



EUROPEAN CENTRAL BANK
EUROSYSTEM

SCoREBOARD

Advisory Group on Market Infrastructures for
Securities and Collateral

Sixth Compliance and Progress Report

June 2023



Contents

Executive summary	2
Markets participating in the survey and the entities monitored	3
Progress towards the current milestones	3
Compliance with the standards	7
Background	9
Structure of this report	12
1 Participants in the H1 2023 monitoring exercise	13
2 Progress towards the milestones	14
2.1 Progress towards the milestones – Triparty Collateral Management Standards	15
2.2 Progress towards the milestones – Corporate Actions Standards	17
2.3 Progress towards the milestones – Billing Processes Standards	24
3 Compliance with the standards defined for each activity	31
3.1 Compliance with the Triparty Collateral Management Standards	31
3.2 Compliance with the Corporate Actions Standards	34
3.3 Compliance with the Billing Processes Standards	50
4 ISO 20022 adoption	57
Annex 1: Markets participating in the surveys and monitored entities	58
Annex 2: Methodology applied for the monitoring exercise	60

Executive summary

This report is part of a series of regular reports published by the Eurosystem's Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) covering the progress made in defining and assessing compliance with the Single Collateral Management Rulebook for Europe (SCoRE).

The report presents the results of the monitoring exercise carried out for the first half of 2023 (data as at 21 April 2023) and covers four main areas, as outlined in Figure 1.

Figure 1
SCoREBOARD overview



This report focuses on the milestones that were to be met by 21 April 2023, i.e. by the survey closing date. In this monitoring exercise, participants were expected to have reached Milestone 9 – **Internal Testing Complete for SCoRE**. Entities were expected to have completed the necessary internal testing to comply with the SCoRE Standard by 10 March 2023.

The results presented in this SCoREBOARD report confirm the strong commitment and willingness of all stakeholders to implement the standards in line with the agreed roadmap.

Markets participating in the survey and the entities monitored

This monitoring exercise covers 29 out of the 30 AMI-SeCo markets, the same number as in the previous round. All seven triparty agents (TPAs) took part in the survey, alongside 37 out of 38 central securities depositories (CSDs). As in previous exercises, the engagement of more custodians and issuers in AMI-SeCo markets is needed to make survey outcomes more representative.

Progress towards the current milestones

In each survey, respondents are invited to indicate (i) if they are still on track to achieve the future milestones within the corresponding deadlines, (ii) whether the current milestones to be met within the reporting period (see Section 2) have been achieved and (iii) whether past milestones have been met.

In most cases the survey results did not suggest any major obstacles to achieving full compliance with the SCoRE Standards at the current juncture. However, the entities concerned need to make further efforts to achieve full compliance with all the standards on time.

Triparty Collateral Management

There have been some delays in the implementation of the SCoRE Standards in the area of triparty collateral management with regard to interim adaptations. This gives cause for concern, as only four (out of seven) TPAs will achieve compliance on time. However, the three remaining TPAs are expected to become compliant shortly after the deadline (the exact date of implementation is still subject to confirmation).

Past milestones

- All seven TPAs have started their analysis (Milestone 1) and initial user communication (Milestone 2).
- Five TPAs have completed their respective detailed analysis (Milestone 3) and four TPAs completed their documentation (Milestone 4). Three TPAs will complete their documentation at a later date (BNY Mellon, Euroclear Bank and Euroclear France). Five TPAs have started external communication (Milestone 5). Five TPAs have started adapting internal processes (Milestone 6).
- Four TPAs indicated that they are behind schedule in completing their adaptations (Milestone 7), i.e. BNY Mellon, Euroclear Bank, Euroclear France, - Clearstream Banking Luxembourg (CBL) and J.P. Morgan.
- Two TPAs (Euroclear Bank and Euroclear France) indicated that they are experiencing delays in starting internal testing (Milestone 8).

Current milestone

Most TPAs indicated that they are behind schedule in completing their internal testing (Milestone 9), i.e. BNY Mellon, Euroclear Bank, BNP Paribas, Euroclear France, and CBL.

Future milestones

- Four (out of seven) TPAs plan to be able to implement the standards (i.e. achieve the final milestone, Milestone 13) on time, i.e. BNP Paribas, CBL, JP Morgan and SIX SIS¹.
- Three TPAs (BNY Mellon, Euroclear Bank and Euroclear France) stated they will implement the standards at a later date (expected by the end of 2024). The detailed milestones for the implementation are still to be confirmed for Euroclear Bank and Euroclear France (and are expected by the start of 2024 at the latest).

Corporate Actions

The implementation of the SCoRE Standards for Corporate Actions is behind schedule in the area of interim adaptations. This has raised some concerns, but most CSDs (25 out of 38) plan to be compliant on time. The delays reported by 12 CSDs range from several months to two years, which in some cases is a long period of time. The overall delays in the euro area for CA on debt instruments relate to three markets (CY, GR/AthexCSD and SK). In addition, specific delays, which do not have an overall impact, relate to two markets (BE/NBB-SSS for new features not currently offered and FI for specific cases on reversals and reporting). The delays in the non-euro area relate to seven markets (BG/BNBGSSS, CH, CZ/SKD, HU, RO/SaFIR, SE and UK), which in most cases envisage delays of up to two years, i.e. until end 2025. One CSD has not taken part in the reporting yet, i.e. Euronext Securities Oslo (NO).

