



General Information (Origin of Request)										
User Requirements Document (URD)										
☑ User Detailed Functional Specification (UDFS)										
User Handbook (UHB)	User Handbook (UHB)									
Other User Functional or Technical Documentation (	(SYS)									
Request raised by: ECB	Institu	ution: ECB Date raised: 04 November 2022								
Request title: Additional EPC requirements on mig	gration a	spects	Request ref. no: TIPS-0056-SYS <sup>1</sup>							
Request type:										
1. Legal/business importance parameter: Mediu	m		implementation efforts parameter - impact: Medium							
3. Operational impact: High		4. Financial impact parameter: Low								
5. Functional/ Technical impact: Medium 6. Interoperability impact: High										
Requestor Category: ECB	_	Status: Alloca	ated to a Release							

### Reason for change and expected benefits/business motivation:

The proposed change request aims at defining the ISO migration approach to version 2019 as described in the updated EPC Guidance document published on 16 February 2023:

<u>EPC087-22 / Version 3.0: EPC Guidance Document - Migration to the 2019 Version of the ISO 20022 Standard-based XML Messages</u>

### Description of requested change:

TIPS message specifications currently in place for both Euro and non-Euro currencies shall comply with the newer version mandated by the EPC and NPC scheme documentation respectively, whose entry into force is envisaged by November 2023, for which separate CRs (namely TIPS-0052 and TIPS-0055) have been already drafted.

However, the migration requirements had been taken out from the above-mentioned CRs waiting for the EPC opinion in reply to several questions on migration aspects raised by the different scheme stakeholders.

The updated EPC Guidance document aims at facilitating a smooth change-over from the 2009 version to the 2019 version. Compared to the version published in May 2022, the following amendments and downtime requirements have been introduced:

- The entry-into-force time of the 2023 SCT-Inst scheme rulebook on the 19 November 2023 has been amended from 08H00 to 03H30 CET.
- This new entry-into-force time will be preceded by a SEPA-wide 30 minutes downtime period from 03H00 CET up to 03H30 CET.
- During the downtime period, no single SCT-Inst instruction, transaction, r-transaction, transaction investigation and any response message related to them will be possible.

This means that up to 03H00 CET, all SCT-Inst payment messages will be in the 2009 version of the ISO 20022 standard. As of 03H30 CET, all SCT-Inst payment messages will be in the 2019 version of that same standard. In addition, the following messages sent as of 19 November 2023 (for SCT-Inst: as of 03H30 CET on 19 November 2023) must be based on the 2019 version:

- any r-transaction message for an initial transaction itself submitted before 19 November 2023 (for SCT Inst: before 03H30 CET at 19 November 2023), and
- any response message for a r-transaction or for an SCT inquiry itself launched before 19 November 2023 (for SCT Inst: before 03H30 CET at 19 November 2023).

It is assumed that the same timing and manner proposed by the EPC will also apply to the NPC scheme for non-Euro message specifications entry into force in November 2023.



Furthermore, a new use of the data element "Original Message Name Identification" in r-transactions, SCT inquiries and related response messages shall be implemented. The R-transactions, SCT inquiries or response messages relating to a message sent before the migration date (i.e. in the 2009 message version of ISO 20022) shall refer to the same 2009 message version in the data element "Original Message Name Identification", despite the SCT<sup>Inst</sup> IGs currently indicate that only the 2019 version of original message is allowed in this element.

Submitted annexes / related documents:

**Proposed wording for the Change request:** 

Please note that, while the wording <u>underlined once</u> is only proposed for change request TIPS.0056.SYS, the proposed wording <u>underlined twice</u> is already foreseen by the change request TIPS.0052.SYS and is reported here just for the sake of completeness.

