

OUTCOME

Second meeting of the New Technologies for Wholesale settlement Contact Group (NTW-CG)

18 JULY 2023 (09:30 - 16:30) VIA MS TEAMS

0. Opening remarks by the Chairperson

Background:

The Chairperson welcomed the NTW-CG members and commenced the second NTW-CG meeting by outlining the agenda for adoption by its members.

Outcome:

The Chairperson welcomed the NTW-CG members, including the three new members, Cassa Depositi e Prestiti, Clearstream International and SWIAT, to the group. To collect feedback and facilitate interaction among all members, a survey tool was used to ask introductory questions. Examples of responses are included in the annex of this meeting outcome.

While outlining the agenda, the Chairperson highlighted that the agenda items and corresponding presentations reflected information that was previously requested by the members. The members adopted the agenda without any changes.

1. Overall scope of Eurosystem exploratory work for 2024

Background:

The ECB presented the overall scope of the planned Eurosystem exploratory work for 2024, taking into account the feedback received from members after the first NTW-CG meeting (21 June 2023). The ECB presented the following topics: (i) scope of trials, (ii) roadmap with timeline and key milestones.

Members were invited to:

Share their views on the optimal timing for a call for interest and duration of trials.

Background documentation:

Presentation on scope and envisaged timeline of Eurosystem exploratory work for 2024

Outcome:

The ECB repeated that one of the Eurosystem exploratory work objectives is to support innovation by offering settlement in central bank money and ensuring the continued relevance of central bank money as monetary anchor in the presence of new technologies. This has led the Eurosystem to decide on launching the exploratory work planned for 2024 based on three solutions presented in more detail in this agenda item. All three solutions will be available to market participants in parallel. As the aim of the trials is to gain as many general and solution-specific insights as possible, the Eurosystem encourages cross-participation in trials with the different solutions as it facilitates direct comparisons.

The exploratory work in turn does not prejudice that the existing TARGET Services will be changed nor that one of the solutions would eventually be adopted. The ECB further recalled that the Eurosystem will minimise any potential impact of the exploratory work on TARGET Services. To ensure this, there will in particular be no changes to current rules for access to central bank money; opening hours for settlement during the day will be shorter than the normal TARGET operating hours. Other constraints (e.g. value/volume of transactions and use cases) are currently being discussed within the Eurosystem. The Eurosystem also highlighted to provide more clarity on the eligibility criteria for participation in the next meeting.

The ECB reminded participants interested in trials/experiments that it will be up to them to identify business and use cases they wish to trial/experiment with. Moreover, they are responsible for conducting their own internal legal assessments.

Members were asked (see figure 1 in annex) if they would prefer having (i) an early “lightweight” call for interest with less information available or (ii) a later call for interest with a more comprehensive package of information (with the Eurosystem and NTW-CG having advanced more on all topics). The majority of the members was in favour of having more information available and accept a later call for interest, arguing that such approach would better facilitate the internal decision-making on potential participation. Some members suggested to organise an early (informative) announcement to the market and maintain the call for interest as planned.

With regard to the optimal duration of trials, most members preferred a duration of around six months, under the understanding that the solutions would be offered in parallel during that period. Members in favour of a longer duration than six months mentioned benefits in terms of testing all asset lifecycle events and generating asset liquidity. The Eurosystem will further define the duration of the trials taking into account the expressed views of the members and align with the internal Eurosystem timelines.

2. Interoperability-type solutions

2.1 Operational model for trials (as introduction to the presentations of the central bank solution providers)

Background:

As an introduction to the presentations on the interoperability-type solutions (see agenda item 2.2), the ECB presented the overall approach chosen for the start of exploratory work in 2024, including the operational model, settlement finality and connectivity.

Background documentation:

Presentation on operational model for trials

Outcome:

Members received information on the operating model for trials applicable across the three interoperability-type solutions. More specifically, on the envisioned ad hoc setup for trials versus the steady state, settlement finality and liquidity management. In the ad hoc setup for trials, the ECB explained that the solution providing central banks would provide ad hoc connectivity to the different environments, that central bank money settlement occurs under the current TARGET Services Framework, and that the ad hoc escrow mechanism would be used for the TIPS Hash-Link and Full-DLT Interoperability solutions.

