TARGET2/T2S consolidation
– Crunch time –

Frankfurt am Main, February 2020
(1) Why is the project important to you?

(2) Where are we on the timeline?

(3) How far along are market preparations?

(4) What are the Bundesbank’s plans to prepare participants?

(5) Introducing the network service providers
(1) Why is the project important to you?

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(5) Introducing the network service providers
The Eurosystem’s current market infrastructure: overview

**TARGET2**
- Central bank operations
- High-value payments
- Ancillary system settlement

**T2S**
- Securities settlement

**TIPS**
- Settlement of instant payments
November 2021: TARGET2 will be deactivated

TARGET2
- Central bank operations
- High-value payments
- Ancillary system settlement

T2S
- Securities settlement

TIPS
- Settlement of instant payments
TARGET2/T2S consolidation: an overview

November 2021: What will replace TARGET2?

CLM – Central liquidity management (incl. central bank operations)

RTGS
- High-value payments
- Ancillary system settlement

T2S
- Securities settlement

TIPS
- Settlement of instant payments

Common components
TARGET2/T2S consolidation: an overview

Eurosystem market infrastructure from November 2021: overview

CLM – Central liquidity management (incl. central bank operations)

RTGS
High-value payments
Ancillary system settlement

T2S
Securities settlement

TIPS
Settlement of instant payments

Common reference data management
Shared operational services
Data warehouse (excl. TIPS)

Eurosystem single market infrastructure gateway (ESMIG)
TARGET2/T2S consolidation: an overview

Eurosystem market infrastructure from November 2021: overview

Central liquidity management (CLM)

RTGS
- Main cash account
- Central bank operations
- Credit line
- Contingency module
- Graphical user interface
- Service-related reference data
- Dedicated cash account
- High-value payments
- Ancillary system settlement
- Graphical user interface
- Service-related reference data

T2S
- Dedicated cash account
- Securities settlement
- Auto-collateralisation
- Graphical user interface
- Service-related reference data

TIPS
- Dedicated cash account
- Instant payments
- Graphical user interface
- Service-related reference data

Common reference data management

Shared operational services (billing, scheduler, …)

Data warehouse

Eurosystem single market infrastructure gateway (ESMIG)
TARGET2/T2S consolidation: an overview
Introduction of central liquidity management

Clear separation between:

- Operation of main cash accounts (MCAs) in the central liquidity management (CLM) module
  - A bank can hold one or more MCAs
  - Obligation to open an MCA if at least one DCA is to be opened

Optional use

1 TARGET instant payment settlement
TARGET2/T2S consolidation
What are the main changes? (I)

Change to account structure

- PM\(^1\) accounts will be replaced by **main cash accounts (MCAs\(^2\))** and, where needed, additionally by **dedicated cash accounts** for high-value payments and ancillary system settlement **(RTGS DCAs\(^3\))**
- HAM\(^4\) accounts will be replaced by **MCAs**
- Dedicated cash accounts for instant payments **(TIPS DCAs)** and securities settlement **(T2S DCAs)** will remain, but will be supplied from **MCAs** (instead of PM accounts, as before)

Separation of central bank operations and liquidity management from payments

- Central bank operations and liquidity management on the MCA
- High-value payments (and ancillary system settlement) on the RTGS DCA

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1 Payments module  
2 Main cash accounts  
3 Dedicated cash accounts  
4 Home accounting module
TARGET2/T2S consolidation
What are the main changes? (II)

Longer operating times

- Night-time processing for all settlement procedures
- High-value payments from 2:30 (may be interrupted by a maintenance window from 3:00 to 5:00)
- Standard maintenance window for all TARGET services

New message standard in the RTGS system T2 (ISO 20022)

- No more MT messages
- T2 based on the HVPS+ (high-value payment systems plus) guidelines
- Close coordination between HVPS+ and CBPR+ (cross-border payments and reporting plus)

Change to technical message exchange in the RTGS system T2 (“V-Shape”)

TARGET2/T2S consolidation
What are the main changes? (III)

Single technical interface ("ESMIG") for T2, T2S and TIPS

- Access via various network service providers
- SWIFT and SIA-Colt

Multi-currency capability

Enhanced cybersecurity

1 Eurosystem single market infrastructure gateway
Why is the project important to you?

Who is affected and what needs to be considered?

