



NPA Message Implementation Guide

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Classification: Public

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1 Documentation Information

1.1 Version history

Version	Date	Description
V0.1	05/07/2021	First Draft – Collection 1
V0.2	06/12/2021	Second Draft – Collection 2
V0.3	09/05/2022	Third Draft – Collection 3
V1.0.0	31/01/2023	Message Standards Base Build V1.0.0
V1.1.0	23/06/2023	Message Standards Base Build V1.1.0

1.2 Copyright statement

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1.3 Change History

Revised Version	Release Date	Document Section	Description of Change	Reason for Change
V1.1.0	June'23	2. Introduction	Updated information to align with new release. Added 2.4 Scope of document.	Uplift in relation to a new document release.
(Removed from this version)	June'23		Previous section outlining Alignment and potential for Interoperability with other FMIs removed.	Removed due to relevance and lack of definition for 'Interoperability'. Will be reconsidered for inclusion later, in line with CPMI ISO 20022 Harmonisation consultation report.
V1.1.0	June'23	3. NPA Standards - The Collateral Within This Release	This new section gives a high-level overview of the Collateral published in this release. It replaces sections 7,8, 9, & 10 in version 1.0.0, which gave more in depth guidance for individual items published by Standards.	All guidance for the use and interpretation of Standards Collateral can now be found within the introduction pages of individual Collateral.
V1.1.0	June'23	4. NPA Products & Messages	This new section introduces the current in scope Payment Products and Payment Submission types available to NPA Participants through the use of the NPA. This includes the list of defined NPA ISO 20022 Messages published on Standards Source, and where these apply to the relevant Business Area. Previous V1.0.0 Section 6.1 NPA Design Use Cases has been removed.	Added to demonstrate the relationship between the NPA Products, Submission Types and NPA ISO 20022 Messages. Previous V1.0.0 Section 6.1 NPA Design Use Cases removed as these Use Cases are no longer relevant to Standard' design approach and documentation.

Revised Version	Release Date	Document Section	Description of Change	Reason for Change
V1.1.0	June'23	5. Structure of NPA Business Message	Updated information on Business Application Header related to Possible Duplicate and Copy Duplicate	Added context on how duplicate and repeat scenarios (including in SOP/FDP) have been handled in the NPA - clarified use of Possible Duplicate. New Copy Duplicate Field Usage: 1) Populated with code 'CODU' in the pacs.002 response to a pacs.028. 2) Populated with code 'COPY' in the pacs.002 payment outcome from the NPA being sent to the payment receiver.
V1.1.0	June'23	7. General Concepts	Previous section 11.3 Structured Address, 11.4 Remittance Information, 11.5 Rule Implementation – Repetition removed.	This information can be found in the Message Specifications.
V1.1.0	June'23	8. Identifiers	Added information on Duplicate Checking with Message ID and Message Definition ID. Usage of Transaction ID updated. Sections 8.4 BICFI and 8.5 Sort Code have been added to version V1.1.0.	Added information on how the NPA will perform Duplicate Checking on a message with Message ID and Message Definition ID - included information that a message with a different Message ID but same UETR will be considered as a new payment. Added detail on how Identifiers are used in the NPA Messages to help identify particular parties in a payment chain - specifically updated use of Transaction ID and added information on use of BICFI and Sort Code.

Revised Version	Release Date	Document Section	Description of Change	Reason for Change
V1.1.0	June'23	9. NPA ISO 20022 Message Roles	<p>V1.1.0 only refers to the Mandatory roles in NPA ISO 20022 messages (Instructing & Instructed Agents, Assigner and Assignee, Creditor and Debtor Agents, and Creditor and Debtor). Examples of how NPA Participants can be mapped to their ISO 20022 Id fields for certain domestic payment scenarios have been added in Sections 10.4.1, 10.4.2 and 10.4.3.</p> <p>V1.0.0 Sections 11.7.2 Previous Instructing Agents and, 11.7.3 Intermediary Agents, have been removed.</p>	<p>V1.1.0 has been updated to only refer to the Mandatory Roles in NPA ISO 20022 Messages and examples of mapping has been produced to help clarify the relationship between the NPA Parties and their related fields in NPA ISO 20022 Messages.</p> <p>V1.0.0 Sections 11.7.2 Previous Instructing Agents and, 11.7.3 Intermediary Agents, removed as the NPA does not require or validate the usage of these for Domestic Payments.</p>
V1.1.0	June'23	9. NPA ISO 20022 Message Roles	Scenario of Redirection Notification (acmt.022) added to where the NPA acts as an Assigner.	Clarified design decision on use of NPA as Assigner in this scenario.
V1.1.0	June'23	11. Annotated Payment Flows	New Section added.	New Section added to contextualise previously defined Key fields through specific payment flows.
V1.1.0	June'23	12. Request and Response Mapping	New Section added.	To describe the mapping between a number of request and response messages in the NPA to enable data to be derived from the appropriate fields.
V1.1.0	June'23	13. Open Banking conversion to NPA ISO 20022 Format	Addition of Open Banking conversion to NPA ISO 20022 Format.	Guidance for the mapping of key fields in Open Banking and their related fields in NPA ISO 20022 Format.

Revised Version	Release Date	Document Section	Description of Change	Reason for Change
V1.1.0	June'23	14. Roll Numbers, Head Office Collection Accounts and Credit Card Payments	Addition of table to describe key fields required for payments involving Roll Numbers, Head Office Collection Accounts and Credit Cards.	To describe some of the key fields that are required for payments involving Roll Numbers, Head Office Collection Accounts and Credit Cards and guidance on where the information for these payments should be populated within NPA ISO 20022 messages.
V1.1.0	June'23	15. Cross-Border Payments	Addition of table to describe key fields required for Cross-Border Payments.	To describe some of the key fields that are required for Cross-Border Payments and guidance on where the information for these payments should be populated within NPA ISO 20022 messages.

Table 1: Change History for Message Implementation Guide

2 Introduction

2.1 Document Purpose

This Message Implementation Guide corresponds to the fifth release of the Standards technical collateral for the New Payments Architecture (NPA).

This document, and the accompanying Message Specifications, sets out Pay.UK's technical approach to implementing the new standard that enables the clearing and settlement capability of the New Payments Architecture (NPA).

The purpose of this document is to:

- Provide technical guidance on the Standard design which applies to the full set of NPA ISO 20022 messages (schemas) and the interpretation of their associated Message Specifications.

This latest release is now version 1.1.0 of the relevant documents and can be used for any initial assessments and developments towards the NPA's standard.

Additional information pertaining to APIs and JSON will be part of the Standards technical collateral but are **excluded** from this document.

2.2 Intended Audience

This document is intended for reference by Participants of the NPA, which will use this new ISO 20022 message standard. It is aimed for organisations and users who will implement the new standard for UK retail payments at a technical level, although other users of the NPA may find it useful.

2.3 How to use this document

This document should be read in conjunction with the other artefacts made available by the Pay.UK Standards Authority regarding the new standard for UK retail payments on [Standards Source Portal](#). These will include: Message Schemas, Message Specifications associated with each Schema, NPA Message Sequence Diagrams, FPS (ISO 8583) to NPA (ISO 20022) Logical Data Mapping, NPA Mandatory Data Document and Sample XML Messages.

For wider NPA context, it is useful to read the NPA Customer Technical Specification (CTS) in conjunction with this document for further information regarding the business services offered by the NPA and for parties connecting to and using the NPA to start their IT systems design. For access to the CTS, please contact **NPAengagement@wearepay.uk** and add the subject, 'Request for Customer Technical Specification'.

This Standards technical collateral has been developed with continuous engagement, representation and feedback from the payments ecosystem. Although every measure has been taken to ensure the accuracy within this document, it is possible that some errors and omissions may exist. If any errors are found in this document please contact **standards@wearepay.uk**.

2.4 Scope

This document covers the Standard design for the NPA and the following ISO 20022 messages are in scope of this document:

- Customer Credit Transfer
- Return Payment
- Payment Status Request
- Credit Transfer Initiation
- Redirection Notification
- System Event Notification

Further detail on the ISO 20022 messages in scope of this release are shown in Table 4 in this document.

The following are not in scope of this version of this document:

- JSON and API Specification
- Peer-to-peer messaging
- Settlement
- Funding and defunding

2.5 Change Management and Version Control

The NPA currently remains in its design phase and we are following an iterative and repeatable process to create, review, publish and evolve the Standards technical collateral. The deliverables in these releases have been taken through internal governance forums, as well as being informed by engagement with Participants and a number of externally established standards fora.

The previous Standards technical collateral published are listed below:

- Collection 1 published in July 2021;
- Collection 2 published in December 2021;
- Collection 3 published in May 2022; and
- Base Build published in Jan 2023.

The NPA Standard is designed to align, and have potential to be interoperable with, with other Financial Market Infrastructures (FMIs) and with the widespread adoption of the global ISO 20022 standard for the clearing and settlement of payments.

Once in use by our Participants, when the standard changes, we will ensure that the NPA will support a “current and minus one” version of the standard concurrently to avoid Participant disruption and give Participants sufficient time to test using the newest version of the standard and implement it.

We will subsequently demise **previous** versions of the standard, throughout the lifetime of the NPA, to maintain the “current and minus one” approach.

Following the launch of the NPA, a framework will be designed by Pay.UK to enable a regular change cycle to the Standards collateral when necessary.

We will ensure we notify Participants and give them the opportunity to collaborate with us to adopt any required changes.

3 NPA Standards – The Collateral Within This Release

The table below provides a list of all the artefact types which will be released as part of this release. All of these artefacts will be published and made available on our Standards Source portal.

Document Title	Document Description
NPA Message Implementation Guide	Provide technical guidance on the Standard design which applies to the full set of NPA ISO 20022 messages (schemas) and the interpretation of their associated Message Specifications.
Schemas	XML Schema Definitions used to describe and validate the structure and the content of the XML messages.
Message Specifications	<p>Provided per NPA ISO 20022 message set (schema). Each guideline defines how a valid message must be populated when inbound to and (where appropriate) outbound from the NPA. It contains message-specific information and application-specific handling of certain data elements for that message. On the cover page of each Message Specification, introductory information can be found regarding the NPA specific usage of the message.</p> <p>All Message Specifications should be read in conjunction with this document and the ISO 20022 XML message standards.</p>
NPA Message Sequence Diagrams	Highlights the selected NPA ISO 20022 message sets and their logical sequencing for NPA specific payment flows.
FPS (ISO 8583) to NPA (ISO 20022) Logical Data Mapping	This mapping has been created from FPS elements within the payment messages (ISO 8583) today, to the ISO 20022 message definitions used in the NPA pacs.008, pacs.004 & pacs.002 (ISO 20022). This assists with Participants transitioning from FPS to the NPA.
NPA Mandatory Data Document	Provides information to business users of the NPA on the mandatory data attributes in the Message Specifications, including their usage, source information (FPS, Bank Reference Data, NPA Reference Data etc.) and whether it was mandated by Pay.UK or ISO. For each data attribute, this document provides a high-level explanation of its usage.
Sample XML Messages	This deliverable provides examples of payment and non-payment NPA ISO 20022 messages exchanged between the NPA CIS and its Participants. These XML messages are a selection of scenarios from the Message Sequence Diagrams and they include mandatory and optional data elements required by the NPA CIS.

Table 2: List of Standards Collateral within this release

3.1 Message Specification Notation Convention

The Message Specifications are presented in a similar format to that used in the ISO 20022 XML standard as shown in the Figure below.

Index	Mult	Element/Attribute	Guideline value(s)
2.19	[1..1]	Document +FIToFICustomer Credit Transfer V09 ++Credit Transfer Transaction Information +++Interbank Settlement Amount	<p>ISO Name ISO Definition ISO Type XML Tag FractionDigits TotalDigits Inclusive ISO Rule(s)</p> <p>Pay.UK Comments Pay.UK Rule(s)</p> <p>Interbank Settlement Amount Amount of money moved between the instructing agent and the instructed agent. ActiveCurrencyAndAmount <IntrBkSttlmAmt> 2 18 0 .. The number of fractional digits (or minor unit of currency) must comply with ISO 4217. Note: The decimal separator is a dot.</p> <p>Contains the amount of money to be moved between Instructing and Instructed agents for the specific transaction. The Interbank Settlement Amount must not exceed the transaction limit for a given payment product.</p>

Figure 1: Message Details Notation Conventions

Column 1: “Index” indicates the element index number specific to the Message Specification and may therefore differ from those in the ISO 20022 guidelines.

Column 2: “Mult.” Indicates the mandatory or optional status and the number of repetitions defined by Pay.UK.

For example:

- 0..1 element is optional and may only be present once
- 0..n element is optional with unlimited instances
- 1..1 element is mandatory and must be present exactly once
- 1..n element is mandatory with unlimited instances

Column 3: “Element/Attribute” indicates the full path of an element where the last line contains the name of the message element as defined in the ISO 20022 XML standard. When an element contains sub-elements, these are indented to the right and noted with a plus sign (+) per level.

Column 4: “Guideline Value(s)” lists the different values or restrictions that can be assigned to the element or attribute:

- ISO Rule(s) indicated in **cyan** appearing at two levels in the documentation, both at the component and at the individual field level. This allows all rules affecting a field to be seen with the definition of that field.
- Pay.UK Comments indicated in **blue** are used to provide further guidance/context about an element’s usage within the NPA.
- Pay.UK Rule(s) indicated in **blue** are structural and functional rules which will be validated by the NPA.

When viewing the HTML version of the Message Specifications, fields included in the new standard are indicated in black whilst fields not included in the new standard, but available in the underlying global ISO 20022 standard, are shown in grey. This is shown below.

NPA_paca.008.001.09_FIToFICustomerCreditTransfer

Message Guideline

Start	Introduction	Status	Guideline	Comments	...	Owner	...
<MsgId>		Message Identification			Document +FIToFICstmrcdtTrf ++GrpHdr +++MsgId		

ISO 20022 Documentation

ISO Name	Message Identification
ISO Definition	Point to point reference, as assigned by the instructing party, and sent to the next party in the chain to unambiguously identify the message. Usage: The instructing party has to make sure that MessageIdentification is unique per instructed party for a pre-agreed period.
ISO Type	Man35Text
XML Tag	<MsgId>

Implementation Guideline

Pay UK Rule(s)	The Message Identifier must be in the following format: MYYYYMMDDDEEEEEEEEEESNNNNNNNNNNNN Pos: 01-01 – FrstB: 'M' Pos: 02-09 – ID Creation Date Pos: 10-21 – Entity Identifier (Characters 07-18 of Sending LEI) Pos: 22-22 – Submission Type (S-Single/M-Multi/F-File) Pos: 23-35 – Unique string
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Figure 2: Pay.UK and ISO 20022 Field Colour Coding

4 NPA Products & Messages

4.1 NPA Products

The NPA payment products covered in this Standards technical collateral are Immediate Payments, Standing Order Payments and Forward Dated Payments.

NPA Payment Product	Features
Immediate Payment	Designed for single “attended’ payments” where an End User (person) may be waiting for an outcome. Outcomes: Supports Accept/Reject/Conditional Accept in Near real-time This will be represented in the NPA ISO 20022, field Local Instrument Code: ‘IMD’
Standing Order Payment	Designed for payments originated from standing order mandates Outcomes: Supports Accept/Reject/Conditional Accept This will be represented in the NPA ISO 20022 field, Local Instrument Code: ‘SOP’
Forward Dated Payment	Designed for payments where no End User is waiting for the payment to complete; an “unattended’ payment”. Outcomes: Supports Accept/Reject/Conditional Accept This will be represented in the NPA ISO 20022 field, Local Instrument Code: ‘FDP’

Table 3: NPA Payment Products

4.2 Message Submission Types

A **single payment** submission contains one payment instruction or return.

A **multi-payment** submission contains more than one payment instruction. We use this term when the channel is API gateway or message gateway; the contents of a multi-payment submission and a file payment submission are the same.

A **file payment** submission contains one or more payment instructions. We use this term when the channel is file gateway or portal; the contents of a multi-payment submission and a file payment submission are the same.

4.3 NPA Standards Messages

The table below details the full list of ISO 20022 messages defined by the NPA and grouped by their Business Area. The NPA ISO 20022 Standards messages are published as both XML Schema Definitions and Message Specifications and can be found on our Portal, Standards Source.

Business Area	ISO 2022 Message	Version	Description
Envelope	Business Message Envelope		Binds the Business Application Header and Document (ISO 2022 Message) together to create a business message.
Header	Business Application Header	head.001.001.02	The Business Application Header is used to transmit the information relating to the source and destination of a message for routing.
Customer Credit Transfer	FI to FI Customer Credit Transfer	pacs.008.001.09	Credit Transfer Message.
	FI to FI Payment Status Report	pacs.002.001.11	Message Status Report of Credit Transfer message.
Return Payment	FI to FI Payment Return	pacs.004.001.10	Instruction to return the funds of a previously cleared payment.
	FI to FI Payment Status Report	pacs.002.001.11	Message Status Report of a Payment Return Message.
Payment Status Request	FI to FI Payment Status Request	pacs.028.001.04	Request for the status of a Credit Transfer Message.
	FI to FI Payment Status Report	pacs.002.001.11	Message Status Report of a Payment Status Request.
Payment Initiation	Customer Credit Transfer Initiation	pain.001.001.10	Credit Transfer Initiation.
	Debit Authorisation Request¹	camt.037.001.07	Requests the authorisation to instruct a Credit Transfer Initiation.
	Debit Authorisation Response	camt.036.001.05	Authorisation Response of an Authorisation Request.
	FI to FI Customer Credit Transfer	pacs.008.001.09	Credit Transfer Message for the Credit Transfer Initiation.

¹ Pay.UK is aware of the new ISO 2022 candidate E&I messages camt.110/camt.111, which could potentially replace camt.037 and camt.036 once the new messages are finalised.

Business Area	ISO 2022 Message	Version	Description
	FI to FI Payment Status Report	pacs.002.001.11	Message Status Report of the Credit Transfer Message.
	Customer Payment Status Report	pain.002.001.11	Customer Payment Status Report of the Credit Transfer Initiation.
Redirection Notification	Identification Modification Advice	acmt.022.001.03	Notifies that a payment has been redirected by the NPA using CASS (Current Account Switch Service).
Technical Reject	Message Reject	admi.002.001.01	Message Rejection due to technical reasons.
System Event Notification	System Event Notification	admi.004.001.02	Notifies that an event has/will occur.

Table 4: Message Specifications

4.4 NPA Participant Roles

The NPA has defined their Participant Roles through a Participation Model. The Participant types relevant to this document have been defined below.

A **Clearing Participant** is an organisation that executes payments using the NPA. It can be a **Direct Settling Participant (DSP)** or a **Direct Non-Settling Participant (DNSP)**.

- A **DSP** is a financial institution that executes and settles payments using NPA; it owns an NPA settlement account at the Bank of England.
- A **DNSP** is a financial institution that executes, but does not settle, payments using the NPA; settlement is performed by a Liquidity Services Sponsor (may be a DSP).

A **Direct Submitter (DS)** is an organisation that initiates payments by submitting to the NPA. Payment initiation requests must be authorised by a sponsor.

Clearing Participants and Direct Submitters are the two Participant types capable of sending NPA ISO 2022 messages directly to the NPA clearing system to instruct/initiate a payment.

The **NPA Central Infrastructure Service (NPA CIS)** is the NPA clearing system, which consists of core clearing and settlement services.

A **Technical Services Participant (TSP)** is an organisation provides technology for a Clearing Participant or Direct Submitter to connect to NPA CIS for payment clearing and initiation.

A **Liquidity Services Sponsor (LSS)** is a financial institution that settles NPA payments for DNSP; they own an NPA settlement account at the Bank of England. A DSP is an LSS if it performs settlement for DNSPs.

An **Indirect Participant** is a financial institution that sends and receives payments via a Participant (DSP, DNSP). They do not connect to NPA and do not require accreditation by Pay.UK as the relationship is managed between the Direct Participant and the Indirect Participant.

