



SWIFT gpi API v5 Enhancements

February 2023

Introduction

Why choose APIv5?

Payment status update APIs specific to the gpi service level

- Improved data modelling based on the gpi service
- Less cross-service constraints
- Easier maintenance (changes will apply only to the service with new business features, the other APIs are unchanged)
- GET APIs share the same datamodel in all API responses (like in v3/v4)

gpi ISO Readiness (not covered in API v3/4)

- Alignment of datatypes with ISO 20022 (interoperability)
- Alignment with gpi ISO rulebook
- Alignment with CBPR+/PMI Usage Guidelines (common denominator)
- Alignment of the API with the trck datamodel (interoperability API/messaging)

New features (not available in API v3/4)

- Increased reject return reason code list
- Forwarded To Agent identifiable with national clearing code
- Partial confirmation functionality
- Amount inconsistency flag in GET
- ...



gpi API v5 – technical highlights

What changes should I expect to make?

	v4	v5
Update Status of Payment Transaction	Single API for: <ul style="list-style-type: none"> • gCCT, gCOV, gFIT to update transaction status • Status reads for gCCT, gCOV, gFIT, gSRP (status), gCASE • Cancellations (gSRP) 	Implement the API for each of gCCT, gCOV, gFIT as required
Get transaction status / Get changed transactions		Implement new API (single API for all status reads and cancellations)
Request cancellation / update status of cancelled transaction		
Connecting to / Consuming the APIs	SWIFT SDK and Microgateway (small number of gpiConnector exceptions)	Install Microgateway or implement SDK Implement back-office API consumption via Microgateway or SDK



Developer Portal Catalogue

gpi APIs version 4

<https://developer.swift.com/api/gpi/overview>

gpi API

Financial Institution

Cross-border Payments

In today's world, customers expect greater transparency. When they send a payment, they want to know what is happening with it and when it has been received. Until now, this has not been possible in cross-border payments as each bank has only been able to guarantee and share information on its own leg of the payment.

SWIFT

V 4.1 V 3.1 V 2.0

gpi Core Service APIs (gCCT, gCOV, gFIT)

<https://developer.swift.com/api/gpicore/overview>

gpi Core Services

Financial Institution

ISO Compatible

Cross-border Payments

The gpi Core Services APIs are service specific and cover the transactions Customer Credit Transfer, Cover Payments, and Financial Institution transfer. Financial institutions using the gpi Tracker API allows calls to be made to retrieve transaction information and update payments in real-time...

SWIFT

V 5.0

gpi Instant API

<https://developer.swift.com/api/ginst/overview>

gpi Instant API

Financial Institution

ISO Compatible

Cross-border Payments

The gpi Instant API is an optional service for SWIFT gpi members to provide a cross-border instant payments experience by linking the international payments with domestic instant payment systems.

SWIFT

V 5.0

Stop and Recall API

<https://developer.swift.com/api/gsrp/overview>

Stop and Recall API

Financial Institution

OpenBanking

ISO Compatible

Enables payment originators to rapidly and efficiently request a payment to be stopped and to have the funds recalled to the sender.

SWIFT

V 5.0

Universal Confirmations API

<https://developer.swift.com/api/uc/overview>

Universal Confirmations API

Financial Institution

Payment

ISO Compatible

The universal confirmations API allows all non-gpi financial institutions to update the status of the MT 103 payment messages received.



V 5.0

SWIFT Low Value Payment API

<https://developer.swift.com/api/slvp/overview>

SWIFT Low Value Payment API

Financial Institution

ISO Compatible

Cross-border Payments

The SWIFT for Low value cross-border payments (SLVP) API enables SLVP participants to provide status updates via API to the SWIFT gpi Tracker for their SLVP transactions.



V 5.0 V 4.0

Developer Portal Reference

gpi APIs version 4
(note: user is logged out)

Reference «

Introduction

Getting Started

SDK

Microgateway

GPI ^

Overview

gpi API

SLVP API

g4C API

gCase API

GPI

Overview

APIs in this category are offered via the secure SWIFT network (MV-SIPN). Access to highly confidential GPI data requires API client to establish a secure session with the API service via the following options: **SWIFT SDK** and **SWIFT Microgateway** for API v4 or higher, gpi Connector for API v3 or lower.

gpi API

[View OpenAPI specification >](#)

This set of APIs provide operations for financial institutions to access and update payment transaction information.

i gpi v3 will be deprecated with the release of gpi v5. Find more information in [gpi API release policy and versioning](#).

