



EUROPEAN CENTRAL BANK

EUROSYSTEM

TIPS Project Team

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

Responsibilities & Timeframes

Test Stage	Preparation	Execution	Coordination	Execution Time
System functional	Provider & ECB	Provider & ECB	Provider	12 weeks
System non-functional	Provider	Provider	Provider	
Pilot	ECB & Users	Users	ECB	12 weeks
Go-live of TIPS				
Certification	ECB & Users	Users	ECB	8 weeks

- 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)