can 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:

- Pre-Authorisation (Initial transaction)
- Update Pre-Authorisation
- Payment Completion

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 presentment for a Pre-Authorisation. The Data Element *AmountQualifier* is set to 'Estimated'. The Data Element *ValidityDate* must be set.

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 presentment for a update pre-authorisation. The Data Element *AmountQualifier* is set to 'Estimated'. The Data Element *ValidityDate* must be set. The link to the original transaction must be present. As reference, the Data Element *SaleSystemTransactionIdentifier* should be used. If not present, the Data Element *TransactionReference* together with the Data Element *POIdentifier* can be used. Several or no Update Pre-Authorisations can be submitted.

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 must 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 must be present. As reference, the Data Element *SaleSystemTransactionIdentifier* should be used. If not present, the Data Element *TransactionReference* together with the Data Element *POIdentifier* can be used.

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 presentment must be sent separately within a limited timeframe. The Data Element *AmountQualifier* is set to 'Actual' in the 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 must be present: *SequenceNumber*, *PeriodUnit*, *InstalmentPeriod*, *TotalNumberOfPayments* and optionally *InterestCharges*. 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 'Instalment' and the Data Element *ServiceAttribute* is set to 'FollowingInstalment'. The following Data Elements must 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* must 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 must 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 must 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.