- All institutions which currently hold, or wish to hold in future, accounts with the Bundesbank
- The migration will occur on 22 November 2021 ("big bang"), with no parallel phase
- There must be clarity about future plans
  - What transactions will be conducted via the Bundesbank?
  - Will they be conducted directly, or indirectly via a third party?
  - What account structure will this require?
- Extensive impact on internal processes (not just restricted to account management and payments, e.g. treasury and liquidity management)
- For multinational institutions: impact beyond Europe (ISO 20022)
- Select network service provider (possibly tender procedure)
- Raise awareness and involve management (board)
- Careful resource planning (budget, staff)
TARGET2/T2S consolidation  
Why is the project important to you?

Why is the project important to you?

Those who have not completed their own preparations for the migration will be excluded …

– … from high-value payments in central bank money

– … from the settlement of monetary policy operations
  
  • No participation in open market operations
  
  • No standing facilities can be used
  
  • Minimum reserve requirements cannot be met

– … possibly from retail payments, if an ancillary system connected to T2 (e.g. SEPA-Clearer) is used
TARGET2/T2S consolidation – Crunch time

Agenda

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(5) Introducing the network service providers
### TARGET2/T2S consolidation
#### Project plan

<table>
<thead>
<tr>
<th>Description</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
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<td>Q1 Q2</td>
<td>Q3 Q4</td>
<td>Q1 Q2</td>
<td>Q3 Q4</td>
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<tr>
<td>NSP licensing</td>
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<td></td>
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<tr>
<td>Eurosystem acceptance tests</td>
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<td></td>
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<tr>
<td>Migration</td>
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<tr>
<td>Go-live</td>
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- **1 December 2020**: Start connectivity testing for banks
- **1 March 2021**: Start user testing
- **21 November 2021**: Go-live
Migration weekend dress rehearsals – planning overview

2021 time schedule

- **March**
  - End of March
  - MWR CBs only (repeat if necessary)

- **April**
  - Early April
  - MWR T2 participants

- **July**
  - Early July
  - MWDR T2 participants

- **August**
  - Late August
  - MWDR CBs only

- **September**
  - Late September
  - Back-up MWDR T2 participants

- **October**
  - Late October
  - Back-up MWDR

**MWR**: weekdays during normal business hours
**MWDR**: weekends

GO-LIVE
TARGET2/T2S consolidation – Crunch time

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What’s the idea behind community readiness monitoring?

- Big bang migration in November 2021:
  - TARGET2 will be deactivated.
  - T2 service – i.e. CLM and RTGS – will commence operations.
  - By a certain deadline, all T2 user communities across Europe need to be able to migrate to the new platform.
  - How can we achieve this?

- Each institution is responsible for ensuring that it is migration-ready.
- Central banks support their user communities and monitor their readiness levels.
- User community readiness levels are collated and evaluated at the European level.
- It is in the interest of all the institutions participating in T2 to be able to count on all the institutions to take the project seriously, give it the priority treatment it merits, and do everything possible to be migration-ready in November 2021.
What is community readiness monitoring exactly?

⇒ The “overall key milestones to ensure a successful big-bang migration in November 2021” are key here.