### Option 1 (Response to an investigation with pacs.002.001.03):

#### TIPS UDFS v5.0.1

1) 3.3.2.1.1 FIToFIPaymentStatusReportV03 (pacs.002.001.03)

The FltoFIPaymentStatusReport message is used in severaltwo business cases:

- 4. It is sent by TIPS to the Originator PSP as a copy of the previous FltoFIPaymentStatusReport in case of Investigation request received after the migration to the ISO MR-2019 relating to an underlying instant payment that has been processed prior to the migration to the ISO MR-2019. It is sent by TIPS to the Originator Participant to report a rejection for a pacs.008 transaction;
- 2. It is sent by the Beneficiary Participant or Instructing Party to TIPS to report the processing result of a pacs.008 sent by TIPS upon request of an Originator Participant;
- 3. The message as received by the Beneficiary Participant is forwarded to the Originator Participant. This scenario covers also the positive response to a Status Investigation request;
- 4. It is sent by TIPS to the Beneficiary Participant as a confirmation for processing of the pacs.002 received from the Beneficiary Participant itself;
- 5. It is sent by TIPS to the Originator Participant after a negative response to a Status Investigation request.
- 6. It is sent by TIPS to the Originator Participant (e.g., in case of errors during the conditional phase or in case of timeout condition triggered by TIPS during either the conditional phase or settlement phase);
- 7. It is sent by TIPS to the sender of the Recall in case of errors;
- 8. It is sent by TIPS to the sender of the positive Recall Response either as a positive settlement confirmation or in case of errors (e.g. not sufficient funds to settle the positive recall or validation error related to the Recall Response);
- 9. It is sent by TIPS to the sender of the negative Recall Response in case of errors (e.g. missing access rights);
- 10. It is sent by TIPS to inform the Single Instructing Party about the result of the settlement (i.e. settled, rejected, timed-out) in the SIP settlement model;
- 11. It is sent by TIPS to the Beneficiary Participant in case of timeout condition triggered by TIPS during the settlement phase due to missing positive confirmation from the Beneficiary Participant;

<sup>&</sup>lt;sup>1</sup> XXXX = ECMS /TIPS / CONS, NNNN = 9999, DDDD = URD/UDFS/UHB



12. It is sent by TIPS to the Beneficiary Participant in case of timeout condition triggered by TIPS during the settlement phase due to delayed positive confirmation from the Beneficiary Participant.

Message specification is compliant to EPC DS-03 Confirmation Message as described in the SEPA Instant Credit Transfer scheme Rulebook.

# 2) Amendment of the Table 78

Table 1 – Description of the fields for DS-03 Dataset vs pacs.002.001.03

EPC Ref.	Reference Name EPC/ISO Description		XML path	Mand.	TIPS Usage
n/a	Message Identification	The Identification of the message.	FIToFIPmtStsRpt/GrpHdr /MsgId	Yes	Only schema validation is performed.
n/a	Creation Date Time	Date and time at which the message was created.	FIToFIPmtStsRpt/GrpHdr /CreDtTm	Yes	Only schema validation is performed.
n/a	Instructing Agent	Agent that instructs the next party in the chain to carry out the instruction.	FIToFIPmtStsRpt/GrpHd r/InstgAgt	No	Only schema validation is performed.
n/a	Agent that is instructed the previous party in the chain to carry out the instruction.		FIToFIPmtStsRpt/GrpHd r/InstdAgt	No	Only schema validation is performed.
n/a	Original Message Identification	Message Identification of the originating message	FIToFIPmtStsRpt/OrgnI GrpInfAndSts/OrgnIMsgI d	Yes	This field matches with the Identification of the original message.  Business cases 1,2,3,6,10,11: FITOFICstmrCdtTrf/GrpHdr/Msgld Business case 4,12: FITOFIPmtStsRpt/GrpHdr/Msgld Business case 5: FITOFIPmtStsReq/GrpHdr/Msgld Business case 7: FITOFIPmtCxIReq/Assgnmt/Id Business case 8: PmtRtr/GrpHdr/Msgld Business case 8: PmtRtr/GrpHdr/Msgld Business case 9: RsltnOfInvstgtn/Assgnmt/Id



