Task Force on TARGET Instant Payments Settlement

2nd Task Force Meeting
17 November 2016

Proposals

Information on Handling of Proposals

Proposals can be categorised as follows:

1. Already presented to the Task Force

    - Adopted as user requirement and transferred into the URD

    - Revised in order to be presented again

    - Removed and superseded by new proposal(s)

    - On hold for later discussion

2. New proposals

    - To be presented during task force meetings

    - Directly adopted as user requirements and transferred into the URD

Scope of the TIPS Service

SCT Inst scheme compliant settlement services for participants to allow the transfer of funds instantly from an originator to the beneficiary

In Scope

- Routing services to forward the SCT Inst instructions from originator participant to the beneficiary participant

- Instant settlement of the SCT Inst instructions accepted by the beneficiary participant

- Immediate transmission of status messages after settlement

- Liquidity transfers between RTGS systems and TIPS using camt.050 messages

Out of Scope

- Liquidity transfers between TIPS accounts

- Additional services (e.g. mapping of mobile numbers to IBANs)

Compliance with SCT^{inst} Scheme

TIPS service shall comply with SCT Inst scheme requirements in the interbank space

- Receive instant payment transactions from originator participants

- Forward instant payment transactions to beneficiary participants and obtain their confirmations

- Perform final and irrevocable settlement

- Send confirmation messages to the originator participants

- Ensure the speed requirements defined by the scheme are met

- Handle exceptions such as rejects and recalls

Alternative 1
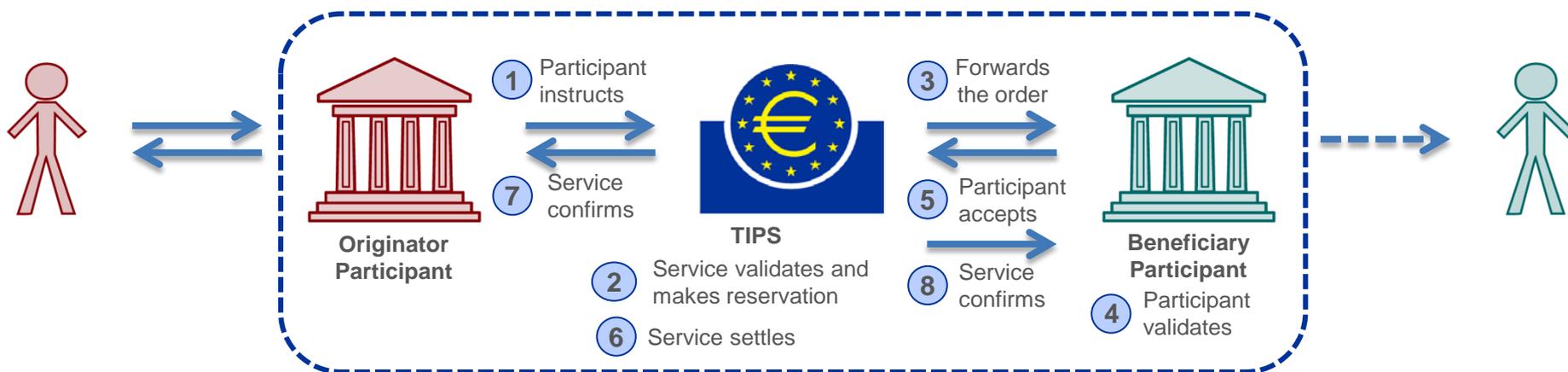
Step 1: Originator participant sends instruction to TIPS