An **End User** is a person or organisation, using the NPA as a payer, payee, or both. *Note that a Direct Submitter is also an end user.*

4.5 NPA ISO 20022 Message Submission Options

Clearing Participants must be able to receive all three payment products, but can choose which to submit on. Direct Submitters can initiate payments using the Immediate Payment product and Forward Dated Payment product only.

ISO 20022 Message	Payment Product	Sender	Cardinality
pacs.008.001.09 FI to FI Customer Credit Transfer	Immediate, Standing Order, Forward Dated Payment	Clearing Participant	Single, Multi, File
pacs.004.001.10 FI to FI Payment Return	Immediate, Forward Dated Payment	Clearing Participant	Single
pain.001.001.10 Customer Credit Transfer Initiation	Immediate, Forward Dated Payment	Direct Submitter	Single, Multi, File
pacs.028.001.04 FI to FI Payment Status Request	Immediate, Standing Order, Forward Dated Payment	Clearing Participant, Direct Submitter	Single, Multi, File

Table 5: NPA ISO 20022 Message Submission Options

5 Structure of NPA Business Messages

All submissions to the NPA must include the following two XML instances:

- ISO 20022 Business Application Header (head.001); **and**
- ISO 20022 Message (pacs.008/pain.001/pacs.002/etc.).

These XML instances will both be included within the Business Message Envelope to create a full Business Message.

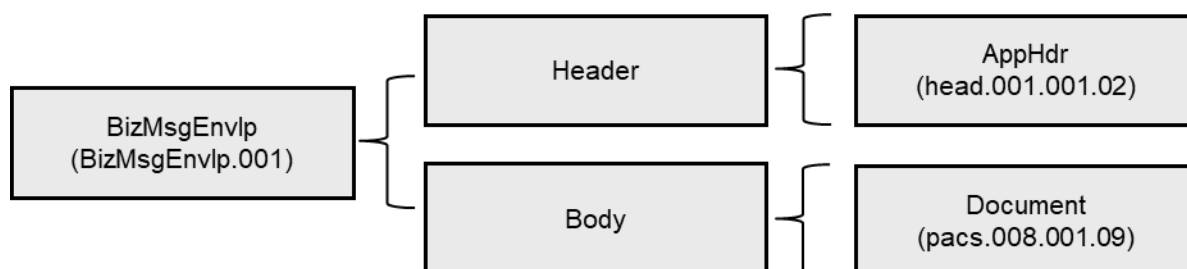


Figure 3: Business Message

5.1 Business Message Envelope

The Business Message Envelope (BizMsgEnvlp) will act as the mechanism with which to bind the ISO 20022 Business Application Header (head.001) to the relevant ISO 20022 messages (pacs.008, pacs.002, etc.).

This provides a consistent definition which formalises the relationship between the header and the body of the business message. The structure was designed to provide flexibility and extensibility.

5.2 Business Application Header

The Business Application Header (BAH) message **must** be combined with any other ISO 20022 message to form an ISO 20022 Business Message. It should not be used as a standalone schema.

The BAH is used in the processing and routing of payment messages and instructions with the NPA.

The NPA uses the BAH to identify where the message originated, as well as its destination. When the NPA is forwarding and generating a message, its LEI will be included as the sender within the “From” element. Similarly, Participants should address the NPA within the “To” element when sending a message.

Note, this may not align with the Instructing/Instructed Agent fields within the underlying ISO 20022 Message as this could be a Technical Services Participant (TSP) which is not considered an Instructing Agent or Instructed Agent in the underlying message; for further information please refer to section 9.1 Instructing & Instructed Agents/Assigner & Assignee.

Whenever the content of the Business Message is modified, the “BizMsgIdr” element should be regenerated to ensure that each Business Message is unambiguously identifiable.

In order to identify a repeat for a single payment instruction, inbound to the NPA, the field Possible Duplicate will be = 'TRUE'. If a Sending Agent suspects that the NPA has not received a transmitted message then they can resend the message with the Possible Duplicate = 'TRUE' in the Business Application Header. If an inbound repeat multi/file payment instruction is received with the Possible Duplicate field = 'TRUE', the NPA will ignore this message.

In a Standing Order Payment or Forward Dated Payment, the NPA will resend the payment instruction to the Receiving Agent to a configurable number of times until it receives a response, in which the message will have Possible Duplicate = 'TRUE' in the Business Application Header to represent a repeat payment instruction. If a payment instruction contains Possible Duplicate = 'TRUE' in the Business Application Header, then the payment response must also have populated this field with the same value.

The Copy Duplicate field of the Business Application Header should be used in two instances to help uniquely identify a pacs.002/pain.002 response from the NPA:

- 1) Populated with code 'CODU' in the pacs.002/pain.002 response to a pacs.028.
- 2) Populated with code 'COPY' in the pacs.002 payment outcome from the NPA being sent to the payment receiver.

These codes, in the Copy Duplicate field, will only be used in the outbound messages from the NPA.

Section 11, Annotated Payment Flows, provides further guidance on how the elements of the Business Application Header behave in certain payment flows.

All messages to and from the NPA must include a Digital Signature, in which the detailed specifics on these signatures is to be designed in the detailed design elaboration phase.

6 Structure of NPA Message Submission Types

6.1 Single Payments

A **Single** Payment Submission contains only one payment from one Debtor to one Creditor. This means within the ISO 20022 message, there will be only one occurrence of the Transaction element (Credit Transfer Transaction Information (CdtTrfTxInf) in pain.001/pacs.008 and Transaction Information (TxInf) in pacs.004).

For further information on the use of the Single Payment Submissions, please refer to the Customer Technical Specification document.



Figure 4: Single Payment Structure

6.2 Multi Payments

A **Multi** Payment Submission contains more than one occurrence of the Credit Transfer Transaction Information (CdtTrfTxInf) element, each representing a different transaction from the same Sending Agent (Instructing Agent). The NPA will support multi payment submissions inbound to the NPA; however, each transaction will be processed separately (debulked) and a subsequent single outbound pacs.008 message is sent to the relevant Receiving Agent (Instructed Agent).



Figure 5: Multi Payment Structure

For further information on the use of the Multi Payment Submissions, please refer to the Customer Technical Specification document.

6.3 File Payments

A **File** Submission has the same structure as a Multi Payment Submission, however it is submitted over a file gateway or portal.

The structure of a File has changed since the last release (of the Standards technical collateral) was published to simplify its design.

For further information on the use of the File Payment Submissions, please refer to the Customer Technical Specification document.

7 General Concepts

7.1 Character Set

ISO 20022 XML messages allow for the full range of global language requirements (the full Unicode character set encoded using UTF-8). **The NPA’s Participants must be able to support the following character set:**

NPA Character Set						
0	A	a	(space)	{	â	Â
1	B	b	/	}	á	Á
2	C	c	“(") ²	*	ä	Ä
3	D	d	#		à	À
4	E	e	\$	[ê	Ê
5	F	f	%]	é	É
6	G	g	&(& amp;)	^	ë	Ë
7	H	h	‘(& apos;)	!	è	È
8	I	i	(î	Î
9	J	j)		í	Í
	K	k	`		ï	Ï
	L	l	+		ì	Ì
	M	m	,		ô	Ô
	N	n	–		ó	Ó
	O	o	-		ö	Ö
	P	p	.		ò	Ò
	Q	q	/		û	Û
	R	r	:		ú	Ú
	S	s	;		ü	Ü
	T	t	<(& lt;)		ù	Ù
	U	u	=		ÿ	ÿ
	V	v	>(& gt;)		ý	Ý
	W	w	?		ÿ	ÿ
	X	x	@		ÿ	ÿ
	Y	y	~		ÿ	ÿ
	Z	z	\		ÿ	ÿ
					ÿ	ÿ
					ÿ	ÿ

Table 6: NPA Character Set

² Characters must be escaped by replacing them with the value between brackets, e.g., < by <. When loading the file the XML parser will recognise the value < and de-escape it to < in memory.

This character set encompasses commonly used characters in international communications and those with diacritics belonging to indigenous languages within the UK beyond English i.e. Irish, Scots, Gaelic and Welsh.

This requires the use of Unicode subsets Latin-1, Latin Extended-A alphabet and Latin Extended Additional Alphabet.

Extending the character set beyond the Basic Latin character set will promote greater inclusivity and allow Participants to populate name and addresses accurately.

Where a more restrictive character set is required, for example the UETR, we have defined XML Pattern facets to restrict each specific element within the schemas.

Identifications and identifiers must respect the following:

- Content is restricted to the basic Latin character set.
- Content must not start or end with a '/'.
• Content must not contain '//'.
• Spaces are not permitted in identification (*Id*) fields.

7.1.1 Special Characters Mapping Tables

To assist Participants that provide services for Indirect Participants that cannot accept or process this extended Latin-based character set, we have provided a mapping table below that allows Participants to 'downgrade' the characters to their Basic Latin equivalents.

1. Mapping of letters with diacritical sign – accent acute:

Glyph	Á	É	Í	Ó	Ú	Ý	Ŵ	á	é	í	ó	ú	ý	ŵ
Latin letter	A	E	I	O	U	Y	W	a	e	i	o	u	y	w

2. Mapping of letters with diacritical sign – circumflex:

Glyph	Â	Ê	Î	Ô	Û	ÿ	Ŵ	â	ê	î	ô	û	ÿ	ŵ
Latin letter	A	E	I	O	U	Y	W	a	e	i	o	u	y	w

3. Mapping of letters with diacritical sign – accent grave:

Glyph	À	È	Ì	Ò	Ù	Ỳ	Ẁ	à	è	ì	ò	ù	ỳ	ẁ
Latin letter	A	E	I	O	U	Y	W	a	e	i	o	u	y	w

4. Mapping of letters with diacritical sign – umlaut/diaeresis:

Glyph	Ä	Ë	Ï	Ö	Ü	ÿ	Ẅ	ä	ë	ï	ö	ü	ÿ	ẅ
Latin letter	A	E	I	O	U	Y	W	a	e	i	o	u	y	w

7.2 Date and Time

ISODate

All dates must be formatted according to the structure defined in ISO 8601, 'YYYY-MM-DD'. For example, 2021-06-01.

ISODateTime

All times must be represented in Coordinated Universal Time (UTC) as per ISO 8601, 'YYYY-MM-DDThh:mm:ss.sss+/-00:00'. UK local time offset must be added taking account of summer and winter time (UTC+01:00 and UTC+00:00 respectively). For example: 2021-06-01T11:00:01.123+00:00

8 Identifiers

8.1 Message and Transaction Identifiers

The ISO 20022 standard has defined a number of elements which can be used to unambiguously identify certain aspects of a Business Message, ISO 20022 Message or Transaction.

The main Message and Transaction Identifiers in the NPA ISO 20022 Standard are:

- Business Message Identifier;
- Message Identification; and
- Unique End-to-End Transaction Reference (UETR)

The NPA will support the passthrough of all other identifiers where a Participant has chosen to use one.

8.1.1 Business Message Identifier and Message Identification

Business Message Identifier and Message Identification are generated by the sender to unambiguously identify the Business Message and Message respectively. These elements are present within the Business Application Header which accompanies the ISO 20022 message **and** the ISO 20022 Message itself. To ensure uniqueness we have defined a format for this element which Participants must adhere to.

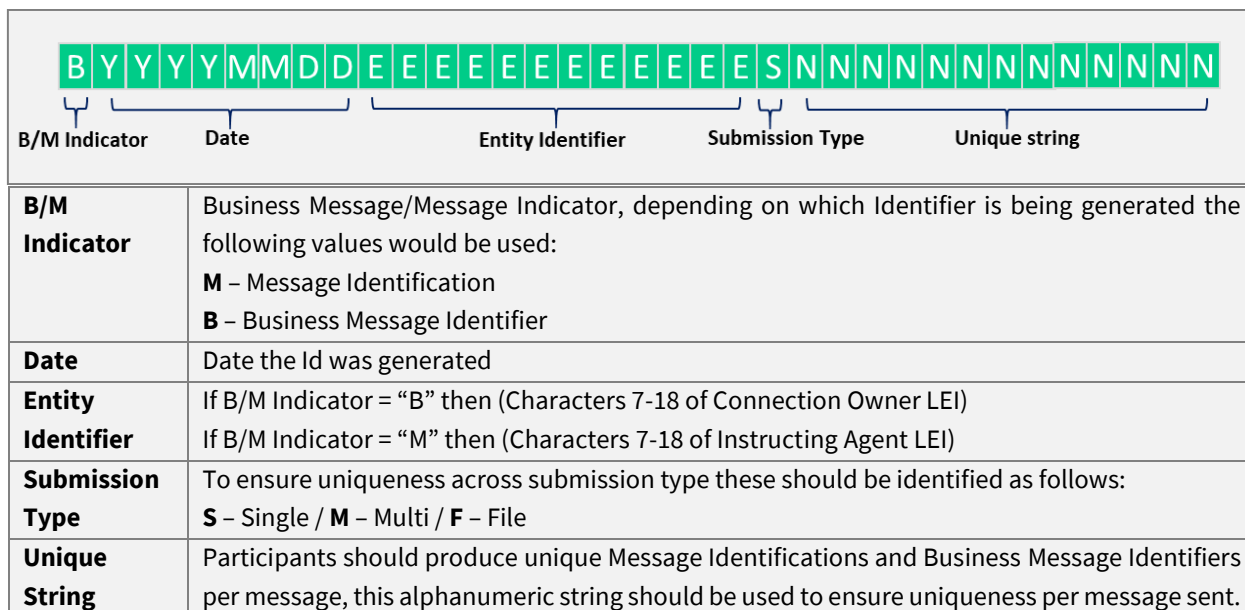


Figure 6: Message ID Format

For all steps in the payment chain the Business Message Identifier should be regenerated to unambiguously identify each Business Message.

The NPA will update the Business Message Identifier every time it creates a new one, or modifies an existing one.

The NPA acts as a passthrough service in the majority of payment messages; in these scenarios the NPA will not adjust the Message Identification, even if we make amendments to the message, for example when updating the payment instruction to facilitate a CASS redirection.

The NPA will only modify the Message Identification when it is acting as an Instructing Agent/Assigner within the ISO 20022 message.

The NPA uses the Message Identification and Message Definition Identifier in duplicate checking messages, whereby payment messages that contain a Message Identification and Message Definition Identifier which has been previously used will be rejected. It will reject any payment over five days old (based on the Creation Date and Time) and duplicate checking is only performed against payments received in the last five days. If the payment message contains Possible Duplicate = TRUE, then the payment is treated as a potential repeat and will be responded to with the original response but not rejected as a duplicate payment.

For a full list of the scenarios where this is the case, 9.1 Instructing & Instructed Agents/Assigner & Assignee.

The use of an Entity Identifier ensures Participants' IDs are unique across the system, providing they are unique per Participant, Submission Type and Date.

8.1.2 UETR

The UETR (Unique End-to-End Transaction Reference) is a 36-character universally unique identifier which provides an end-to-end reference of a payment transaction; it is designed to be unique across systems and does not need an authority to administer its allocation.

Since the reference must be unique across systems, the NPA has mandated the usage of the UUIDv4 standard compliant with RFC 4122. These UETRs can be generated "in-house" using the algorithms published within RFC 4122 or using publicly available libraries.

Within financial transactions the principal use of the UETR is to uniquely identify a payment from the initial payer (Debtor Agent) right through to the final payee (Creditor Agent).

The UETR will be generated by the sender and passed through the entire payment chain.

One application of the UETR is to facilitate a payment "track & trace" function across the payment ecosystem. The UETR is used as a reference and is not used in duplicate checking but if payment with a new Message ID and a UETR previously used, then this is considered as a new payment by the NPA.

8.1.3 End to End Identification (EndToEndId)

The NPA does not use the EndToEndId element within its processing. EndToEndId is still mandated by the ISO 20022 standard and is used to unambiguously identify a financial transaction to the initiating party from its inception to its conclusion.

If an EndToEndId is not provided by the payment initiator, Participants can use the value "NOTPROVIDED" so as to produce valid XML instances as per the schema.

If an EndToEndId is provided, the NPA will pass this value untouched from the Instructing Agent to the Instructed Agent.

8.1.4 Transaction Identification (TxId)

This field should only be used by the NPA to populate the Message ID of the inbound Payment Instruction/Initiation Message to link to the individual outbound pacs.008 messages from the NPA.

If the outbound pacs.008 TxId field is populated, this field needs to be translated into the Original Transaction Identification (OrgnlTxId) in the inbound/outbound pacs.002.

8.1.5 Instruction Identification (InstrId)

The NPA does not use InstrId within its processing. If an InstrId is provided then the NPA will pass this value untouched from the Instructing Agent to the Instructed Agent.

8.2 NPA Usage of Message and Transaction Identifiers

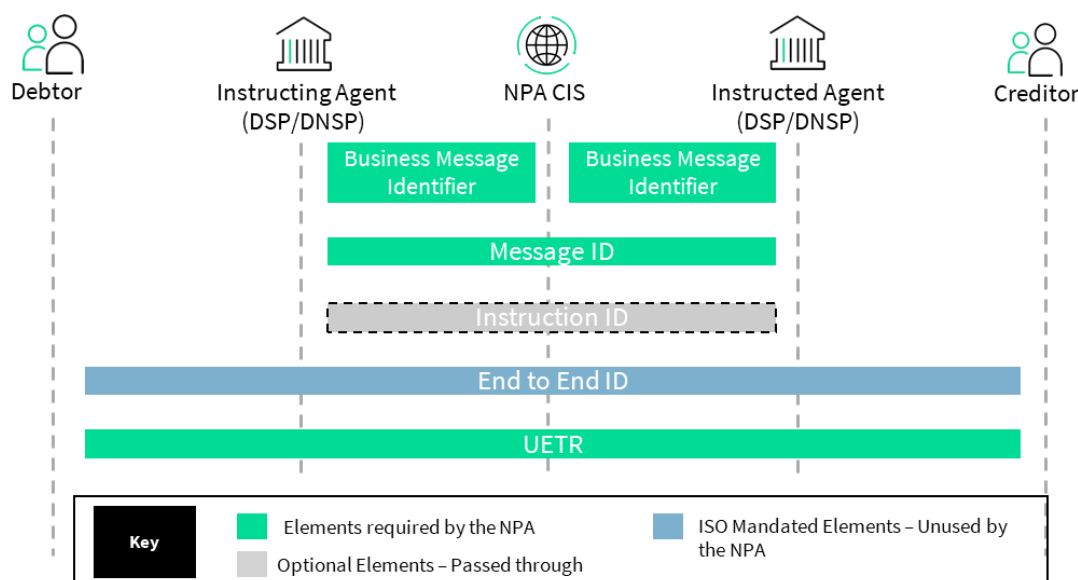


Figure 7: Message Identifier Elements Usage

Business Message Identifier: Unique identifier of a Business Message from Point to Point. (Mandatory)

Message ID: Unique identifier of an ISO 20022 Message from Instructing Agent to Instructed Agent (Mandatory)

Instruction ID: Uniquely identifies an instruction within a message. Not used by the NPA. (Optional)

End to End ID: Reference created by payment initiator. Not used by the NPA. (Mandatory)

UETR: Unique identifier of a payment throughout the payment lifecycle. (Mandatory)

For examples of the messages detailing of how these identifiers change through the lifecycle of a payment, please refer Section 11, Annotated Payment Flows.

8.3 Legal Entity Identifier

The LEI is a 20-character, alpha-numeric code based on the ISO 17442 standard. Each LEI contains standardised information about ‘who is who’ and ‘who owns whom’. Simply put, the publicly-available LEI information can be regarded as a global directory, which greatly enhances transparency in the international financial marketplace.

All Clearing Participants **must** be identified using the Legal Entity Identifier (LEI) in messages exchanged with the NPA.

For further information on the LEI and its structure please see GLEIF's introduction on their website:
<https://www.gleif.org/en/about-lei/introducing-the-legal-entity-identifier-lei>

8.4 BICFI

The BICFI is the code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking – Banking telecommunication messages – Business identifier code (BIC)".

Valid BICs for financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consist of eight (8) or eleven (11) contiguous characters.

The BICFI can be used to help identify Cross-Border Payments. However, for Domestic payments the BICFI is optional.