EPC Ref.	Reference Name EPC/ISO Description		XML path	Mand.	TIPS Usage	
n/a	Original Message Name Identification	Message identifier of the originating message. SEPA usage rule: Only pacs.008.001.082 is allowed.	FIToFIPmtStsRpt/Orgnl GrpInfAndSts/OrgnlMsg NmId	Yes	Business cases 1,2,3,6,10,11: pacs.008.001.08 or pacs.008.001.02 Business cases 4,12: pacs.002.001.03 Business case 5: pacs.028.001.01 Business case 7: camt.056.001.01 Business case 8: pacs.004.001.02 Business case 9: camt.029.001.03 SEPA usage rule applicable only to business cases 2, 3	
[]	[]	[]	[]	[]	[]	

### 3) Business cases related to pacs.002.001.10

A clarification on the investigation processing shall be included in this new section envisaged within CR-0052. The point shall manage the deviation that may materialize during the retention period of instant payments whose processing has been initiated prior to the migration and the corresponding investigation is received after the downtime.

# Option 2 (Response to an Investigation with pacs.002.001.10):

No impact on the TIPS UDFS compared to what is currently envisaged by the TIPS-0052.

The following changes are applicable to both options:

## TIPS UDFS v5.0.1

# 1) § 3.3.2.1 Payments Clearing and Settlement

FIToFIPaymentStatusReport (pacs.002.001.10)

Table 78 – Description of the fields for DS-03 Dataset vs pacs.002.001. $\underline{10}$ 

		EPC/ISO Description	XML path	Man d.	TIPS Usage
[]	[]	[]	[]	[]	[]



EP C Ref	Referen ce Name	EPC/ISO Description	XML path	Man d.	TIPS Usage
n/a	Original Message Identificati on	Message Identification of the originating message	FIToFIPmtStsRpt/OrgnlGrpInfAndSts/OrgnlMsgld	Yes	This field matches with the Identification of the original message. Business cases 1,2,3, 6,10,11: FIToFICstmrCdtTrf/GrpHdr/Msgld  Business case 4,12: FIToFIPmtStsRpt/GrpHdr/Msgld  Business case 5: FIToFIPmtStsReq/GrpHdr/Msgld  Business case 7: FIToFIPmtCxIReq/Assgnmt/Id  Business case 8: PmtRtr/GrpHdr/Msgld  Business case 9: RsltnOfInvstgtn/Assgnmt/Id
n/a	Original Message Name Identificati on	Message identifier of the originating message. SEPA usage rule: Only pacs.008.001. 082 is allowed.	FIToFIPmtStsRpt/OrgnIGrpInfAndSts/OrgnIMsgNmId	Yes	Business cases 1,2,3, 6,10,112:  pacs.008.001.08 or pacs.008.001.02  Business cases 4,12: pacs.002.001.10  Business case 5: pacs.028.001.03  Business case 7: camt.056.001.08  Business case 8: pacs.004.001.09  Business case 9: camt.029.001.09  SEPA usage rule applicable only to business cases 2, 3
[]	[]	[]	[]	[]	[]

PaymentReturn (pacs.004.001.09)

Table 79 – Description of the fields for DS-06 Dataset vs pacs.004.001.09

EPC Ref.	Reference Name	EPC/ISO Description	XML path	Mand.	TIPS Usage
[]	[]	[]	[]	[]	[]

<sup>2</sup> For all business cases in which the message is generated by TIPS, the Original Message Name Identification in line with the 2019 message version of ISO 20022 is provided. For all the other business cases, the usage of the correct Original Message Name Identification, in relation to the moment in which the original message was sent in reference to the migration date to the 2019 message version of ISO 20022, should be ensured by the actor who sends the message to TIPS: no check on the correspondence of this value with respect to the version of the original message is performed by TIPS.



EPC Ref.	Reference Name	EPC/ISO Description	XML path	Mand.	TIPS Usage
n/a	Original Group Information + Original Message Identification	Point to point reference, as assigned by the original instructing party, to unambiguously identify the original message.	PmtRtr/OrgnlGrpInf/Org nlMsgld	Yes	This information must be present in either 'Original Group Information' or in 'Transaction Information'.  If it is included in both components, message will be rejected.
n/a	Original Group Information + Original Message Name - Identification	Specifies the original message name identifier to which the message refers.  Allowed values <sup>3</sup> :Only pacs.008.001.08 or pacs.008.001.02 is allowed.	PmtRtr/OrgnlGrpInf/Org nlMsgNmId	Yes	This information must be present in either 'Original Group Information' or in 'Transaction Information'.  If it is included in both components, message will be rejected.
[]	[]	[]	[]	[]	[]

# FIToFIPaymentStatusRequest (pacs.028.001.03)

[...]

