



The T2S Project

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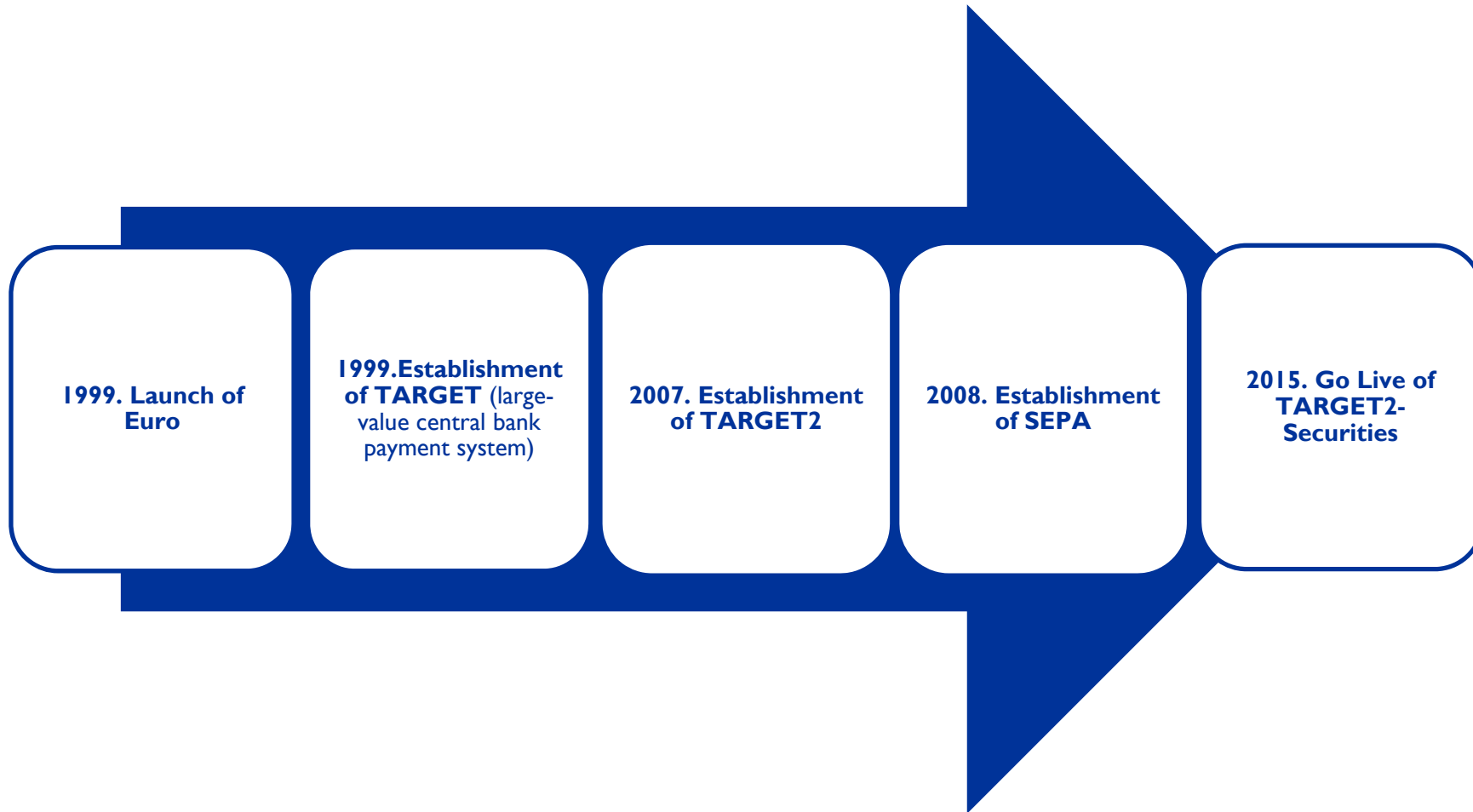
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- T2S Programme Plan and Status
- Testing phases
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- **The aim of Financial Integration in Europe is to create a single **European financial market** and to increase *growth* and *prosperity* of Members States by generating *new investment opportunities* and **strengthening the EU banking sector** and **ensuring continuous development of the EU economy.****