Step 2: TIPS validates and makes reservation

Step 3: TIPS forwards the instruction to the beneficiary participant

Step 4: The beneficiary participant validates the order

Step 5: The beneficiary participant sends a positive confirmation to TIPS
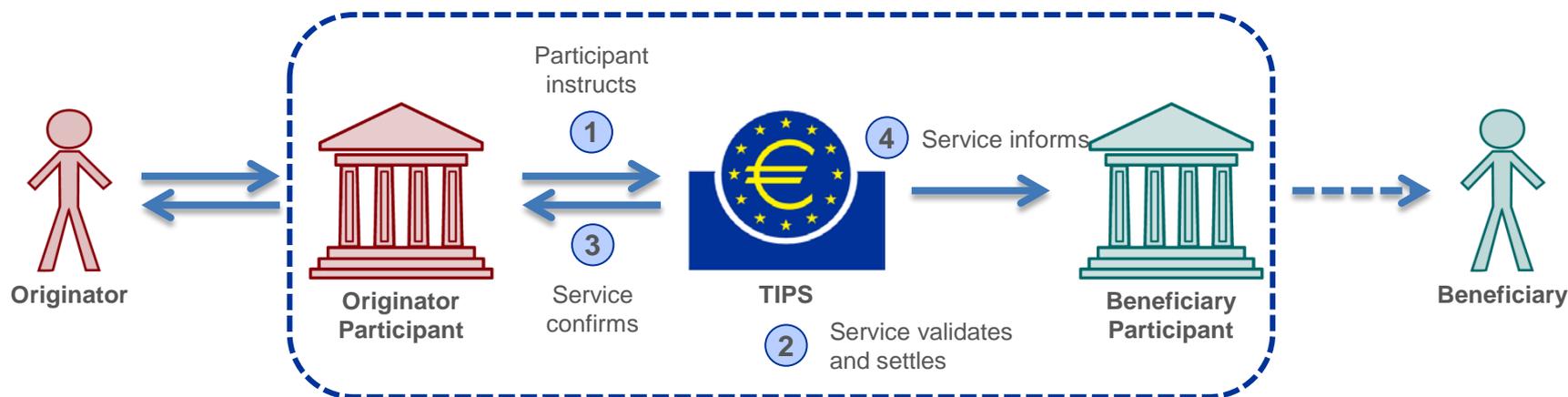
Step 6: TIPS settles the payment

Step 7: TIPS confirms the settlement to the originator participant

Step 8: TIPS confirms the settlement to the beneficiary participant

Alternative 1: Main Features

- Compliant with SCT Inst scheme ensuring the harmonisation of standards and practices across the SEPA area

- TIPS service reserves the funds from the originator participant until the payment is accepted by the beneficiary participant

- Acceptance by the beneficiary participant guarantees the finality of settlement to the originator participant

Alternative 2

Step 1: Originator participant sends instruction to TIPS

Step 2: TIPS validates and settles the instruction

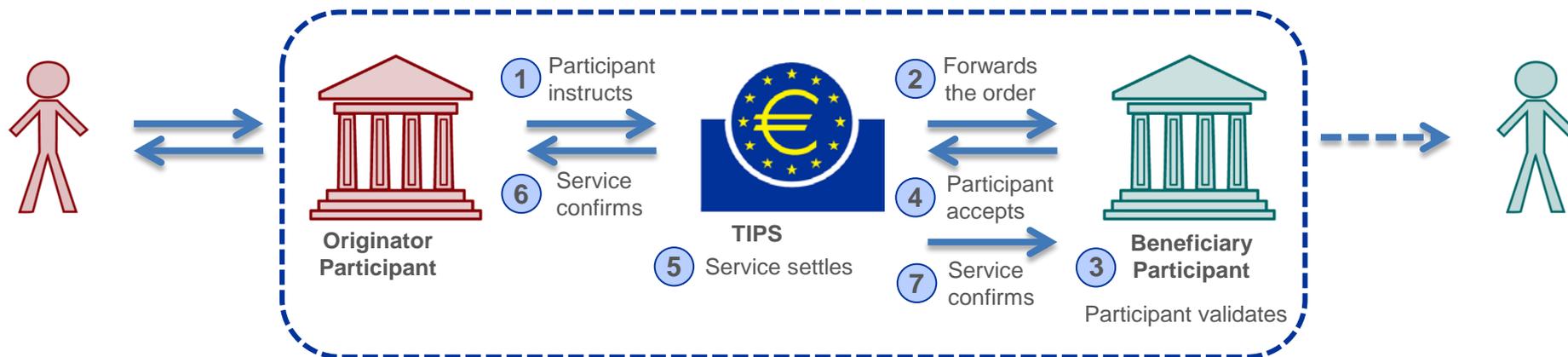Step 3: TIPS confirms the settlement to the originator participant