Table 82 - Request for Status Update on a Recall

EPC Ref.	Reference Name EPC/ISO Description XML path		Mand.	TIPS Usage	
[]	[]	[]	[]	[]	[]
n/a	Original Message Name Identification	Message identifier of the originating message	FIToFIPmtStsReq/Orgnl GrpInf/OrgnlMsgNmId	Yes	Possible allowed value <u>s</u> <sup>3</sup> : "camt.056.001.0 <u>8</u> " or "camt.056.001.01"
[]	[]	[]	[]	[]	[]

ResolutionOfInvestigation (camt.029.001.09)

<sup>&</sup>lt;sup>3</sup> The usage of the correct Original Message Name Identification, in relation to the moment in which the original message was sent in reference to the migration date to the 2019 message version of ISO 20022, should be ensured by the actor who generates and sends the message to TIPS: no check on the correspondence of this value with respect to the version of the original message is performed by TIPS.



Table 101 - ResolutionOfInvestigation (camt.029.001.09)

EPC Ref.	Reference Name	EPC Description	XML path	Mand.	TIPS Usage	
[]	[]	[]	[]	[]	[]	
n/a	Original Message Name Identification	Message identifier of the originating message	RsitnOfInvstgtn/CxIDtls/ TxInfAndSts/OrgnIGrpI nf/OrgnIMsgNmId	Yes	Possible allowed value <u>s</u> <sup>4</sup> "pacs.008.001.0 <u>8</u> " <u>or</u> "pacs.008.001.02"	
[]	[]	[]	[]	[]	[]	

# FIToFIPaymentCancellationRequest (camt.056.001.08)

[...]

Table 108 - FIToFIPaymentCancellationRequest (camt.056.001.08)

EPC Ref.	Reference Name	EPC Description	XML path	Mand	TIPS Usage
[]	[]	[]	[]	[]	[]
n/a	Original Message Name Identification	Specifies the original message name identifier to which the message refers.	FIToFIPmtCxlReq/Undrly g/Txlnf/OrgnlGrpInf/Orgnl MsgNmld	Yes	AllowedOnly values pacs.008.001.08 or pacs.008.001.02 is allowed.
[]	[]	[]	[]	[]	[]

### **ESMIG UDFS v3.0**

# 2) § 1.5.3.2.1 Technical message validation for SCTInst scheme

Table 2 - Cross-field validations for SCT<sup>inst</sup> scheme

ISO Code	Field/Gro up	Check to be performed	Х-Ратн	ERRO R Code	Output message
[]	[]	[]	[]	[]	[]
pacs.028.001 .0 <u>3</u>	Original Message Name Identificatio n Original Instruction Identificatio n	Original Message Name Identification = "camt.056.001. 01" OR "camt.056.001. 08" and Original Instruction Identification not specified.	FIToFIPmtStsReq/OrgnlGrpInf/OrgnlMsgNmId FIToFIPmtStsReq/TxInf/OrgnlInstrId	MS01	pacs.002.001 . <u>10</u>

<sup>&</sup>lt;sup>4</sup> The usage of the correct Original Message Name Identification, in relation to the moment in which the original message was sent in reference to the migration date to the 2019 message version of ISO 20022, should be ensured by the actor who generates and sends the message to TIPS: no check on the correspondence of this value with respect to the version of the original message is performed by TIPS.