– Autumn 2018 saw the definition of a total of 13 milestones as the foundations of community readiness monitoring.
– This catalogue of milestones was expanded in spring 2019 to include nine further milestones for 2019 and 2020:
  • English original document: [https://www.bundesbank.de/resource/blob/764378/3dc8748ed635267cff5eb7f263b33476/mL/meilensteine-big-bang-migration-data.pdf](https://www.bundesbank.de/resource/blob/764378/3dc8748ed635267cff5eb7f263b33476/mL/meilensteine-big-bang-migration-data.pdf)
– 2021 – the period earmarked for user testing and migration preparations – is likely to see a more granular breakdown of the catalogue of milestones and even closer surveillance of institutions’ readiness status.
TARGET2/T2S consolidation
Community readiness monitoring

2019 and 2020 milestones at a glance

- **IAD1**: Impact assessment started (March 2019)
- **NSP1**: NSP selection criteria development completed (July 2019)
- **IAD2**: Impact assessment completed (Sep. 2019)
- **IAD3**: Drafting of internal applications documentation started (Dec. 2019)
- **NSP2**: New connectivity design strategy and planning completed (June 2020)
- **IAD4**: Drafting of internal applications documentation completed (July 2020)
- **IAD5**: Software development for the necessary changes to T2 started (Oct. 2020)
- **NSP3**: NSP selection and contract preparation completed (Nov. 2020)
- **IAD6**: Software development for necessary changes to T2 completed (Dec. 2020)
- **NSP4**: NSP procurement process completed (Feb. 2021)
- **IAD7**: Internal applications testing started (March 2021)
- **IAD8**: Internal applications testing completed (Feb. 2021)
- **NCO1**: Network connectivity tests started (Nov. 2021)
- **NCO2**: Network connectivity tests completed and user testing activities ready to start (Dec. 2021)

Source: ECB
How does community readiness monitoring work?

- Roughly every three months, central banks ask all their institutions to report on the progress they have made towards meeting the relevant milestone(s) (met/not met, plus follow-on questions in some cases)
- to gauge their current project status (green, yellow, red)

- Their responses give central banks valuable insights into their user community’s readiness and enable them to provide institutions with timely, dedicated support should any difficulties arise.

- Responses also feed into community readiness monitoring at the European level:
  - Every central bank participating in TARGET2 is required to take part in this monitoring process and to report on both its own readiness and that of its participants.
  - Public outcome after every milestone survey:
    - Community Readiness Report
    - Community Readiness Dashboard
TARGET2/T2S consolidation
Community readiness monitoring as at 31 December 2019

31 December 2019
NSP2 New connectivity design strategy and planning completed

Green
Fully confident, no risks identified

Yellow
Risks identified, but can be overcome

Source: ECB.
Roughly 1,200 institutions currently covered by Bundesbank's community readiness monitoring.

- Around 880 institutions with co-management.
- Around 320 direct participants.
- Of which:
  - 13 closely monitored participants.
  - All the others: regularly monitored participants.
Results for the German market (as at 31 December 2019)

- By the reporting date,
  - 46% of the closely monitored participants (6 out of 13) and 16% of the regularly monitored participants were reporting a status of “green”;
  - 54% of the closely monitored participants (7 out of 13) and 80% of the regularly monitored participants were reporting a status of “yellow”.

- One regularly monitored participant was reporting a status of “red”.

- Roughly 4% of the regularly monitored participants (48 institutions) had not even participated in the survey by the reporting date.

- Milestone NSP2 has been met by around 90% of the regularly monitored participants and by 12 of the 13 closely monitored participants.
TARGET2/T2S consolidation
Community readiness monitoring

IAD4
Drafting of internal applications documentation completed

IAD5
Software development for the necessary changes to T2 started

NSP3
NSP selection and contract preparation completed

IAD7
Internal applications testing completed

NSP4
NSP procurement process completed

31 March

30 June

31 July

31 Dec.

31 Oct.

31 Dec.

31 Oct.

Milestones this year

IAD8
Internal applications testing completed

NCO1
Network connectivity tests started

IAD6
Software development for necessary changes to T2 completed

*Milestone codes:
https://www.bundesbank.de/resource/blob/764378/3dc8748ed635267cff5eb7f263b33476/ml/meilensteine-big-bang-migration-data.pdf

Source: ECB
Which milestones are going to be surveyed?