8.5 Sort Code

The Sort Code is the domestic bank code used to route money between financial institutions in the United Kingdom and Republic of Ireland.

The Sort Code is mandatory for Domestic Payments and is included in Member ID.

When using Member ID, Clearing System ID/Code must also be populated with 'GBDSC' i.e. UKDomesticSortCode.

9 NPA ISO 20022 Message Roles

In this section, only the mandatory ISO 20022 ID Fields have been addressed: Instructing & Instructing Agents/Assigner & Assignee, Debtor and Creditor Agent, and Debtor and Creditor.

9.1 Instructing & Instructed Agents/Assigner & Assignee

Instructing and Instructed Agents are transitory fields within the ISO 20022 standard; they change based on the direction of the payment.

This applies to all messages that have Instructing/Instructed Agents and the same scenario applies when the messages include the Assigner/Assignee elements instead.

For all payment messages (pacs.008/pain.001/pacs.004) the Instructing Agent must set the Instructed Agent to be the handling bank of the Creditor Agent the payment is intended for and not the NPA.

When the Creditor Agent handles their own payments then the Instructed Agent will be the same as the Creditor Agent.

When the Creditor Agent does not handle their own payments, and is therefore not directly connected to the NPA, then the Instructed Agent will be the handling bank of the Creditor Agent.

To ascertain which scenario is applicable to the payment being sent, the Instructing Agent will need to look up the Sort Code of the Creditor Agent within the NPA Bank Reference Data (BRD) and identify the LEI of the handling bank.

In the following scenarios the NPA will be the **Instructing Agent**:

- Payments rejected by the NPA (pacs.002);
- Payment Status Responses (pacs.002); and
- Payment Outcome to the Instructed Agent (pacs.002).

In the following scenario the NPA will be the **Instructed Agent**:

- Payment Status Requests (pacs.028).

In the following scenarios the NPA will be the **Assigner**:

- Debit Authorisation Requests (camt.037); and
- Redirection Notification (acmt.022).

In the following scenario the NPA will be the **Assignee**:

- Debit Authorisation Responses (camt.036).

In the above scenarios, messages will only be exchanged between one Participant and the NPA CIS. Therefore, the NPA will be addressed within the body of the message as **either** an Instructing Agent/Instructed Agent or Assigner/Assignee.

In all other use cases, the NPA **will not** feature as an Instructing/Instructed Agent within the ISO 20022 message.

The Instructing and Instructed Agents have been restricted to the transaction level of their respective messages to support the multi/file payment submission types.

9.2 Debtor and Creditor Agent

Debtor and Creditor Agent are **mandated** within the ISO 20022 standard.

The **Debtor Agent** is a financial institution serving an account for the debtor.

The **Creditor Agent** is a financial institution serving an account for the creditor.

For the Debtor Agent, this can be identified using one of the following elements: BICFI or Clearing System Member ID. For UK domestic payments, the Sort Code is mandatory and is populated within the Member ID. BICFI is optional and can be used to identify the Debtor Agent (only) for cross-border payments.

The Creditor Agent must be identified by the Clearing System Member ID (Sort Code) in the NPA.

When using Member ID, Clearing System ID/Code must also be populated with 'GBDSC' i.e. UKDomesticSortCode.

9.3 Debtor and Creditor

Debtor and Creditor are **mandated** within the ISO 20022 standard.

If the Debtor and Creditor are organisations, they should be identified with a LEI, otherwise, Name must be present.

9.4 NPA Parties and their Roles in NPA ISO 20022 Messages

NPA Participants should use the Message Specifications for full guidance on which ISO 20022 ID fields are appropriate to represent Participants in NPA ISO 20022 messages. The section below offers examples of how NPA Participants will be represented in domestic payments submitted to the NPA.

9.4.1 pacs.008 Domestic Payment Submission by a DSP/DNSP

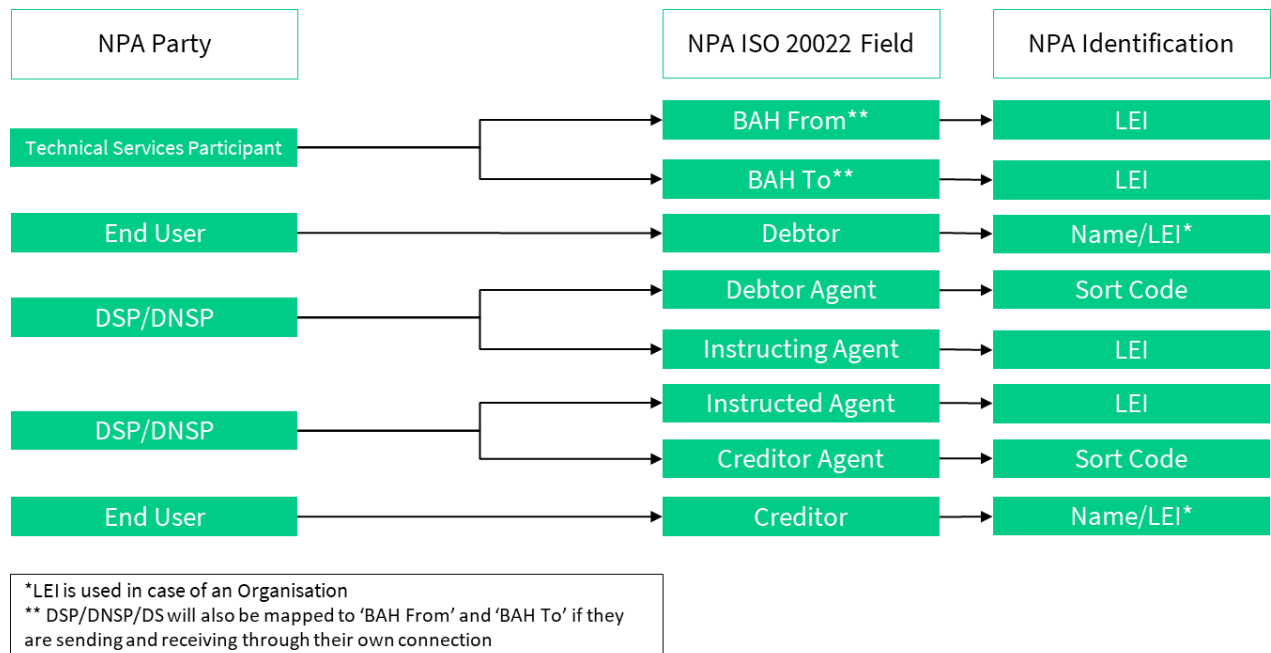


Figure 8: pacs.008 DSP/DNSP and NPA ISO 20022 Message Fields

9.4.2 pacs.008 Domestic Payment Submission by an Indirect Participant

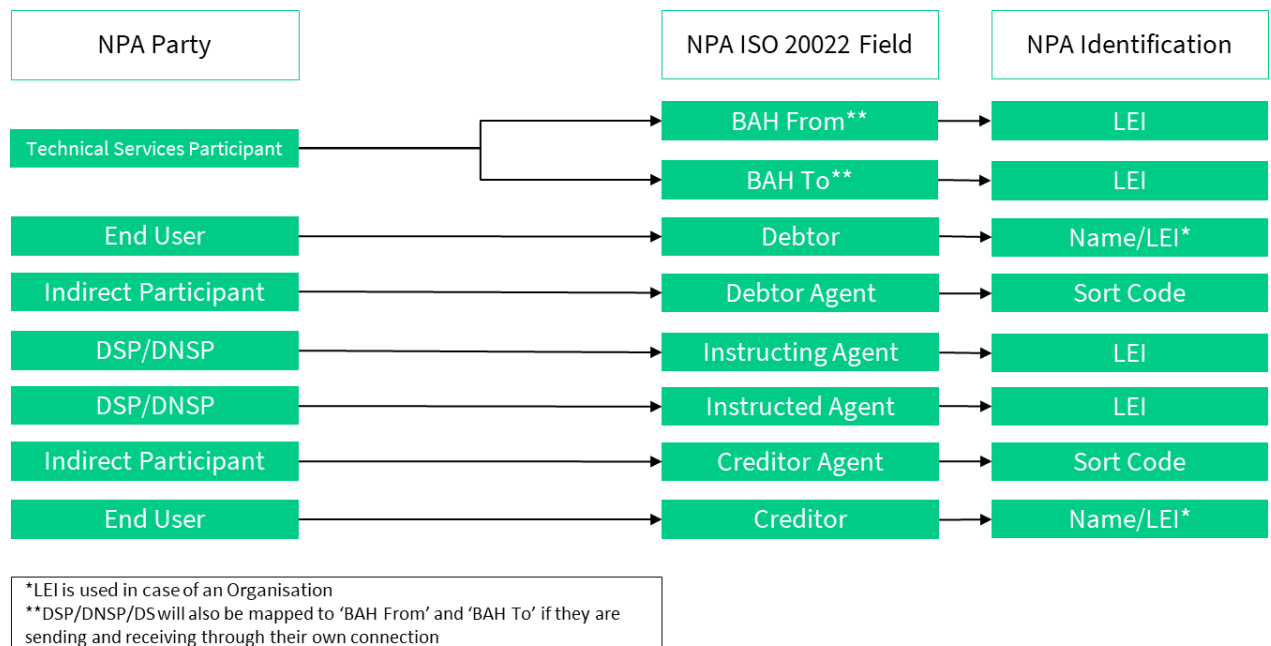


Figure 9: pacs.008 Indirect Participant and NPA ISO 20022 Message Fields

9.4.3 pain.001 Payment Initiation Submission by a Direct Submitter

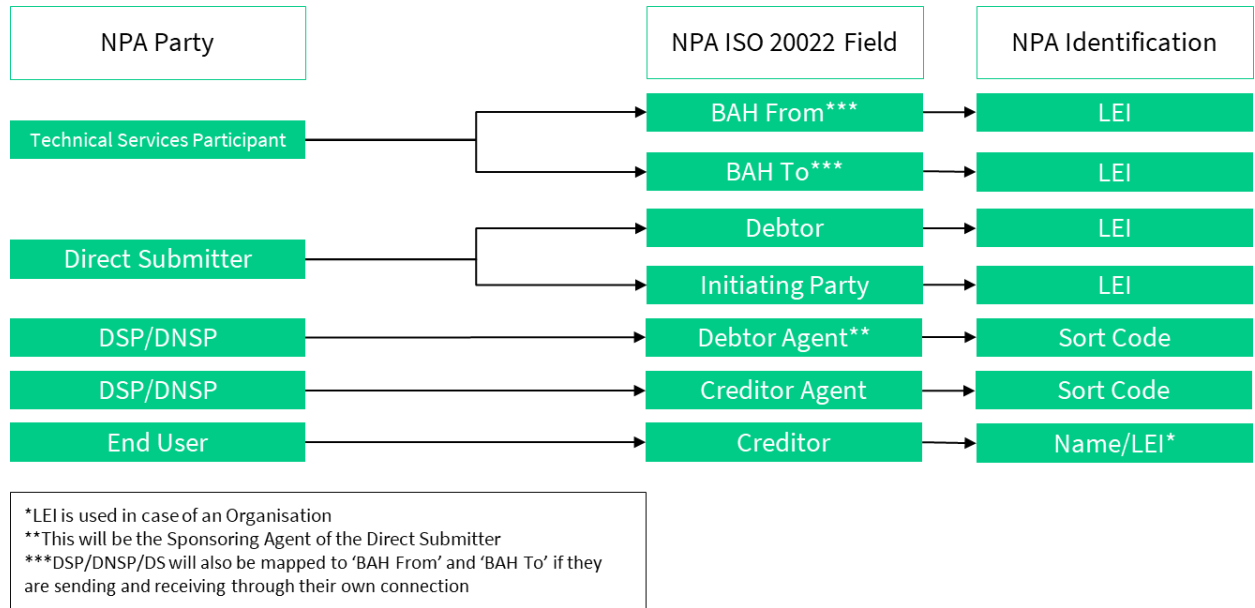


Figure 10: pain.001 Direct Submitter and NPA ISO 20022 Message Fields

10 Code Lists

10.1 Status Codes

Status codes should be populated in the ISO 20022 pacs.002 and pain.002 messages and they illustrate the status of the payments.

10.1.1 Transaction Status Codes

The NPA Transaction Status codes, as described below, may be subject to change in future elaborations and should not be considered final.

Transaction Status codes will be used by both the NPA and Clearing Participants to inform the status of transactions. These codes can be used differently by Participants and the NPA so we have provided a table below to clarify the meaning of the codes.

Tx Sts Code	Definition	Clearing Participant	NPA
ACTC	Accepted	Sent by the Instructed Agent to inform that the payment has been accepted.	Sent by the NPA to both Direct Participants (Instructing and Instructed Agents) to confirm that the payment has been accepted by the Instructed Agent and processed by the NPA and it is now finalised.
ACWP	Conditionally Accepted	Sent by the Instructed Agent to inform that the payment has been conditionally accepted. Must be followed by an End State Confirmation.	Sent by the NPA to both Direct Participants (Instructing and Instructed Agents) to inform that the payment has been conditionally accepted by the Instructed Agent and processed by the NPA and it is now finalised.
RJCT	Rejected	Sent by the Instructed Agent to reject a payment. A reason for rejection must also be provided when this code is used.	Sent by the NPA to inform that a payment has been rejected (either by the NPA or the NPA passing through a rejection).
ACCC	Accepted (End State Confirmation)	Sent by Instructed Agent in a conditional acceptance scenario to confirm the completion of the payment.	Forwarded by the NPA to the Instructing Agent to inform that the payment has been credited to the Creditor's account.

Tx Sts Code	Definition	Clearing Participant	NPA
PDNG	Pending	N/A	Sent by the NPA in response to a pacs.028 status request when a transaction is “in flight” (i.e. has not reached the status of successful or rejected).

Table 7: Transaction Status Codes

10.1.2 Group Status Codes

The NPA Group Status codes, as described below, may be subject to change in future elaborations and should not be considered final.

Groups Status Codes will be populated by the NPA when providing the status of a group of transactions in a File or Multi Payment.

Group Sts Code	Definition	NPA
ACTC	Accepted	Sent by the NPA to the Instructing Agent in response to a multi-payment message or file to inform that all the payments in the original message/file have been accepted/conditionally accepted by the Instructed Agents and processed by the NPA and are now finalised.
PART	Partially Accepted	Sent by the NPA to the Instructing Agent in response to a multi-payment message or file to inform that only a number of payments in the original message/file have been accepted by the Instructed Agents and processed by the NPA and are now finalised. The remainder of the payments have instead been rejected.
RJCT	Rejected	Sent by the NPA to inform that all payments in the original message/file have been rejected.
RCVD	Received	Sent by the NPA to the Instructing Agent in response to a pacs.028 status request of a multi-payment message or file to inform that the message/file has been received but has not yet been fully processed by the NPA.
PDNG	Pending	Sent by the NPA to the Instructing Agent in response to a pacs.028 status request of a multi-payment message or file to inform that the message/file has been processed by the NPA but not all responses have yet been received from the Instructed Agents.

Table 8: Group Status Codes

10.2 Purpose Codes

Pay.UK has committed to introduce Purpose Codes to UK payments, as part of the migration to the ISO 20022 financial messaging standard, so relevant parties can identify clearly the purpose of a payment. The objective is to provide enhanced data in payment messages for improved analytics, innovation, resilience and fraud detection.

A recommended UK Purpose Code list (127 Purpose Codes, each a combination of 4 alpha characters) has been defined, which is a subset of the (ISO) international External Code Set. This includes six new Purpose Codes related to Property and Gambling that have been approved by ISO 20022 Registration Authority.

The subset is designed to improve usability and consistency across UK industry.

All Purpose Codes in the international External Code Set will continue to be accepted in CHAPS **and** the NPA to maximise international compatibility.

Purpose Codes are initially being introduced as an optional element within CHAPS. Adoption of their use across the ecosystem will drive benefit realisation. From November 2024 Purpose Codes will be **mandatory** for CHAPS in payments between financial institutions, and for property transactions. The NPA is expected to follow this trend and have Purpose Codes mandated at schema level. Please find more information on [Purpose Codes from Pay.UK and Bank of England's joint consultation response](#).

11 Annotated Payment Flows

This purpose of this section is to illustrate how certain key fields behave within payment scenarios. This section is intending to cover the main payment scenarios; a comprehensive coverage of all the payment scenarios can be found in the NPA Message Sequence Diagrams as part of this Standards technical collateral.

The payment scenarios covered in this section are:

- Single Immediate Payment Instruction Success Scenario,
- Single SOP/FDP Payment Instruction Success Scenario,
- Single Immediate Payment Initiation Success Scenario,
- Repeat Payment Instruction Scenario,
- Multi/File Payment Instruction Success Scenario,
- Multi/File Payment Initiation Success Scenario,
- Single/Multi/File Status Request Scenarios,
- Payment Redirection Scenario, and
- Single Payment Return Success Scenario.

The key fields included as annotations to these payment flows do not reflect a full message schema. The transaction details are also available through reporting and enquiry services.

11.1 Single Immediate Payment Instruction Success Scenario

This payment flow below depicts a successful single immediate payment instruction (pacs.008) sent by an NPA Clearing Participant (Bank A) to another NPA Clearing Participant (Bank B).

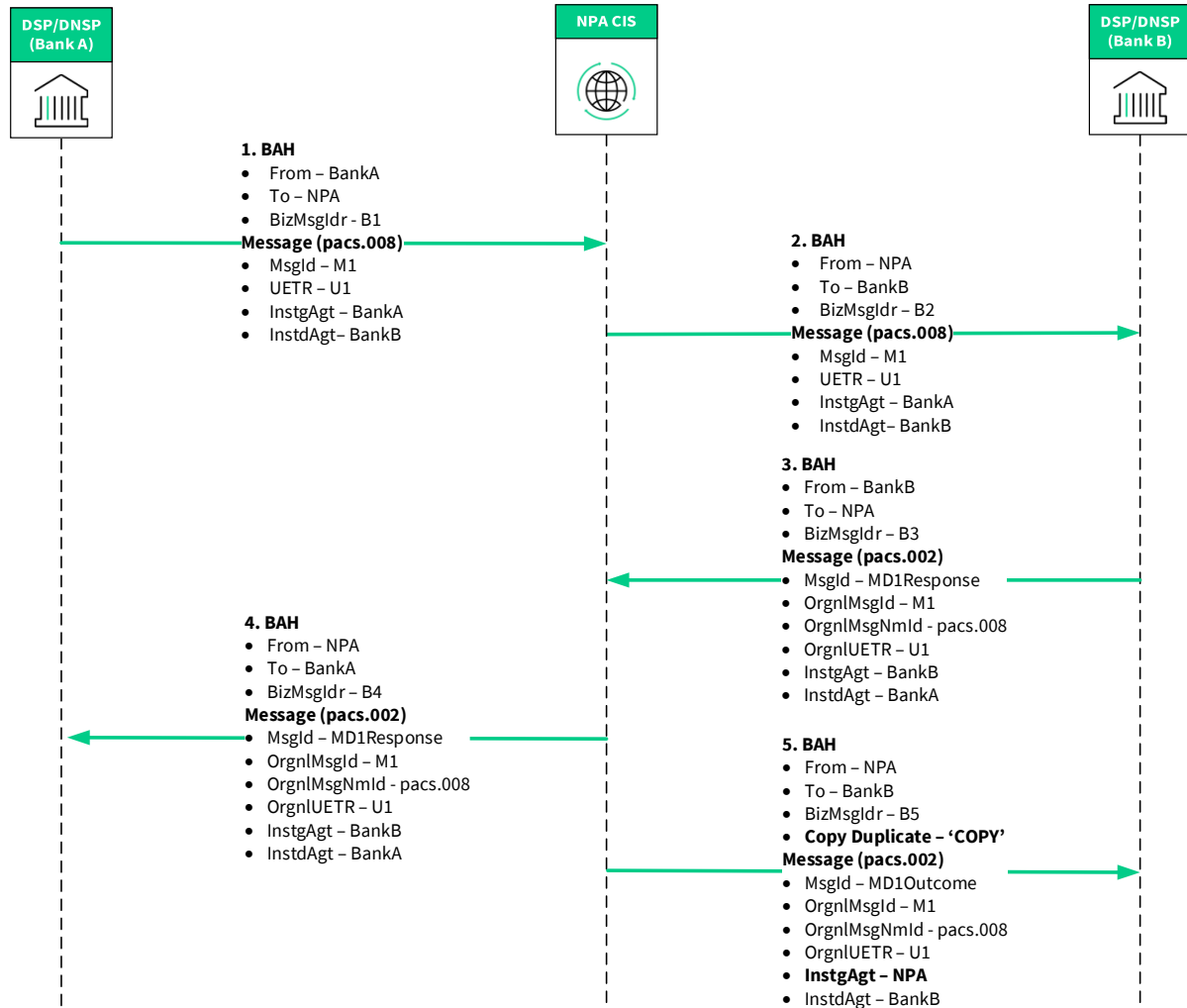


Figure 11: Annotated Single Immediate Payment Instruction Success Scenario

From and To: These fields represent the point to point sender and receiver, respectively, of payment messages exchanged in all payment flows.