Past milestones

- 34 (out of 38) CSDs have now started analysis (Milestone 1).
- 34 CSDs have now provided initial communication to their users on the SCoRE Standards (Milestone 2).
- 27 CSDs have completed their respective detailed analysis (Milestone 3). Ten CSDs are experiencing delays in completing this analysis (i.e. NBB-SSS – for new functionalities, SIX SIS, Cyprus Stock Exchange - CSE, CSD Prague, SKD, AthexCSD, KELER, Euroclear Sweden, CDCP and Euroclear International - EUI).
- 26 CSDs have completed their documentation (Milestone 4) and have started detailed communication (Milestone 5).

¹ SIX SIS indicated the TPA will be slightly later (June instead of April).

- 28 CSDs have started the adaptation process (Milestone 6).
- 28 CSDs have not completed their adaptations (Milestone 7). In particular, the delays observed in 9 CSDs (CH, CY, CZ/SKD, FI, GR/AthexCSD, HU, RO/SaFIR, SE and UK) are a cause for concern as they are leading to delays in the final adoption of the standards.
- 20 CSDs have not started internal testing (Milestone 8). The delays experienced in 9 CSDs (CH, CY, CZ/SKD, FI, GR/AthexCSD, HU, RO/SaFIR and SE and UK) are a cause for concern as they will not start testing until the end of 2023 or thereafter.

Current milestones

- 36 CSDs indicated that they are experiencing delays in completing internal testing (Milestone 9).

Future milestones

- 25 CSDs are confident that they will implement the standards on time. 11 CSDs expect some delays and will not implement all standards on time (NBB-SSS for new features, BNBGSSS, SIX SIS, CSE, SKD, Euroclear Finland for specific, AthexCSD, KELER, SaFIR, Euroclear Sweden and EUJ). 1 CSD (CDCP) requires an update of their planning. Euronext Securities Oslo (NO) did not report.
- All seven TPAs indicated that they will be able to implement all the standards on time (Milestone 13).
- Custodians have not made many preparations. Awareness must be increased by national stakeholder groups (NSGs) to ensure that the deadline for achieving compliance with the standards will be met.

Billing Processes

The implementation of the SCoRE Standards in the area of billing processes is behind schedule with regard to the achievement of interim milestones, but this is explained by the need to implement fewer changes (and implementation is therefore planned to start later). Most CSDs (29 out of 38), will become compliant on time. Four CSDs are reporting delays ranging from several months and three CSDs report delays up to two years, which is a lengthy period of time but provides planning certainty. One CSD (Euroclear Finland) reports a delay of over two years for specific standards, which requires updated planning. One CSD did not report, i.e. Euronext Securities Oslo (NO).

Past milestones

- 35 CSDs have started their analysis (Milestone 1) and 35 CSDs have provided initial communication to their users (Milestone 2). 27 CSDs have completed their analysis (Milestone 3).
- 26 CSDs have documented their internal processes (Milestone 4), 21 have provided detailed communication (Milestone 5) and 25 have started their adaptations (Milestone 6).
- 5 CSDs have completed adaptation (Milestone 7) and 8 have started internal testing (Milestone 8). However, overall they remain on track and attribute the later start date for testing to the smaller number of changes (and therefore less testing) required for CSD billing processes.

Current milestones

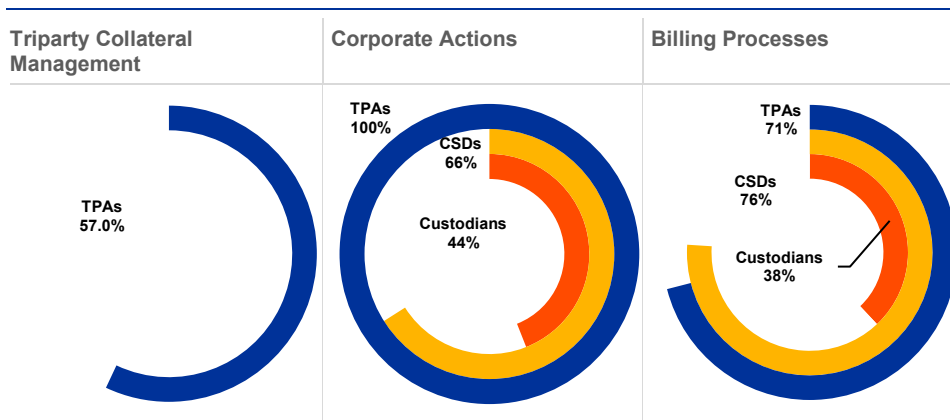
- 4 CSDs indicated that they have completed internal testing

Future milestones

- Most CSDs plan to implement the Billing standards on time, while 7 CSDs expect delays in overall implementation, i.e. BNBGSSS (12/24), CSE (11/24), SKD (11/25), Euroclear Finland (12/29), AthexCSD (11/24), KELER (11/26) and Euroclear Sweden (01/26). One CSD did not report, i.e. Euronext Securities Oslo (NO). 1 CSD (EUI) requires an update of their planning.
- 5 TPAs expect to meet the final milestone on time, i.e. they are confident that they will implement all standards by April 2024. BNY Mellon plan to reach compliance later (11/24). BNP Paribas should review its planning to comply with the Billing Processes Standards.
- Custodians are falling behind in their preparations. Therefore, awareness must be raised by NSGs to ensure that the deadline for achieving compliance with the standards will be met.

Chart 1

Expectations of meeting the final milestone (Milestone 13) by 8 April 2024



Notes: The percentages are calculated based on the expected number of respondents across all AMI-SeCo markets. See Section 2 for further details.