- **IAD4** Drafting of internal applications documentation completed
- **IAD5** Software development for the necessary changes to T2 started
- **NSP3** NSP selection and contract preparation completed

In addition to the milestones, we are currently planning to ask the following questions:

- Are you currently employing the use of, or do you intend to use, one or more *service providers* that will contribute significantly to the successful preparation and migration of your institution?
- What *access option* (U2A/A2A) does your institution plan to use?
- Which *network service provider* does your institution plan to use?

⇒ The survey will begin towards the end of March 2020.
⇒ As per usual: advance notice by email a week or two before the survey begins.
How can you help us make community readiness monitoring a success?

- Take part in the surveys within the allotted time.
- Be honest with your feedback on your institution's readiness.
- Make sure your feedback is realistic.
- Get in touch if you have any questions or experience problems.
TARGET2/T2S consolidation – Crunch time

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TARGET2/T2S consolidation
Readiness in the German user community

Around 880 institutions with co-management

Roughly 1,200 institutions currently covered by Bundesbank’s community readiness monitoring

Around 320 direct participants

Close cooperation with co-managers from the savings banks and cooperative bank sectors

Co-manager forum

What’s the best we can do to help you get ready?
TARGET2/T2S consolidation: What are the Bundesbank’s plans to prepare participants?

- Kick-off event “Crunch time” in February 2020
- Training sessions
  - First training sessions in April/May 2020 (see slides 32 to 35)
  - Additional training sessions on selected topics in autumn 2020 (see slide 36)
- Offer of personal, tailored consultations (see slides 37 to 40)
- **9 identical sessions** at regional office or branch locations for participants connecting directly to TARGET services

- **Target group:**
  - Staff who are already actively working with TARGET2 and will be active in T2
  - Staff working on their institution's internal projects
  - Providers of payment services (e.g. service offices)

- **Focus on T2 UDFS Version 2.1 and other information that is already available (e.g. on cash withdrawals and lodgements)**

- **Invitations** will be emailed in early/mid-March 2020
  - Same group of recipients as for this kick-off event
  - Registration via our website (link will be included in the invitation)

- **Duration** of the one-day event: probably 9:30 to 16:30
Provisional agenda

- Overview of TARGET services
- Communication with TARGET services
- General creation of static data in CRDM
- Course of a business day
- Information management
- Central liquidity management (CLM)
  - Account structure in CLM
  - Cash transfer orders (liquidity transfers and payments)
  - Liquidity management
  - Central bank operations
- Real-time gross settlement (RTGS)
  - Account structure and types of participation in RTGS
  - Cash transfer orders (liquidity transfers, payments and ancillary system transfers)
  - Liquidity management
  - Ancillary system settlement
As only one day is scheduled for the training sessions, please do the following in advance:

- Familiarise yourself with your institution’s current set-up (e.g. current account structure and planned account structure from November 2021)

- Familiarise yourself with the publications on the TARGET2/T2S consolidation (e.g. Business Description Document ⇒ Update to v2.1 scheduled for March 2020)
### TARGET2/T2S consolidation

#### Training sessions for direct participants

<table>
<thead>
<tr>
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</tr>
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<td>20 April 2020</td>
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<tr>
<td>21 April 2020</td>
<td>Regional Office in Berlin</td>
</tr>
<tr>
<td>22 April 2020</td>
<td>Erfurt branch</td>
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<td>Regional Office in Frankfurt</td>
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<td>Regional Office in Hanover</td>
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<td>30 April 2020</td>
<td>Regional Office in Stuttgart</td>
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<tr>
<td>5 May 2020</td>
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<td>19 May 2020</td>
<td>Regional Office in Düsseldorf</td>
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</table>
Additional sessions will be held in the second half of 2020 – the dates will be announced in advance.