Business Message Identifier (BizMsgIdr): The Business Message Identifier changes point to point. In the payment flow above this is illustrated by the changing value in this field in each leg of the payment.

Message Identification (MsgId): This is shown by the Message ID changing from ‘M1’ in messages 1 & 2, to ‘MD1Response’ in messages 3 & 4, and ‘MD1Outcome’ in message 5 (where the NPA becomes the Instructing Agent).

UETR: Remains the same throughout the payment flow.

Original Message ID (OrgnlMsgId), Original Message Name ID (OrgnlMsgNmId) & Original UETR (OrgnlUETR): In these fields, the pacs.002 will always reference the Message ID, Message Name ID and UETR of the original pacs.008 or pacs.004 message.

Instructing/Instructed Agent: In messages 1 & 2, the Instructing Agent remains as the Clearing Participant who sends the original pacs.008. In messages 3 & 4, the Instructing Agent becomes the Clearing Participant who responds with a pacs.002. Message 5 shows how the NPA becomes the Instructing Agent of the pacs.002.

BAH Copy Duplicate: Code 'COPY' should be present for message 5 of this payment flow in order to uniquely identify the pacs.002 to the payment receiver.

11.2 Single SOP/FDP Payment Instruction Success Scenario

This payment flow below depicts a successful single SOP/FDP payment instruction (pacs.008) sent by an NPA Clearing Participant (Bank A) to another NPA Clearing Participant (Bank B).

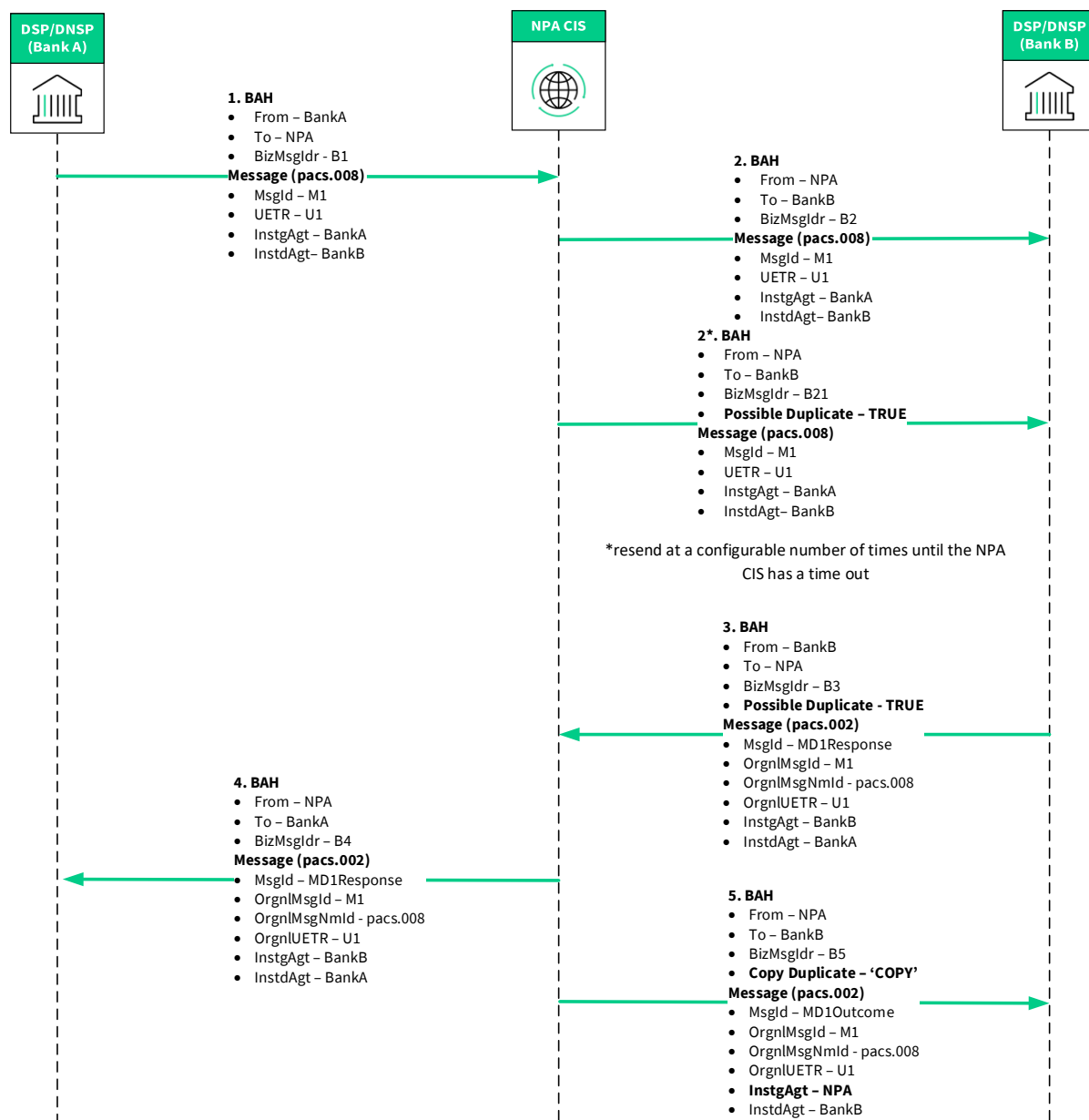


Figure 12: Annotated Single SOP/FDP Payment Instruction Success Scenario

BAH Possible Duplicate: In an SOP/FDP payment instruction (pacs.008), the NPA CIS will send a repeat payment instruction (message 2*) until it receives a response from the Instructed Agent to a number of configurable times. In this repeat payment instruction (pacs.008), Possible Duplicate is 'TRUE' in both the repeat payment instruction and the pacs.002 response to the repeat payment instruction. This provides an indicator, to both the Instructing Agent and the NPA, that this payment may have already been received by the Instructed Agent.

BAH Copy Duplicate: Code 'COPY' should be present for message 5 of this payment flow in order to uniquely identify the pacs.002 to the payment receiver.

11.3 Single Immediate Payment Initiation Success Scenario

This payment flow below depicts a successful single immediate payment initiation (pain.001) sent by a Direct Submitter (DS1) to an NPA Clearing Participant (Bank B), involving their Sponsoring Agent (Bank A). A Sponsoring Agent is the Direct Settling Participant that sponsors the submitting party.

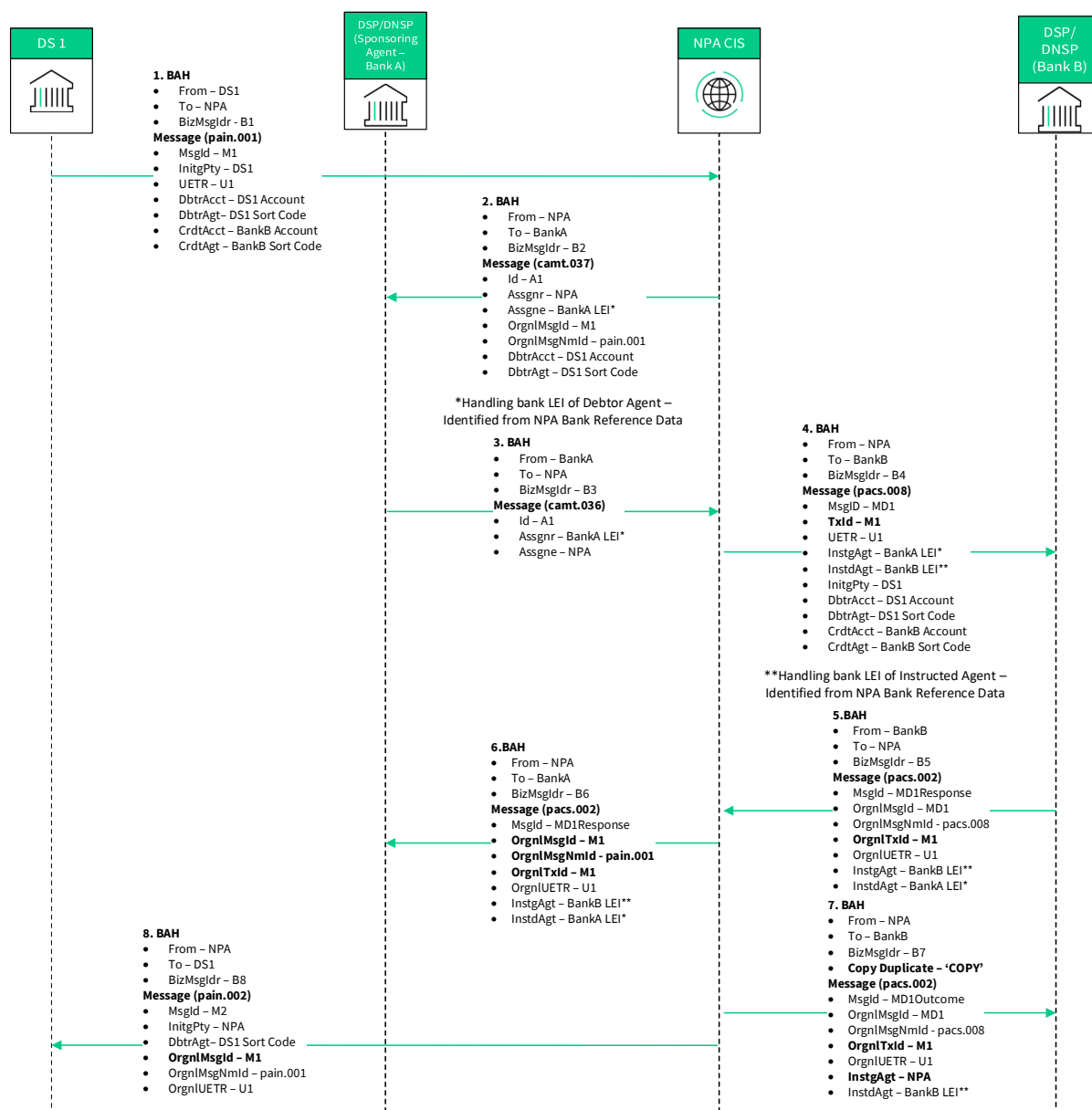


Figure 13: Annotated Single Immediate Payment Initiation Success Scenario

Message ID (MsgID) and Original Message ID (OrgnlMsgId): The Message ID in the payment initiation (pain.001) is reflected in the Original Message ID of the Debit Authorisation Request (camt.037) in message 2 and Original Message ID of the payment initiation response (pain.002) in message 8. This provides a reference to the Direct Submitter and to their Sponsoring Agent for the payment initiation (pain.001) through this scenario. This field is then translated into Transaction ID in the payment instruction (pacs.008) message (4) and subsequently relayed to Original Transaction ID in the payment response (pacs.002) messages (5, 6 and 7). The Original Message ID and Original

Message Name ID in the payment response (pacs.002) message (6) to the Sponsoring Agent will be the values from the payment initiation (pain.001).

Transaction ID (TxId) and Original Transaction ID (OrgnlTxId): Transaction ID in the payment instruction (pacs.008) of message 4 is derived from the Message ID in the payment initiation (pain.001) of message 1. This is then maintained as Original Transaction ID in the payment responses (pacs.002) of messages 5, 6 and 7 as reference for the Sponsoring Agent and Instructed Agent.

Instructing Agent (InstgAgt) and Instructed Agent (InstdAgt): The Instructing Agent and Instructed Agent are derived from NPA Bank Reference Data as the LEI of the handling bank for the Debtor and the Creditor respectively. These are resourced from the Debtor Agent Sort Code/Creditor Agent Sort Code with reference to the NPA Bank Reference Data.

camt.037/camt.036

- **Case ID (Id):** This is a unique identifier for the camt.037/camt.036 message.
- **Assigner and Assignee (Assgnr & Assgne):** These fields can be found in the camt.037/camt.036 and include the NPA and 'Bank A LEI', which is similarly derived from NPA Bank Reference Data as in the payment instruction (pacs.008) messages for the Instructing Agent.
- **Debtor Account (DbtrAcct) and Debtor Agent (DbtrAgt):** These fields are populated with the Debtor Account and Debtor Agent from the payment initiation (pain.001) submitted by the Direct Submitter.
- camt.037 (message 2) contains the Debit Authorisation Request with the transaction amount sent to the Sponsoring Agent of Direct Submitter and the camt.036 (message 3) contains the Debit Authorisation Response. At the point of the Sponsoring Agent receiving the camt.037 (message 2), the Sponsoring Agent debits the Direct Submitter's account. When the Sponsoring Agent receives the payment response (message 6), it will adjust the Direct Submitter's account based on the accepted/rejected transaction amount in the payment response (message 6).

BAH Copy Duplicate: Code 'COPY' should be present for message 7 of this payment flow in order to uniquely identify the pacs.002 to the payment receiver.

11.4 Repeat Payment Instruction Scenario

This payment flow depicts a successful payment instruction (pacs.008) sent by an NPA Clearing Participant (Bank A) to another NPA Clearing Participant (Bank B) where a duplicate pacs.008 has been sent after the pacs.002 (messages 3 & 4) has been received.

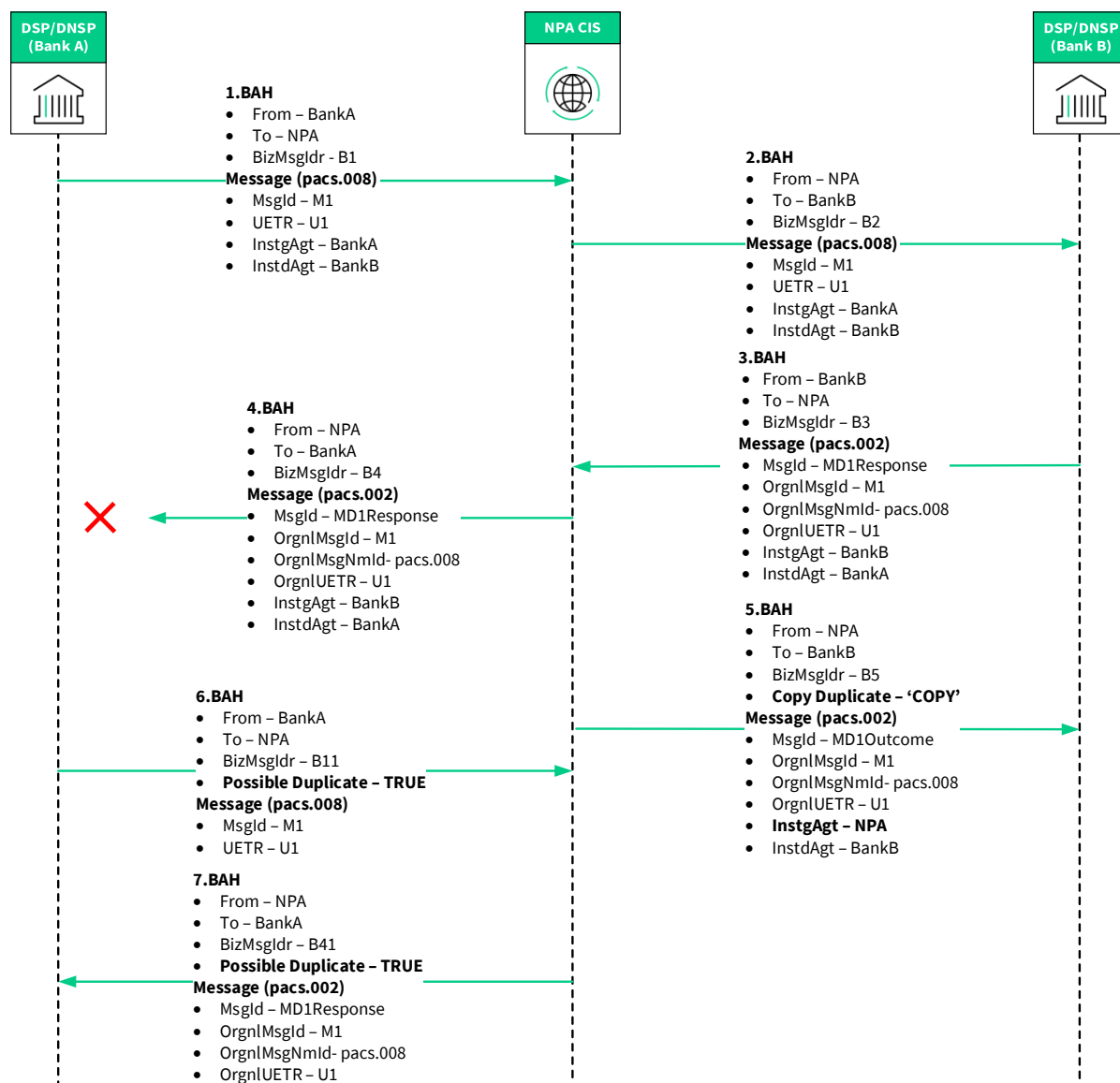


Figure 14: Annotated Repeat Payment Instruction Scenario

Message ID (Msgld): The Message ID of the Repeat Payment Instruction from the Instructing Agent will have the same Message ID, ‘M1’, as the original instruction sent. The pacs.002 response to the repeat will contain the same Message ID as the original pacs.002 (4) sent from the NPA to the Instructing Agent.

BAH Copy Duplicate: Code ‘COPY’ should be present for message 5 of this payment flow in order to uniquely identify the pacs.002 to the payment receiver.

BAH Possible Duplicate: Possible Duplicate is ‘TRUE’ in both the repeat payment instruction and the pacs.002 response to the repeat payment instruction. This provides an indicator, to both the

Instructing Agent and the NPA, that this payment may have already been received by the Instructed Agent.

11.5 Multi/File Payment Instruction Success Scenario

This payment flow depicts a successful Multi/File Payment Instruction (pacs.008) sent by an NPA Clearing Participant (Bank A) to another NPA Clearing Participant (Bank B). Multi/File Payments are debulked by the NPA (between messages 1 & 2) and send on as individual transactions to the Instructed Agents. The individual pacs.002 responses are then bulked by the NPA (between messages 3 & 5) for sending to the Instructing Agent of the original pacs.008. It should be noted that only one transaction of the Multi/File Payment, sent by 'Bank A', has been represented on the receiving side of the payment flow. It should be assumed that the second transaction sent to 'Bank C' within the Multi/File Payment, follows the same payment flow for messages 2, 3, & 4.