Sign in to access our toolbox section to download the specification and other related information.

Try the APIs in the sandbox with Postman or clone the [gpi v4 demo app](#).

[▶ Run in Postman](#)

gpi APIs version 5
(note: user is logged in)

Reference «

Introduction

Getting Started

SDK

Microgateway

GPI ^

Overview

gpi API

Customer Credit
Transfer API

Cover Payments API

Financial Institutions
Transfer API

SLVP API

Stop and Recall API

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gCase API

GPI

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Download the specification in **OAS 3.0** format.

Download the **Detailed Specification** to learn more.

Download the **Schemas** to validate API requests and responses.

Visit the **Tracker Errors Guide** to check for error codes descriptions.

Try the APIs in the sandbox with Postman or clone the [gpi v4 demo app](#).

[▶ Run in Postman](#)

gpi Customer Credit Transfer API

[View OpenAPI specification >](#)

This API is a status confirmation update to inform the tracker about the updated status of a given customer credit transfer payment.



APIv4 vs APIv5 – splitting of Payment Status Request API

	v4		v5					
	Payment Status Request (single API all services)	gpi SLVP Payment Status Request	gCCT Payment Status Request	gCOV Payment Status Request	gFIT Payment Status Request	UC Payment Status Request	gCCTINST Payment Status Request	gSLVP Payment Status Request
gCCT	✓		✓					
gCOV	✓			✓				
gFIT	✓				✓			
UC	✓					✓		
gCCT Instant	✓						✓	
gpi SLVP (simple)		✓						✓
ISO MX channel	N/A	N/A	trck UG gCCT	trck UG gCOV	trck UG gFIT	trck UG UC	trck UG gCCTINST	trck UG gSLVP

Change to make in v5

- Implement separate API per service



APIv4 vs APIv5 – no splitting of other APIs

V4 & V5	gCCT	gCOV	gFIT	UC	gCCTINST	gSLVP
GET Transactions Details (UETR-search)	✓	✓	✓	✓	✓	✓ **
GET Changed Transactions (time-range)	✓	✓	✓	✓	✓	✓ **
PUT Request Cancellation (gSRP)	✓		✓ *		✓	✓
PUT Update Status Cancelled Transaction (gSRP)	✓		✓ *		✓	✓

*only v5

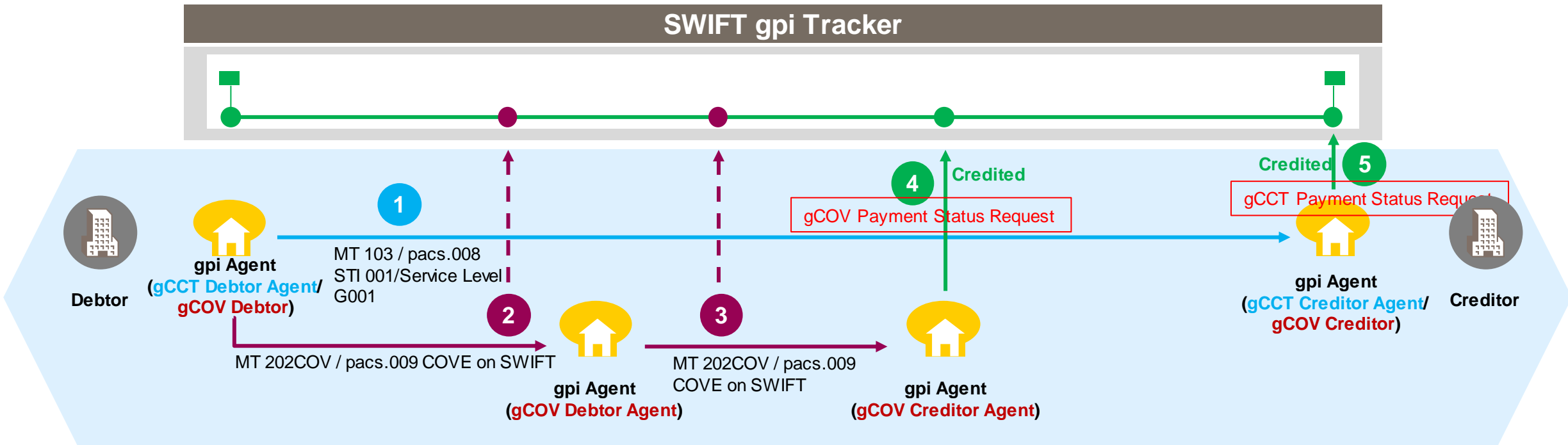
**In V3, Service Level G009 is converted to G001