ISO CODE	Field/Gro up	Check to be performed	Х-Ратн	ERRO R Code	Output message
pacs.028.001 .0 <u>3</u>	Original Message Name Identificatio n Creditor Agent	Original Message Name Identification = "camt.056.001. 01" OR "camt.056.001. 08" and Creditor Agent not specified.	FIToFIPmtStsReq/OrgnlGrpInf/OrgnlMsgNmId FIToFIPmtStsReq/TxInf/OrgnlTxRef/CdtrAgt/FinIns tnId/BICFI	MS01	pacs.002.001 . <u>10</u>
pacs.028.001 .0 <u>3</u>	Original Message Name Identificatio n Creditor Agent	Original Message Name Identification = "camt.056.001. 01" OR "camt.056.001. 08", multiple instances of Transaction Information must have the same BIC as Creditor Agent.	FIToFIPmtStsReq/OrgnlGrpInf/OrgnlMsgNmId FIToFIPmtStsReq/TxInf/OrgnlTxRef/CdtrAgt/FinIns tnId/BICFI	MS01	pacs.002.001 . <u>10</u>
[]	[]	[]	[]	[]	[]

## **High-level description of Impact:**

The change request aims at describing the additional requirements stemming from the EPC Guidance document for the migration to the updated version of the SCT-Inst Rulebook.

According to the above-mentioned EPC guidance document the following requirements have been requested for the Inter-PSP space.

- 1. The entry into force of the new version of the rulebook has to be handled without business continuity, by introducing a SCT-Inst-wide downtime. This approach would entail that also the non-Euro community will be affected by the
- 2. The response to an investigation received by the CSM after the downtime, relating to an underlying instant payment whose processing was executed prior to the downtime, has to be generated by the CSM utilizing the new ISO message type for the pacs.002.
- The message field Original Message Name Identification in pacs.002, pacs.004, camt.056, camt.029 and pacs.028 should report the 2009 message version in the element "Original Message Name Identification", in case the related message was sent before the migration date in the 2009 message version of ISO 20022. Considering the TIPS retention period and the fact that some messages are not persistent in TIPS (e.g. camt.056) the usage of the correct Original Message Name Identification, in relation to the moment in which the original message was sent in reference to the migration date to the 2019 message version of ISO 20022, should be ensured by the actor who generates and sends the message to TIPS: no check on the correspondence of this value with respect to the version of the original message is performed by TIPS.

# Impacts on other projects and products:

No impact is foreseen on other TARGET services:

T2: no impact ECMS: no impact T2S: no impact TARGET2: no impact



#### Outcome/Decisions:

On 24 October 2023, the EPC communicated that the migration of the SEPA payment schemes to the 2019 version of ISO 20022 has been postponed from Sunday 19 November 2023 to Sunday 17 March 2024.

Therefore, the entry-into-force of the 2023 SCT-Inst scheme rulebook is at 03H30 CET on the 17 March 2024.

This means that <u>up to 03H00 CET, all SCT-Inst payment messages will be in the 2009 version</u> of the ISO 20022 standard. As of 03H30 CET, all SCT-Inst payment messages will be in the 2019 version of that same standard. In addition, the following messages sent as of 17 March 2024 (for SCT-Inst: as of 03H30 CET on 17 March 2024) must be based on the 2019 version:

- any r-transaction message for an initial transaction itself submitted before 17 March 2024 (for SCT Inst: before 03H30 CET at 17 March 2024), and
- any response message for a r-transaction or for an SCT inquiry itself launched before 17 March 2024 (for SCT Inst: before 03H30 CET at 17 March 2024).

Furthermore, a new use of the data element "Original Message Name Identification" in r-transactions, SCT inquiries and related response messages shall be implemented. The R-transactions, SCT inquiries or response messages relating to a message sent before the migration date (i.e. in the 2009 message version of ISO 20022) shall refer to the same 2009 message version in the data element "Original Message Name Identification", despite the SCT<sup>Inst</sup> IGs currently indicate that only the 2019 version of original message is allowed in this element.