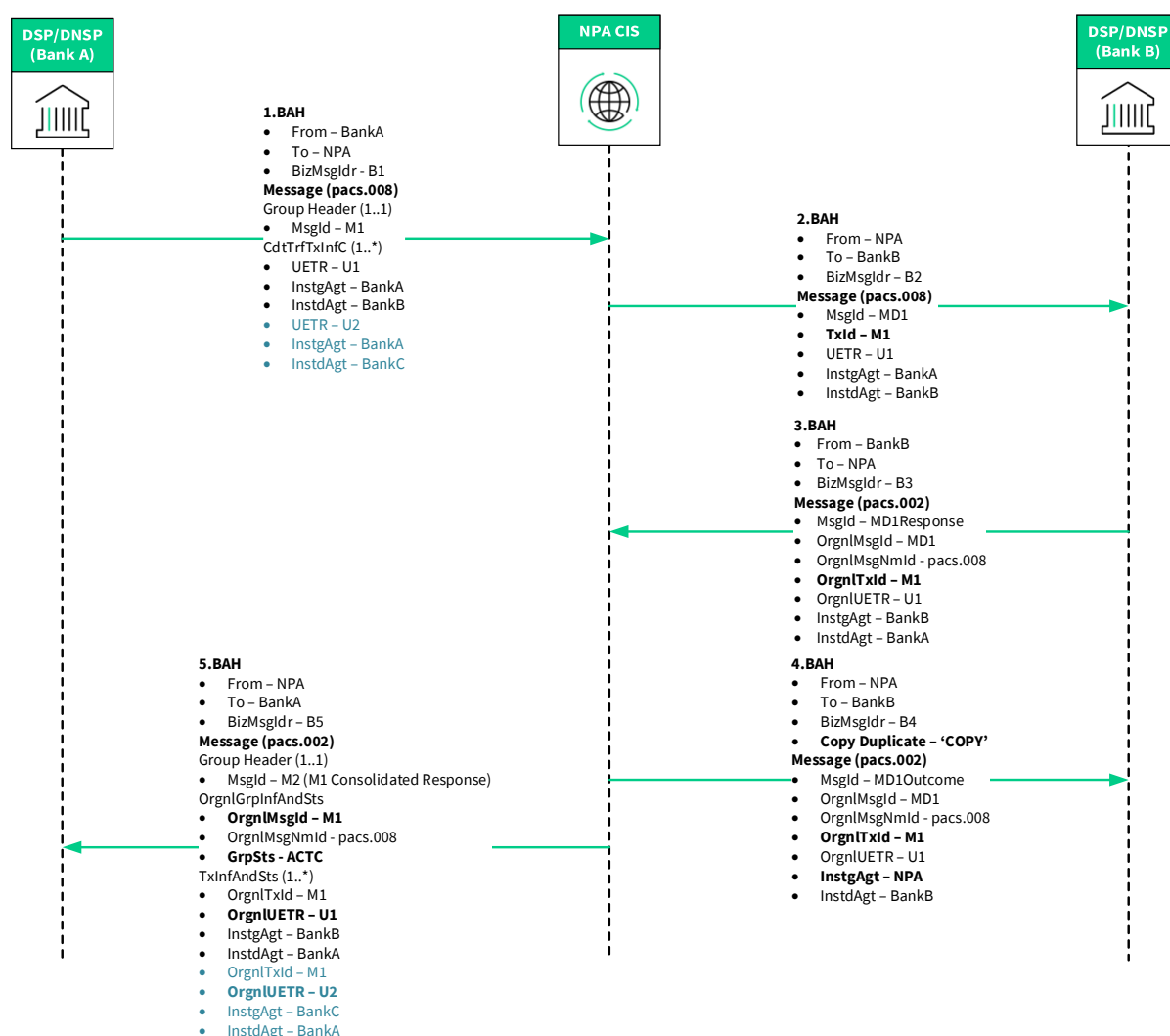


Figure 15: Annotated Multi/File Payment Instruction Success Scenario

Message ID (MsgId): The Message ID of the debulked pacs.008 (2) and bulked multi/file pacs.002 response (5) will be newly generated, as shown in message 3. The Message ID behaves similarly to the single payment instruction flow otherwise.

Transaction ID (TxId): The MsgID of the inbound multi/file pacs.008 or the pain.001 will be populated in the Transaction ID of the debulked pacs.008 (2) sent to the Receiving Agent and should be returned in the Original Transaction ID field in the pacs.002 response (3, 5) and outcome (4).

UETR: The UETR is at the transaction level of a pacs.008 (1, 2) and therefore, each transaction within a multi/file payment can be uniquely identified. This is important when it is debulked and sent on to the Instructed Agent of the original pacs.008.

Group Status (GrpSts): Group Status is present in a bulked multi pacs.002 response from the NPA to the Instructing Agent (Bank A) is shown in leg 5 as 'ACTC'. This is to inform that all the payments in the original pacs.008 have been accepted and/or conditionally accepted by the Instructed Agents.

BAH Copy Duplicate: Code 'COPY' should be present for message 4 of this payment flow in order to uniquely identify the pacs.002 to the payment receiver.

11.6 Multi/File Payment Initiation Success Scenario

This payment flow below depicts a successful multi/file payment initiation (pain.001) sent by a Direct Submitter (DS1) to two NPA Clearing Participants (Bank B and Bank C), involving their Sponsoring Agent (Bank A). A Sponsoring Agent is the Direct Settling Participant that sponsors the submitting party.

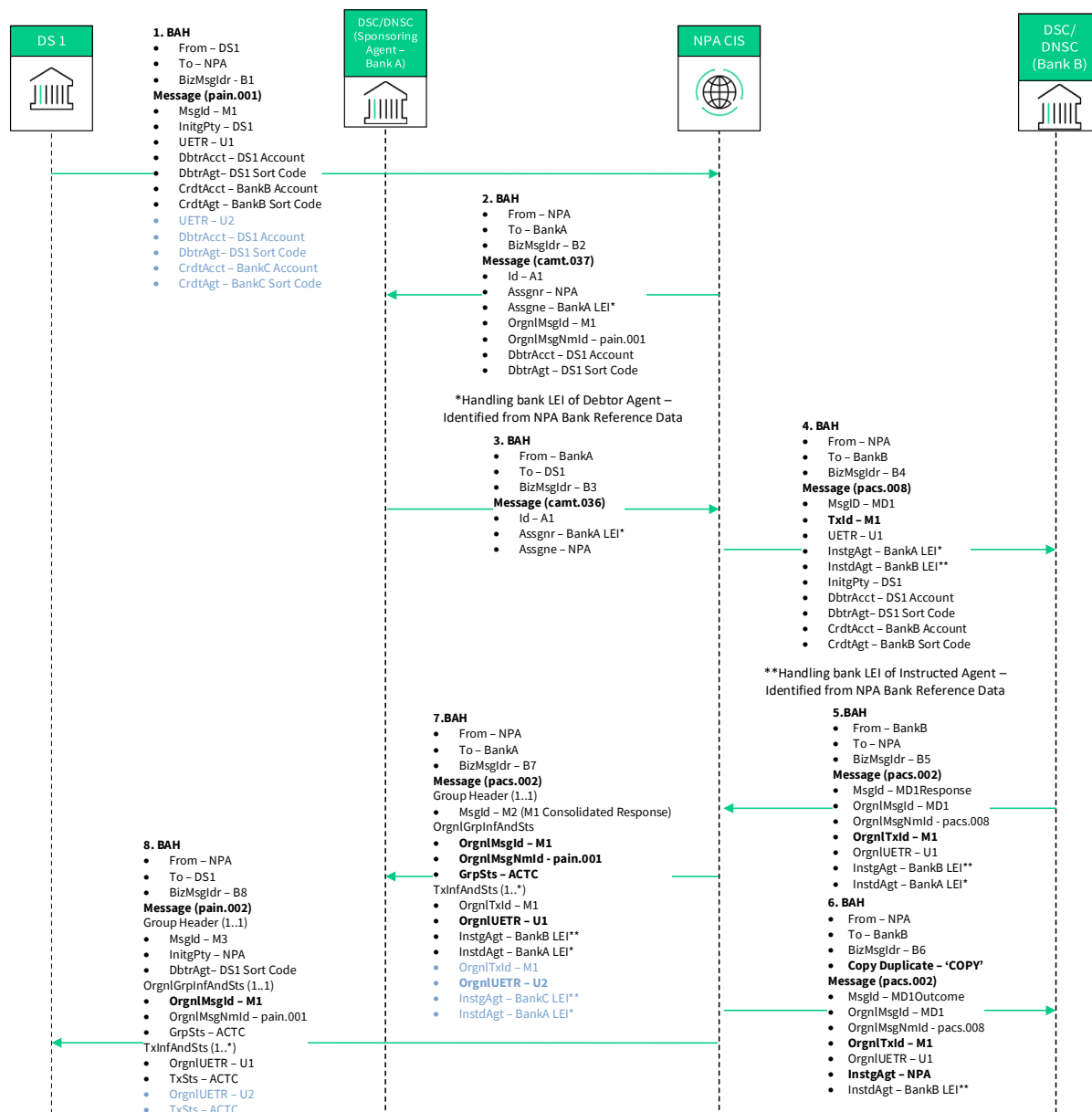


Figure 16: Annotated Multi/File Payment Initiation Success Scenario

The identifiers in this flow are reflected in the Single Immediate Payment Initiation and Multi/File Payment Instruction Success scenarios. The Original Message ID and Original Message Name ID in the aggregated payment response (pacs.002) message (6) to the Sponsoring Agent will be the values from the payment initiation (pain.001) to help the Sponsoring Agent identify the original payment in the aggregated payment response. The camt.037 (message 2) contains the Debit Authorisation Request with the sum of the transaction amounts sent to the Sponsoring Agent of Direct Submitter and the camt.036 (message 3) contains the Debit Authorisation Response. At the point of the Sponsoring Agent receiving the camt.037 (message 2), the Sponsoring Agent debits the Direct

Submitter's account. When the Sponsoring Agent receives the payment response (message 7), it will adjust the Direct Submitter's account based on the sum of the accepted/rejected transaction amounts in the payment response (message 7).

11.7 Single Status Request submitted by a DSP/DNSP Scenario

This payment flow depicts the Status Request (pacs.028) for a previous single payment instruction (pacs.008) submitted by a DSP/DNSP.

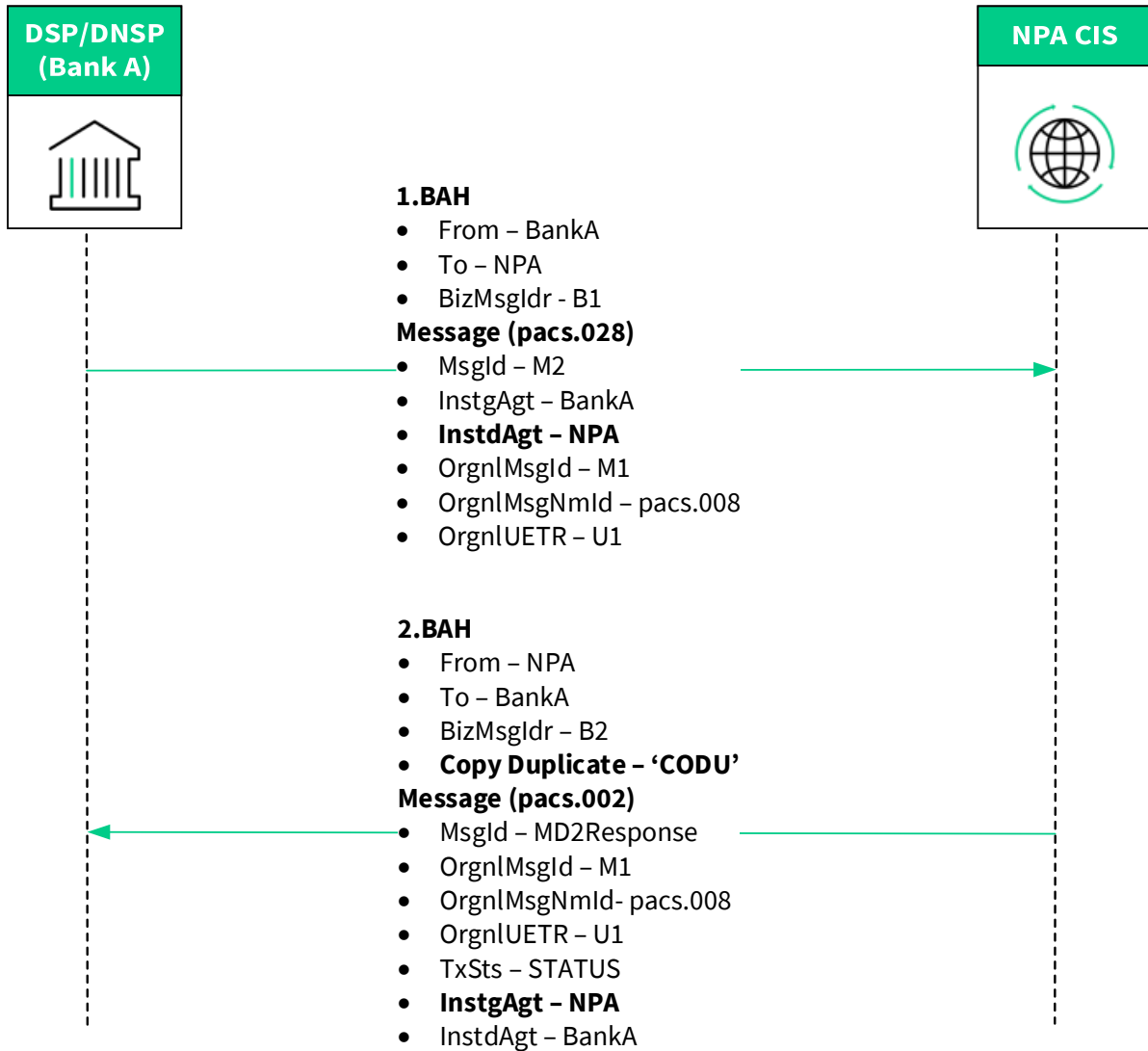


Figure 17: Annotated Status Request for a Single Payment Instruction submitted by a DSP/DNSP Scenario

Message ID (Msgld): The Message ID of the message 1 is new and unique to this payment flow. The Message ID of the Status Request (pacs.028) does not match that of the original payment being queried. The original payment Message ID is found in the Original Message ID (OrgnlMsgld).

Original Message ID (OrgnlMsgld), Original Message Name ID (OrgnlMsgNmld) & Original UETR: These fields in both the pacs.028, and the status report (pacs.002) reference that of the original payment message that is being queried.

Instructing/Instructed Agent: The NPA appears in the messages of both the pacs.028 (as the Instructed Agent) and the pacs.002 (as the Instructing Agent) in this payment flow.

BAH Copy Duplicate: Code 'CODU' should be populated in the pacs.002 response to a pacs.028 in order to uniquely identify this response to other pacs.002 responses from other payment flows.

11.8 Multi/File Status Request submitted by a DSP/DNSP Scenario

This payment flow depicts the Status Request (pacs.028) for a previous multi/file payment instruction (pacs.008) submitted by a DSP/DNSP. This scenario demonstrates the use of 'Group Status' in the payment response compared with the 'Transaction Status' in a single payment scenario. In this case, the submitter of the Status Request (pacs.028) uses only the OrgnlMsgId and OrgnlMsgNmId as a reference for the payment, meaning that they are returned with a 'Group Status'. Using the OrgnlUETR, with the other references, will return an individual 'Transaction Status' of a single payment.

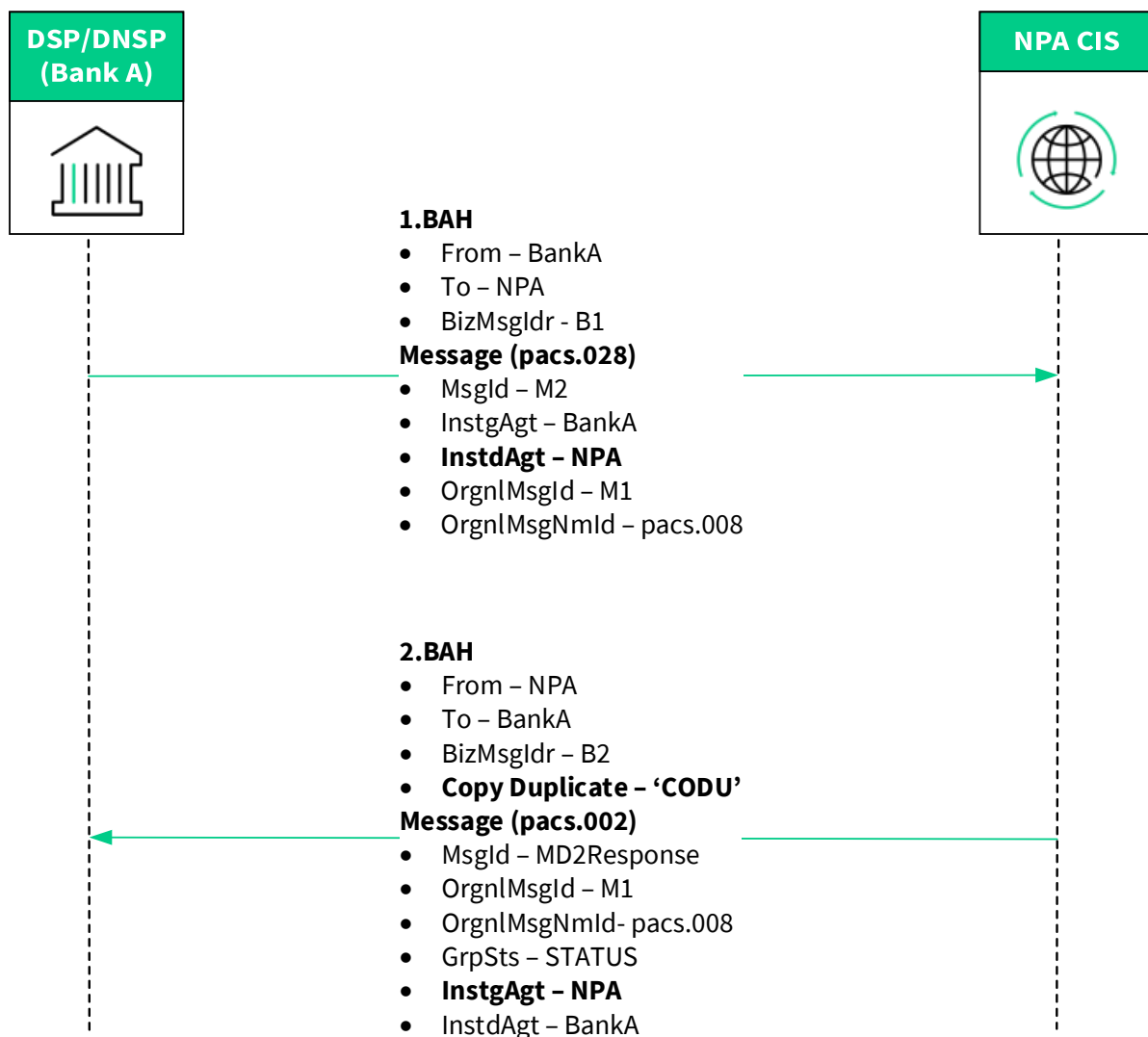


Figure 18: Annotated Status Request for a Multi/File Payment Instruction submitted by a DSP/DNSP Scenario

11.9 Single Status Request submitted by DS Scenario

This payment flow depicts the Status Request (pacs.028) for a previous single payment initiation (pain.001) submitted by a DS. The same applies with regards to identifiers in the flow (unless stated otherwise) and transaction/group status being returned.