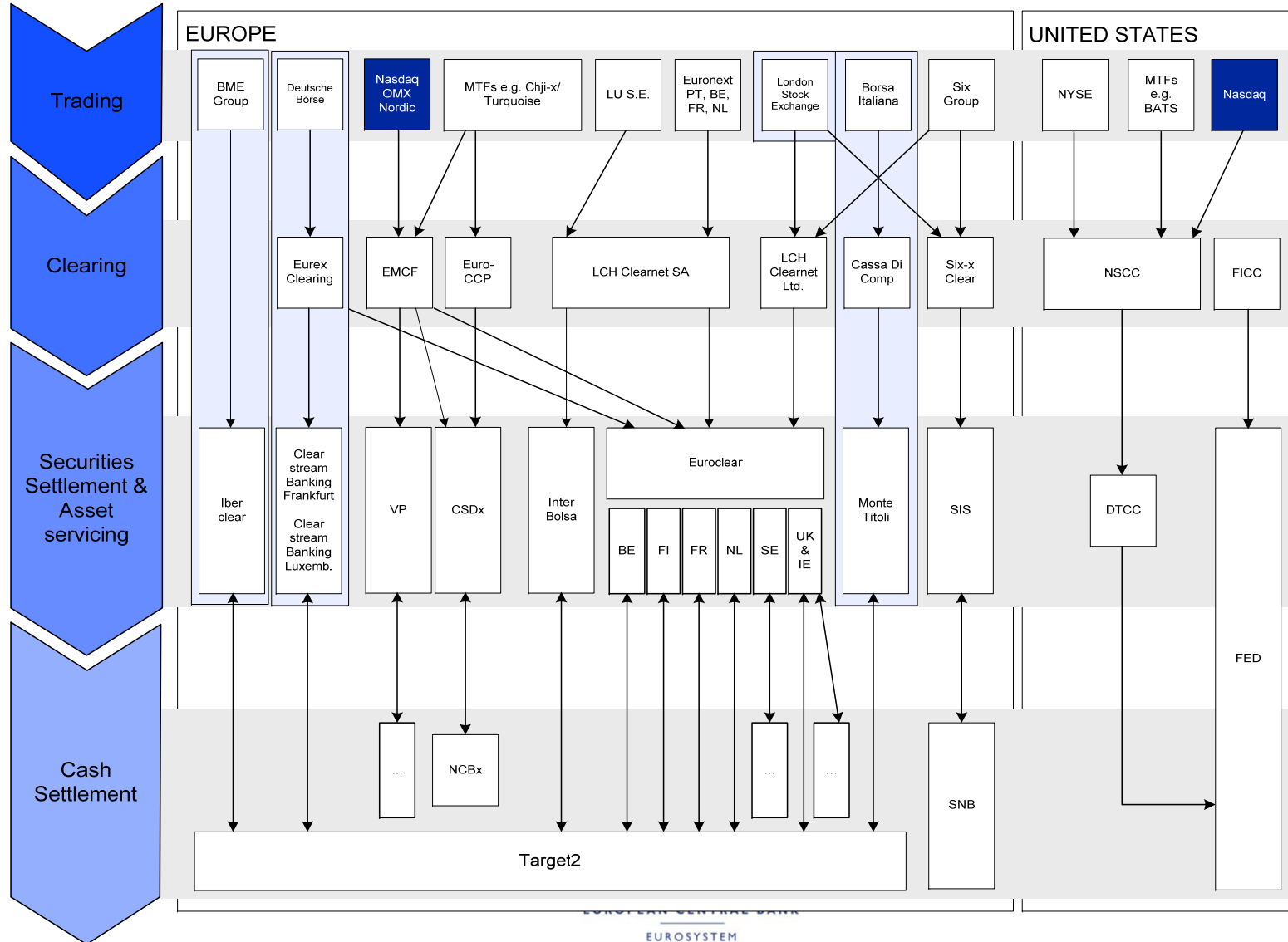
T2S – Key facts, purpose and benefits

Important dates for **European Financial Market Integration**:



Why T2S? - Fragmented Infrastructure

T2S Key facts, Purpose and Benefits





T2S Programme

T2S Key facts, Purpose and Benefits

Concept

- T2S is a technical solution to support Central Securities Depositories (CSDs) by providing core, borderless and neutral settlement services.

Objective of T2S

- To achieve harmonised settlement in Central Bank Money (CeBM) in euro and other eligible currencies for substantially all securities in Europe.

Technical Settlement Only

- Integrated settlement model, BUT the CSDs participating in T2S, and the Central Banks (CB) who make their currencies available for settlement in T2S, will keep full control over the business and contractual relationships with their customers.