Change to make in v5

• Implement new version of APIs



Split Payment Status Request APIs – gCCT/gCOV

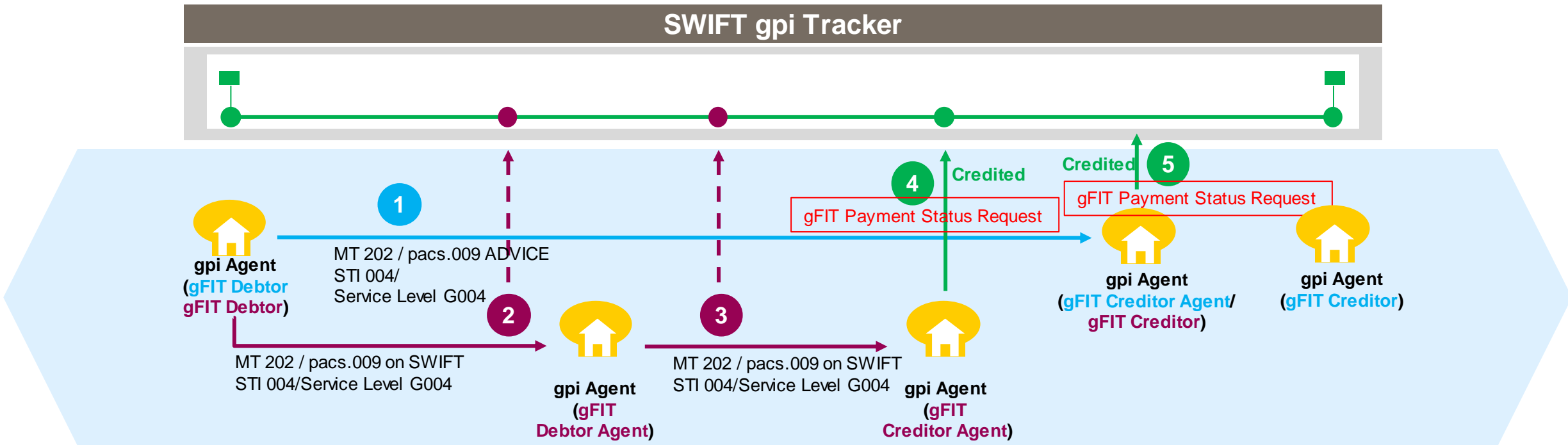


Split APIs

Type of operation	v3/v4	v5
gpi Agent updates status of gCCT transaction (f.ex. Step 5)	Send PaymentStatusRequest API with UpdatePaymentScenario CCTR	Send gCCT PaymentStatusRequest API
gpi Agent updates status of gCOV transaction (f.ex. Step 4)	Send PaymentStatusRequest API with UpdatePaymentScenario COVE	Send gCOV PaymentStatusRequest API