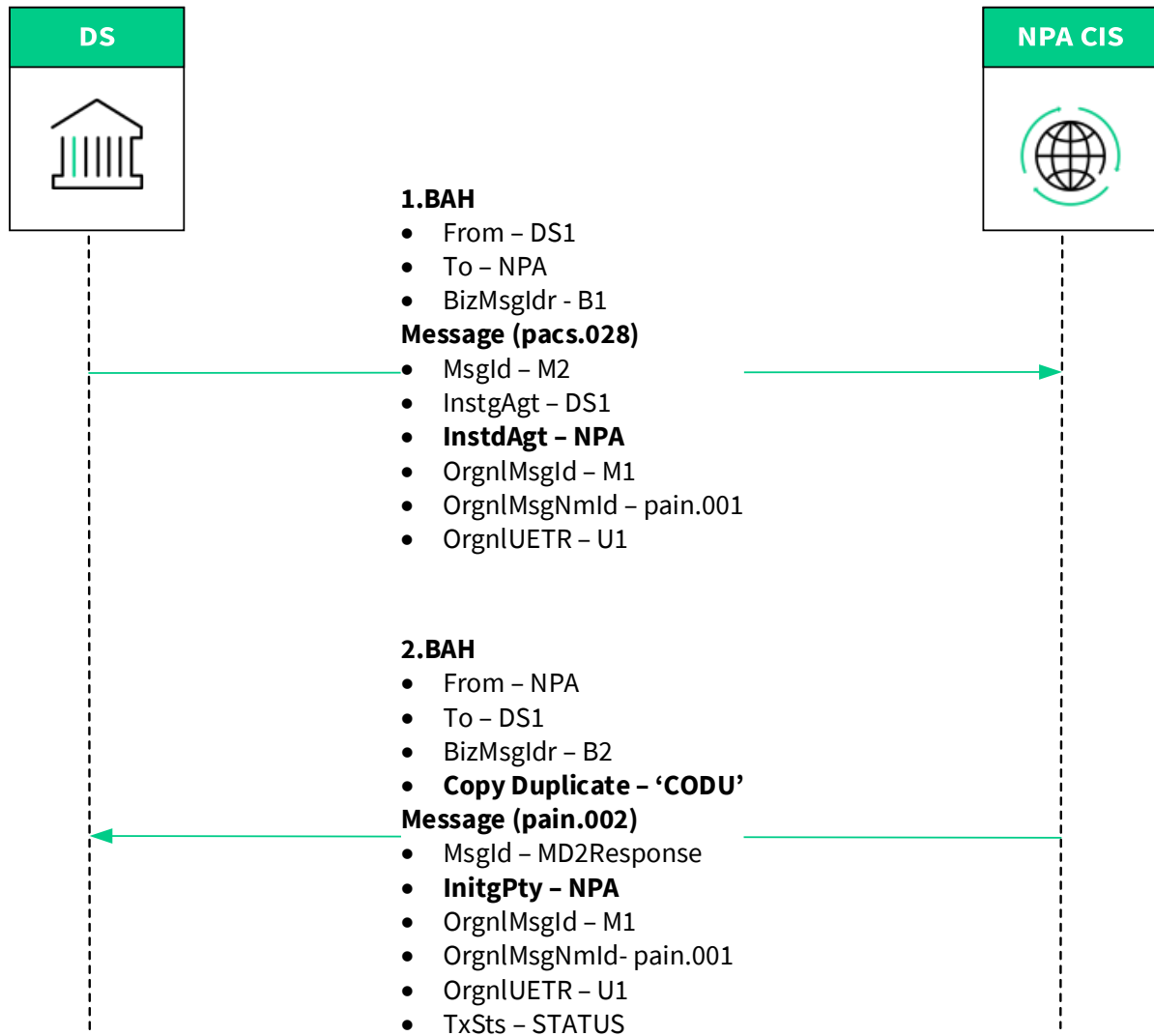


Figure 19: Annotated Status Request for a Single Payment Initiation submitted by a DS Scenario

Instructed Agent/Initiating Party: The NPA appears in the messages of both the pacs.028 (as the Instructed Agent) and the pain.002 (as the Initiating Party) in this payment flow.

11.10 Multi/File Status Request submitted by a DS Scenario

This payment flow depicts the Status Request (pacs.028) for a previous multi/file payment initiation (pain.001) submitted by a DS. The same applies with regards to identifiers in the flow (unless stated otherwise) and transaction/group status being returned.

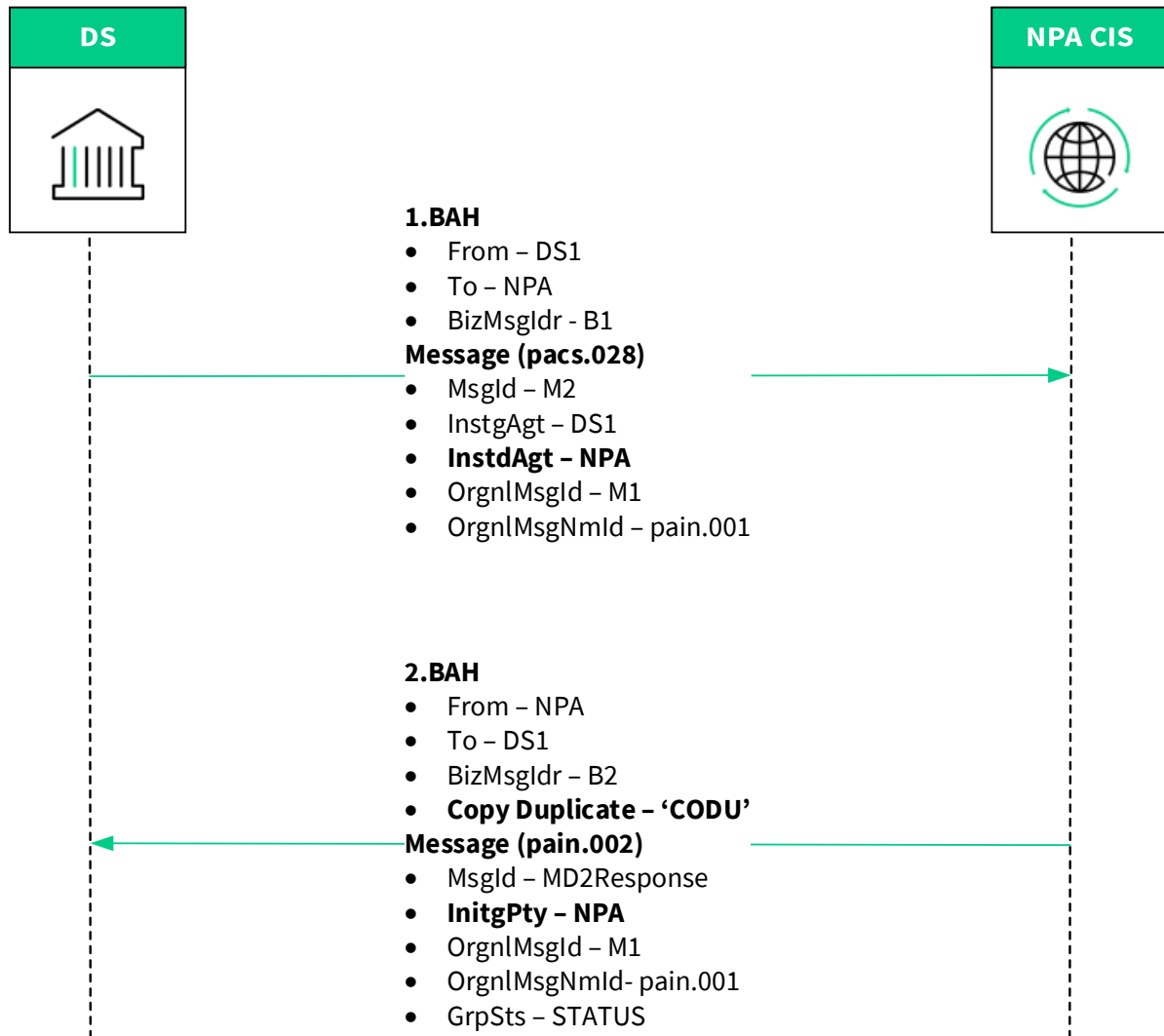


Figure 20: Annotated Status Request for a Multi/File Payment Initiation submitted by a DS Scenario

Instructed Agent/Initiating Party: The NPA appears in the messages of both the pacs.028 (as the Instructed Agent) and the pain.002 (as the Initiating Party) in this payment flow.

11.11 Payment Redirection Scenario

The Current Account Switch Service (CASS) will continue to be supported within the NPA in a similar fashion to the other UK domestic schemes. The NPA will redirect payment instructions addressed to accounts which have been switched using the CASS and will update the Instructed Agent, Creditor Agent and Creditor Account elements with the updated account information.

To support the functionality of CASS we have also introduced the ISO 20022 acmt.022 message which will be sent by the NPA to alert the Instructing Agent that the account they have sent a payment to is no longer active and provide them with updated account information.

This Payment Flow illustrates the message exchange between the NPA and its Clearing Participants in the case of redirection of a payment instruction through CASS. In this example, 'Bank B' (the originally intended Instructed Agent) and 'Bank C' (the Instructed Agent for the redirected payment) are both Clearing Participants of the NPA.

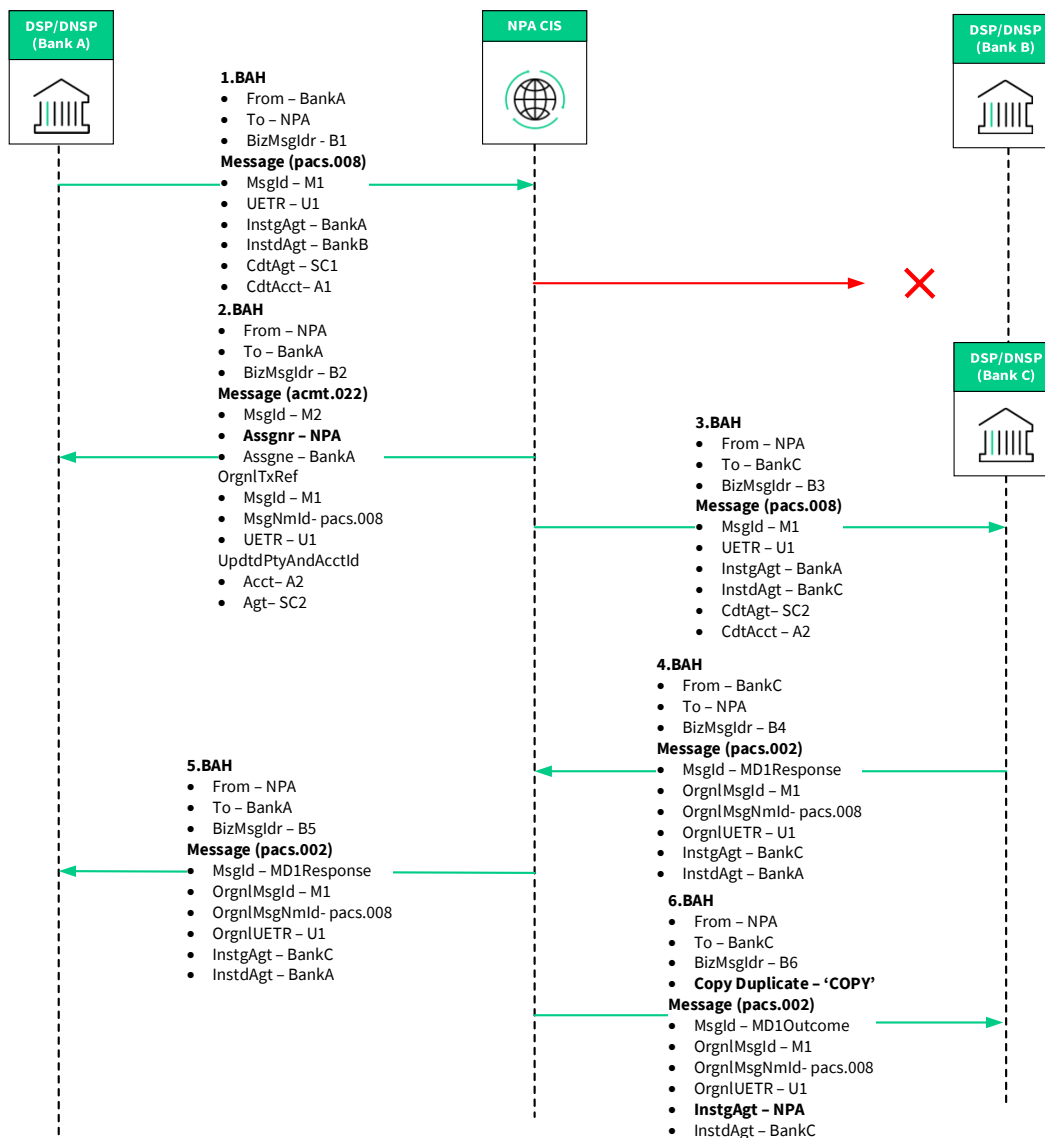


Figure 21: Annotated Payment Redirection Scenario

Message ID (MsgId): The Message ID of the original pacs.008 (1, 2) remains the same for the redirected payment instruction (4). The Message ID is newly generated by the NPA for the acmt.022 redirection notification (3).

UETR: Remains unchanged from the original pacs.008 to the final pacs.002 payment outcome.

acmt.022

- **Assigner and Assignee (Assgnr & Assgne):** These fields can be found in the acmt.022 and represent the NPA and 'Bank A' respectively.
- **OrgnlTxRef/MsgId, OrgnlTxRef/MsgNmId, and OrgnlTxRef/UETR:** These fields reflect the corresponding fields of the originally sent pacs.008 in a redirection scenario.
- **Updated Party and Account ID (UptdPtyAndAcctId):** This contains the new Account and Agent information of the redirected payment.

Creditor Agent and Creditor Account (CdtrAgt & CdtrAgtAcc): These have been included to illustrate the change in destination for the original pacs.008. The Creditor Agent and Account of the redirected pacs.008 sent to 'Bank C' contains the same data as the UptdPtyAndAcctId fields in the acmt.022.

Original Message ID (OrgnlMsgId), Original Message Name ID (OrgnlMsgNmId) & Original UETR (OrgnlUETR): These fields in the pacs.002 messages in this payment flow reference the original pacs.008 sent in message 1.

11.12 Single Payment Return Success Scenario

This payment flow below depicts a successful single payment return (pacs.004) sent by an NPA Clearing Participant (Bank B) to another NPA Clearing Participant (Bank A). It simulates that there has been a successful single payment instruction (pacs.008) from Bank A to Bank B prior to this and the pacs.004 is referring to this.

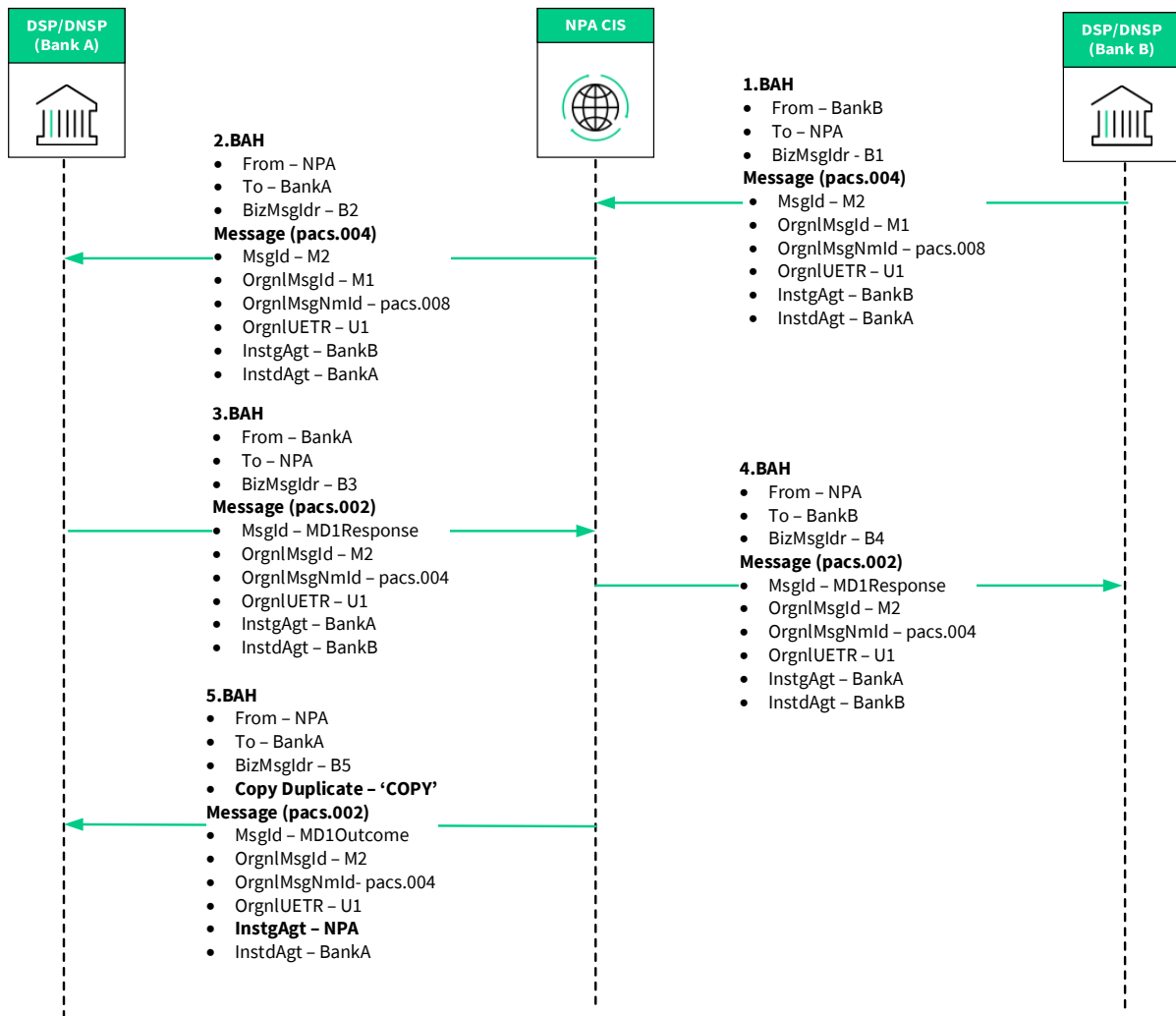


Figure 22: Annotated Single Payment Return Success Scenario

Message ID (Msgld), Original Message ID (OrgnlMsgld) and Original Message Name ID (OrgnlMsgNmld): The Original Message ID and Original Message Name ID in this Payment Return (pacs.004), in messages 1 and 2, is referring to a simulated previously successful payment instruction (pacs.008).

BAH Copy Duplicate: Code 'COPY' should be present for message 5 of this payment flow in order to uniquely identify the pacs.002 to the payment receiver.

12 Request and Response Mapping

This section describes the mapping between a number of request and response messages (from left to right) in the NPA. This enables data to be derived from the appropriate fields.

The tables highlight the key fields that are required to be mapped between request and response messages in a payment flow and those that are mandatory within the Schema.

12.1 Mapping pacs.008 to pacs.002

The table below shows the corresponding fields for pacs.008 and pacs.002* messages.

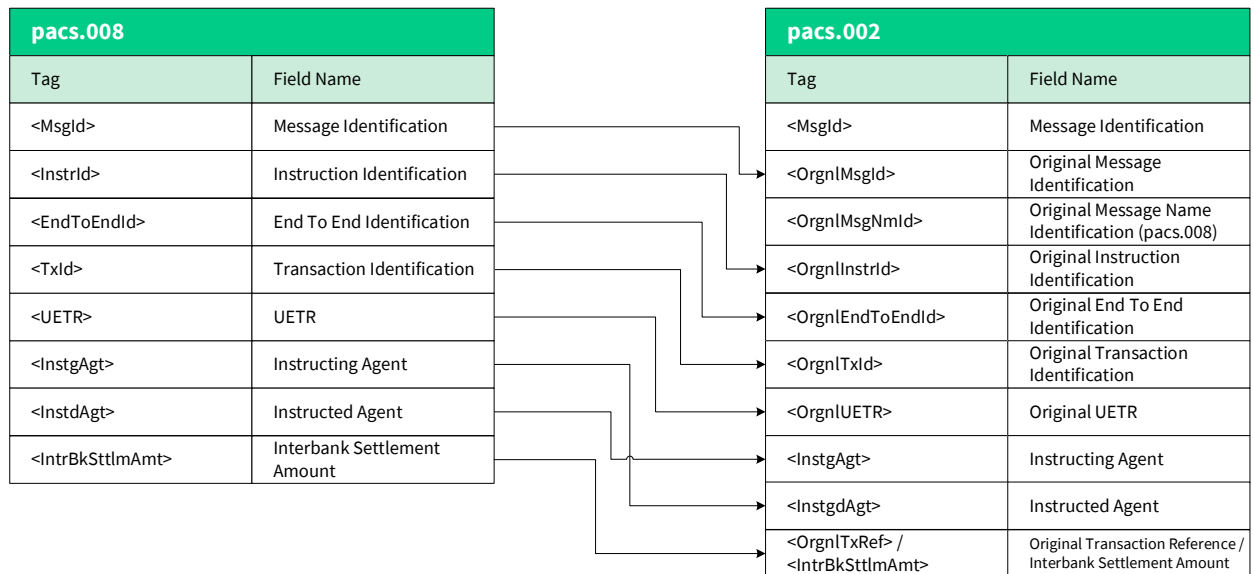


Figure 23: Mapping pacs.008 to pacs.002

*Mapping represents a pacs.002 Payment Response from the Receiving Agent. In a pacs.002 Payment Response from the NPA to the Sending Agent and pacs.002 Payment Outcome from the NPA to the Receiving Agent, the Instructing Agent will be the NPA (as depicted in Section 11 Payment Flows).