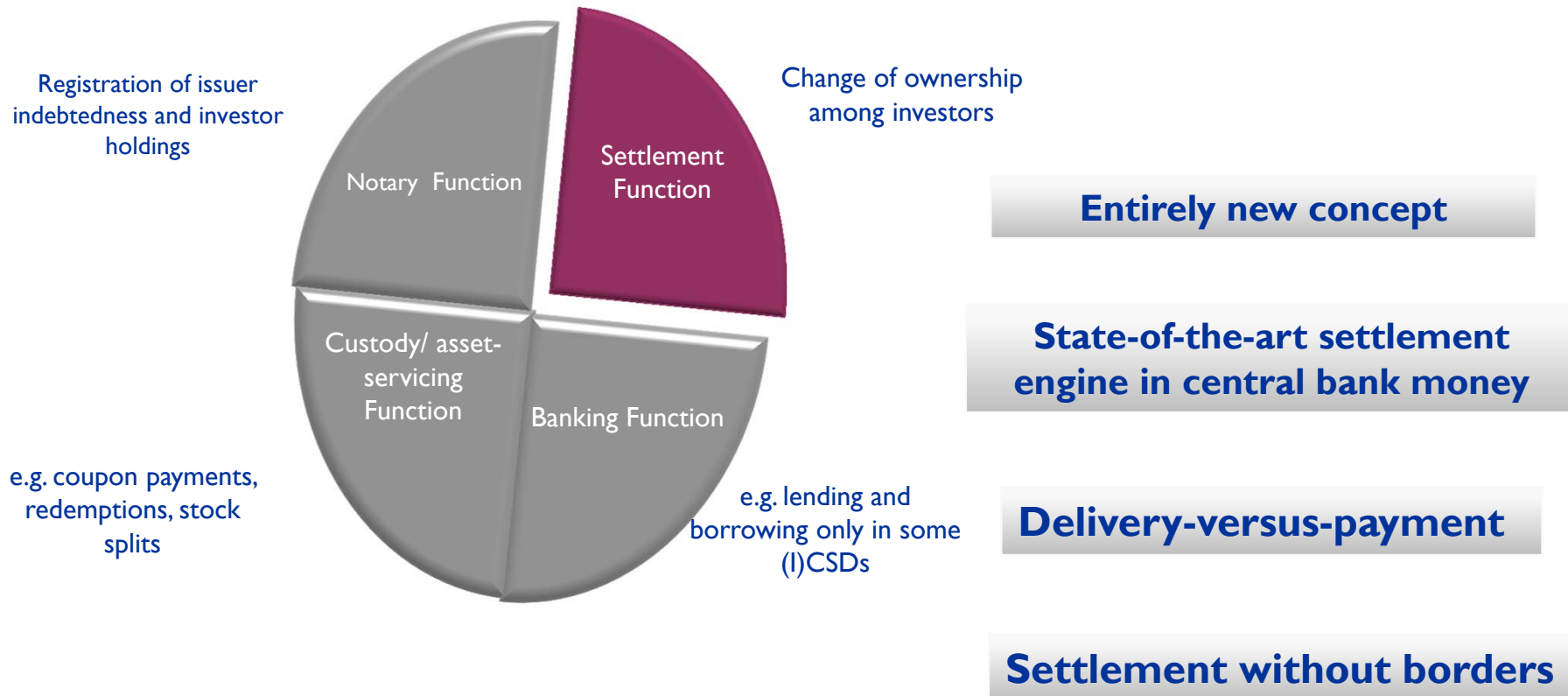
Role of Eurosystem

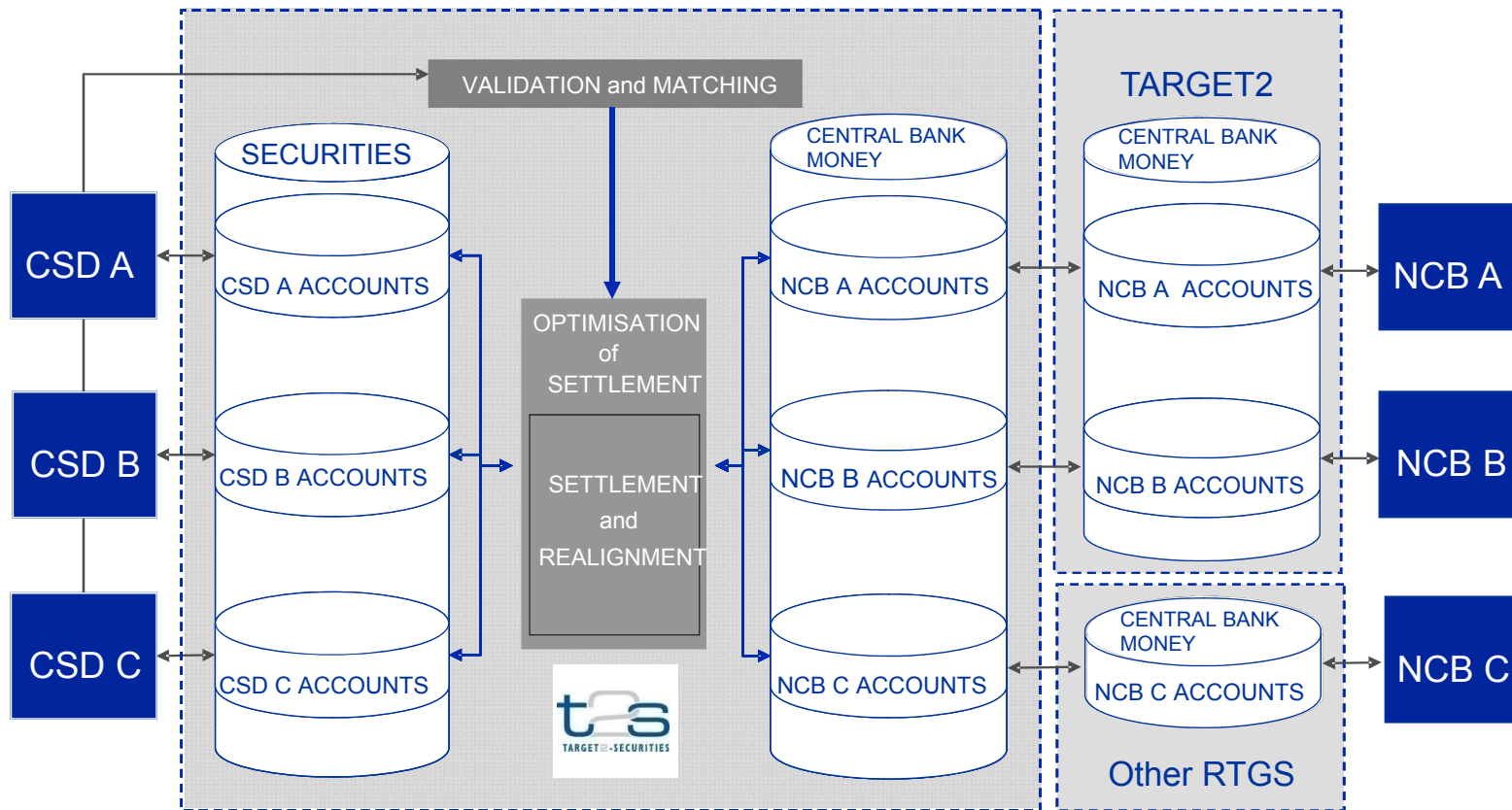
- The Eurosystem will manage and operate the business application and the technical solution which provides the T2S Services.



A service offered to CSDs for settlement only

T2S Key facts, Purpose and Benefits





Technical platform of all securities (single pool) and cash accounts to settle all securities transactions in central bank money



