Task Force on TARGET Instant Payments Settlement

3rd Task Force Meeting
20 December 2016

Test Strategy
Go-Live Approach

• TIPS users that commit to start using the service from day one will be part of a pilot testing wave (“early joiners”)

• Additional go-live waves during the first year of operations are feasible if:
  i. Some users are willing to join but know that they will not be ready for pilot testing
  ii. The number of users willing to join pilot testing is too high from an organisational and coordination viewpoint

• All users will have the chance to join TIPS at a later stage, in the following years, within one or more certification testing waves per year

• Central banks will commit to support TIPS services from the moment the first participant from their national community joins
Test Stages

- **System tests**: Their objective is to ensure that the software is fully in line with all functional and non-functional requirements
  - Functional tests are *jointly* performed by the ECB project team and the service provider
  - Non-functional tests (e.g. performance, contingency, penetration) are performed by the service provider

- **Certification tests**: Their objective is to ensure that users are technically, functionally and operationally ready to join TIPS. These tests
  - are performed by central banks and TIPS participants (coordinated by the ECB)
  - cover full end-to-end functionality (including e.g. connectivity, interoperability); a free testing window is foreseen as well which can be used for preparation of the actual test

- **Pilot tests** are only performed by the “early joiners”. Objectives are:
  - To ensure that users are technically, functionally and operationally ready to join TIPS (replace certification tests for early joiners)
  - To mitigate all the possible risks connected to the standard certification tests that will have to be performed by all other users
Test Strategy

Responsibilities & Timeframes

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<th>Test Stage</th>
<th>Preparation</th>
<th>Execution</th>
<th>Coordination</th>
<th>Execution Time</th>
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</thead>
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<tr>
<td>System functional</td>
<td>Provider &amp; ECB</td>
<td>Provider &amp; ECB</td>
<td>Provider</td>
<td>12 weeks</td>
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<tr>
<td>System non-functional</td>
<td>Provider</td>
<td>Provider</td>
<td>Provider</td>
<td></td>
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<tr>
<td>Pilot</td>
<td>ECB &amp; Users</td>
<td>Users</td>
<td>ECB</td>
<td>12 weeks</td>
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<tr>
<td>Certification</td>
<td>ECB &amp; Users</td>
<td>Users</td>
<td>ECB</td>
<td>8 weeks</td>
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- Entering of a test stage requires successful completion of prior stage
- Successful completion of pilot resp. certification testing is a prerequisite for go-live of TIPS resp. a user (to join TIPS)
- Only a small set of cases for pilot and certification testing will be provided by ECB
Test Environments

- **Integration Environment**
  - Reduced capacity with respect to production (up to 10%)
  - Full administrator access for service provider for swift and efficient deployment; provider can act on business level on behalf of users
  - Has to be outfitted with simulators for (i) liquidity injections/extractions from/to TARGET2 and (ii) participant responses (very simple, e.g. one account which accepts and one which rejects payments)
  - Will be used for system tests (internal tests, no user tests)
  - Can be re-used after go-live of TIPS for user tests (e.g. using a new release)

- **Pre-production Environment**
  - Capacity and availability up to production levels for specific testing (up to 100% and 24/7)
  - Used for pilot, certification and performance tests
  - Service provider cannot act on business level without prior authorisation by the users
  - Does *not* provide an RTGS simulator but should be connected to TARGET2 test environment CUST
  - Has to provide the same participant response simulator as available in the integration environment. A participant can always play both roles, as an originator and beneficiary participant
  - Can be re-used after go-live of TIPS for user tests (e.g. using the stable production release)