12.2 Mapping pacs.008 to pacs.004

The table below shows the corresponding fields for pacs.008 and pacs.004 messages.

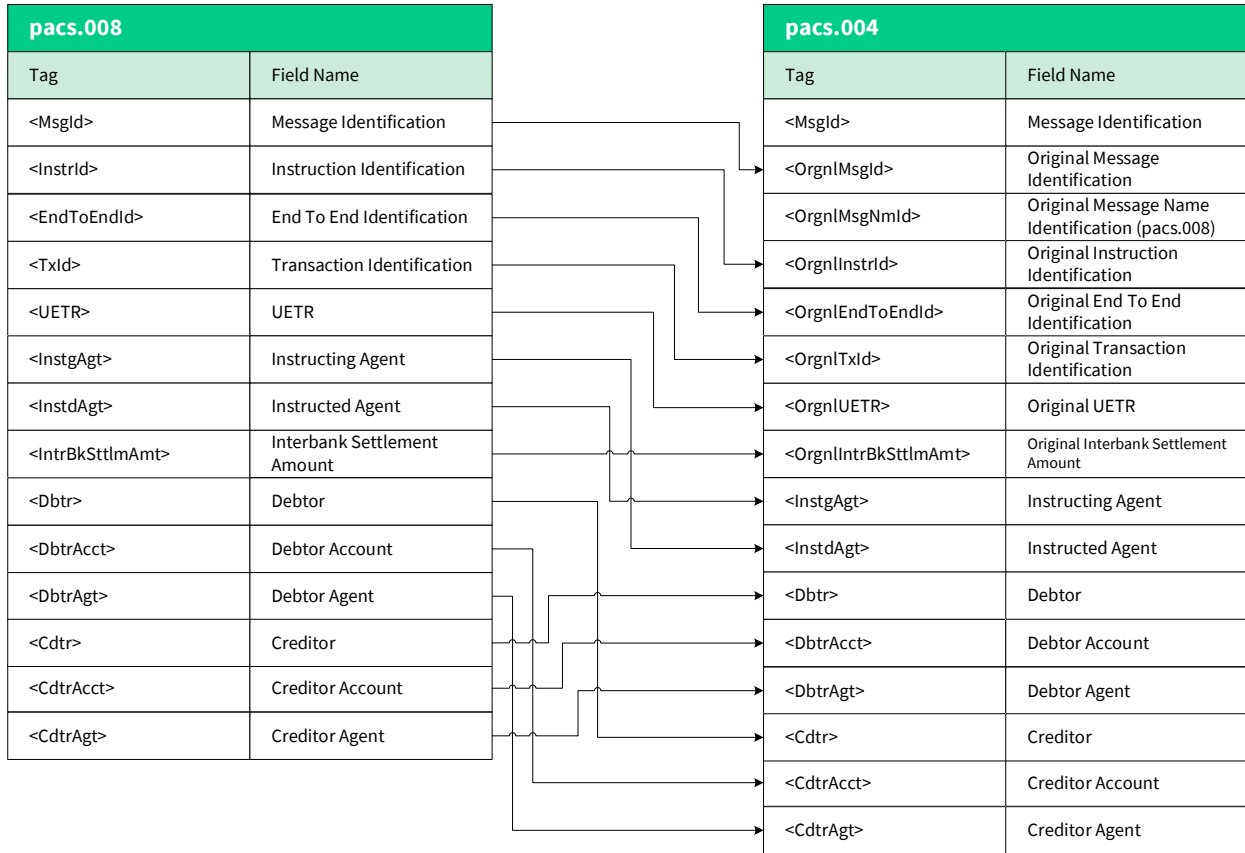


Figure 24: Mapping pacs.008 to pacs.004

12.3 Mapping pacs.004 to pacs.002

The table below shows the corresponding fields for pacs.004 and pacs.002 messages.

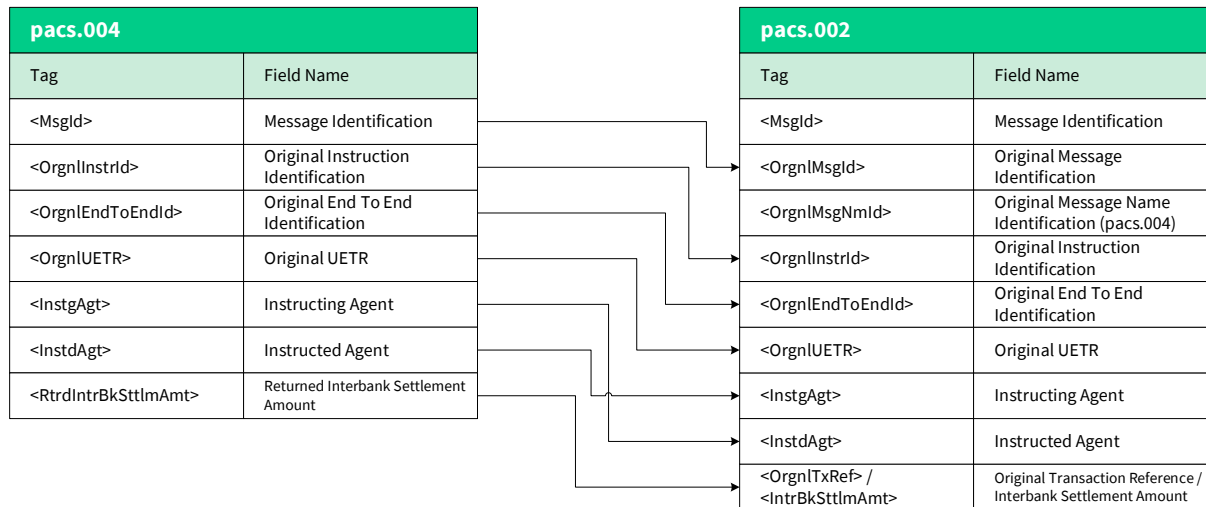


Figure 25: Mapping pacs.004 to pacs.002

12.4 Mapping pacs.028 to pacs.002

The table below shows the corresponding fields for pacs.028 (pacs.008/pacs.004) and pacs.002 messages.

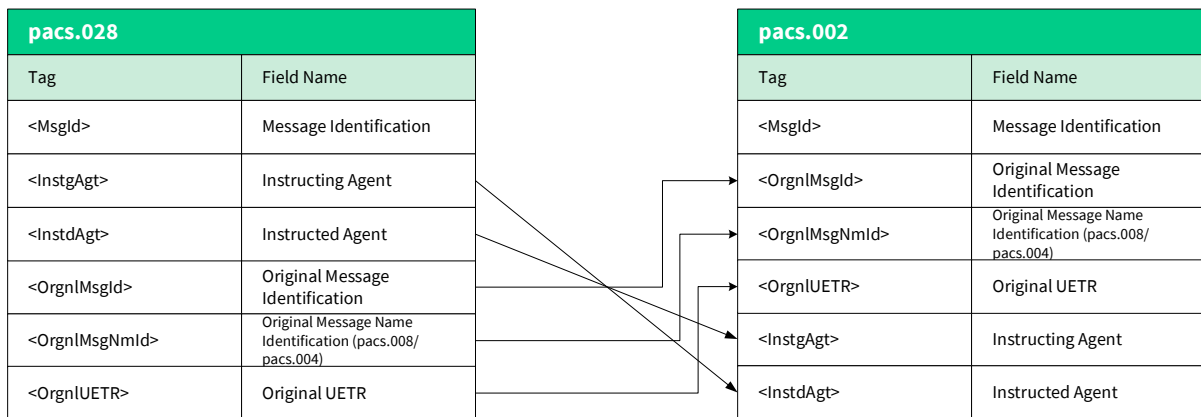


Figure 26: Mapping pacs.028 (pacs.008/pacs.004) to pacs.002

12.5 Mapping pacs.028 to pain.002

The table below shows the corresponding fields for pacs.028 (pain.001) and pain.002 messages.

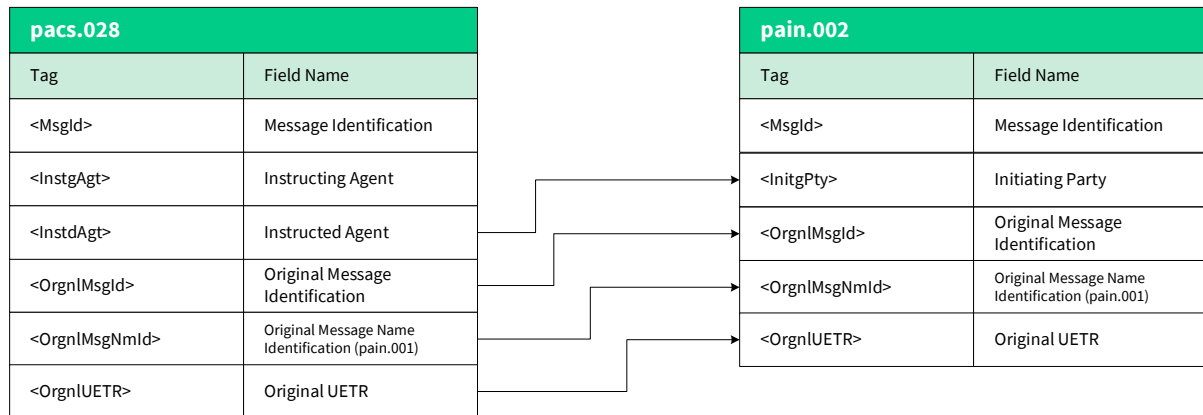


Figure 27: Mapping pacs.028 (pain.001) to pain.002

12.6 Mapping pain.001 to camt.037

The table below shows the corresponding fields for pain.001 and camt.037 messages.

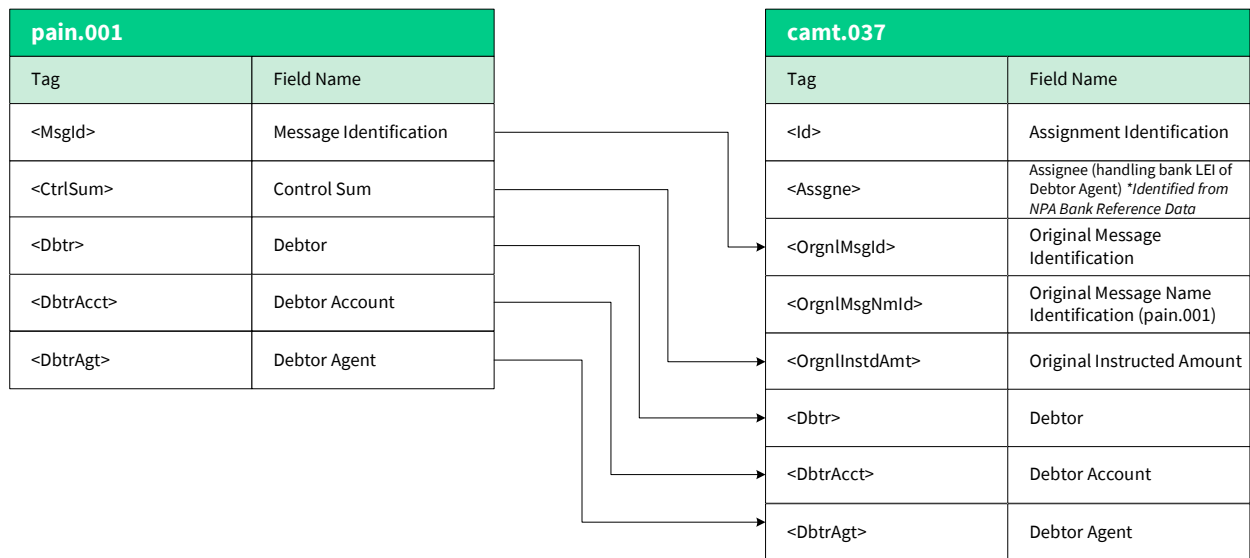


Figure 28: Mapping pain.001 to camt.037

12.7 Mapping pain.001 to pacs.008

The table below shows the corresponding fields for pain.001 and pacs.008 messages.

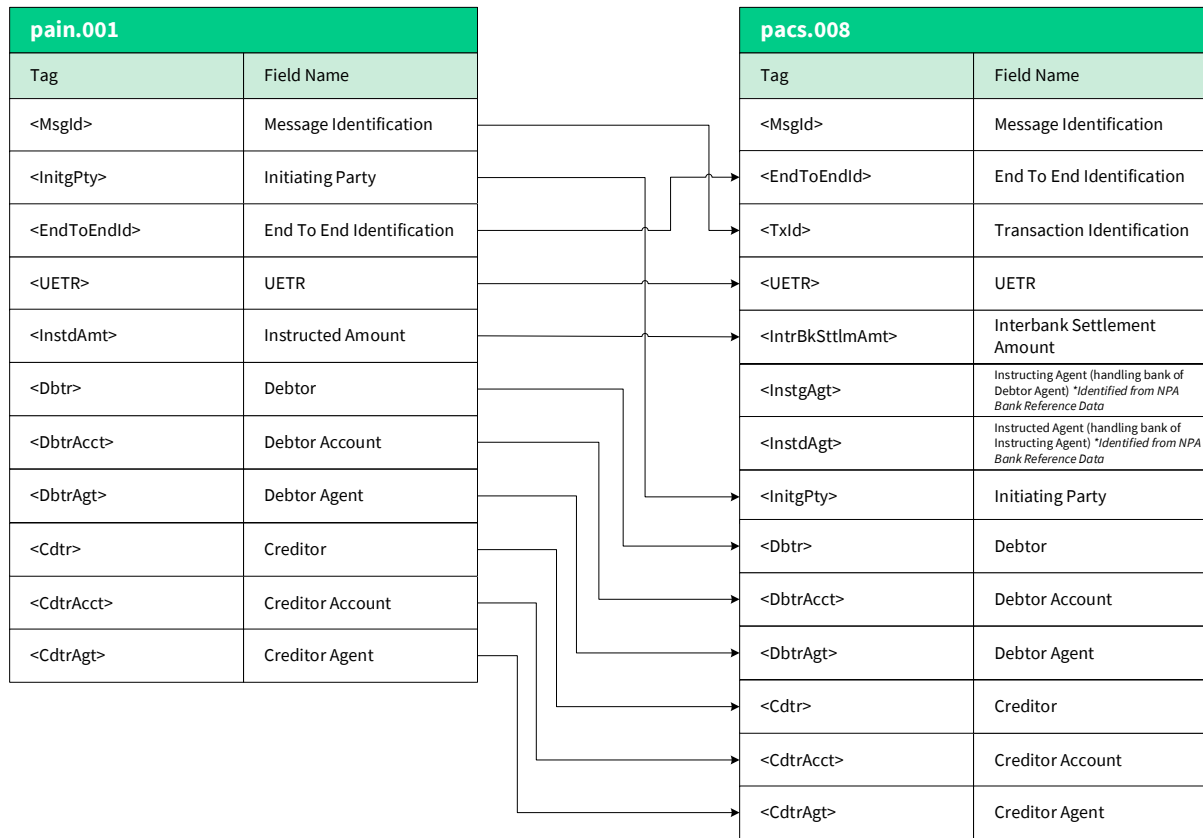


Figure 29: Mapping pain.001 to pacs.008

12.8 Mapping camt.037 to camt.036

The table below shows the corresponding fields for camt.037 and camt.036 messages.

camt.037			camt.036	
Tag	Field Name		Tag	Field Name
<Id>	Case Identification	→	<Id>	Case Identification
<Assgnr>	Assigner	→	<Assgnr>	Assigner
<Assgne>	Assignee	→	<Assgne>	Assignee
<OrgnlInstdAmt>	Original Instructed Amount	→	<AmtToDebt>	Amount To Debit

Figure 30: Mapping camt.037 to camt.036

12.9 Mapping pain.001 to pain.002

The table below shows the corresponding fields for pain.001 and pain.002 messages.

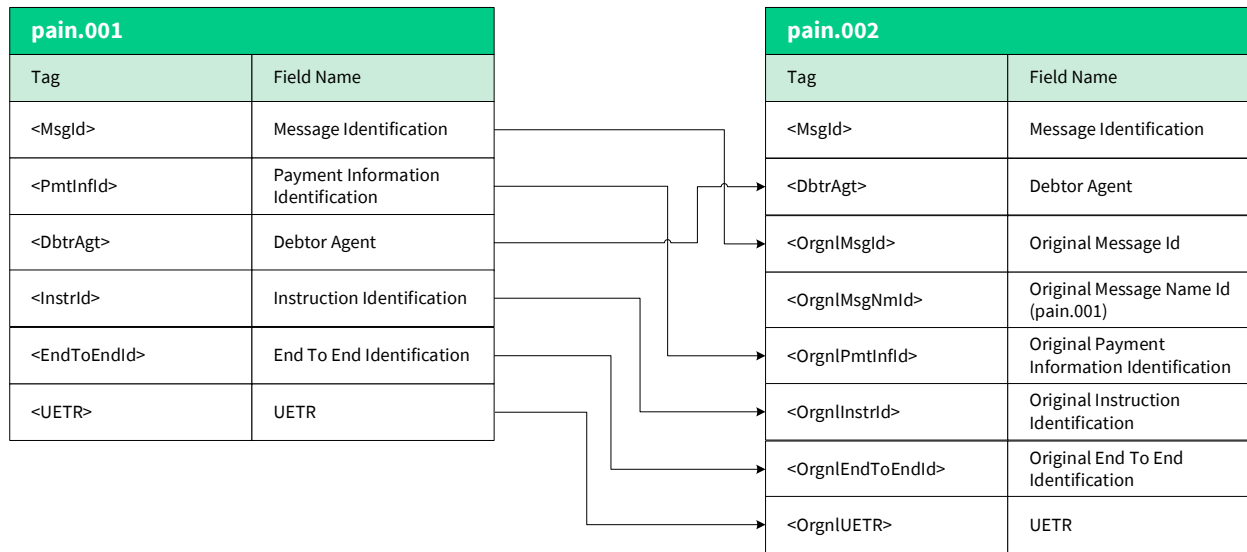


Figure 31: Mapping pain.001 to pain.002

12.10 Mapping pacs.008 to acmt.022

The table below shows the corresponding fields for pacs.008 and acmt.022 messages.

