



EUROPEAN CENTRAL BANK

EUROSYSTEM

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ISO message freeze period in T2S

Joint AMI-Pay / AMI-SeCo meeting

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ISO message freeze period in T2S

- The T2-T2S Consolidation and ECMS projects require substantial changes in the context of ISO messaging:
 - migration of T2 from SWIFT FIN messages to the ISO 20022 message standard
 - usage of securities' ISO 20022 messages and development of new messages based on the ISO 20022 message standard for the new ECMS application
- Accordingly, the users of T2 and ECMS affected by these changes requested a period with a stable and defined message schema, i.e. to have ISO Maintenance Release 2019 as basis for implementation of both projects, considering that T2 and ECMS have 16 messages in common use.
- From the T2S perspective we should take note that:
 - T2S is designed to only support a single ISO message standard on one ISO Maintenance Release version (full implementation), and
 - T2S is/will be interacting with T2 (19 messages in common use) and ECMS (51 messages in common use), hence
 - there are project/operational risks stemming from inconsistency if the three services T2, ECMS and T2S are not using the same ISO message standard.
- **Way forward: Introduce an ISO message freeze period in T2S between November 2020 and November 2023.**

Besides the Eurosystem analysed alternatives to the ISO freeze in T2S. The outcome of the investigation is as follows:

1) Upgrade T2S to allow for support of two different ISO message versions in its communication with ECMS and T2

- Pro: No ISO Maintenance Release freeze
 - Contras:
 - Overall technical feasibility not proven yet.
 - Requires T2S Change Request with high implementation effort, resulting also in additional annual maintenance effort.
 - There are other priorities in T2S at this stage (e.g. implementations related to R.3.2 and the CSDR).
 - Implementation of such upgrade in T2S is not feasible within the available timeframe required by the T2-T2S Consolidation and the ECMS projects (availability for testing in Q4 2019).
- The Eurosystem would be willing to examine the feasibility of such change at a later stage, if the T2S community considers it important for the future to provide respective functionality in T2S. In any case, this would not be a solution for the present scenario.

2) Introduce no ISO message freeze period in T2S at all

- Pro: No ISO Maintenance Release freeze
 - Contras:
 - This option ignores (i) the magnitude of messages in common use by T2S/ECMS and T2S/T2; and (ii) the interlinks between payment and securities messages (e.g. semt/sese information is needed also in camt/colr messages).
 - Risk of inconsistency (e.g. datatypes, format definition for the same business elements) between the different services with possible effects on both the ongoing projects (delays and scope creep) and the services in operation (blocking of communication/processing between/in the different services):
- Based on the above this is not a viable option as it would endanger the operability of T2S and interoperability across all services.

3) Limit the ISO freeze to the timeline of the T2-T2S Consolidation project

- Pro: Shorter freeze period with less effort to catch up
- Contras:
 - Similar to previous option.
 - Although the risk of inconsistency between T2 and T2S will be mitigated, the risk remains valid for the ECMS and its interactions with T2 and T2S.
- Based on the above the freeze cannot be limited to the timeline of the T2-T2S Consolidation project but needs to cover also the usage, development and integration of new messages for ECMS.

4) Postpone the T2-T2S Consolidation and ECMS projects

- Sub-option 1) Postpone go-live of T2-T2S Consolidation and ECMS to allow for an upgrade of T2S to support two different ISO message versions
 - Contras:
 - Uncertainty related to technical feasibility.
 - Only a substantial delay would allow for this option.
 - Substantial increase of costs for all impacted services.
 - Uncertainties expected causing incalculable risks.

- Sub-option 2) Postpone go-live of T2-T2S Consolidation and EMCS to allow for an upgrade of T2 and ECMS to support two different ISO message versions
 - Contras:
 - Uncertainty related to technical feasibility.
 - Only a substantial delay would allow for this option.
 - Substantial increase of costs for the projects.
 - Costs incurring on T2S side could be more limited, but same level of uncertainties expected causing incalculable risks.

The RMSG and PMG discussed the ISO message freeze in its meetings held in July and August 2018. The following concerns were raised by participants:

1) Is there a risk for regular ISO freeze periods in the future?

The **freeze is a one-off** exercise, required only once now due to the upgrade of T2 from SWIFT FIN to the ISO 20022 message standard and to introduce ISO 20022 within the ECMS.

Once having adapted to the ISO 20022 message standard for all services the Eurosystem does not expect the need to migrate to another standard in the near future. Even for the development of new projects or potential significant changes to existing services no similar freeze should be needed.

After the freeze, the T2S minor release in November each year will introduce the upgrade to the most recent ISO Maintenance Release; corresponding updates will also need to go live for both T2 and ECMS in parallel.

2) *What if an ISO Maintenance Release during the freeze period includes changes that have critical business implications for CSDs?*

If required, **ad hoc exceptions** could be made during the freeze period to update certain messages in order to meet participant's needs. As in the past, this will be done by designing specific solutions that only require the initiation of a T2S Change Request but without the registration of an ISO Change Request.

Examples that could be handled as ad hoc exceptions:

- Field is in a message used by T2S, but in fact is not used, e.g. *CR-588*
- Field is included in a basic message and needs to be unpruned, e.g. *CR-606*
- Usage of a specific alternative in a respective message, e.g. *CR-668* (“*additional release information*”) or *CR-503* (“*Processing Identification field*”)
- Usage of a tool “supplementary data block” foreseen by ISO, e.g. *CR-653* (“*reporting of the partially released quantity*”) or a request on *semt.018* messages to replace A2A queries during end-of-day process

3) *Workload to catch up after the freeze period?*

With the upgrade of T2S from ISO Maintenance Release 2012 to ISO Maintenance Release 2017 (T2S R.3.0 in June 2019) and 2019 (T2S R.4.2 in November 2020) the messages will be brought up-to-date introducing major changes.

At this stage **no major ISO changes** are expected for the ISO Maintenance Releases to be implemented after the freeze period. Also, significantly **less effort** is expected to catch up compared to the freeze ongoing in T2S since 2012 as the new freeze period will be much **shorter**.

4) Will this freeze be compliant with the CSDR requirements on communication procedures?

ESMA confirmed that the **freeze is compliant with the CSDR** requirements set out on communication procedures.

The relevant Article 35 of the CSDR generically refers to the usage of “international open communication procedures and standards for messaging and reference data in order to facilitate efficient recording, payment and settlement”. There is no strict reference to mandatorily make use of the latest available versions of the communication procedures and standards at all times.