L3 analysis - General Information				
Impact on TIPS				
Business Interface				
Х	A2A Interface			
	U2A Interface			
Settlem	ent Engine			
Х	Payment Transaction			
	Liquidity Transfer			
Х	Recall			
Queries	and Reports			
	Queries			
	Reports			
Other fu	unctions			
X (only Option 2)	Local Reference Data Management			
Орион 2)	Statistics			
	Complex Queries and Reports			
	Mobile Proxy Look-up			



Commo	on Components
Х	ESMIG
	CRDM
	Archiving
	Billing
	DMT
Operat	onal Tools
	SLA Reporting
	TMS
	Technical Monitoring
	Change Management
	Capacity Management
Infrastr	ucture request
	Application components impacted
	Application components not impacted
Operat	onal activities
	Business activities impacted
	Technical activities impacted
New fu	nctionalities
	Enhanced Information Database (EIDB)
	Impact on documentation

Impact on documentation						
Document	Chapter	Change				
TIPS UDFS	Option 1:  1) 3.3.2.1.1 FIToFIPaymentStatusReportV03 (pacs.002.001.03)  2)Table 78  3) 3.3.2.1 Payments Clearing and Settlement	Option 1:  Amendment of the business scenarios; Changes on TIPS validation for Original Message Name Identification.				
	Option 2: § 3.3.2.1 Payments Clearing and Settlement	Option 2:  Changes on TIPS validation for Original Message Name Identification.				
TIPS UHB	N/A					
Training documentation	N/A					



Other documents	ESMIG UDFS 1.5.3.2.1 Technical message validation for SCTInst scheme	Changes on TIPS validation for Original Message Name Identification for pacs.028
MyStandards	pacs.002, pacs.004, camt.056, camt.029 and pacs.028 for EUR community	MyS UGs annotation to be updated for the allowed values on Original Message Name Identification field.

# Overview of the impact of the request on TIPS (L2 view)

Summary of functional, development, infrastructure, operational and security impacts

## Summary of functional impact:

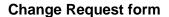
According to the above-mentioned EPC guidance document the following requirements have been requested for the Inter-PSP space.

- 1. The entry into force of the new version of the rulebook has to be handled without business continuity, by introducing a 30-minutes SCT-Inst-wide downtime. This approach would entail that also the non-Euro community will be affected by the same downtime.
- 2. The response to an investigation received by the CSM after the downtime, relating to an underlying instant payment whose processing was executed prior to the downtime, has to be generated by the CSM utilizing the new ISO message type for the pacs.002.
- 3. The message field Original Message Name Identification in pacs.002, pacs.004, camt.056, camt.029 and pacs.028 should report the 2009 message version in the element "Original Message Name Identification", in case the related message was sent before the migration date in the 2009 message version of ISO 20022.

As far as the downtime requirement is concerned, no functional impact is detected. Impact, actual migration playbook and constraints shall be identified both at technical and operational level.

The requirement at bullet point n.2, requires that the following business cases shall be handled smoothly.

- a) Investigation received by TIPS prior to the downtime, relating to an underlying payment processed before downtime:
  - Underlying instant payment received by TIPS: pacs.008.001.02





- Payment confirmation forwarded by TIPS to the Originator PSP: pacs.002.001.03
- Payment confirmation generated by TIPS to the Beneficiary PSP: pacs.002.001.03
- Investigation request issued by the Originator PSP: pacs.028.001.01
- Investigation response: pacs.002.001.03
- b) Investigation received by TIPS after the downtime, relating to an underlying payment processed before the downtime:
  - Underlying instant payment received by TIPS: pacs.008.001.02
  - Payment confirmation forwarded by TIPS to the Originator PSP: pacs.002.001.03(\*)
  - Payment confirmation generated by TIPS to the Beneficiary PSP: pacs.002.001.03<sup>(\*)</sup>
  - Investigation request issued by the Originator PSP: pacs.028.001.03(\*)
  - Investigation response: pacs.002.001.10(\*)
- Investigation received by TIPS after the downtime, relating to an underlying payment processed after the downtime:
  - Underlying instant payment received by TIPS: pacs.008.001.08(\*)
  - Payment confirmation forwarded by TIPS to the Originator PSP: pacs.002.001.10<sup>(\*)</sup>
  - Payment confirmation generated by TIPS to the Beneficiary PSP: pacs.002.001.10<sup>(\*)</sup>
  - Investigation request issued by the Originator PSP: pacs.028.001.03(\*)
  - Investigation response: pacs.002.001.10(\*)

(\*) New message type, compliant with ISO MR-2019.

For the sake of cost efficiency, and uniquely for the unlikely scenario of the Investigation processing described before. i.e. handling residual cases for a transitory time, two different options are assessed in the context of the DA.

### Option 1 (Response to an investigation with pacs.002.001.03):

This option is consistent with the current TIPS URD (i.e. **TIPS.UR.03.960**) whereby it is requested to send a copy of the original pacs.002 that got lost in the payment chain. This answer shall be an exact copy of the rejection or confirmation message, which TIPS sent to the Originator Participant, Ancillary System or Instructing Party during processing of the payment transaction message whose status is queried.

Furthermore, this approach is also consistent with the requirement mandated by the EPC (CT-03.05) "If a party in the Inter-PSP Space had received a confirmation message on the initial SCT Inst Transaction, this party is obliged to retransmit Instantly this confirmation message (the dataset DS-03) to the Originator PSP." (see §4.4 SEPA instant Credit Transfer Scheme Rulebook 2023 Version 1.0).

The requirement did not change in the Rulebook version 2023 entering into force in November 2023, therefore in our functional analysis the proposal within option 1 is the only one fully compliant with both TIPS URD and the EPC Rulebook.

### Option 2 (Response to an Investigation with pacs.002.001.10):

This option is consistent with EPC guidance document for migration whereas it might be contradicting the statement of the rulebook in which the party is obliged to retransmit Instantly the received confirmation message. Following this option, the behaviour of TIPS shall be changed in order to store of the entire data set of each pacs.002 so that they can be used, upon reception of an investigation, to generate a brand new pacs.002 containing the data set previously captured in the local transactional database.

This change would require a substantial change of architecture as this behaviour will be applicable, after the migration to ISO MR-2019, to all the instant payments regardless of the currency, affecting negatively the processing time and the latency of each instant payment.

The rationale to support the option 1, despite keeping for a very short period of time after migration a minor non-compliance to ISO MR-2019, is nonetheless based on the following assumptions:

- 1) Investigation processing can be replaced for these very special corner cases with other reconciliation methods either in U2A or A2A. The former through existing GUI queries, the latter through the already supported *GetTransaction/ReturnTransaction* messages.
- Option 1 implies the absence of impacts on the existing TIPS architecture, whereas the option 2 introduces a major deviation compared to current requirements.
- 3) From an end-user standpoint (i.e. the payer), the effectiveness of an investigation is gradually reduced the more the relevant response is deferred from the time the underlying instant payment was originated. In this case, at least for the entire downtime, the payer and its Originator PSP (or instructing Party) has no mean to confirm nor to reject the payment.



Regarding the requirement on the usage of field 'Original Message Name Identification' in pacs.002, pacs.004, camt.056, camt.029 and pacs.028, the field shall report the 2009 message version in the element "Original Message Name Identification", in case the related message was sent before the migration date, i.e. in the 2009 message version of ISO 20022. Considering the TIPS retention period and the fact that some messages are not made persistent in TIPS (e.g. camt.056) the usage of the correct Original Message Name Identification in relation to the moment in which the original message was sent in reference to the migration date to the 2019 message version of ISO 20022 shall be ensured by actor who generates and sends the messages to TIPS: no check on the correspondence of this value with respect to the version of the original message is performed by TIPS.

TIPS validations on pacs.002, pacs.004, camt.056, camt.029 and pacs.028 should be adapted in order to allow the logical OR between the old (2009) and the new (2019) message versions. This requires a functional impact to the TIPS UDFS, ESMIG UDFS and to the MyStandards Usage Guidelines for the above mentioned messages: this impact is restricted to EUR community only, considering that non-EUR message specifications are already compliant with the ISO MR2019 and so no need of any message version migration in R2023.NOV (as underlined by TIPS.0055.SYS).

#### Summary of application development impact:

#### Deployment of the TIPS release.

TIPS was designed to operate 7/24/365 and, consequently, all deployments should adopt the so called "rolling deployment" strategy.

The current CR requires to ensure that the new schemas enter into force at a precise point in time, implying that a different deployment strategy must be adopted: a "recreate deployment" has to be put in place, thus adopting an *all-or-nothing* logic that realizes an immediate update of the whole system. In this event, TIPS must be stopped before deployment and re-started after the new version is fully installed.

Contrary to "rolling deployment, "recreate deployment" is a scenario never before put in place or tested in the TIPS environments.

Although the model implemented for TIPS would allow to deploy these changes without service interruption, the EPC requires to complete the migration in Production with a planned downtime of 30 minutes. Such request implies that, in case of unforeseen operational issues that can occur during the migration activities, the time may not be sufficient. In case such exceptional case occurs, standard operational procedures will apply and TIPS actors will be notified via the foreseen channels.

The "recreate deployment" shall require support by DEV staff for two types of activities:

- 1. Designing and testing the deployment activities;
- 2. Supporting the deployment during the night of 29 November 2023.

## Investigations of payments in the period at the turn of the release change.

From an application perspective, the Option 2 above (Response to an investigation with the new version, pacs.002.001.10, even when the original message was received with the old version) is **strongly not recommended** because it leads to the need to create a special message converter only for this purpose and operating in a context in which no manipulation of the content of the original message is envisaged. Additionally, this transformation would only be used for the period of time when such kind of investigations can take place: after a few weeks, the payments received in the old format will be evicted and, then, the transformation logic would not be needed anymore. Then this part must be removed from the TIPS codebase because, as a general policy, the "dead code" is considered as an element of degradation of the quality of the system. Consequently, after this clean-up, the affected component must be subjected to new non-regression tests. Finally, it should be noticed that the original choice to reply to an investigation sending out exactly the same message that reached the system, without any alteration, originated from an explicit requirement that was incorporated into the current system architecture.



On the other hand, "Option1" is more streamlined and does not require any further intervention to remove code from the system.

The activities to be carried out for both options are the followings:

### 1. Option1

Implementing a logic for determining the version of the pacs.002 sent out by TIPS in case of positive response to an investigation request (pacs.028): this assignment shall be determined on the basis of a date that will distinguish between the payment messages received in TIPS-r5 from those received in TIPS-r6. This date shall be included in an environment-dependent parameter.

In all the other cases and for all message types, TIPS will answer using the message version consistent with the TIPS release. As an example, when the investigation request is rejected, the version of the pacs.002 sent by TIPS will be the version belonging to TIPS-r5 if the pacs.028 arrived before the deployment or the version belonging to TIPS-r6 if the pacs.028 arrived after the deployment, regardless of the settlement date of the original payment.

#### 2. Option2

### As in Option1:

Implementing a logic for determining the version of the pacs.002 sent out by TIPS in case of positive response to an investigation request (pacs.028): this assignment shall be determined on the basis of a date that will distinguish between the payment messages received in TIPS-r5 from those received in TIPS-r6. This date shall be included in an environment-dependent parameter.

#### In addition to Option1:

Implementing a special message converter servicing the investigation component only and responsible for converting TIPS-r5 payments in the TIPS-r6 format.

Removing the above conversion components and related no-regression tests (the change would be released in occasion of the next TIPS release after TIPS-r6.0).

### 3. For both Option1 and Option2:

Testing the condition if an investigation is received after the release change and concerns payments received before the change.

#### Additional checks on allowed message names.

Checks to be added:

The message validation of the following EUR community messages:

- pacs.002
- pacs.004
- camt.056
- camt.029
- pacs.028

shall be enhanced in order to check that the field "Original Message Name Identification" contains only admitted values, either the old (2009) OR the new (2019) message names versions.

Furthermore, as the checks have limited validity in time, they must be removed at the first possible release following the end of the retention period of the messages.

Note: TIPS does not store all the information needed to implement a strict control ensuring proper usage of the message names (e.g., no checks are possible related to the original message version) and, consequently, the checks implemented by TIPS can only reduce the possibility of having wrong values inserted into the "message name" field. The TIPS checks cannot prevent ALL the possible misuse of the field by the sender.



Summary of infrastructure impact:
TA team support during the migration activities.
Summary of operational impact:
Coordination of the communication with ECB and Settlement Managers about the progress of deployment of the version 2019 of the ISO 20022.
Summary of security impact:
See Change Request analysis.