Step 4: TIPS informs the beneficiary participant about the settled transaction

Alternative 2: Main Features

- Beneficiary participant authorises TIPS Service to send settlement confirmations to the originator participant, without validating each individual payment

- Process flow similar to existing TARGET2

- Less complex technically, no time-outs or reservations

- Beneficiary participant needs to create a new payment instruction to return any funds it should not have received

Does the TF feel that this model is compliant with SCT Inst scheme?

Alternative 3

Step 1: Originator participant sends instruction to TIPS

Step 2: TIPS forwards the instruction to the beneficiary participant

Step 3: The beneficiary participant validates the order

Step 4: The beneficiary participant sends a positive confirmation to TIPS

Step 5: TIPS settles the payment

Step 6: TIPS confirms the settlement to the originator participant

Step 7: TIPS confirms the settlement to the beneficiary participant

Alternative 3: Main Features

- Similar to alternative 1 except that TIPS does not reserve the originator participant funds while it waits for the acceptance of the beneficiary participant

- Technically less complex than alternative 1 but more complex than alternative 2

- Proven solution to be used in other markets like Australia

- Payments will be rejected if the originator participant does not anymore have sufficient funds after the confirmation from the beneficiary participant

1. Is the model compliant with SCT Inst scheme?

2. What are the advantages and disadvantages, compared to the other models?

Eligible Participants

RTGS rules for direct and indirect participation shall apply

- TIPS shall be open to participants which have access to an RTGS
- Only RTGS direct participants can own TIPS accounts
- The service shall allow third parties having an agreement with a TIPS participant to initiate payments on behalf of that TIPS participant

Does the Task Force agree with this proposal?

TIPS Account Identifiers

TIPS account identifiers shall be ISO compliant

- Account identifiers used in TIPS shall be ISO compliant in order to allow ISO compliant payment instructions to be sent to TIPS (as suggested by proposal Interface 8)

- TIPS participants shall be able to choose their account identifiers, as long as they are ISO compliant (e.g. 34x characters) and unique

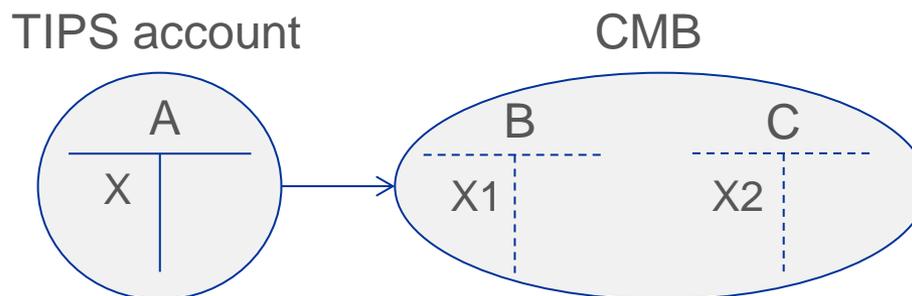Does the Task Force agree with this proposal?

Credit Memorandum Balance (CMB) functionality

Every direct participant shall have the technical ability to provide CMB functionality to its clients or other participants

- CMB functionality allows third parties (e.g. correspondent banks), that do not have a cash account in TIPS, to send and receive payment instructions using one of the direct participant's TIPS account

- CMB allows direct participants to set maximum limits for each of the third party to use the direct participant's TIPS account

- TIPS shall check the limit before processing the payment instruction. If the limit is exceeded, the payment instruction shall be rejected

- TIPS shall update the balance of the two involved TIPS accounts and update the CMB limits after every successfully settled instant payment

- Liquidity transfers and arrangements between the TIPS direct participant and third parties is outside the scope of TIPS

Credit Memorandum Balance (CMB) functionality

Every direct participant shall have the technical ability to provide CMB functionality to its clients or other participants.

TIPS account   CMB

- A has a TIPS account with X amount cash on it
- A provides CMB to B and C, setting limits for both of them (X1 for B and X2 for C)
- X can be lower than X1+X2
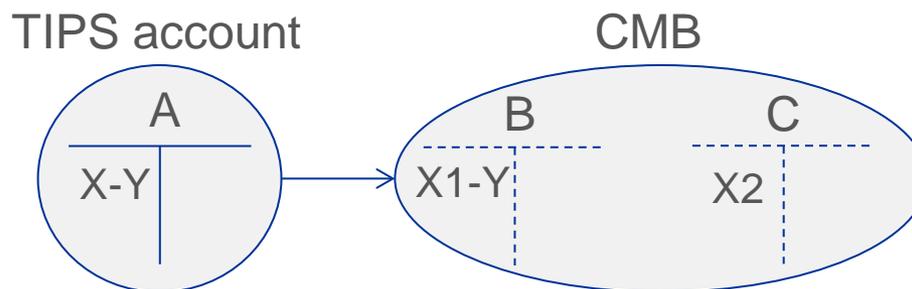
Credit Memorandum Balance (CMB) functionality

Every direct participant shall have the technical ability to provide CMB functionality to its clients or other participants.

TIPS account   CMB

A
X-Y

B   C
X1-Y   X2

- B sends a payment instruction to TIPS with an amount of Y.

- TIPS checks if $Y < X1$ and $Y < X$, then TIPS processes the payment.

- Immediately after processing, TIPS updates B's CMB limit to $X1-Y$ and A's real cash account balance to $X-Y$

1. Does the Task Force see an advantage to use CMB for individual clients and/or indirect participants?

2. Does the Task Force see the need for having other limits besides CMBs (action point 1.10)?

TIPS Standard Time

TIPS shall use Central European Time (CET and CEST)

- Timestamps reflecting date and time of the system shall use the format YYYY-MM-DDThh:mm:ss:µsµsµsµsµsµs+01

- Timestamps will be used e.g. for reports and queries

- Timestamps in raw data will use UTC

Does the Task Force agree with this proposal?

Detection of Duplicate Payment Instructions

In case a duplicate payment instruction is detected TIPS shall reply with a status message indicating that a duplicate has been detected; in that case no settlement processing shall take place

- Duplicates of payment instruction IDs have to be checked per participant using the participants' message identifier, which has to be unique

- Duplicate checks shall be done against messages received within the last 72 hours

- The status message indicating a duplicate shall be sent to the originating participant only

- This functionality could be used for disaster recovery on the participants side: In case of a major issue participants could resend all payment instructions starting from a sane point in the past: Already processed instructions will be replied to with a duplicate status, missing transactions will be processed regularly

Does the Task Force agree with this proposal?

Blocking Functionality

TIPS shall provide a functionality to block TIPS accounts or CMBs from being debited

- Blockage of a TIPS account implies blockage of all linked CMBs as well
- TIPS shall allow central banks to block TIPS accounts of participants they are responsible for, e.g. for insolvency scenarios
- TIPS participants shall be able to block any one of the CMBs linked to their TIPS account
- Blocking functionality shall be available during the opening hours of TIPS
- TIPS shall reject payments debiting blocked accounts

1. Does the Task Force see a need to trigger such functionality via GUI?

2. Does the Task Force see other use cases for this functionality?

3. Does the Task Force see any benefit in having the same blocking functionality also for crediting?

Business Validation

TIPS shall validate all incoming instructions

- TIPS shall apply a set of harmonised validation rules. After encountering the first negative validation result, TIPS shall continue to validate as far as possible and report all negative results together in a single message. Only after performing all logically possible validations shall TIPS reject the instruction

- Examples of validation rules:

    - TIPS shall check for completeness and format of mandatory fields

    - If the instructing party is not the owner of the account, TIPS shall check that it is authorised to send instructions on behalf of the account owner

    - TIPS shall check that the payment instruction amount is not higher than the maximum amount set by SCT Inst scheme

Does the Task Force agree with this proposal?

Statement of Account Turnover

TIPS shall generate daily reports on the current TIPS account turnover for all accounts a participant is responsible for; this report shall contain at least the opening and closing balances as well as the sum of debits and the sum credits

The report should contain at least the account identifier, its currency, the opening balance, the closing balance, the sum of all credits and the sum of all debits

1. Does the Task Force agree with this proposal?

2. Does the Task Force see additional reporting requirements (action point 1.11)?

Links with RTGS Accounts

Every participant will provide liquidity to its TIPS account (or accounts) from an account (or from different accounts) opened in an RTGS system and not necessarily belonging to the same participant

- TIPS should not provide any automatic push/pull liquidity mechanism, but it could be envisaged as a future service

- Similarly the automatic procedures for the use of collateralised credit lines will be out of the scope initially for TIPS, but it could be envisaged as a future service

Does the Task Force agree with this proposal?

TIPS Directory Service

TIPS shall provide an Addressing Directory Service as a centralised lookup service for TIPS participants

- The Addressing Directory Service will allow participants to look up information on all TIPS participants

- TIPS should provide participants with functions to create and maintain the entries in the Addressing Directory Service

Does the Task Force agree with this proposal?
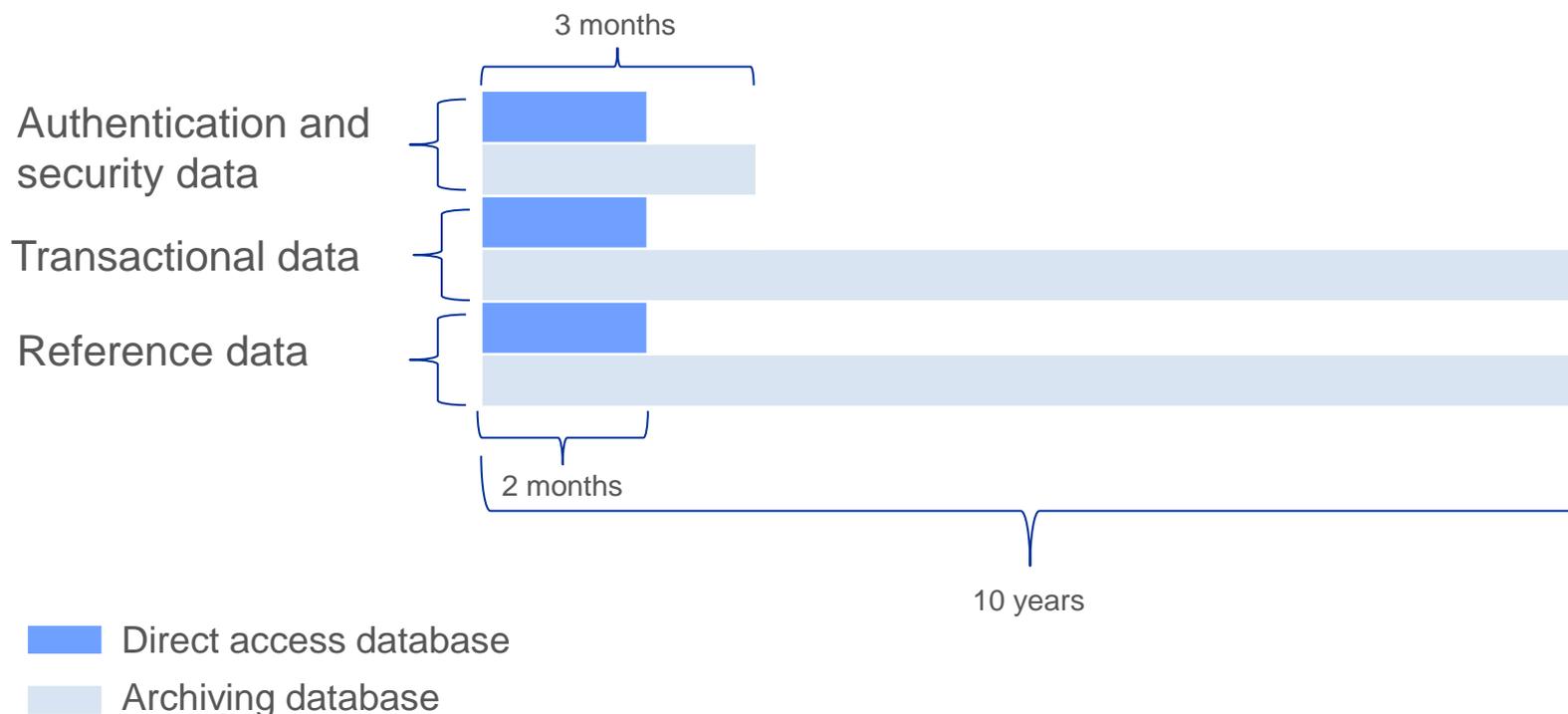
Direct Access Functionality

TIPS shall provide TIPS participants with direct access to data, which is not older than two months. Data older than two months will be archived and TIPS participants shall be able to retrieve archived data only through the TIPS operator.

- TIPS participants can use advanced queries to access reference, transactional or authentication and security data which is not older than two months

- If TIPS participants need to access data which is older than two months, they should send a request to the TIPS operator, who will have direct access to archived data and will be responsible for providing archived data to participants upon request

- Even the TIPS operator will not have access to the data which is older than preset archiving periods, because this data would be automatically deleted

What kind of data does the Task Force need to access to using advanced queries?

Direct Access Functionality

TIPS shall provide TIPS participants with direct access to data, which is not older than two months. Data older than two months will be archived and TIPS participants shall be able to retrieve archived data only through the TIPS operator

3 months

Authentication and security data

Transactional data

Reference data

2 months

10 years

■ Direct access database

■ Archiving database

TIPS Availability

TIPS shall be available for settlement of payment instructions each day of the year, 24 hours per day

- Unplanned downtime, calculated on a yearly basis, shall not exceed 4.38 hours, equivalent to an availability rate of 99.95%

- Short planned downtime periods may be envisaged in order to manage contingency or emergency scenarios (e.g. installation of an emergency fix that requires stopping the service)

Does the Task Force agree with this proposal?

List of Action Points

1.1 Elaborate on the Principles and potential update the Principles

1.2 Draft the first set of URD (only the few proposals agreed to be ready)

1.3 Update existing/draft new proposals based on input received at the last meeting

1.4 Provide a description of the service the Eurosystem would like to offer

1.5 Consider any effects on the monetary policy and analyse how liquidity can be raised in TIPS

1.6 Prepare a glossary

1.7 Consider types of messages, version number (with regards to ISO 20022) and the precise data that is needed for communication purposes

List of Action Points

1.9	Consider the need of a GUI and its placement (e.g. a separate GUI in TARGET2 or in the banks' own system), the opening hours of the GUI, what is the need outside office hours and functions that is needed in TIPS or TARGET2
1.10	Consider what kind of limits are necessary in TIPS and what kind of limit checks could be done elsewhere
1.11	Consider what is needed with regards to reporting (e.g. how often, for which purpose e.g. reconciliation etc.)
1.12	Consider if data extraction should be push or pull
1.14	Consider if TIPS should provide non-repudiation
1.15	Consider if you have any input on other topics that need to be added to the list of proposals