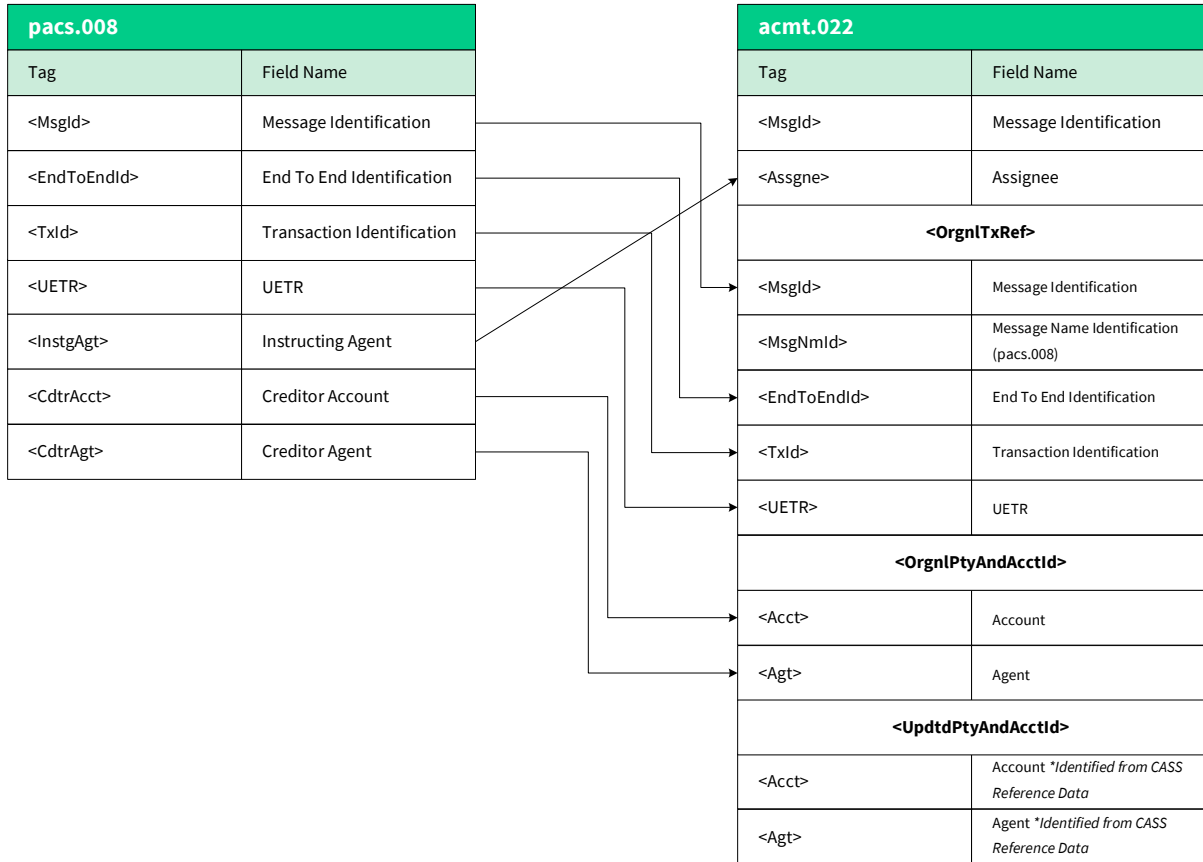


Figure 32: Mapping pacs.008 to acmt.022

12.11 Mapping pacs.004 to acmt.022

The table below shows the corresponding fields for pacs.004 and acmt.022 messages.

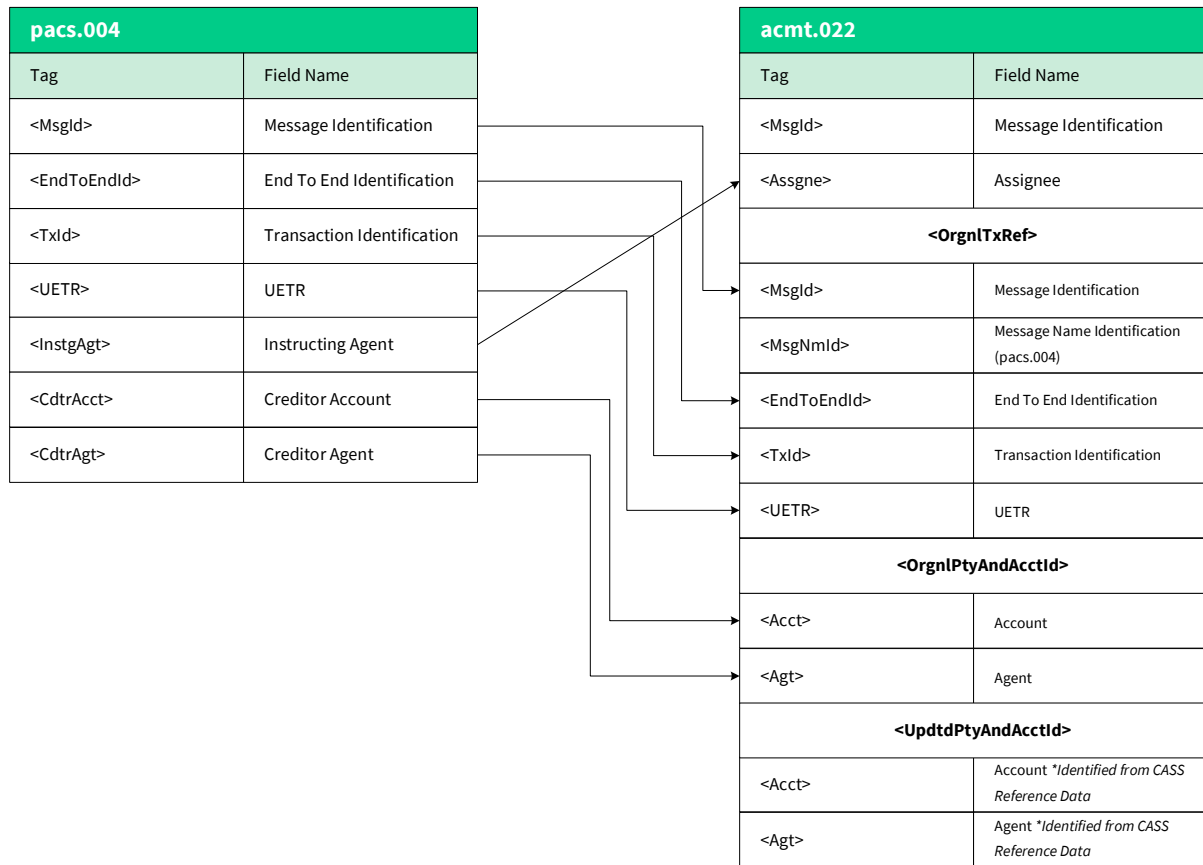


Figure 33: Mapping pacs.004 to acmt.022

13 Open Banking conversion to NPA ISO 20022 Format

With the increasing prevalence and use of Open Banking, guidance has been provided to help our Participants submit payments through Open Banking and use the NPA. The guidance shows where key fields from an Open Banking Payment Initiation API should be populated in a Payment Instruction (pacs.008) through the NPA.

The guidance includes the relevant mandatory and optional elements from the Payment Instruction (pacs.008) which are required for an Open Banking Payment Initiation API. It also includes notes on the fields in Open Banking with definitions and, where necessary, information on usage.

Fields that have a mapping from the NPA Payment Instruction (pacs.008) to Open Banking API are highlighted in green, those where normal NPA processing should be used are in white and those that have no provision in Open Banking are highlighted in grey.

Element Path	Name	Mandatory (M) or Optional (O) in NPA	Open Banking Field Name	Notes
/GrpHdr/MsgId	Message Id	M		Normal NPA Processing.
/GrpHdr/CreDtTm	Creation Date Time	M		Normal NPA Processing.
/GrpHdr/NbOfTx	Number of Transactions	M		Normal NPA Processing.
/GrpHdr/TtlIntrBkSttlm Amt	Total Interbank Settlement Amount	M		Normal NPA Processing.
/GrpHdr/TtlIntrBkSttlm Amt/Ccy	Total Interbank Settlement Amount Currency			Normal NPA Processing.
/GrpHdr/IntrBkSttlmDt	Interbank Settlement Date	M		Normal NPA Processing.
/GrpHdr/SttlmInf/Sttlm Mtd	Settlement Method	M		Normal NPA Processing.
/GrpHdr/SttlmInf/ClrSys/Cd	Clearing System Code	M		Normal NPA Processing.
/GrpHdr/PmtTpInf/LclInstrm/Cd	Local Instrument Code	M		Normal NPA Processing.
/PmtId/InstrId	Instruction Identification	O	/InstructionIdentification	Unique identification as assigned by an instructing party for an instructed party to unambiguously identify the instruction.
/PmtId/EndToEndId	End-to-End Identification	M	/EndToEndIdentification	Unique identification assigned by the initiating party to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain.
/PmtId/TxId	Transaction Identification	O		Normal NPA Processing.
/PmtId/UETR	UETR	M		Normal NPA Processing.
/IntrBkSttlmAmt	Interbank Settlement Amount	M	/InstructedAmount/Amount	Amount of money to be moved between the debtor and creditor, expressed in the currency as ordered by the initiating party.

Element Path	Name	Mandatory (M) or Optional (O) in NPA	Open Banking Field Name	Notes
/IntrBkSttlmAmt/Ccy	Interbank Settlement Currency		/InstructedAmount/Currency	A code allocated to the currency of the payment recorded in the amount field.
/InstdAmt	Instructed Amount	O		Currently no provision in Open Banking API.
/InstdAmt/Ccy	Instructed Amount Currency			Currently no provision in Open Banking API.
/XchgRate	Exchange Rate	O		Currently no provision in Open Banking API.
/ChrgBr	Charge Bearer	M		Normal NPA Processing.
/InstgAgt/FinInstnId/LEI	Instructing Agent	M		Normal NPA Processing.
/InstdAgt/FinInstnId/LEI	Instructed Agent	M		Normal NPA Processing.
/Dbtr/Nm	Debtor	M	/Debtor/Name	The account name is the name or names of the account owner(s) represented at an account level.
/Dbtr/PstlAdr	Debtor Postal Address	O		Currently no provision in Open Banking API.
/DbtrAcct/Id/Othr/Id /DbtrAcct/Id/IBAN	Debtor Account	M	/DebtorAccount/Identification	Identification assigned by an institution to identify an account, which is either the Account Number (UK) or IBAN. This identification is known by the account owner.
/DbtrAgt/FinInstnId/ClrSysMmbld/ClrSysId/Mmbld	Debtor Agent	M	/DebtorAccount/Identification	Identification assigned by an institution to identify an account, which will be the Sort Code for an account held in the UK. This identification is known by the account owner.
/CdtrAgt/FinInstnId/ClrSysMmbld/ClrSysId/Mmbld	Creditor Agent	M	/CreditorAccount/Identification	Identification assigned by an institution to identify an account, which will be the Sort Code for an account held in the UK. This identification is known by the account owner.
/Cdtr/Nm	Creditor Name	M	/CreditorAccount/Name	The account name is the name or names of the account owner(s) represented at an account level.
/Cdtr/PstlAdr	Creditor Postal Address	O	/CreditorPostalAddress	Information that locates and identifies a specific address, as defined by postal services.
/CdtrAcct/Id/Othr/Id	Creditor Account	M	/CreditorAccount/Identification	Identification assigned by an institution to identify an account, which will be the Account Number (UK). This identification is known by the account owner.
/InstrForCdtrAgt/Cd	Code	O	/CreditorAccount/SecondaryIdentification	To populate /InstrForCdtrAgt/Cd in NPA with code "SEID" for Secondary Identification usage. Code indicates use of Secondary Identification of Creditor Account (which may relate to a Roll Number or Credit Card Primary Account Number).
/InstrForCdtrAgt/InstrInf	Instruction Information	O	/CreditorAccount/SecondaryIdentification	To populate /InstrForCdtrAgt/InstrInf in NPA with Secondary Identification of Creditor Account (which may relate to a Roll Number or Credit Card Primary Account Number) to be used to route payments to the correct Customer Account.

Element Path	Name	Mandatory (M) or Optional (O) in NPA	Open Banking Field Name	Notes
/InstrForNxtAgt/Cd	Code	O		This field is used to identify the originating source of a payment and will be used by the NPA. Code value '007' will indicate a payment originating from 'Open Banking'.
/Purp/Cd	Code	O	/PaymentPurposeCode	Category code, related to the type of services or goods that corresponds to the underlying purpose of the payment.
/RgltryRptg/Dtls/Cd	Code	O	Third Party Provider ID (TPP_ID) and Software ID (SWI_ID) Code	To populate /RgltryRptg/Dtls/Cd in NPA with code "TPP_ID" in first occurrence for usage of Third Party Identifier and with code "SWI_ID" in second occurrence for usage of Software ID. Reference for Third Party Provider and Software ID structure are described in /RgltryRptg/Dtls/Inf.
/RgltryRptg/Dtls/Inf	Information	O	Third Party Provider ID (TPP_ID) and Software ID (SWI_ID) Reference	TPP_ID and Software_ID values taken from the TPP software registration prior to Payment Initiation and populated in this field. In the event that this is determined to be a Payment Originating Overseas then the existing Regulatory Reporting Information should be stated first followed by the TPP_ID and Software_ID.
/RmtInf/Ustrd	Unstructured	O	/RemittanceInformation/Unstructured	Information supplied to enable the matching/reconciliation of an entry with the items that the payment is intended to settle, such as commercial invoices in an accounts' receivable system, in an unstructured form.
/RmtInf/Strd/CdtrRefInf/Ref	Reference	O	/RemittanceInformation/Reference	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. This may be used for billing references and reconciliation purposes including references to a Head Office Collection Account (HOCA) number.

Table 9: Open Banking and NPA ISO 2022 pacs.008 mapping

14 Roll Numbers, Head Office Collection Accounts and Credit Card Payments

In order to use Roll Numbers, Head Office Collection Accounts (HOCA(s)) and Credit Card payments, the identifiers of these payments must be maintained within the payment flow and held within the message. A guidance for the use of these identifiers in a Payment Instruction (pacs.008) to the NPA has been created. Key fields are highlighted in green to show their importance in such Secondary Identification payments.

Element Path	Name	Mandatory (M) or Optional (O)	Pay.UK Usage
/Pmtld/UETR	UETR	M	Normal NPA Processing.
/InstgAgt/FinInstnId/LEI	Instructing Agent	M	Normal NPA Processing.
/InstdAgt/FinInstnId/LEI	Instructed Agent	M	Normal NPA Processing.
/Dbtr/Nm	Debtor	M	Normal NPA Processing.
/Dbtr/PstlAdr	Debtor Postal Address	O	Normal NPA Processing.
/DbtrAcct/Id/Othr/Id			
/DbtrAcct/Id/IBAN	Debtor Account	M	Normal NPA Processing.
/DbtrAgt/FinInstnId/ClrSysMm bld/ClrSysld/Mmbld	Debtor Agent	M	Normal NPA Processing.
/CdtrAgt/FinInstnId/ClrSysMm bld/ClrSysld/Mmbld	Creditor Agent	M	Normal NPA Processing.
/Cdtr/Nm	Creditor	M	Normal NPA Processing.
/Cdtr/PstlAdr	Creditor Postal Address	O	Normal NPA Processing.
/CdtrAcct/Id/Othr/Id	Creditor Account	M	Normal NPA Processing.
/InstrForCdtrAgt/Cd	Code	O	To populate /InstrForCdtrAgt/Cd in NPA with code "SEID" for Secondary Identification usage. Code indicates use of Secondary Identification of Creditor Account (which may relate to a Roll Number or Credit Card Primary Account Number).
/InstrForCdtrAgt/InstrInf	Instruction Information	O	To populate /InstrForCdtrAgt/InstrInf in NPA with Secondary Identification of Creditor Account (which may relate to a Roll Number or Credit Card Primary Account Number) to be used to route payments to the correct Customer Account.
/Purp/Cd	Code	O	Normal NPA Processing.
/RgltryRptg/Dtls/Cd	Code	O	Normal NPA Processing.
/RgltryRptg/Dtls/Inf	Information	O	Normal NPA Processing.
/RmtInf/Ustrd	Unstructured	O	Normal NPA Processing.
/RmtInf/Strd/CdtrRefInf/Ref	Reference	O	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. This may be used for billing references and reconciliation purposes including references to a Head Office Collection Account (HOCA) number.

Table 10: Key fields required for payments involving Building Society Roll Numbers, HOCA and Credit Card Payments

15 Cross-Border Payments

In order to assist Participants in using payments originating overseas through the NPA, a guidance has been created for the key fields to be populated in a Payment Instruction (pacs.008) in this scenario. These key fields are highlighted in green to show their importance in a Cross-Border Payment.

Element Path	Name	Mandatory (M) or Optional (O)	Notes
/GrpHdr/MsgId	Message Id	M	Normal NPA Processing.
/GrpHdr/CreDtTm	Creation Date Time	M	Normal NPA Processing.
/GrpHdr/NbOfTx	Number of Transactions	M	Normal NPA Processing.
/GrpHdr/TtlIntrBkSttlmAmt	Total Interbank Settlement Amount	M	Normal NPA Processing.
/GrpHdr/TtlIntrBkSttlmAmt/Ccy	Total Interbank Settlement Amount Currency		Normal NPA Processing.
/GrpHdr/IntrBkSttlmDt	Interbank Settlement Date	M	Normal NPA Processing.
/GrpHdr/SttlmInf/SttlmMtd	Settlement Method	M	Normal NPA Processing.
/GrpHdr/SttlmInf/ClrSys/Cd	Clearing System Code	M	Normal NPA Processing.
/GrpHdr/PmtTpInf/LclInstrm/Cd	Local Instrument Code	M	Normal NPA Processing.
/PmtId/InstrId	Instruction Identification	O	Normal NPA Processing.
/PmtId/EndToEndId	End-to-End Identification	M	Normal NPA Processing.
/PmtId/TxId	Transaction Identification	O	Normal NPA Processing.
/PmtId/UETR	UETR	M	UETR is the universally unique identifier and provides an end to end reference of a payment transaction. The NPA has mandated the usage of UETRs; all messages referencing a transaction must include the UETR.
/IntrBkSttlmAmt	Interbank Settlement Amount	M	Normal NPA Processing.
/IntrBkSttlmAmt/Ccy	Interbank Settlement Currency		Normal NPA Processing.
/InstdAmt	Instructed Amount	O	Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party. This field is key in Cross-Border Payments as the Instructed Amount may vary in Currency type (not GBP) and therefore should be populated when making a Cross-Border Payment.
/InstdAmt/Ccy	Instructed Amount Currency		This field is key in Cross-Border Payments as the Instructed Amount may vary in Currency type (not GBP) and therefore should be populated when making a Cross-Border Payment. A code allocated to a currency by a Maintenance Agency under an international identification scheme.
/XchgRate	Exchange Rate	O	This field is key in Cross-Border Payments as the Instructed Amount may in Currency type and therefore should be populated when making a Cross-Border Payment. Factor used to convert an amount from one currency into another. This reflects the price at which one currency was bought with another currency.

Element Path	Name	Mandatory (M) or Optional (O)	Notes
/ChrgBr	Charge Bearer	M	Normal NPA Processing.
/InstgAgt/FinInstnId/LEI	Instructing Agent	M	Normal NPA Processing.
/InstdAgt/FinInstnId/LEI	Instructed Agent	M	Normal NPA Processing.
/Dbtr/Nm	Debtor	M	The identifier of the Debtor. If LEI is not present for Debtor, then Name is mandatory. If postal address is absent then name is mandatory.
/Dbtr/PstlAdr	Debtor Postal Address	O	Information that locates and identifies a specific address of the Debtor, to support other identification fields of the Debtor for a Cross-Border Payment.
/DbtrAcct/Id/Othr/Id			This is the Debtor Account Number held at the Debtor Agent. IBAN should be used for an account which is not based in the UK.
/DbtrAcct/Id/IBAN	Debtor Account	M	
/DbtrAgt/FinInstnId/BICFI	Debtor BICFI	O	Used to identify the Debtor of a payment originating from overseas and the country code in this identifier must not be 'GB'.
/DbtrAgt/FinInstnId/ClrSysMmbld/ClrSysId/Mmbld	Debtor Agent	O	The Debtor Agent is the Financial Institution where the Debtor holds their Account. The Debtor Agent is identified using Clearing System Member Id. When using Mmbld you must populate ClrSysId/Cd with 'GBDSC' for a domestic payment.
/CdtrAgt/FinInstnId/ClrSysMmbld/ClrSysId/Mmbld	Creditor Agent	M	The Creditor Agent is the Financial Institution where the Creditor holds their account. The Creditor Agent must be identified by the Clearing System Member Id in the NPA. When using Member Id, Clearing System Id/Cd must also be populated with 'GBDSC' i.e. UKDomesticSortCode.
/Cdtr/Nm	Creditor	M	Normal NPA Processing.
/Cdtr/PstlAdr	Creditor Postal Address	O	Normal NPA Processing.
/CdtrAcct/Id/Othr/Id	Creditor Account	M	This is the Creditor Account Number held with the Creditor Agent.
/InstrForNxtAgt/Cd	Code	O	This field will be used to identify the originating source of a payment. Code value '008' is used to identify Cross-Border Payments.
/Purp/Cd	Code	O	Normal NPA Processing.

Table 11: Key fields required for Cross-Border Payments

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