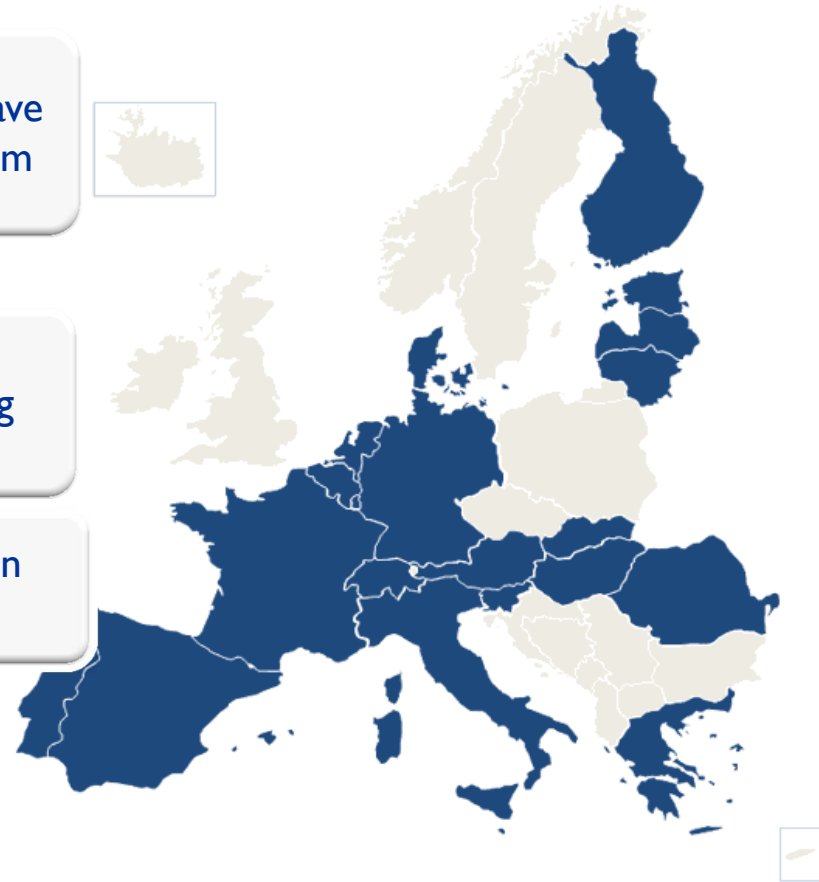
The T2S Community

Key facts, Purpose and Benefits

24 CSDs (nearly 100 % of EUR settlement volume) have signed T2S Framework Agreement with the Eurosystem

Danmarks Nationalbank has signed Currency Participation Agreement with the Eurosystem allowing for settlement in DKK on the platform as of 2018

T2S is an open system: more CSDs and currencies can join





The business continuity concept for T2S

Key facts, Purpose and Benefits

- ✓ **T2S core system architecture based on “2 regions / 4 sites” concept**
- ✓ **The four sites are fully equivalent and equipped with the same technical resources: processor, storage, network interface, software, etc.**

First region



2 sites

Second region



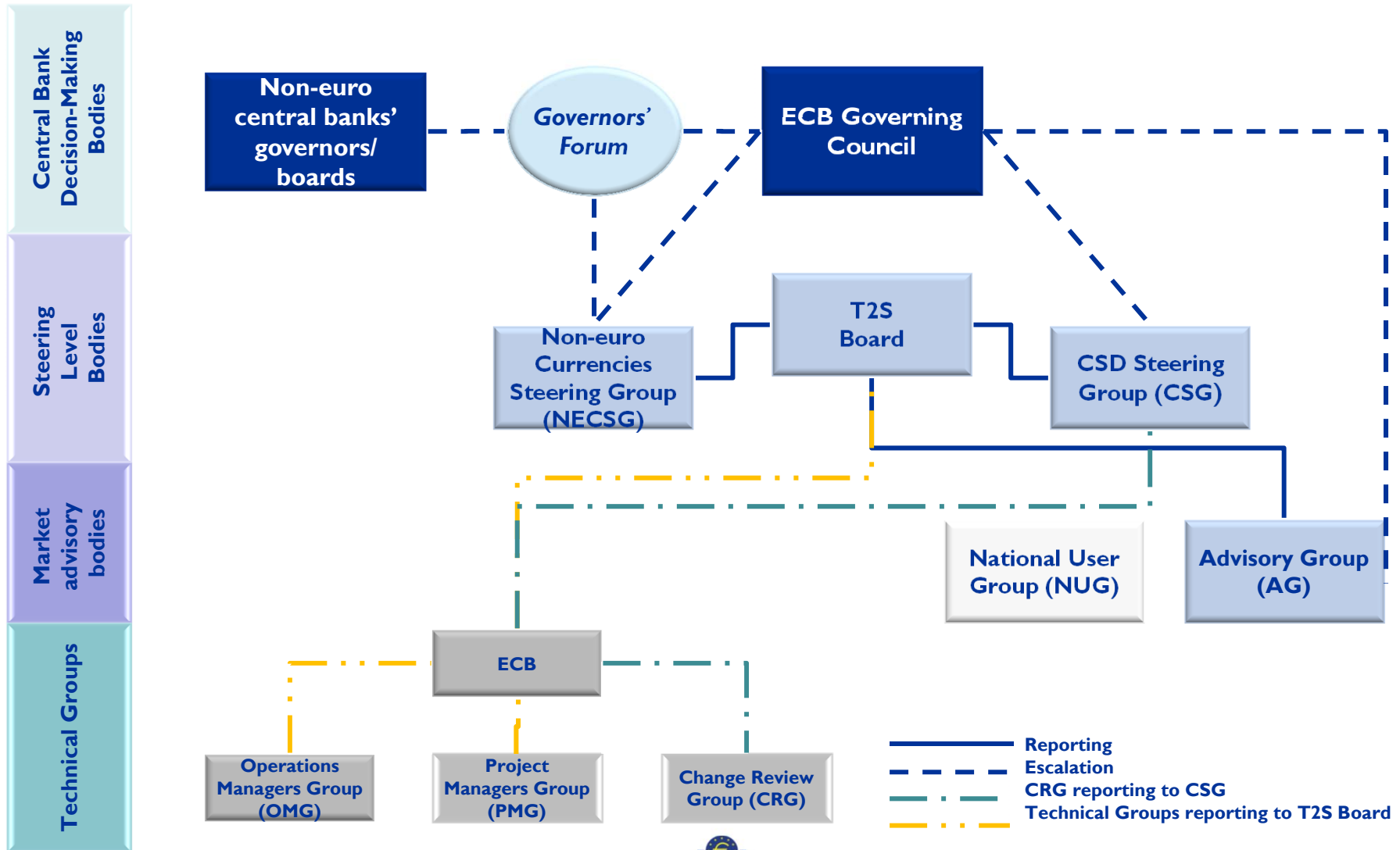
2 sites

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T2S Governance

Who is involved?



Full & transparent involvement

- ✓ The T2S User Requirements and all technical documentation are *negotiated and agreed* with market participants
- ✓ *Procedures are jointly discussed and agreed* with market participants, e.g. operational procedures and information security requirements
- ✓ *Extensive testing* is preformed prior to go-live (within the Eurosystem (IAC and EAT) and later together with all stakeholders, CSDs and users (pilot and user testing)).

IAC ---→ **Internal Acceptance Testing**

EAT ---→ **Eurosystem Acceptance Testing**



T2S Governance

T2S Board	Chair: ECB senior manager + 9 members from other Eurosystem NCBs + 1 member from a non-euro area central bank + 2 non-central bank board members (all members are appointed by the Gov. Council)
Non-euro Currencies Steering Group	Senior managers from all non-euro NCBs that signed the Currency Participation Agreement
Governors Forum	Governors of non-euro NCBs with their currencies available in T2S. Plus an equal number of members of the ECB Governing Council
CSD Steering Group	CEOs/ Board members of CSDs that signed the Framework Agreement + T2S Board members and up to 6 user representatives as observers
Advisory Group	“T2S Parliament” (95 participants) Participating CSDs and users in equal number + relevant public authorities (ECB, euro NCBs, non-euro NCBs) + observers (EU Commission, regulators, oversight, 4CBs, etc.)



T2S Governance

T2S Board

13 members
(including ECB,
Eurosystem's NCB,
non-euro area CB,
non-central bank
managers)

Composition

Objectives

Delivery of T2S by
the Eurosystem be
ensured to occur on
time, within budget,
and according to
market needs

Members represent
the interests of the
T2S project and the
Eurosystem. They are
supported by the T2S
project team at the
ECB

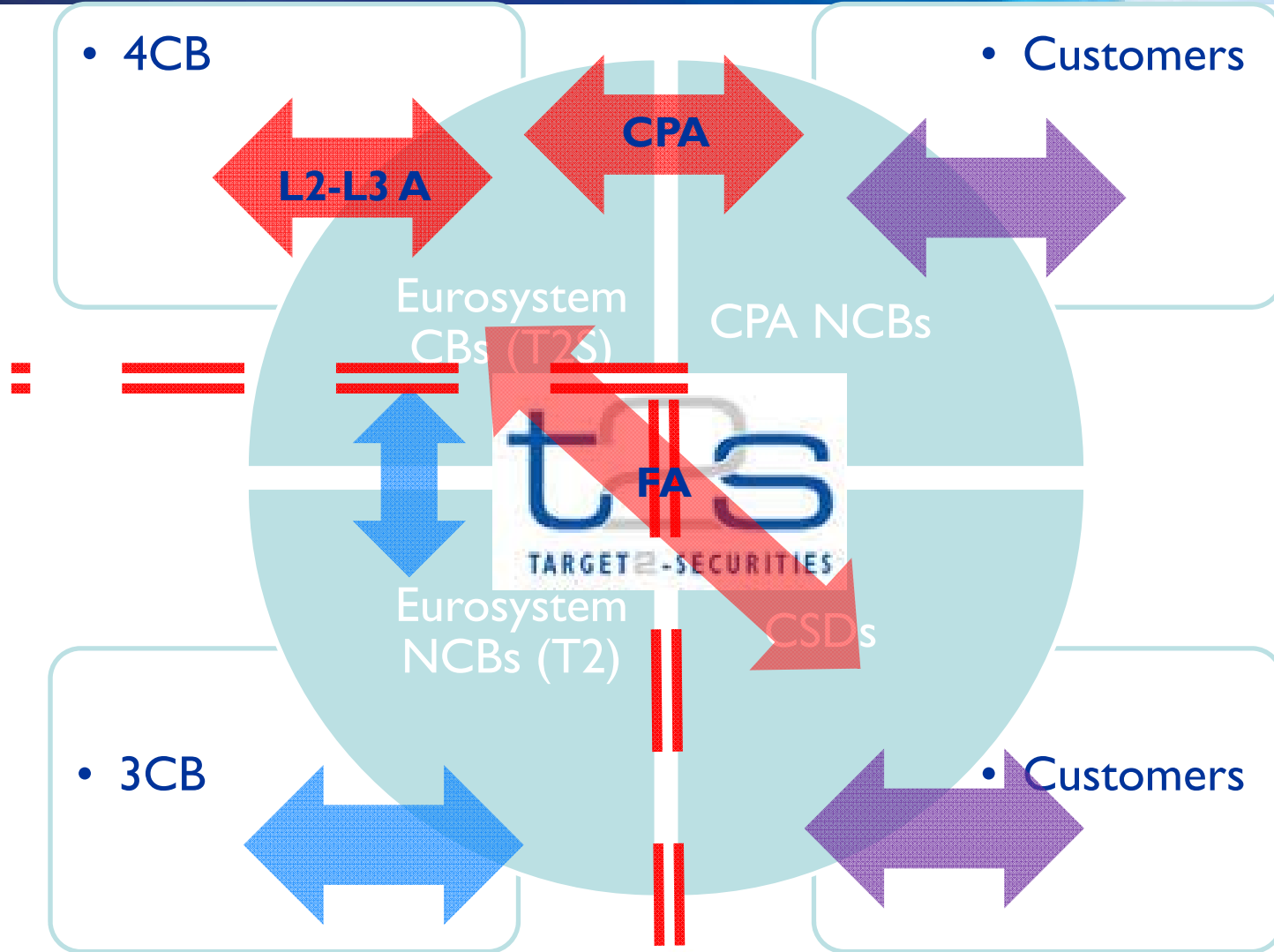
Important
Principles

Responsibilities

Elaborating proposals
for Governing
Council decisions,
managing the T2S
programme, reporting,
managing revisions
with stakeholders,
validating 4CBs'
deliverables

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T2S Contractual liability - the actors



CB--→Central Banks
 NCB---→National Central Bank
 CPA----→Currency Participation Agreement

- **Principle of Liability:** duty of reasonable care (incl. obligation to mitigate damages)
- **Extent of Liability:** duties and obligations provided in the relevant agreement(s); *force majeure*: standard clause
- **Damages covered:** Direct (consequential, reputational etc. explicitly excluded)
- Liability for fraud – wilful misconduct: Unlimited
- Liability for gross/ordinary negligence: Caps & limitations apply

▪ **Framework Agreement (FA)**

- **Ordinary negligence cap: EUR 30 mio/ calendar year (Eurosystem)/ 12 months' fees (per CSD)**
- **Gross negligence cap: EUR 500 mio/ calendar year (Eurosystem)/ 5X12 months' fees (per CSD)**
- **No Eurosystem liability for CSD early termination of FA**
- **CSDs hold Eurosystem harmless from third party claims**

▪ **Currency Participation Agreement (CPA)**

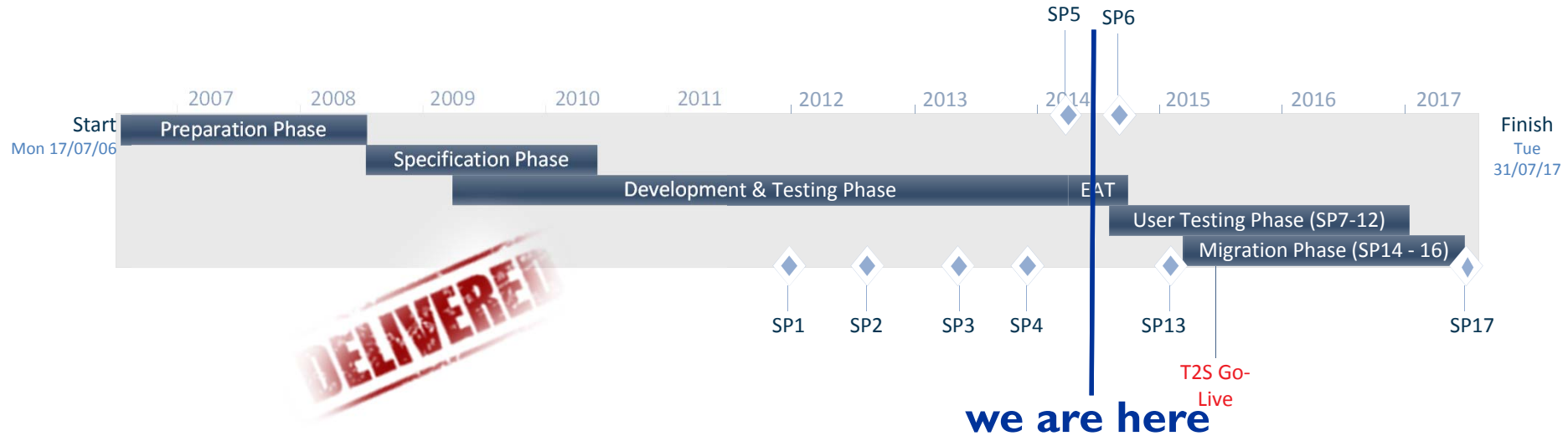
- **Ordinary negligence cap: EUR 20 mio/ calendar year (Eurosystem)/ EUR 2 mio/ calendar year (CPA NCB)**
- **Gross negligence cap: EUR 100 mio/ calendar year (Eurosystem)/ EUR 20 mio/ calendar year (CPA NCB)**
- **Eurosystem holds CPA NCB harmless from DCA holder claims**
- **No Eurosystem liability for early termination of CPA**

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The T2S Programme Plan

Current status of T2S



Software development complete

4CB have completed testing and delivered software to Eurosystem

All Synchronisation Points (SPs) scheduled have been met so far

Synchronisation points (SP) Definition

---> Monitoring milestones, represent the check points between the processes of T2S Programme and the internal processes of the CSDs/NCBs reshaping/adaptation project plan.

Key milestones until go-live

Current status of T2S

Challenge

- All T2S stakeholders (Eurosystem, central banks, CSDs, banks) to be ready in time for testing and migration to T2S



SP 5: Start of Eurosystem Acceptance Testing
(31 Mar 2014)

4CB to deliver the T2S software



SP 6: Eurosystem Ready for User Testing
(1 Sept 2014)

Eurosystem to set up User Testing environments and deliver relevant training material and testing documentation

SP 16.1: Ready for T2S Go-Live
(22 June 2015)

First-wave CSDs and Eurosystem NCBs to be ready for migration (four migration waves planned)