The ECB explained the purpose of the escrow mechanism during trials for minting/burning the exploratory liquidity for the TIPS Hash-Link solution (i.e. exploratory cash balances) and for the Full-DLT Interoperability solution (i.e. exploratory cash tokens). Such a mechanism would be needed specifically for trials as these two solutions would rely, if implemented, on new liquidity pots being set up. For the Trigger solution no escrow mechanism would be required: the settlement of central bank money would take place in the existing RTGS component of TARGET Services. All central bank money funds on the escrow accounts would be released on an intraday basis and no funds could remain overnight. For the three solutions, the finality of the settlement of the cash leg would be guaranteed by the Eurosystem in T2. The ECB clarified that the escrow mechanism would be applied only for the duration of trials and that this mechanism will not reflect the steady state if a solution would be considered for adoption.

2.2 Presentations on the interoperability-type solutions by the central bank solution providers (CBSPs)

Background:

Following the high-level overviews of the first NTW-CG meeting and input received from NTW-CG members as regards market participants' needs to plan 2024 activities should they choose to join the Eurosystem's exploratory work, more detailed presentations on the interoperability-type solutions for central bank money settlement were presented. Experts from the three central bank solution providers (CBSPs) each presented the features of the three solutions (i.e. setup, technology, settlement process), taking into account the input received from NTW-CG members via written procedure: (i) Trigger solution by the Deutsche Bundesbank, (ii) TIPS Hash-Link solution by the Banca d'Italia, (iii) Full-DLT Interoperability solution by the Banque de France.

Members were invited to:

- Seek further clarifications on the solutions as presented, and share relevant use cases and objectives for trials and/or experiments.

Background documentation:

- Presentations of the CBSPs on the three interoperability-type solutions
- Publications from the CBSPs on the interoperability-type solutions: Trigger ([link 1](#); [link 2](#)), TIPS Hash-Link ([link](#)); Full-DLT Interoperability solution ([link 1](#); [link 2](#)).

Outcome:

Experts from the three CBSPs presented their respective solution, focusing on the main functionalities (i.a. the interoperability mechanisms), technical details/features (i.a. connectivity), overview of DvP transaction flow, (technical) onboarding.

The CBSPs clarified that the presented technology design of the solutions is what participants will be able to trial/experiment with. Participants should identify for themselves what is required on their side, depending on the use case they envisage (e.g. to operate smart contracts for different purposes, such as for interoperability mechanism or for complex transactions).

The CBSPs made clear that the connectivity to the solutions is technology neutral and that participants have different possibilities (e.g. API, smart contract, interoperability mechanism designed by a market participant) to invoke the required functions on the different platforms of the solutions. The central bank experts also provided more information which technologies would be used on the different platforms and for which functionality.

Regarding the question raised on a possible integration of the solutions with existing TARGET Services, if after the exploratory work one of the three solutions would be considered for adoption, the CBSPs repeated the reason behind the current focus of the interoperability-type solutions for exploratory work

(see first NTW-CG meeting). In terms of adoption, these three solutions would be expected to require the least effort for development and integration in the existing TARGET Services environment. It was clarified that the outcome of the trials and experiments will contribute to the understanding of whether the implementation of these solutions could be reasonable (also in comparison to other solutions) and how a potential integration/implementation could look like.

Examples raised by members of use cases for trials were trading of listed and unlisted securities settled on a DLT infrastructure, issuance of a security on a DLT, coupon payments. In line with what members raised in the first NTW-CG meeting (i.e. strong preference to focus on DvP for exploratory work), the presented transaction flows for the three solutions mainly focused on DvP. To advance on the PvP cases, the ECB invited members to raise relevant ideas or insights for certain use and/or business cases for PvP as follow-up to this meeting.

