



EUROPEAN CENTRAL BANK

EUROSYSTEM

DG-MIP

Market Infrastructure Development

TARGET Instant Payments Settlement (TIPS)

9 February 2017

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TIPS Main Pillars

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TIPS Pricing Scheme

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TIPS Functional Overview

Why TARGET Instant Payments Settlement?

The Eurosystem decided in September 2016 to launch an investigation phase for TIPS

- TIPS extends the availability of central bank money (CeBM) settlement to **24/7/365**, to facilitate the emergence of instant payments

The investigation phase will, among others:

- Elaborate the **user requirements** for TIPS
- Define the **business case**

Objectives of the Eurosystem:

- Euro area not to lag behind in speed of payments
- Promote **efficiency** and ensure market **integration** in the settlement of instant payments

Principles: Foundation of the Service



Same **participation criteria** as for TARGET2



Instant payments settlement in **Central Bank Money**



24/7/365
operating hours



Operated on a **full cost-recovery** basis



Supports participants to comply with the **SCT Inst scheme**



Multi-currency
technical capability

Additional Principles

- Technical solution for providing instant payments settlement services
- Offers final and irrevocable settlement
- Participation in TIPS is not mandatory
- To be developed and operated by the Eurosystem assuming full ownership
- Lean, harmonised and standardised pan-European service



Time Plan

	2016		2017				2018			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4



- **Early January '17**
Submission of a draft User Requirements Document (URD) version to the Market
- **January – February '17**
7 weeks of consultation with the Market on the draft URD
- **June '17**
Decision to develop the service based on the results of the Investigation phase
- **May/June '18**
Start of Eurosystem internal system testing
- **August/September '18**
Start of pilot testing involving users
- **November '18**
TIPS Go-live

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TIPS on Tour

ECB team travelled across the euro area countries with the aim of having a dialogue with the market participants about TIPS

- 12 sessions completed, at least one more session planned for this month
- Excellent participation in most markets
- Lively discussions in most TIPS on Tour sessions
- Helped in gaining attention for the market consultations on the URD and expected volumes



TIPS on Tour

Encouraging takeaways

- Instant irrevocable settlement in CeBM without credit risk is perceived to be the most efficient model for instant payments
- Flexible participation structure will facilitate the reachability of PSPs within TIPS
- Price range was considered very interesting

Some concerns expressed by participants

- PSPs may need to reassess their IP projects that are already underway
- Costs for network connectivity could act as a dampener, especially for smaller markets
- Liquidity for instant settlement cannot be used for instant clearing

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Consultation on Expected Volumes: Main Goal and Structure

- TIPS market consultation has been launched on **23 January 2017** with a deadline of **24 February 2017**
- The main goal of this consultation is to explore the expected volumes for instant payments
- The consultation is comprised of an introduction and 9 straightforward questions and has been published on the [ECB website](#)
- Only volume estimations from individual institutions will be considered relevant in the context of this consultation

Consultation on Expected Volumes: Specific goals



What are the expectations of the market on the growth rate of instant payments in Europe? How much of its instant payments volume does each individual institution expect to process in TIPS?



How mature are the plans of the financial institutions to play an active role in satisfying their customer needs in instant payments?



In which role in TIPS do financial institutions see themselves? Which of the roles fits their business needs best?



Where do the financial institutions see the end-customer need/business case? Which types of payments will be more inclined to become instant?



Which institutions are interested in pilot testing and becoming the pioneer of TIPS for their customers?

TIPS Unit Cost Assessment

- On 23 January 2017 indication of TIPS unit cost has been communicated to the market together with market consultation questionnaire
- This unit cost (a range between €0.005 and €0.01) has been calculated based on the full cost-recovery principle and an extrapolation exercise based on existing instant payment solutions volumes, particularly based on UK and Denmark data

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TIPS Service Scope

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

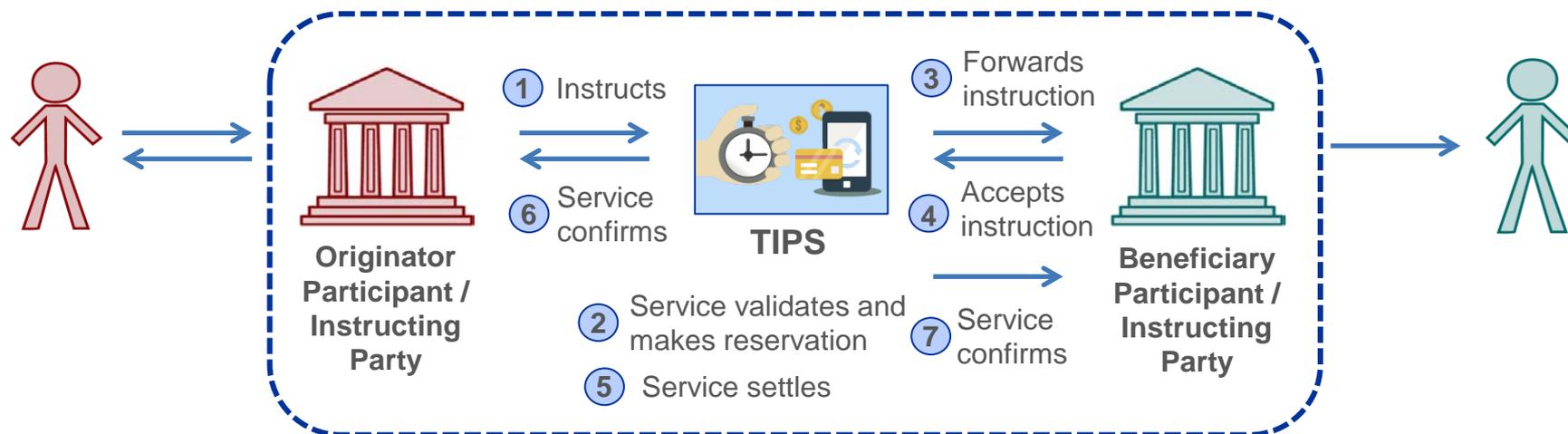
In Scope

- Routing services to forward the SCT Inst instructions from the 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
- Timing requirements prescribed by the SCT Inst scheme
- 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)

Process Flow for a Successful Instant Payment Transaction



1. TIPS receives an instant payments transaction
2. TIPS validates and reserves the amount (conditional settlement)
3. TIPS forwards the transaction for acceptance to the beneficiary participant or the party acting on its behalf
4. TIPS receives a positive confirmation
5. TIPS settles the payment
6. TIPS confirms the settlement to the originator participant or the party acting on its behalf
7. TIPS confirms the settlement to the beneficiary participant or the party acting on its behalf

TIPS Actors

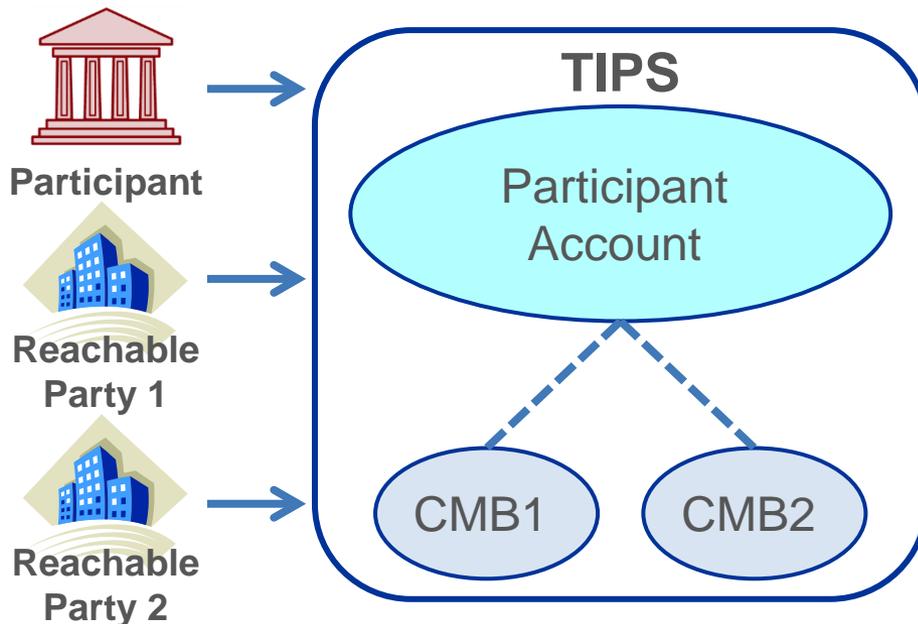
- **Central Banks**
 - provides cash account services to Participants
 - additionally can act as Participants in TIPS
- **Participants**
 - open accounts in TIPS
 - have access to Central Bank Money according to TARGET2 rules
 - may opt for instructing TIPS without the services of Instructing Party
- **Reachable Parties**
 - do not have TIPS accounts
 - can be recognised by a BIC
 - have contractual agreements with a Participant to use the participant's TIPS account for the settlement of instant payments
- **Instructing Parties**
 - have contractual agreements with one or more Participants to instruct on behalf of the participant
 - Reachable Parties can act as Instructing Parties themselves

TIPS Participation Structure – Overview

Actor	Addressed	Owens	Uses	Transfers liquidity	Manages
Central Banks	-	Transit account & Accounts		All accounts in their books	Manage accounts in their books Manage linkages between actors
Participants	Via own BIC	Accounts & CMBs	Accounts & CMBs	Own accounts	Manage own CMBs Update own CMB limits
Reachable Party	Via own BIC	-	Accounts & CMBs	-	-
Instructing party on behalf of a Participant	-	-	Accounts & CMBs	Participant's accounts	Manage and block Participant's CMBs Update Participant's CMB limits
Instructing party on behalf of a Reachable Party	-	-	Accounts & CMBs	-	-

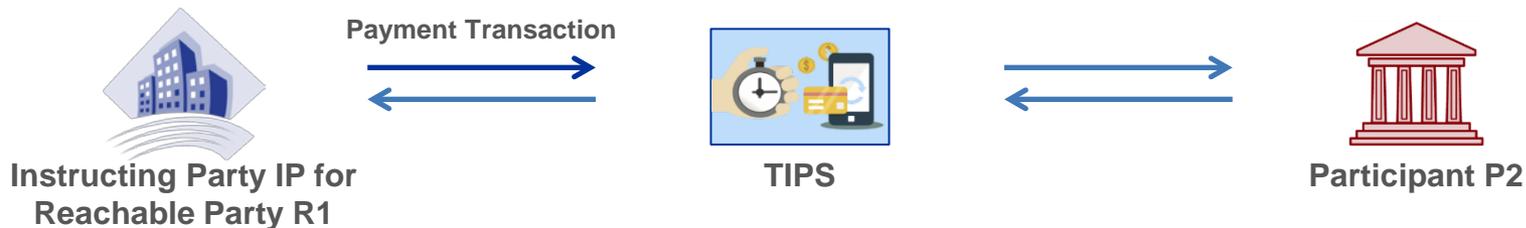
Credit Memorandum Balance (CMB) Limits

- CMBs allow Reachable Parties that do not have a cash account in TIPS to send and receive payment instructions using a participant's TIPS account
- CMBs allow Participants to set maximum limits for Reachable Parties

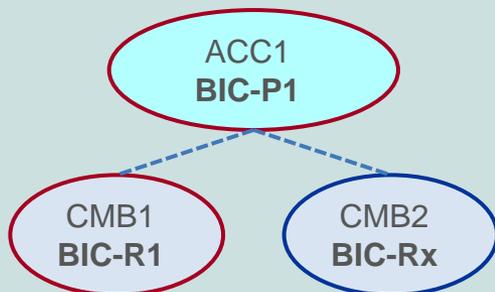


- Settlement in Central Bank money
- Efficient limit management without splitting of liquidity

Use Case – Reachable Party and Participant



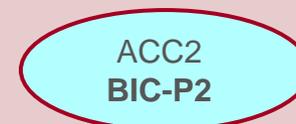
Participant P1 Account Structure



Payment Transaction

Originator BIC = **BIC-R1**
Beneficiary BIC = **BIC-P2**

Participant P2 Account Structure



Situation:

- TIPS communicates with one Instructing Party **IP** on behalf of the Reachable Party **R1** and the Participant **P2**
- **R1** uses a CMB provided by Participant **P1**, **P2** uses its own account
- Inference of accounts/CMBs:
 - **BIC-R1** → **CMB1**
 - **BIC-P2** → **ACC2**

Settlement process:

1. Decrease **CMB1**
2. Debit **ACC1**
3. Credit **ACC2**

Liquidity management

- You may use TARGET2 to fund liquidity to TIPS
- TIPS will have the same business date as TARGET2
- TIPS account balances could be counted in minimum reserve computations



- Usage of collateral and automated liquidity management could be available in the context of the T2-T2S consolidation
- Floor and ceiling alerts could be offered for TIPS accounts and CMBs

Information Services

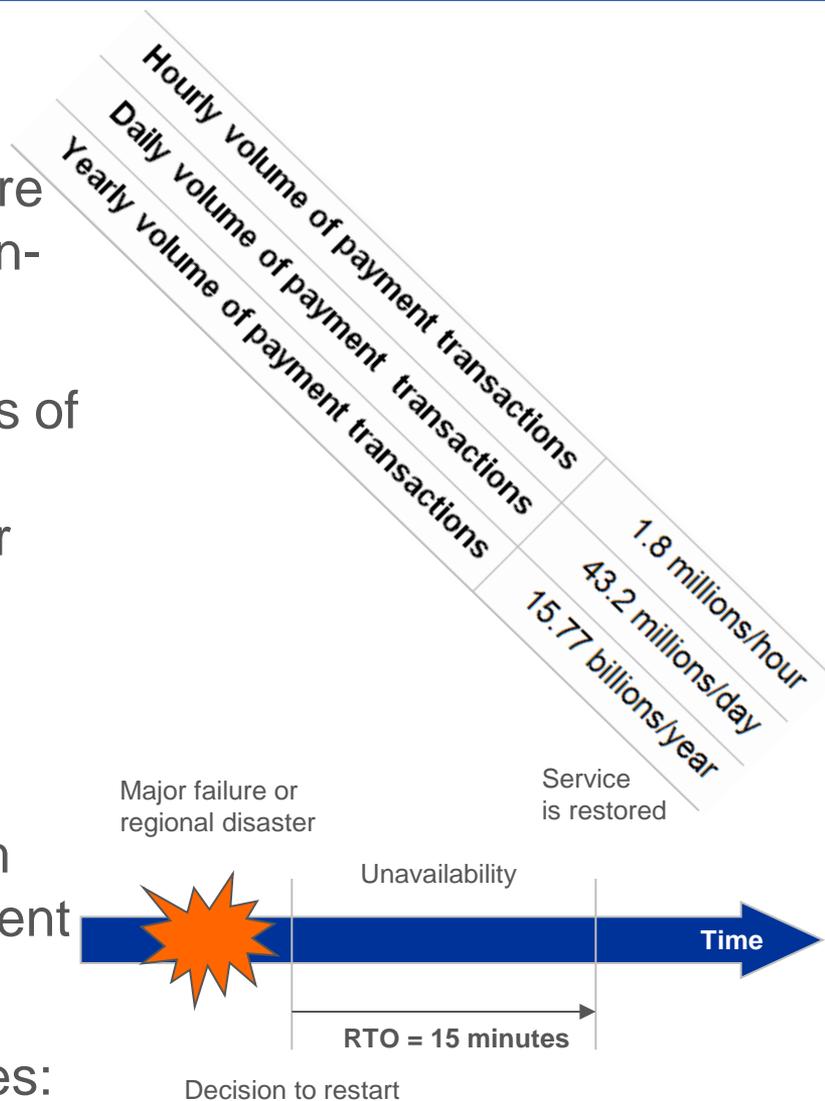
- Real-time statuses of transactions
- Configurable daily reports
 - flexibility for actors to choose the reports they wish to receive
 - capable of sending reports to multiple authorised addressees
- Statement of all transactions to support you in reconciliation
- Queries to support you in investigations
- Daily raw data to support archiving, billing, advanced queries & reports and statistics

Interfaces & Availability

Functionality	Description	U2A	A2A
Transactions	<ul style="list-style-type: none"> - Instant payment transactions - Recalls 	N/A	24/7/365
Liquidity Management	<ul style="list-style-type: none"> - Liquidity orders 	TARGET2 opening hours	TARGET2 opening hours
Reports	<ul style="list-style-type: none"> - All identified reports 	N/A	24/7/365
Queries	<ul style="list-style-type: none"> - All identified queries 	24/7/365	24/7/365
Reference Data	<ul style="list-style-type: none"> - Blocking of accounts / CMBs - Update of CMB limits 	24/7/365	24/7/365
	<ul style="list-style-type: none"> - Account/CMB creation/update/deletion 	TARGET2 opening hours	TARGET2 opening hours
	<ul style="list-style-type: none"> - Report / raw data subscriptions 	TARGET2 opening hours	N/A
	<ul style="list-style-type: none"> - Other reference data updates 	TARGET2 opening hours	N/A

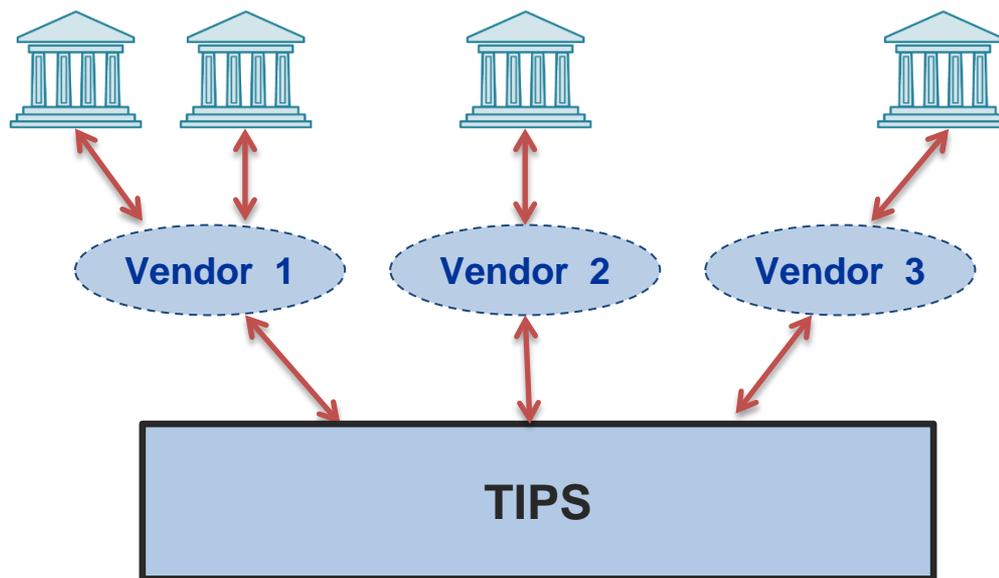
Non-Functional Highlights

- State of the art technology architecture scalable enough to support future pan-European instant payments volumes
- Meets timing and speed requirements of the SCT Inst scheme: Complete all processing tasks within 5 seconds for 99% of transactions
- Operational 24/7/365, with 99.9% availability, measured quarterly
- Capable to process up to a maximum average number of 500 instant payment transactions per second
- Advanced disaster recovery objectives: Recovery Time Objective of 15 minutes



TIPS Connectivity

- TIPS will be a network vendor agnostic service
- The intention is to let TIPS Participants decide the network vendor they each intend to use, as long as this network vendor adheres to the requirements



Consultation on User Requirements

- TIPS URD market consultation was published [on the ECB website](#) on **9 January 2017** with a deadline of **24 February 2017**
- Financial market infrastructures and financial institutions in Europe with a stake and interest in instant payments are invited to provide their feedback on the URD
- You may use the pre-formatted excel sheet published along with the URD and send the comments to the mail-id **TIPS@ecb.europa.eu**
- The URD will be enhanced based on the feedback received during the consultation



Thank you for the attention!

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