Split Payment Status Request APIs – gFIT & gFIT cover-like transaction

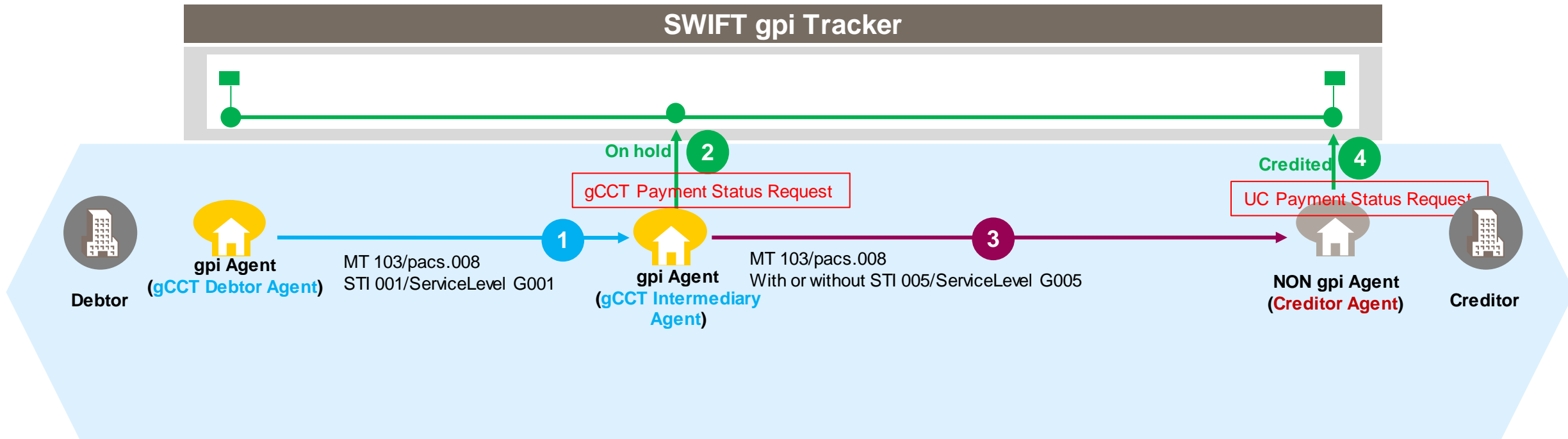


Split APIs

Type of operation	v4 (v3 not applicable)	v5
gpi Agent updates status of gFIT transaction (step 4 and 5)	Send PaymentStatusRequest API with UpdatePaymentScenario FCTR	Send gFIT PaymentStatusRequest API



Split Payment Status Request APIs – gCCT/UC



Split APIs

Type of operation	v3/v4	v5
gpi Agent updates status of gCCT transaction (f.ex. step 2)	Send PaymentStatusRequest API with Service Level* 001 and UpdatePaymentScenario CCTR	Send gCCT PaymentStatusRequest API
NON gpi Agent updates status of transaction (f.ex. Step 4)	Send PaymentStatusRequest API without Service Level* and with UpdatePaymentScenario CCTR	Send UC PaymentStatusRequest API

*called BusinessService in v4 spec

Deep dive updates per API and comparison between v4 and v5



Status Confirmations 1/2

This API is a status confirmation update to inform the Tracker about the updated status of a given payment.



- Separate specifications by service level
- No change to path/URI from v4 to v5 (remains /payments/{uetr}/status)
- Consistent path across each API specification by service level

Data model changes for API request:

- Party Identification: replacement of AnyBIC with BICFI.
- BusinessService renamed into ServiceLevel and use of 4-character codes (f.ex. G001, G004, etc, ...).
- UpdatePaymentScenario was simplified to PaymentScenario.
- Payment Scenario element changed logic: in v4 used to select type of update (CCTR or COVE or FCTR). In v5, no longer needed for this purpose as we have separate specifications by service level. In V5, element allows for update on normal payment transaction versus update on return transaction (future).
- All identifications are 35 characters (instruction identification & end to end identification).
- TransactionStatusReason element only used for reasons linked to status ACSP.
- New element RejectReturnReason to be used for reasons linked to status RJCT.
- Number of reject return reasons increased.
- Return boolean removed (returns for SR2022 => presence RejectReturnReason in combination with certain transaction statuses/transaction status reasons will indicate update on return transaction).

The combination of the “base path” from the servers URL and the /payment/{uetr}/status path identifies the API being requested. For example for CCT:
The URI/path for updating a CCT transaction on the tracker in v5 is /swift-api-tracker-**gcct**-pilot/v5/payment/{uetr}/status



Status Confirmations 2/2

This API is a status confirmation update to inform the Tracker about the updated status of a given payment.



Request (continued)

- FundsAvailable element renamed into ConfirmedDate.
- Confirmed Date only used for ACCC.
- New element TransactionStatusDate used for ACSP/G000 & G001 and RJCT.
- DateTime element allow only UTC/Zulu and local time with UTC offset.
- StatusOriginator renamed into TrackerInformingParty.
- ForwardedToAgent renamed into InstructedAgent.
- InstructedAgent can be identified with a ClearingSystemMemberIdentification (alternative to BIC).
- ChargesInformation now includes the identification of the Agent taking the charge (only applicable to gCCT/UC/gCCTINST/gSLVP)
- All amounts are 18 digits (excluding decimal dot)
- Foreign Exchange Details structure was flattened.
- New elements RemainingToBeConfirmedAmount and PreviouslyConfirmedAmount (only applicable to gCCT/gCCTINST/gSLVP)
- ConfirmedAmount only used for ACCC
- InterbankSettlementAmount introduced to be used for ACSP/G000&G001. Optionally for RJCT, ACSP/G002&G003&G004.

Response

- No change to response for gCCT, gCOV, gFIT, UC, gCCTINST
- gSLVP response may provide a warning message when request is invalid but accepted (e.g. when charge bearer not equal to 'SHAR')



Get Payment Transaction Details

Payment query to get detailed information regarding a given payment. It requires the UETR to be known

```
GET /payments/{uetr}/transactions
```



```
GET /payments/{uetr}/transactions
```

Request

- No change to request.

Response

- All data model changes applicable to Status Confirmations (previous slide) also applicable to GET APIs
- Additional data model changes:
 - Datatype timestamps changed to UTC/Zulu (tracker by default delivers UTC/Zulu)
 - New element AmountInconsistency
 - New code SLEV in ChargeBearer element
 - Inclusion of new parties:
 - PreviousInstructingAgent1-2-3
 - IntermediaryAgent2-3
 - Network references increased to Max50Text.
 - Seven new Tracker Event Types:
 - Three codes for cancellation of FIT
 - Four codes for cover of a FIT
 - Renaming of certain elements (f.ex. Sender Acknowledgement Receipt changed to Sender Acknowledgement Receipt Date Time)



Get Changed Payment Transactions

This API is a delta query to get all payment update information starting from a given date and time



Request

- Query Parameter 'PaymentScenario' extended with 3 new values:
 - FCOV Cover Financial Institution Credit Transfer
 - CTCN Customer Credit Transfer Cancellation
 - FTCN Financial Institution Credit Transfer Cancellation

Response

- All data model changes applicable to Status Confirmations (previous slide) also applicable to GET APIs
- Additional data model changes:
 - Datatype timestamps changed to UTC/Zulu (tracker by default delivers UTC/Zulu)
 - New element AmountInconsistency
 - New code SLEV in ChargeBearer element
 - Inclusion of new parties:
 - PreviousInstructingAgent1-2-3
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 - Network references increased to Max50Text.
 - Seven new Tracker Event Types:
 - Three codes for cancellation of FIT
 - Four codes for cover of a FIT
 - Renaming of certain elements (f.ex. Sender Acknowledgement Receipt changed to Sender Acknowledgement Receipt Date Time)



Get Payment Transaction Details/Get Changed Payment Transactions

```
GET /payments/{uetr}/transactions
```

```
GET /payments/changed/transactions
```

Inclusion of new parties (detail):

- PreviousInstructingAgent1-2-3
- IntermediaryAgent2-3

V4

- Serial Parties [0,1] : CustomerCreditTransferTransactionParties3
 - Debtor [0,1] : AnyBICDec2014Identifier
 - Debtor Agent [0,1] : AnyBICDec2014Identifier
 - Intermediary Agent 1 [0,1] : AnyBICDec2014Identifier
 - Instructing Reimbursement Agent [0,1] : AnyBICDec2014Identifier
 - Creditor Agent [0,1] : AnyBICDec2014Identifier
 - Creditor [0,1] : AnyBICDec2014Identifier
 - Creditor Account [0,1] : AccountIdentification47Choice
- Cover Parties [0,1] : CreditTransferTransactionParties2
 - Debtor [0,1] : AnyBICDec2014Identifier
 - Debtor Agent [0,1] : AnyBICDec2014Identifier
 - Intermediary Agent 1 [0,1] : AnyBICDec2014Identifier
 - Creditor Agent [0,1] : AnyBICDec2014Identifier
 - Creditor [0,1] : AnyBICDec2014Identifier