For experiments, members flagged that the objective of running experiments would be to try out certain aspects of the solutions that would not be straightforward to test in trials with real central bank money settlement (e.g. scalability, resiliency, reliability of the solutions, performance testing with different market DLTs in parallel for each solution).

Members shared their views on the benefits of an open infrastructure in general while acknowledging that a new infrastructure for wholesale settlement would come with needed requirements including controlled participation.

As next steps after the exploratory work, the ECB pointed out that the first step would be to analyse what key takeaways could be drawn from the three interoperability-type solutions by evaluating different aspects (e.g. risk of market fragmentation, how good is the interoperability with the various market DLTs) before considering other solutions for trials/experiments.

Action point for next meeting:

Written follow-up to be launched after the meeting inviting members to share use cases for PvP transactions

3. Q&A

Background:

NTW-CG members were invited to raise questions if there were other remaining points that had not been covered in the previous presentations.

Outcome:

The Chairperson walked through the key points raised by members in the written feedback received after the first NTW-CG meeting and highlighted those topics that are still being discussed internally within the Eurosystem, including aspects to the legal framework (e.g. liability, intellectual property rights) and limitations in terms of value and volume of transactions during trials. For intellectual property rights, members flagged that clarity on disclosure of information regarding trials, use cases and participants would be helpful.

Members raised the following topics on which they would like to receive more details: technical (integration) requirements to better evaluate the required budgeting for trials; and specific technical features related to the solutions (e.g. encryption of transactions/data, protocol version, VPN).

4. AOB, closing remarks and upcoming meetings

Background:

The members were informed of the meetings scheduled for 2023. Members were also recalled that the **07 September** NTW-CG meeting will be a physical meeting at the ECB premises.

In addition, members were invited to raise any other business items under this agenda item.

Outcome:

The Chairperson closed the meeting with concluding remarks and recalled that the third NTW-CG meeting on 07 September will be in person at the ECB premises in Frankfurt, for which logistical information will be communicated soon. An opportunity for networking is foreseen prior to the start of and during the actual meeting. The NTW-CG members also took note of the meeting schedule for the upcoming meetings of 2023.

ANNEX: Examples of results from survey tool

Figure 1:

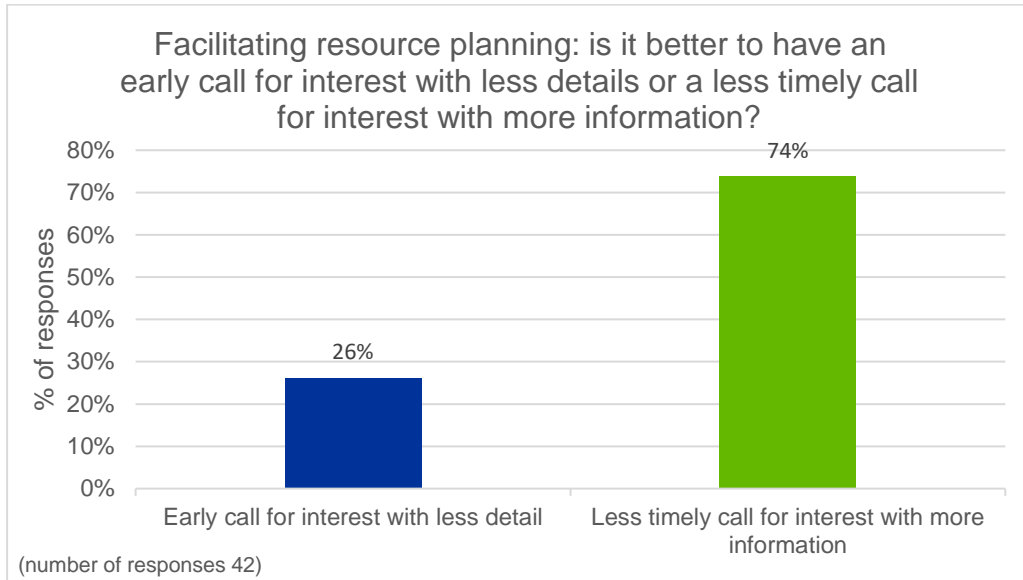


Figure 2:

