TARGET Instant Payments Settlement (TIPS)

9 February 2017
<table>
<thead>
<tr>
<th></th>
<th>TIPS</th>
<th>Main Pillars</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>TIPS</td>
<td>on Tour</td>
</tr>
<tr>
<td>3</td>
<td>TIPS</td>
<td>Pricing Scheme</td>
</tr>
<tr>
<td>4</td>
<td>TIPS</td>
<td>Functional Overview</td>
</tr>
</tbody>
</table>
What is TIPS?

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
What is TIPS?

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
What is TIPS?

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

<table>
<thead>
<tr>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q4</td>
</tr>
</tbody>
</table>

**TIPS**

Investigation phase

Realisation phase

**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
# Table of Contents

<table>
<thead>
<tr>
<th></th>
<th><strong>TIPS</strong> Main Pillars</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>TIPS</strong> on Tour</td>
</tr>
<tr>
<td>3</td>
<td><strong>TIPS</strong> Pricing Scheme</td>
</tr>
<tr>
<td>4</td>
<td><strong>TIPS</strong> Functional Overview</td>
</tr>
</tbody>
</table>
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
Table of Contents

1  TIPS Main Pillars

2  TIPS on Tour

3  TIPS Pricing Scheme

4  TIPS Functional Overview
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 Pricing Scheme

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
Table of Contents

1. **TIPS** Main Pillars
2. **TIPS** on Tour
3. **TIPS** Pricing Scheme
4. **TIPS** Functional Overview
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)
TIPS Functional Overview

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

<table>
<thead>
<tr>
<th>Actor</th>
<th>Addressed</th>
<th>Owns</th>
<th>Uses</th>
<th>Transfers liquidity</th>
<th>Manages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Banks</td>
<td>-</td>
<td>Transit account &amp; Accounts</td>
<td></td>
<td>All accounts in their books</td>
<td>Manage accounts in their books</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Manage linkages between actors</td>
</tr>
<tr>
<td>Participants</td>
<td>Via own BIC</td>
<td>Accounts &amp; CMBs</td>
<td>Accounts &amp; CMBs</td>
<td>Own accounts</td>
<td>Manage own CMBs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Update own CMB limits</td>
</tr>
<tr>
<td>Reachable Party</td>
<td>Via own BIC</td>
<td>-</td>
<td>Accounts &amp; CMBs</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Instructing party on behalf of a Participant</td>
<td>-</td>
<td>-</td>
<td>Accounts &amp; CMBs</td>
<td>Participant’s accounts</td>
<td>Manage and block Participant’s CMBs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Update Participant’s CMB limits</td>
</tr>
<tr>
<td>Instructing party on behalf of a Reachable Party</td>
<td>-</td>
<td>-</td>
<td>Accounts &amp; CMBs</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
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

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

Minimum reserve = TARGET2 end of day balance + TIPS balance at the time of TARGET2 end of day

- 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

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Description</th>
<th>U2A</th>
<th>A2A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactions</td>
<td>- Instant payment transactions</td>
<td>N/A</td>
<td>24/7/365</td>
</tr>
<tr>
<td></td>
<td>- Recalls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquidity Management</td>
<td>- Liquidity orders</td>
<td>TARGET2 opening hours</td>
<td>TARGET2 opening hours</td>
</tr>
<tr>
<td>Reports</td>
<td>- All identified reports</td>
<td>N/A</td>
<td>24/7/365</td>
</tr>
<tr>
<td>Queries</td>
<td>- All identified queries</td>
<td>24/7/365</td>
<td>24/7/365</td>
</tr>
<tr>
<td>Reference Data</td>
<td>- Blocking of accounts / CMBs</td>
<td>24/7/365</td>
<td>24/7/365</td>
</tr>
<tr>
<td></td>
<td>- Update of CMB limits</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Account/CMB creation/update/deletion</td>
<td>TARGET2 opening hours</td>
<td>TARGET2 opening hours</td>
</tr>
<tr>
<td></td>
<td>- Report / raw data subscriptions</td>
<td>TARGET2 opening hours</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>- Other reference data updates</td>
<td>TARGET2 opening hours</td>
<td>N/A</td>
</tr>
</tbody>
</table>
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!

TIPS@ecb.int