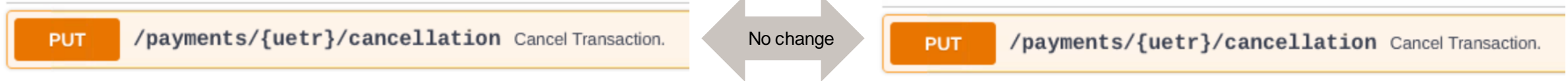
V5

- Instructing Reimbursement Agent [0,1] : BICFIDec2014Identifier
- Previous Instructing Agent 1 [0,1] : BICFIDec2014Identifier
- Previous Instructing Agent 2 [0,1] : BICFIDec2014Identifier
- Previous Instructing Agent 3 [0,1] : BICFIDec2014Identifier
- Intermediary Agent 1 [0,1] : BICFIDec2014Identifier
- Intermediary Agent 2 [0,1] : BICFIDec2014Identifier
- Intermediary Agent 3 [0,1] : BICFIDec2014Identifier
- Debtor [0,1] : BICFIDec2014Identifier
- Debtor Agent [0,1] : BICFIDec2014Identifier
- Creditor Agent [0,1] : BICFIDec2014Identifier
- Creditor [0,1] : BICFIDec2014Identifier
- Creditor Account [0,1] : AccountIdentification47Choice
- Underlying Customer Credit Transfer [0,1] : CreditTransferTransaction40
 - Debtor Agent [0,1] : BICFIDec2014Identifier
 - Previous Instructing Agent 1 [0,1] : BICFIDec2014Identifier
 - Previous Instructing Agent 2 [0,1] : BICFIDec2014Identifier
 - Previous Instructing Agent 3 [0,1] : BICFIDec2014Identifier
 - Intermediary Agent 1 [0,1] : BICFIDec2014Identifier
 - Intermediary Agent 2 [0,1] : BICFIDec2014Identifier
 - Intermediary Agent 3 [0,1] : BICFIDec2014Identifier
 - Creditor Agent [0,1] : BICFIDec2014Identifier



Cancel Transaction

Requesting cancellation of a transaction.



Request

- BusinessService renamed into ServiceLevel with code G002
- OriginalInstructionIdentification 35 char
- New element OriginalMessageNameIdentification with codeset:
 - pacs.008 -Identifies a customer credit transfer payment (MT 103, pacs.008, ...)
 - pacs.009 -Identifies a financial institution credit transfer payment (MT 202, MT 205, pacs.009 CORE, ...).

Response

- No change



Transaction Cancellation Status

Updating the status of a transaction cancellation.



Request

- BusinessService renamed into ServiceLevel with code G002
- StatusOriginator renamed into TrackerInformingParty
- ForwardedToAgent renamed into InstructedAgent

Response

- No change



Recap

Tracker confirmations –

Key format changes and impact

Key format changes and impact (1/4)

Change Area	format change	Functionality (short description)	impact gCCT	Impact gCOV	Impact gFIT	impact on FINX99 confirmations	Impact on API v4	Impact on track confirmations	Impact on API v5
Charge Information	Inconsistency flag in T2U	Tracker adds inconsistency flag in tracker to user confirmations in case inconsistent amount information has been reported in user to tracker confirmation or payment	Yes	N/A	N/A	N/A	N/A	Yes	Yes
	Charge Agent in U2T & T2U	In user to tracker confirmations, BIC of charge agent must be mentioned (if not available, fixed code NOTPROVIDED must be provided)	Yes	N/A	N/A	N/A	N/A	Yes	Yes
	ChargeBearer SLEV in T2U	If SLEV is used on PMI leg (not allowed in cross-border leg), Tracker will report it in ISO-based tracker to user confirmations. The confirmation with SLEV is only provided to the sending participant itself. Not to the previous agents. And also SLEV is never used on the	Yes	N/A	N/A	N/A	N/A	Yes	Yes
Tracking of reject	Extended reject reason code list in T2U & U2T	Alignment of gpi reject reason code list with CBPR+ reject reason code list for ISO-based confirmations (51 codes). In FINX99/APIv4 current 16 codes remain. MS03 will be reported by tracker in FINX99/v4 API in case code is received by Tracker that is not within the 16 codes accepted today.	Yes	Yes	Yes	N/A	N/A	Yes	Yes