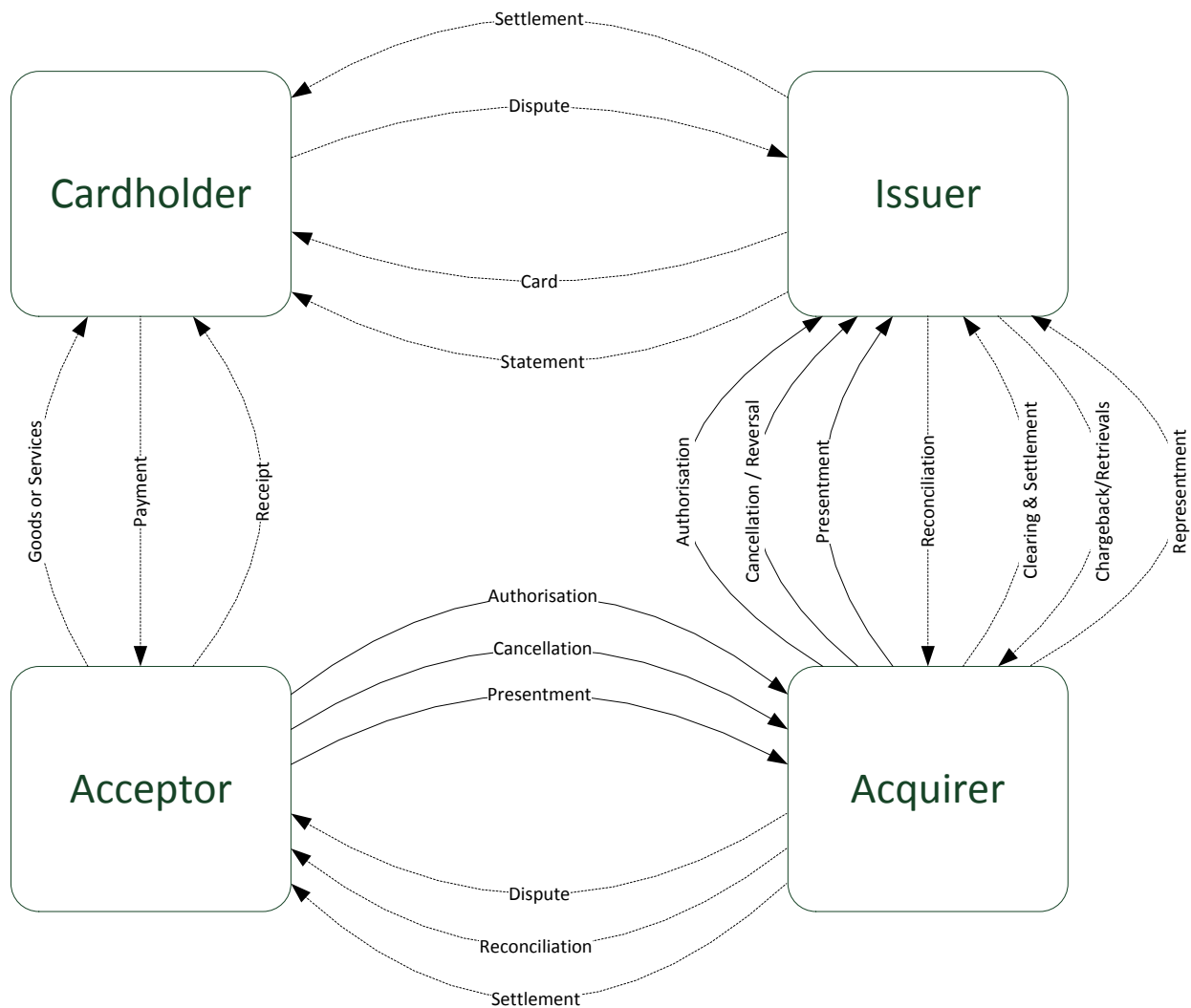


FIGURE 1: RELATIONS BETWEEN INVOLVED PARTIES

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

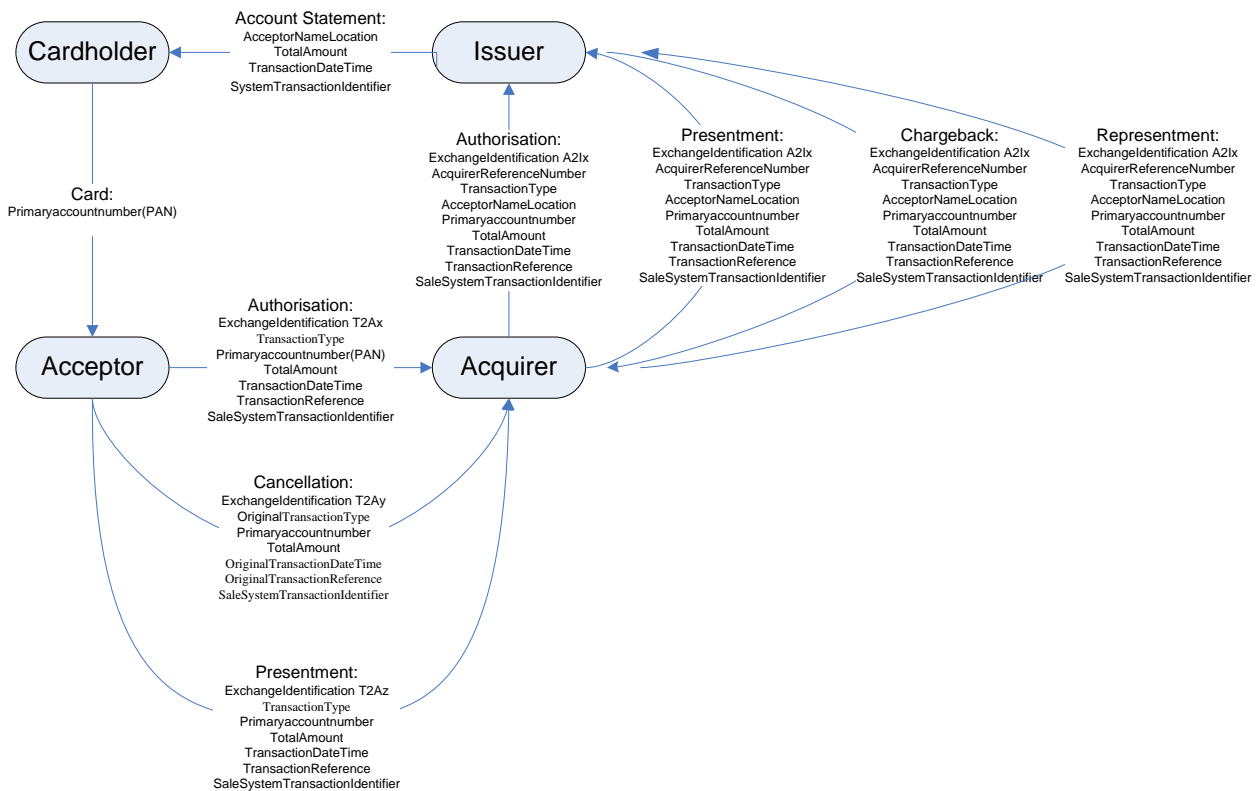


Figure 2: Combinations of Data Elements

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:

- Life cycle support indicator*
- Life cycle trace identifier*
- Life cycle transaction sequence number*
- 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 may 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:

- *SaleSystemTransactionIdentifier*
- *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	SaleSystemTransactionIdentifier	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

5 FIGURES AND TABLES

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