



EUROPEAN CENTRAL BANK

EUROSYSTEM

ECB
DG-MIP
T2/T2S Consolidation Project Team

T2/T2S Consolidation

Testing and migration

Task Force on Future RTGS Services

Conference call on 6 June 2017

Overview

1 Objectives of the presentation

2 Testing

3 Migration

Background and objective

As part of the investigation phase, the testing strategy shall elaborate the main principles for testing of and migration to the new service

The Task Force is invited to analyse

- The connection between the testing capacities of the different services
 - The 5 main services, i.e. CLM, the future RTGS, T2S, TIPS and ECMS
 - The supporting shared services, such as ESMIG, CRDM and DWH/Billing
- The migration and the need for specific tools

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Scope

The scope of this presentation is **User Testing**

Out of scope are

- EAT (Eurosystem acceptance), which can be located either in the internal IAC environment as for T2S, or in User Testing environment during specific time slots such as for T2 currently
- CSD acceptance, which is a specific case for T2S, with a dedicated environment (EAC)

Requirements for the execution of User Testing

Requirement 1: it shall be possible to test in parallel

- New releases (next version)
- User certification and hot fixes (prod version)

Does the TF support this, knowing that this could lead to additional costs, but will reduce the operational risks?

Requirements for the execution of User Testing

Requirement 2: each year, a service shall have two new versions (excluding hot fixes)

- 1 major CR release
- 1 minor fixes release

Should there be more than 2 releases per year for RTGS, CLM, Shared Services?

Should the number of releases be harmonised for all services?

Should the implementation time of the releases between the services be synchronised, at least for the major one?

Requirements for the execution of User Testing

Requirement 3: to test End-to-End all of the services, and notably their interactions

- Each of the five main services (CLM, future RTGS, T2S, TIPS and ECMS) cannot be tested without the supporting shared services (ESMIG, CRDM and DWH/Billing)
- These shared services should be unique and common for all five main services

Requirements for the execution of User Testing

Requirement 4: to have some flexibility, considering the complexity of the full system

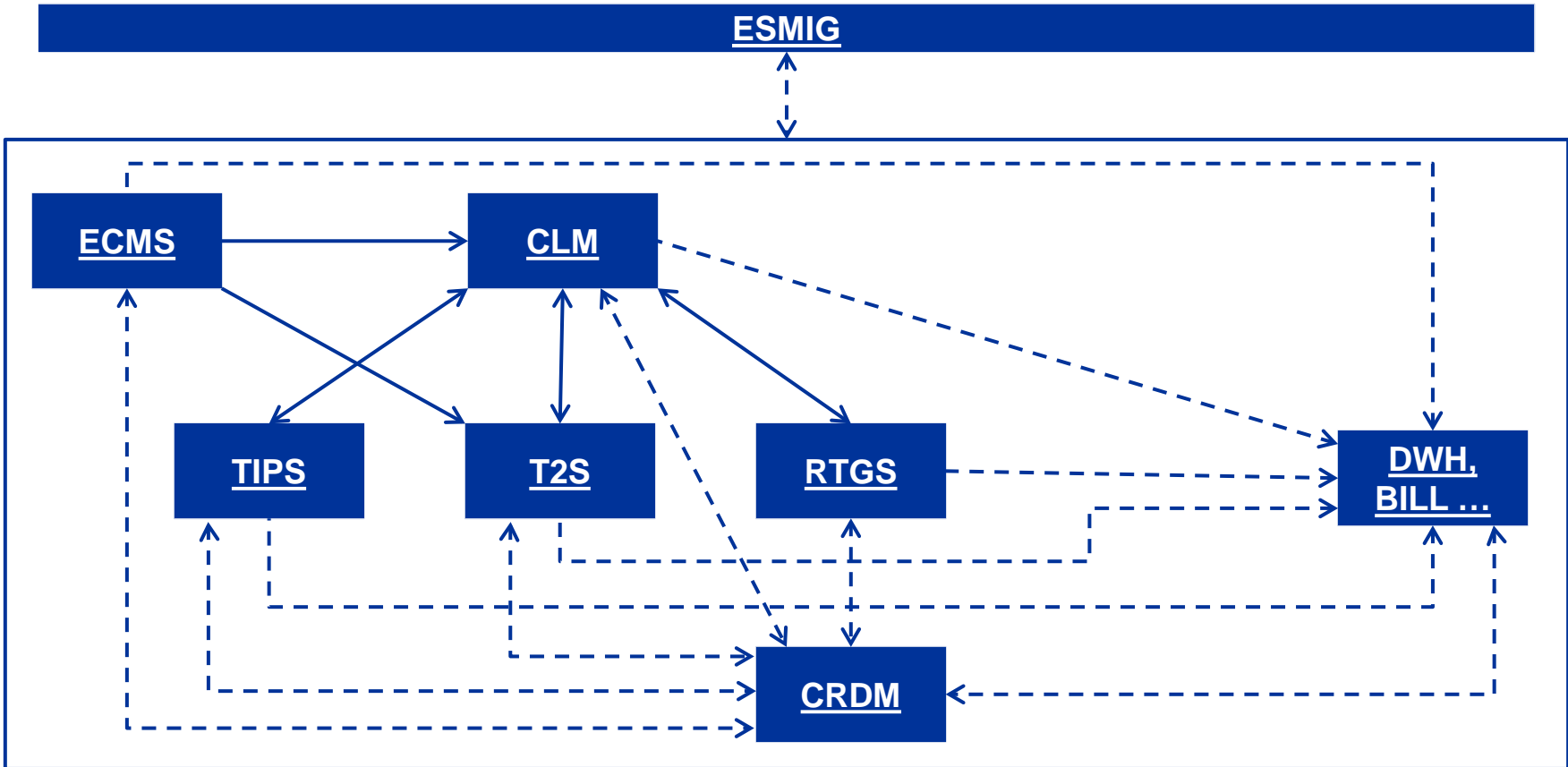
- Most of the test cases of the users will be located within one of the five main services
- Specific requirements or timing constraint could lead to decouple one of the five main services from the other ones

This could be achieved through

- Contingency tools, such as injecting liquidity without CLM through LT from the CB account
- Basic simulators, allowing for instance T2S to be temporarily tested without CLM

Test environment connection

End-to-End testing



Main flow

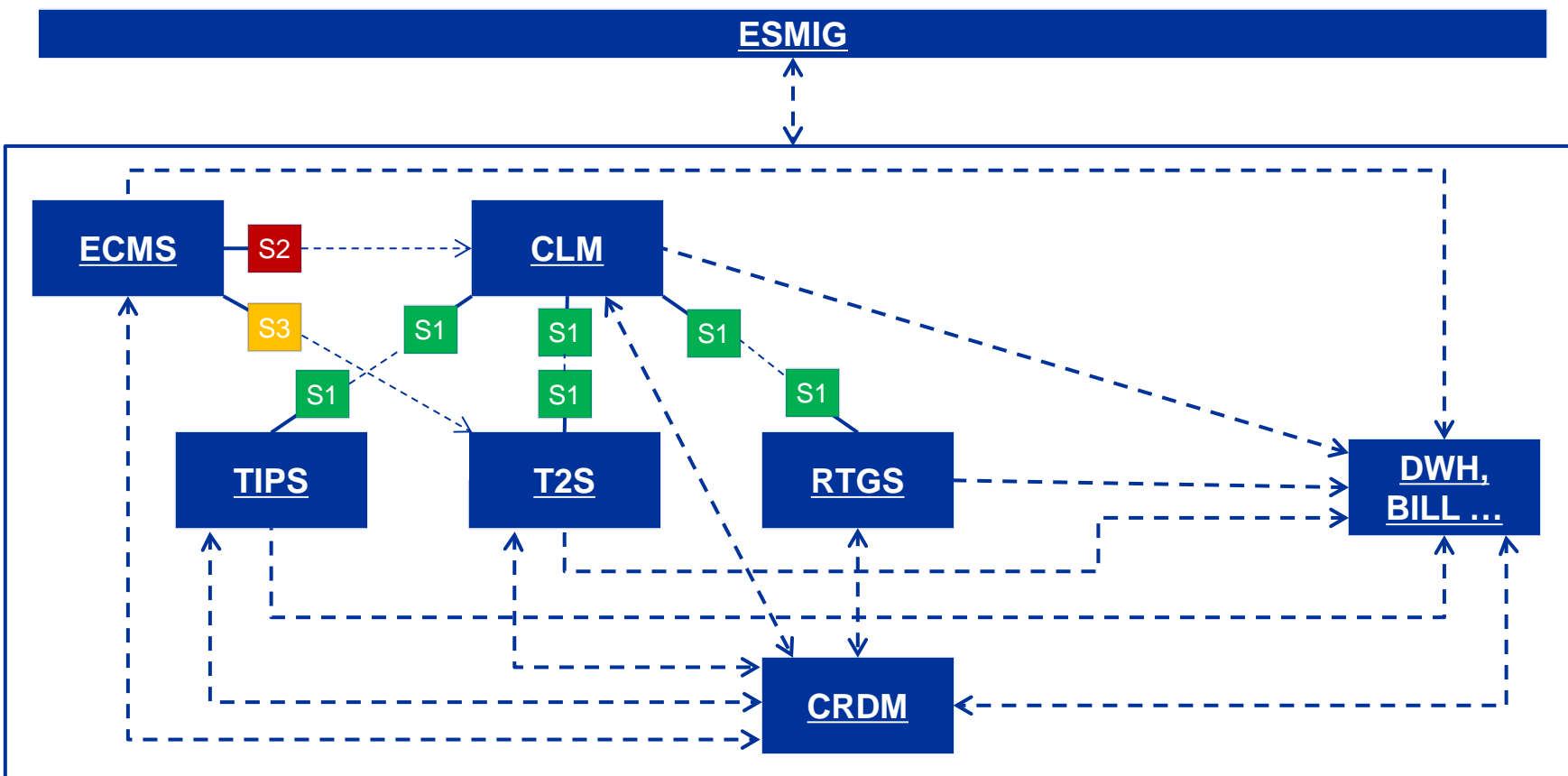


Support flow

Test environment connection

One of the five main services testing

- S1 Basic simulator for LT
- S2 Basic simulator for credit line update to CLM
- S3 Basic simulator for SI to T2S



- Main flow
- Support flow
- Simulated flow

In addition to basic simulators, some contingency tools such as provision of liquidity from CB accounts could be part of each service

Test environment connection

As a consequence

- A basic simulator for each service would need to be provided within the testing capacity of each other services
- Reference data would need to be common
 - ESMIG, CRDM and downstream services could be on a general basis always be connected to the five main service test environments except for specific periods
 - In case of isolated CRDM testing, reference data via the five main service test environments cannot be changed, and data cannot be exported

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Migration steps

The following steps are foreseen

1. Anticipated go-live of ESMIG, part of CRDM and Billing together with the TIPS go-live
2. Big bang for the future RTGS services (ESMIG, full CRDM, CLM and RTGS, interface to TIPS and T2S, DWH/Billing...)
3. Technical migration for T2S, with limited functional impact : full ESMIG, from SDMG to CRDM, DWH. This should not be synchronised with the big bang for RTGS
4. ECMS

Migration tools

The needs for migration tools

- Migration of Reference Data:
 - Cannot be organised as one to one migration (i.e. from HAM to CLM and PM to RTGS)
 - Static data could be downloaded and migrated by default, but CB/Party could change the configuration before the re-loading of the data
- Migration of balances:
 - User shall identify the “from/to accounts”
- Warehoused payments could be excluded

Other tools

There is a need for tools, such as a snapshot tool, to be able to unload and reload reference data constellations