Key format changes and impact (2/4)

Change Area	format change	Functionality (short description)	impact gCCT	Impact gCOV	Impact gFIT	impact on FINX99 confirmations	Impact on API v4	Impact on track confirmations	Impact on API v5
Amount format	Larger amounts in U2T & T2U	Some PMIs allow for larger amounts (18d instead of 14d). ISO-based confirmations aligned with larger amounts. Applicable to InterbankSettlementAmount and ChargeAmount. Note: When using an existing confirmation no status confirmation can be sent for such transaction's amount.	Yes	Yes	Yes	N/A	N/A	Yes	Yes
Amount reporting	Rule change: Obligation to report amount relaxed in U2T ISO-based confirmations	In U2T new ISO-based confirmations reporting of amount for statuses RJCT, ACSP/G002-G003-G004 is optional.	Yes	Yes	Yes	N/A	N/A	Yes	Yes
Date & Timestamp	New TransactionStatusDate in ISO-based U2T & T2U confirmations	For status RJCT and ACSP/G000-G001, event date/time must be reported. In new ISO-based U2T confirmations, TransactionStatusDate element must be used for this purpose. In FINX99, line 1 remains mandatory and must include event date/time for above statuses. in V54 API, no change (only time of credit must be reported).	Yes	Yes	Yes	N/A	N/A	Yes	Yes



Key format changes and impact (3/4)

Change Area	format change	Functionality (short description)	impact gCCT	Impact gCOV	Impact gFIT	impact on FINX99 confirmations	Impact on API v4	Impact on track confirmations	Impact on API v5
Credit Confirmation	Partial credit elements in U2T & T2U	In new ISO-based confirmations, possibility to confirm partially (split credits or partial credit+return)	Yes	N/A	N/A	N/A	N/A	Yes	Yes
Date & Timestamp	Rule change: Reporting of timestamp for pending statuses no longer allowed in U2T new ISO-based confirmations	In new U2T ISO-based confirmations, timestamp for pending statuses no longer allowed (make gpi more easy).	Yes	Yes	Yes	N/A	N/A	Yes	Yes
Agent Identification	Intermediary Agent 2-3 & Previous Instructing Agents 1-2-3 available in new new ISO-based T2U confirmations	In case present in tracked payment with their BIC, those agents will be reported in the T2U new ISO-based confirmations.	Yes	Yes	Yes	N/A	N/A	Yes	Yes
	Instructed Agent identifiable with ClearingSystem MemberIdentification in new UT2 ISO-based confirmations	For non FIN PMI legs, the forwarded to agent (or Instructed Agent) can now be reported via a local clearing code (as alternative to the BIC). Some gpi banks were requesting this new functionality.	Yes	Yes	Yes	N/A	N/A	Yes	Yes



Key format changes and impact (4/4)

Change Area	format change	Functionality (short description)	impact gCCT	Impact gCOV	Impact gFIT	impact on FINX99 confirmations	Impact on API v4	Impact on trck confirmations	Impact on API v5
Payment References	End-to-End Identification in new U2T&T2U ISO-based gCOV confirmations	Obligation to report the related reference/end-to-end identification for new ISO-based gCOV confirmations (reference equals instruction identification of underlying covered payment).	N/A	Yes	N/A	N/A	N/A	Yes	Yes
Support of status 'Delivered to Creditor Agent'	status G005/G006 supported in gCOV T2U confirmations (all)	When payment is received by Creditor Agent, Tracker reports G005/G006 status for gCOV payments. Better liquidity forecasting and potentially quicker release of funds (if gCOV creditor = gCCT creditor agent)	N/A	Yes	N/A	Yes	Yes	Yes	Yes