The following topics are already on the agenda:
- GUI screens
- Forms
- Test and migration

Please note that all training events will be held in German.
TARG\textsuperscript{E}T2/T2S consolidation
Offer of tailored consultations for direct participants

- Our dedicated customer service teams are available to answer questions about the consolidation project at any time:

  \url{https://www.bundesbank.de/en/tasks/payment-systems/target2/contacts/contact---customer-service-team-620648}

- In addition to the usual contact points, we would also like to offer you \textit{a personal, tailored consultation}, available \textbf{from March 2020}, to help you prepare for the consolidation.
Why might a joint discussion be useful?

- Clarify specific questions
- Remove any uncertainties you may have
- Identify unresolved issues important to a successful migration and possibly assist in finding solutions
- Specific reason: Preparation for our survey on your future account set-up, scheduled for spring 2020 (see next slide)
This spring, we are planning to ask what accounts (number of MCAs and/or RTGS DCAs) you would like to open at the start of the consolidation.

In preparation for this, please ask yourself the following questions:

- What accounts do you currently hold at the Bundesbank?
- For which types of transaction do you use your present account set-up?
  - Holding of minimum reserves
  - Participation in open market operations
  - High-value payments
  - Retail payments
  - Cash supply
  - What ancillary systems do you participate in, if any?
- How large is your settlement volume?

Based on this information, you can then transfer your present account set-up to the accounts that will be available going forward.

If you need help answering any of these questions or transferring your present account set-up to the future environment, we can offer you a consultation with the customer service team responsible for you.
How can you register for a personal consultation?

- Consultations will begin from March 2020
- Please contact your responsible customer service team directly to make an appointment as soon as possible

How should you prepare for this consultation?

- Please try – as best you can – to answer the questions on the previous slide for yourself and to transfer your current set-up to the future environment

⇒ **Aim of the consultation**: For us to go through your considerations together and to clarify specific questions and issues

- To help us prepare for the consultation, please send any specific questions you would like to ask to your customer service team **1 week before your personal consultation appointment**
TARGET2/T2S consolidation – Crunch time

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Options for connecting to the TARGET services

− All account holders need technical access to their account or accounts in order to manage liquidity and monitor balances and transactions properly.

− Technical access can be provided
  • via the participant’s own direct connection or
  • also indirectly via a co-manager for main cash accounts (MCAs)

− Technical access is granted via a central access point:
  
  **ESMIG** - Eurosystem single market infrastructure gateway

  • Since November 2018 – access to TIPS
  • From November 2021 – access to T2 (CLM and RTGS)
  • From June 2022 – access to T2S
  • From November 2022 – access to ECMS (Eurosystem Collateral Management System)

• Communication between participants and ESMIG is conducted via a network service provider (NSP), with two NSPs having been authorised by the Eurosystem:

  SWIFT and SIA-Colt
Options for connecting to the TARGET services

Technical access via the NSPs is possible

- in **U2A (user-to-application) only** mode, i.e. via graphical user interfaces (GUI) of TARGET services, and/or
- in **A2A (application-to-application)** mode, including U2A mode.

Unlike today, there will no longer be any internet access. Alternatively, **U2A-only mode** could be used.

According to the milestone plan, an **NSP is to be selected by 31 March 2020** and a **contract with an NSP concluded by 31 July 2020**.
TARGET2/T2S consolidation
Publications on the Bundesbank’s website

- Circular 16/2018
  https://www.bundesbank.de/resource/blob/672176/99adb127666633d66c8bbbd038d77817/mL/2018-03-02-rs-16-data.pdf

- User Requirements Document (URD) version 2.1

- Business Description Document (BDD) version 1.0 – likely to be updated in a timely manner for the start of harmonisation with UDFS 2.1

- Important milestones for a successful big bang migration in November 2021

- User Detailed Functional Specifications (UDFS) version 2.1

- Concession contracts between the NSPs and the Eurosystem

- ESMIG FAQs

Published at https://www.bundesbank.de/en/tasks/payment-systems/enhancements-of-market-infrastructure/target2-t2s-consolidation
TARGET2/T2S consolidation
Any questions?