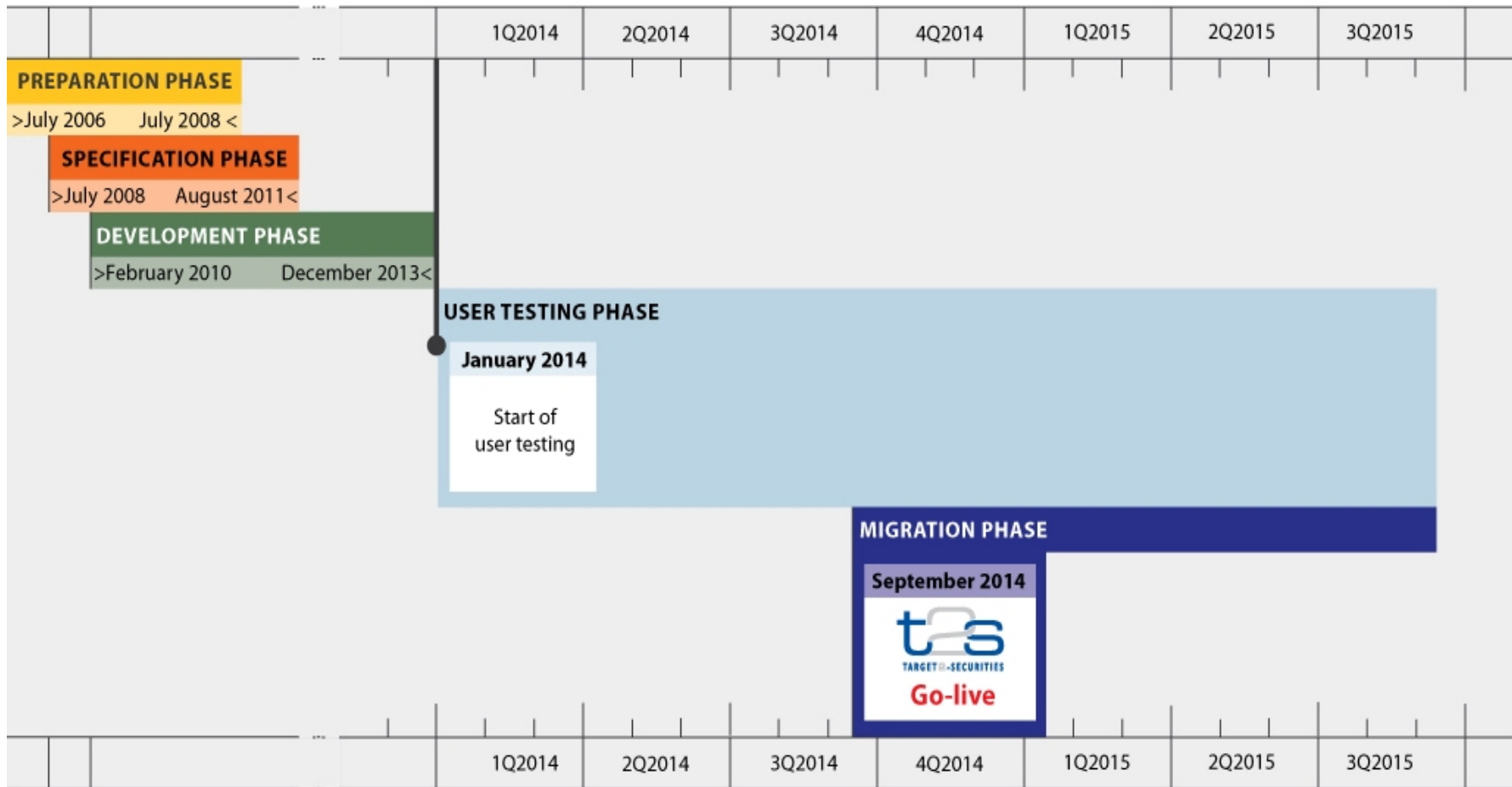
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Testing activities & phases



Testing activities & phases

Eurosystem Acceptance Testing (EAT) started on 31 March 2014 as planned

- Formal tests carried out by the Eurosystem to ensure that the T2S Platform is of the required quality and is compliant with the legal documentation outlining the scope for the T2S Platform.
- 20 January 2014 - 4 Central Banks had **established the first connection between the ECB and T2S.**
- From now until September 2014** - A first critical phase of EAT testing activities **will run;**
- 1 October 2014** - T2S application will finally be delivered to the **CSDs for the user testing phase.**

T2S User testing (January 2014 – January 2017)

- Multilateral testing by all external parties – CSDs, national central banks and banks;
- The objective: ensure that the T2S platform fully meets the user requirements.**
- The successful completion of the user testing will enable CSDs, central banks, directly connected T2S parties and (other) holders of T2S dedicated cash accounts **to migrate to and operate in T2S.***
- Testing will be completed **after the full migration of the last group of CSDs expected by February 2017.**

Testing activities & phases

EAT preparation

2011	2012	2013	Q1
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EAT general preparation

(without connection to T2S)

- governance
- infrastructure
- specification

EAT execution

Q2	Q3	Q4
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critical phase
cycle 1 cycle 2 non-critical phase



EAT technical preparation before execution

(with connection to T2S)

Testing activities & phases

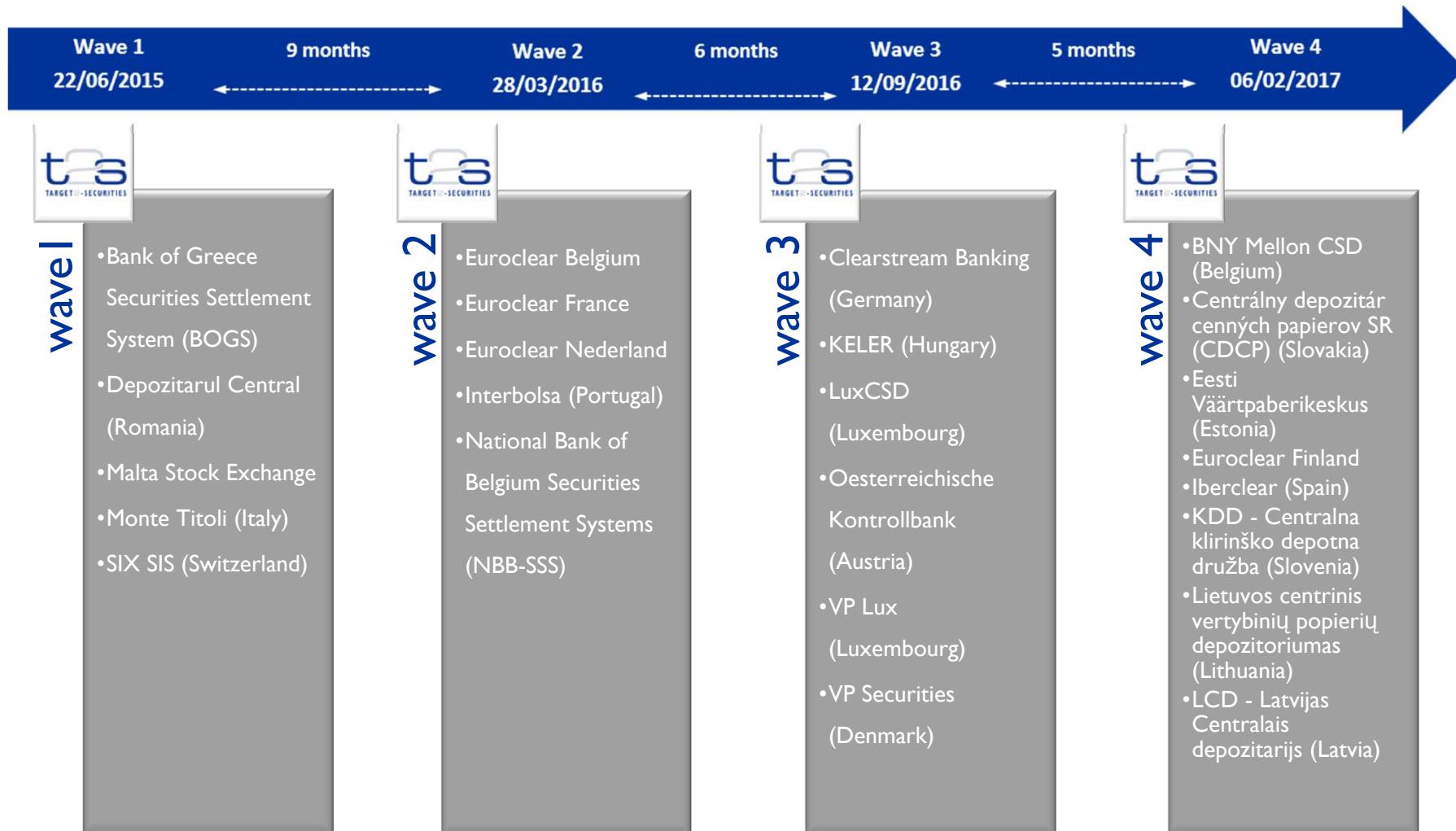
User Testing Phase (May 2014 - January 2017)

- May 2014 marks the beginning of the User Testing Phase. The first step is SP7 – Ready to Start Connectivity Set-up. Connectivity Testing will follow once set-up has been completed, starting at the latest in August 2014.
- **In Q3 2014**, the specific user testing phases will begin – involving those **CSDs, national central banks and banks** which intend to be directly connected to T2S. The purpose of the different phases is to gradually increase the number of T2S actors involved and expand the scope of testing.
- The objective of the user testing phase as a whole is to ensure that **the T2S platform fully meets the user requirements**. In addition, the successful completion of the user testing will enable CSDs, central banks, directly connected T2S parties and (other) holders of T2S dedicated cash accounts to migrate to and operate in T2S.

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Migration waves (endorsed by ECB GvC November 2013)



The objective of the migration phase is to ensure a **smooth transition of data to the T2S system** and the consequent adaptation of the processes and technical environments of all T2S Actors, i.e. CSDs, central banks, directly connected T2S parties and (other) holders of T2S dedicated cash accounts.

Phase	Description	Status
Concept	Elaboration of migration strategy and generic migration plan	Completed
Preparation	Detailed planning & preparatory work for the preparation of the individual migration Fulfilling the entry criteria for migration execution	In progress
Implementation	Execution of migration activities prior to and during the migration weekend	Not started
Closing	Reporting on the results of the migration and reflection on “lessons learned” Monitoring after the migration weekend during the stabilisation period	Not started



T2S Migration - migration implementation phase

Migration to T2S will be performed in two steps:

- **Pre-migration phase:**

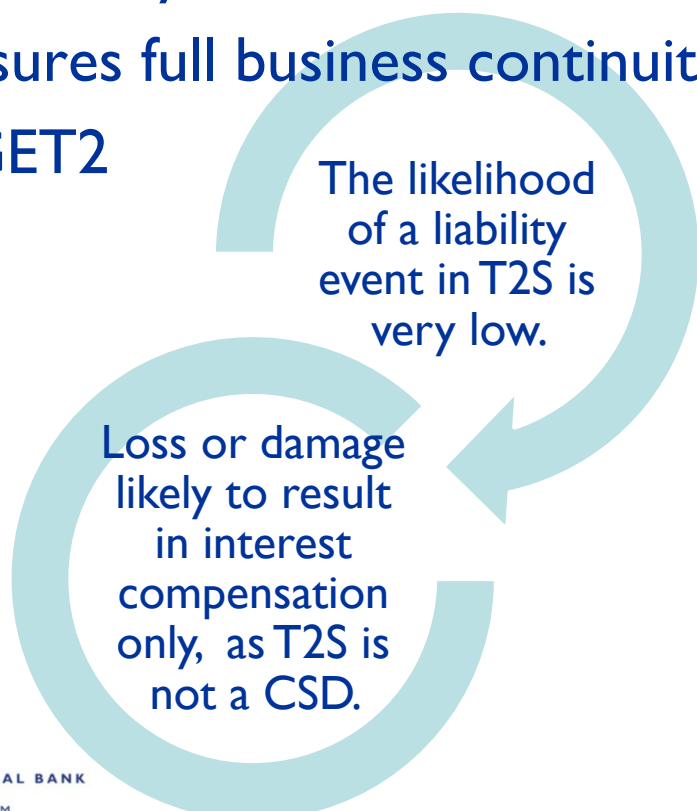
- Planned typically for 3 months, until the migration weekend
- As a guiding principle, all **static data** which can be migrated before the migration weekend should be migrated before the migration weekend
- Data will be migrated to T2S according to the agreed schedule applicable to each migration wave

- **Migration weekend:**

- Is assumed with 58.25 hours (from Friday 06:45 p.m. until Monday 05:00 a.m.)
- Dynamic data and delta of static data (new data or updates to the existing data) will be migrated during the weekend
- Data will be migrated to T2S according to the agreed schedule applicable to each migration wave

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- T2S will be owned and operated by the Eurosystem
- T2S will be a state-of-the-art settlement engine for securities settlement in central bank money. It uses the latest technology and high security and safety standards.
- Concept of 2 regions/4 sites ensures full business continuity
- Excellent track record of TARGET2



The likelihood of a liability event in T2S is very low.

Loss or damage likely to result in interest compensation only, as T2S is not a CSD.

Thank you for your attention!

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