Compliance with the standards

Triparty Collateral Management Standards

Compliance by TPAs with the Triparty Collateral Management Standards is overall on track for workflows/processes (Standards 2 to 6) and implementation has been achieved to a large degree for three standards – Standard 12 (Partial allocation), Standard 14 (Usage of baskets) and Standard 15 (Future dated processing). Additional efforts need to be made to ensure more progress on ISO 20022 messaging (Standard 1), unilateral removal (Standard 7), reporting on flows (Standard 8) and reference data (Standard 13) to ensure that the requirements are implemented.

Corporate Actions Standards

The highest level of compliance has been achieved in seven standards relating to market practices, i.e. relating to rounding rules, negative cash flows, business day conventions, securities amount data and payment times (Standards 4 to 8), default options (Standard 11) and foreign currency (Standard 14).

The two standards for workflows and reversals (Standard 1 and 13) are on track.

Implementation is behind schedule for six standards in specific areas of corporate actions, but no showstoppers have emerged, i.e. meeting events (Standard 1G to 1H), data for calculating proceeds (Standard 2), consistency of data (Standard 3), processing status (Standard 9), elective events (Standard 10) and fees on meeting events (Standard 12).

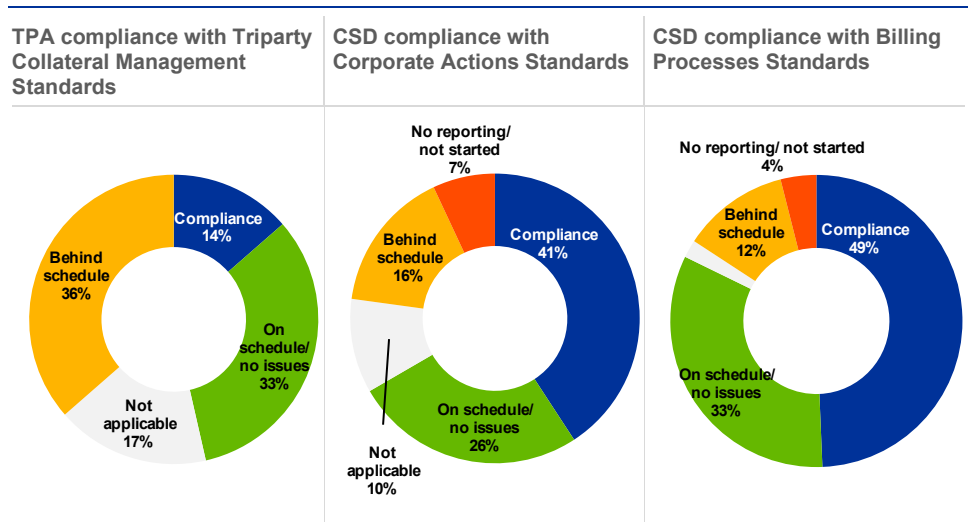
It is acknowledged that CSDs have started to upgrade their systems to process meeting events. In addition, they have started to engage with issuers to ensure that issuers (and their agents) provide meeting information in accordance with the SCoRE Rulebook. However, if the issuer/issuer agents do not channel information on meeting events via the CSD, the market is considered non-compliant with the standards. The non-compliance for meeting events is related to the following markets: BE (Euroclear Settlement of Euronext-zone Securities - ESES, NBB-SSS) FR (ESES), NL (ESES), CY (CSE), DK (Euronext Securities Copenhagen - ESC), GR (AthexCSD), HU (KELER), IT (Euronext Securities Milan - ESM), EE/LT/LT (Nasdaq), LU (CBL, LuxCSD), MT (Malta Stock Exchange - MSE), PL (KDPW), PT (Euronext Securities Porto - ESP), RO (Depozitarul Central), SE (Euroclear Sweden), SI (KDD), SK (CDCP). Communication on the standards towards issuers/issuer agents should have taken place, but this may not have been done consistently. A stock take is therefore taking place on the communication of the standards in each market.

Billing Processes Standards

The level of compliance with Billing Processes Standards is already high, but further efforts will be needed in 2023 to ensure that all the relevant standards will be on track for full implementation by 8 April 2024.

Chart 2

TPA and CSD compliance with the standards



Notes: The percentages are calculated based on the number of standards of a certain colour across all AMI-SeCo markets. For further details, please refer to the SCoREBOARD in Section 3.

Further details on the implementation status across all AMI-SeCo markets can be found in Sections 2 and 3.

Background

Since the publication of the [Collateral Management Harmonisation Report](#) in December 2017, the Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) has made a number of significant breakthroughs in its ambition to create a **S**ingle **C**ollateral Management **R**ulebook for **E**urope (SCoRE).

What is SCoRE?

SCoRE defines common rules for managing collateral in Europe. These rules will replace the fragmented legacy standards, structural constraints and complex and diverse market practices that exist across Europe today. Implementation of SCoRE should remove operational impediments to the availability, usage and mobility of collateral. Market participants in AMI-SeCo have committed to implementing the SCoRE Rulebook, with the first set of rules due to be implemented by April 2024. Their implementation efforts are regularly monitored by AMI-SeCo.

How does SCoRE contribute to the capital markets union?

This SCoRE initiative delivers on AMI-SeCo's mandate to foster European financial market integration and promote a true single market in Europe. Implementation of SCoRE will have material benefits for the EU capital market and ultimately make it easier for:

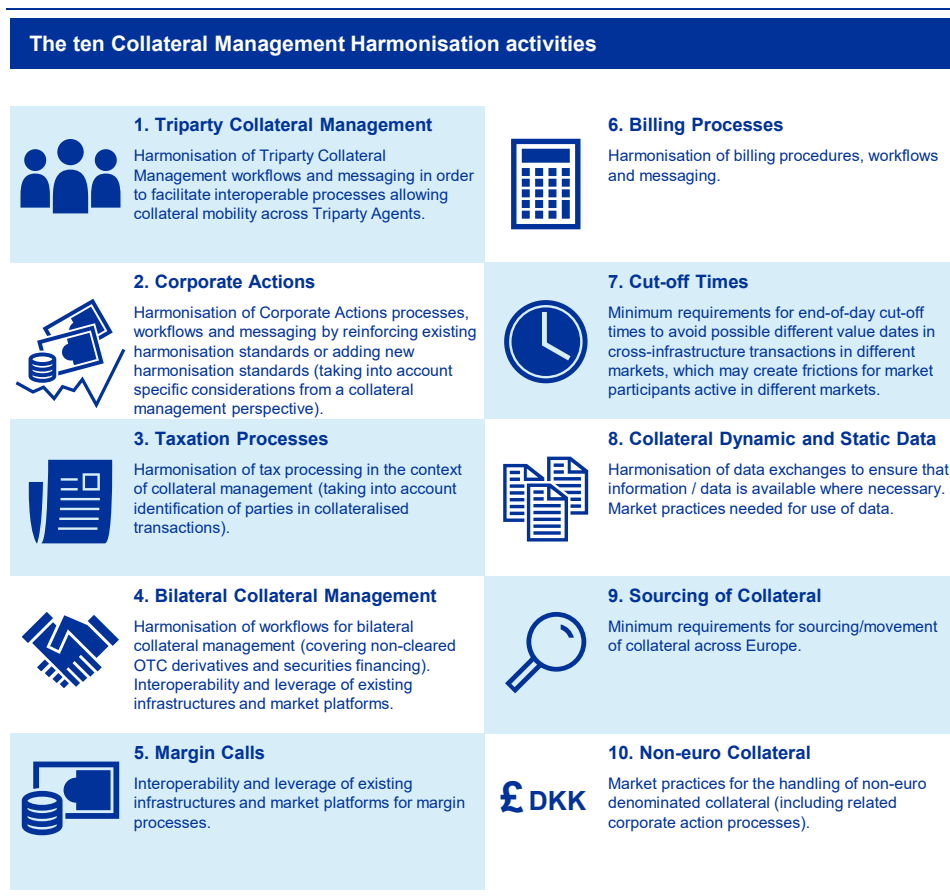
- market participants to move their securities and collateral safely and efficiently between EU countries, without friction or restrictions;
- investors to buy securities in any EU country and use them as collateral in the same or any other EU country;
- banks to move collateral and securities quickly to where they are needed.

SCoRE defines common rules for managing collateral

The SCoRE initiative was launched in December 2017 with the identification of ten activities for which further harmonisation was needed in order to improve the efficiency of collateral management in Europe.²

² Please refer to the [Collateral Management Harmonisation](#) report for further information.

Figure 2
Ten SCoRE activities



Each of these ten activities is analysed by a dedicated AMI-SeCo task force on collateral management harmonisation (CMH-TF) with a view to defining harmonisation standards (SCoRE Standards).

What is the current status?

So far, AMI-SeCo has defined a series of standards in three areas deemed important for collateral management within Europe, namely:

- **Triparty Collateral Management** – a Single Triparty Model for Europe has been agreed with common processes for interaction between all major European triparty service providers and their participants, including the Eurosystem, using ISO 20022 messaging.
- **Corporate Actions** – a first set of harmonised business processes and workflows for managing corporate actions on securities held in custody or provided as collateral, foreseeing the use of ISO 20022 messaging. Harmonised processes allow continued use of securities as collateral over the record date of a corporate action event, thus increasing collateral availability.

- **Billing Processes** – a single set of rules for the transmission of billing information by post-trade service providers involved in custody and collateral management, including the alignment of billing frequency and dates and using ISO 20022 messaging; this would result in the implementation of an e-invoicing solution by all account servicers in Europe.

Work to define standards in other areas deemed relevant for collateral management is ongoing.

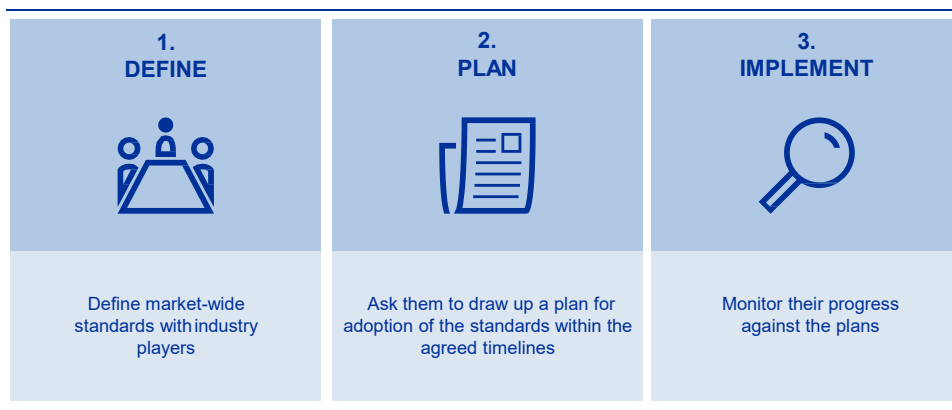
Implementation efforts

AMI-SeCo has agreed a **Monitoring Framework** that sets out the methodology to be used in monitoring implementation of the standards. The Framework consists of three phases.

1. **Phase 1** involves the definition of standards for each of the aforementioned ten activities.
2. **Phase 2** consists of a planning phase in which adaptation plans are drawn up in each market.
3. **Phase 3** focuses on monitoring the implementation of the plans to ensure that this remains on schedule and in line with the agreed milestones.

Figure 3

The three phases of the Monitoring Framework



Define

In 2019 AMI-SeCo endorsed the definition of the first set of AMI-SeCo Standards covering the first three activities and published the corresponding rulebooks, which were then updated in 2021, namely:

- **Triparty Collateral Management** (June 2021).
- **Billing Processes** (June 2021).
- **Corporate Actions** (December 2021).

Plan

Details of the Adaptation Plans drawn up for these three activities can be found in the [SCoRE Adaptation Plans Status Report](#) (as at June 2021).

Implement

This report focuses on the implementation of the standards that have already been defined, i.e. the Triparty Collateral Management, Corporate Actions and the Billing Processes standards.

Structure of this report

The report is structured as follows:

- **Section 1** gives an overview of the participants in the survey.
- **Section 2** focuses on the progress towards the milestones.
- **Section 3** depicts entities' compliance with the standards.
- **Section 4** monitors the progress made on market-wide adoption of the ISO 20022 messaging protocol.
- Two annexes are also included, one of which describes the methodology applied to obtain the findings of this SCoRE monitoring exercise.

1 Participants in the H1 2023 monitoring exercise

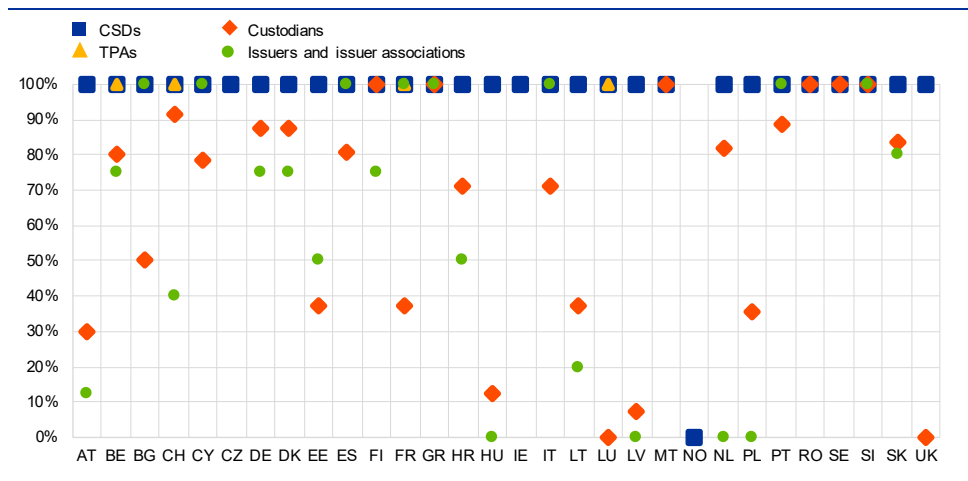
29 out of 30 AMI-SeCo markets took part in the H1 2023 monitoring exercise. All triparty agents (**TPAs**) (7 out of 7) and most central securities depositories (**CSDs**) (37 out of 38) participated in the exercise. There was also broad involvement of **custodians** in the exercise. In many markets, at least four custodians took part in the reporting exercise, thus ensuring wide coverage of custody activities in each market. In some markets, further engagement is needed in order to achieve broader representation of custodians. Of the 170+ custodians in the AMI-SeCo community, about 105 took part in this monitoring exercise.

Issuer engagement has commenced in the field of corporate actions. Further work on issuer engagement is needed in all markets. 42 issuers and issuer associations took part in the monitoring exercise.

Among non-participating **markets**, further engagement has commenced with a view to putting in place the necessary reporting structures and ensuring participation in future exercises.

Of the **markets currently without an NSG** (i.e. the Czech Republic, Iceland, Norway and the United Kingdom), some are making progress towards establishing NSGs or coordination forums to support the implementation of the Single Collateral Management Rulebook for Europe.

Chart 3
Participation rate by market and entity type (based on completed surveys)



2 Progress towards the milestones

A series of key milestones were identified by AMI-SeCo to serve as the basis for assessing the progress made by market stakeholders with implementing the standards and for assigning the colour-coded assessment throughout the implementation phase.

The milestones facilitate consistent implementation across markets (given the long-term efforts that are needed) and avoids issues remaining undetected until the deadline for compliance.

In each survey, all the entities are asked to confirm (on a yes/no basis) whether the milestones identified in the Adaptation Plans would be met by the time the survey was closed. They are also asked if they expect the subsequent milestones to be met by their respective deadlines.

There are 13 milestones in total, as set out in the table below. The milestones shaded in blue (i.e. M1 to M9) were expected to be achieved within the current monitoring cycle.

Table 1
13 milestones identified by AMI-SeCo

Milestone	Description	Date
M1	Analysis Started: Have you commenced an in-depth analysis of all applicable SCoRE Standards to identify and document all the changes required to internal processes and procedures in order to comply with the SCoRE Standards?	30/06/2020
M2	Initial Communication: Has initial high-level communication with external stakeholders on the changes introduced by SCoRE commenced?	01/03/2021
M3	Analysis Completed: Have you completed an in-depth analysis of all applicable SCoRE Standards?	31/07/2021
M4	Documentation Completed: Have you documented all the internal processes and procedures which need to be adapted in order to comply with the SCoRE Standards?	31/12/2021
M5	Detailed External Communication: Has detailed communication started regarding (i) upcoming changes in business processes, (ii) messaging formats and usage guidelines (in the case of new messages based on non-registered latest drafts by SWIFT), and (iii) planned testing activities been provided to users?	31/12/2021
M6	SCoRE Adaptation Started: Have you started to adapt/develop the processes and procedures in order to comply with the SCoRE Standards?	01/01/2022
M7	SCoRE Adaptation Complete: Have you completed the necessary adaptations/developments for the processes and procedures in order to comply with the SCoRE Standards?	30/06/2022
M8	Internal Testing Started for SCoRE: Have you started to test the changes to your internal processes and procedures which have been introduced in order to comply with the SCoRE Standards?	01/07/2022
M9	Internal Testing Complete for SCoRE: Have you completed the necessary internal testing?	10/03/2023
M10	External Testing Started for SCoRE: Are you in a position to test the changes introduced in order to comply with the SCoRE Standards with your user community (i.e. CSD participants/collateral givers and collateral takers in the context of the standards applicable to TPAs)?	22/05/2023
M11	Final External Communication on SCoRE: Has final communication to users been provided (i.e. updated user guide to reflect the changes implemented, final message usage guidelines for A2A communication) related to the SCoRE Standards?	22/05/2023
M12	External Testing Completed for SCoRE: Is the testing of the changes introduced in order to comply with the SCoRE Standards with your user community completed (i.e. CSD participants/collateral givers and collateral takers in the context of the standards applicable to TPAs)?	16/02/2024
M13	SCoRE Standards Implemented: Have the SCoRE Standards been implemented?	08/04/2024

The H1 2023 monitoring exercise focuses on Milestones 1 to 9, given that Milestone 9 (with a deadline of 10 March 2023) was meant to have been achieved by the time the survey closed.

In each survey round, all the entities are asked to confirm (on a yes/no basis) whether the milestones will be met by the set milestones dates. If not, they are also asked to state the date on which they expect to reach the milestone.

For the milestones which had to be achieved by the time the survey closed: the blue colour code is assigned to those achieved. Milestones that will be reached later than the set deadline are assigned a yellow status with indication of the likely date of achievement.

For the milestones that are only due to be achieved after the current reporting cycle: the green colour code indicates that the entity anticipates achieving that future milestone on time. A yellow status indicates that the milestone is foreseen to be met later than the set milestone date. In this case, the date of achievement anticipated is also indicated in the table.

2.1 Progress towards the milestones – Triparty Collateral Management Standards

All TPAs had to fill in the survey on Triparty Collateral Management standards. Annex 1 lists the markets and entities monitored.

Key takeaways	Action points
<p>Past milestones</p> <p>M1 (Analysis Started) and M2 (Initial User Communication):</p> <ul style="list-style-type: none"> All TPAs confirmed that they have achieved these milestones. <p>M3 (Analysis Completed), M5 (Detailed External Communication) and M6 (SCoRE Adaptation Started):</p> <ul style="list-style-type: none"> Two TPAs (Euroclear Bank and Euroclear France) are expected to complete these milestones later than expected in 2024. <p>M4 (Documentation Completed)</p> <ul style="list-style-type: none"> Three TPAs (BNY Mellon, Euroclear Bank and Euroclear France) are expected to complete these milestones later than expected in late 2023 and 2024. <p>M7 (SCoRE Adaptation Complete):</p> <ul style="list-style-type: none"> Four TPAs indicated that they are behind schedule and will complete their adaptations at the end of 2023 or in 2024 (BNY Mellon, Euroclear Bank, Euroclear France and CBL) <p>M8 (Internal Testing Started for SCoRE):</p> <ul style="list-style-type: none"> Two TPAs indicated that they are experiencing delays in starting internal testing (Euroclear Bank and Euroclear France). <p>Current milestone</p> <p>M9 (Internal Testing Complete for SCoRE):</p> <ul style="list-style-type: none"> Five TPAs indicated that they are experiencing delays in completing internal testing (BNY Mellon, Euroclear Bank, BNP Paribas, and Euroclear France and Clearstream Banking Luxembourg). <p>Future milestones</p> <ul style="list-style-type: none"> Four TPAs (out of seven) will be able to implement the standards (i.e. achieve the final milestone, Milestone 13), on time. SIX SIS indicated the TPA will be slightly later (June instead of April). Three TPAs (BNY Mellon, Euroclear Bank and Euroclear France) stated they will implement the standards later (expected by end of 2024). 	<ul style="list-style-type: none"> Four TPAs need to confirm their milestones and prepare an updated Adaptation Plan (BNY Mellon, Euroclear Bank, SIX SIS and Euroclear France).

Table 2

TPA expectations of meeting the milestones for the SCoRE Triparty Collateral Management Standards

	Milestones 1-13												
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
BE - BNY Mellon	Yes	Yes	Yes	11/23	Yes	Yes	11/24	Yes	11/24	11/24	12/24	11/24	11/24
BE - Euroclear Bank	Yes	Yes	03/24	03/24	03/24	03/24	03/24	03/24	03/24	03/24	Yes	03/24	12/24
CH - SIX SIS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	06/24
FR - BNP Paribas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	09/23	10/23	01/24	Yes	Yes
FR - Euroclear France	Yes	Yes	03/24	03/24	03/24	03/24	03/24	03/24	03/24	03/24	Yes	03/24	12/24
LU - Clearstream Banking	Yes	Yes	Yes	Yes	Yes	Yes	09/23	Yes	11/23	Yes	Yes	Yes	Yes
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

2.2 Progress towards the milestones – Corporate Actions Standards

CSDs, TPAs and custodians must become compliant with the Corporate Actions Standards as laid down in the Rulebook for Corporate Actions. Annex 1 lists the markets and entities monitored. This section presents the findings of the survey for the three categories of entity that took part in the survey.

2.2.1 CSD progress towards the milestones – Corporate Actions Standards

Key takeaways	Action points
<p>Past milestones</p> <p>M1 (Analysis Started): 34 (out of 38) CSDs have now achieved M1.</p> <ul style="list-style-type: none"> Two CSDs (Euroclear Sweden and Euroclear International) plan to start their analysis by 01/26 and 12/25 respectively, which is considered to be too late. <p>M2 (Initial User Communication): 34 CSDs have now provided initial communication to their users on the SCoRE Standards:</p> <ul style="list-style-type: none"> Two CSDs (Euroclear Sweden and Euroclear International) will provide communication to their users later than expected. <p>M3 (Analysis Completed): 27 CSDs have now completed their in-depth analysis of all the standards:</p>	<ul style="list-style-type: none"> NSGs should address the delays in implementing the standards and review the impact on the overall timeline. The following euro area markets are experiencing overall delays <ul style="list-style-type: none"> CY (CSE) and GR (AthexCSD) SK (CDCP) In addition, some specific delays need to be addressed: FI (Euroclear Finland) should address delays for some features related to i) reversals, ii) some CA events currently not offered, and iii) advise messages. BE (NBB-SSS) should address delays for some features/CA events currently not offered. In four markets (in BE, FR, IT, PT), it should be ensured that meeting events are consistently processed via the CSDs from a SCoRE/market efficiency perspective. In non-euro area markets, overall delays should be addressed in BG, CH, CZ, HU, SE and UK.

Key takeaways	Action points
<ul style="list-style-type: none"> Nine CSDs still have to complete their analysis: NBB-SSS – for new functionalities not yet offered (by 07/23), SIX SIS (07/23), CSE (03/25), CSD Prague (05/23), SKD (12/23), AthexCSD (03/25), KELER (12/23), Euroclear Sweden (01/26) and Euroclear International (by 12/24). <p>M4 (Documentation Completed): 26 CSDs have documented all the internal processes and procedures which need to be adapted to comply with the SCoRE Standards.</p> <ul style="list-style-type: none"> 10 CSDs still have to complete their documentation – NBB-SSS (by 12/24), SIX SIS (07/23), CSE (4/25), CSD Prague (07/23), SKD (12/23), AthexCSD (04/25), KELER (12/24), Euroclear Sweden (01/26), KDD (06/23) and Euroclear International (by 12/27). <p>M5 (Detailed External Communication): 26 CSDs have started to provide detailed communication.</p> <ul style="list-style-type: none"> 10 CSDs have yet to start detailed communication – NBB-SSS (by 12/23), SIX SIS (06/23), CSE (04/25), CSD Prague (05/23), SKD (12/23), AthexCSD (04/25), KELER (06/24), Euroclear Sweden (01/26) KDD (06/23) and Euroclear International (12/23). <p>M6 (SCoRE Adaptation Started): 28 CSDs have started adaptation.</p> <ul style="list-style-type: none"> 8 CSDs have yet to start adaptation – SIX SIS (by 07/25), CSE (04/25) SKD (02/24), Euroclear Finland (12/29), AthexCSD (04/25) KELER (01/24), Euroclear Sweden (01/26) and Euroclear International (by 12/24). <p>M7 (SCoRE Adaptation Complete):</p> <ul style="list-style-type: none"> 28 CSDs have not completed adaptation. In many cases (11 markets), CSDs are experiencing shorter delays and will complete their adaptation by 2023. <p>M8 (Internal Testing Started for SCoRE):</p> <ul style="list-style-type: none"> 11 CSDs are behind schedule and do not expect to start internal testing in mid-2023. 	<ul style="list-style-type: none"> The CMH TF Secretariat will continue to follow-up on the non-reporting CSD, Euronext Securities Oslo (NO).
<p>Current milestone</p> <p>M9 (Internal Testing Complete for SCoRE):</p> <ul style="list-style-type: none"> 36 CSDs indicated that they are experiencing delays in completing internal testing. 	
<p>Future milestones</p> <ul style="list-style-type: none"> 25 CSDs reported delays in achieving upcoming interim milestones but they are confident that they will implement the standards on time. 11CSDs have reported that they expect this to result in an overall delay. <ul style="list-style-type: none"> NBB-SSS (BE) for new functionalities that are not currently offered – delayed until 11/2025 BNBGSSS (BG) delayed until 12/2024 SIX SIS (CH) delayed until 10/2025 CSE (CY) delayed until 01/2026 SKD (CZ) delayed until 11/2025 Euroclear Finland (FI) delayed until 12/2029 AthexCSD (GR) delayed until 01/2026 KELER (HU) delayed until 12/2025 SaFIR (RO) delayed (exact date tbc) Sweden (SE) delayed until 01/2026 Euroclear International (UK) delayed until 12/27 One CSD did not report, Euronext Securities Oslo (NO). One CSD did not have milestones defined, CDCP (SK). 	

Table 3

CSD expectations of meeting the milestones for the SCoRE Corporate Actions Standards

	Milestones 1-13												
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
AT - OeKB CSD	Yes	Yes	Yes	Yes	Yes	Yes	10/23	Yes	09/23	10/23	10/23	Yes	Yes
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	07/23	07/23	Yes	Yes	Yes
BE - Euroclear Belgium	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	07/23	07/23	Yes	Yes	Yes
BE - NBB-SSS	Yes	Yes	07/23	12/24	12/23	Yes	11/25	Yes	11/25	Yes	10/25	10/25	11/25
BG - BNBGSSS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	12/23	03/24	10/24	12/24
BG - CD AD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CH - SIX SIS	Yes	Yes	07/23	07/23	06/23	07/25	10/25	05/25	05/25	04/25	01/24	01/24	10/25
CY - CYPRUS STOCK EXCHANGE	Yes	Yes	03/25	04/25	04/25	04/25	05/25	06/25	09/25	09/25	12/25	12/25	01/26
CZ - CSD Prague	Yes	Yes	05/23	07/23	05/23	Yes	09/23	06/23	12/23	09/23	06/23	03/24	Yes
CZ - SKD	Yes	Yes	12/23	12/23	12/23	02/24	05/24	06/24	07/24	08/24	07/24	11/24	11/25
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	Yes	Yes	10/23	05/23	11/23	08/23	Yes	Yes	Yes
DK - Euronext Securities Copenhagen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	07/23	Yes	Yes	Yes	Yes
EE - NASDAQ	Yes	Yes	Yes	Yes	Yes	Yes	02/24	Yes	02/24	Yes	Yes	Yes	Yes
ES - Iberclear	Yes	Yes	Yes	Yes	Yes	Yes	09/23	Yes	12/23	09/23	10/23	03/24	Yes
FI - Euroclear Finland	Yes	Yes	Yes	Yes	Yes	12/29	12/29	12/29	12/29	12/29	12/29	12/29	12/29
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	07/23	07/23	Yes	Yes	Yes
GR - BOGS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	05/23	Yes	Yes	Yes	Yes
GR - AthexCSD	Yes	Yes	03/25	04/25	04/25	04/25	05/25	06/25	09/25	09/25	12/25	12/25	01/26
HR - SKDD	Yes	Yes	Yes	Yes	Yes	Yes	06/23	06/23	07/23	Yes	07/23	Yes	Yes
HU - KELER	Yes	Yes	12/23	12/24	06/24	01/24	02/24	03/24	11/24	01/25	01/25	10/25	12/25
IE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	07/23	07/23	Yes	Yes	Yes
IT - Euronext Securities Milan	Yes	Yes	Yes	Yes	Yes	Yes	06/23	06/23	11/23	11/23	Yes	Yes	Yes
LT - NASDAQ	Yes	Yes	Yes	Yes	Yes	Yes	02/24	Yes	02/24	Yes	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes	10/23	05/23	11/23	08/23	Yes	Yes	Yes
LU - LuxCSD	Yes	Yes	Yes	Yes	Yes	Yes	10/23	05/23	11/23	08/23	Yes	Yes	Yes
LV - NASDAQ	Yes	Yes	Yes	Yes	Yes	Yes	02/24	Yes	02/24	Yes	Yes	Yes	Yes
MT - Malta Stock Exchange	Yes	Yes	Yes	Yes	Yes	Yes	05/23	Yes	06/23	07/23	Yes	Yes	Yes
NL - Euroclear Nederland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	07/23	07/23	Yes	Yes	Yes
NO - Euronext Securities Oslo	R	R	R	R	R	R	R	R	R	R	R	R	R
PL - KDPW	Yes	Yes	Yes	Yes	Yes	Yes	07/23	05/23	07/23	07/23	10/23	Yes	Yes
PL - SKARBNET4	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	05/23	Yes	06/23	Yes	Yes
PT - Euronext Securities Porto	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	07/23	Yes	Yes	Yes	Yes
RO - Depozitarul Central	Yes	Yes	Yes	Yes	Yes	Yes	10/23	11/23	01/24	02/24	02/24	03/24	Yes
RO - SaFIR	Yes	Yes	Yes	Yes	Yes	Yes	04/24	03/24	11/24	02/24	02/24	04/24	04/24
SE - Euroclear Sweden	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26
SI - KDD	Yes	Yes	Yes	06/23	06/23	Yes	06/23	Yes	06/23	Yes	Yes	Yes	Yes
SK - CDCP	R	R	R	R	R	R	R	R	R	R	R	R	R
UK - Euroclear International	12/25	07/23	12/24	12/24	12/23	12/24	12/27	07/24	12/23	08/24	12/26	12/26	12/27

2.2.2 TPA progress towards the milestones – Corporate Actions Standards

Key takeaways	Action points
<p>Past milestones</p> <p>M1 (Analysis Started):</p> <ul style="list-style-type: none"> All TPAs have reached the first milestone. <p>M2 (Initial User Communication):</p> <ul style="list-style-type: none"> Six TPAs have reached the second milestone. One TPA, BNP Paribas, needs more time (expected by 09/2023). <p>M3 (Analysis Completed):</p> <ul style="list-style-type: none"> Six TPAs have completed their analysis. One TPA, BNP Paribas, needs more time (expected by 05/2023). <p>M4 (Documentation Completed):</p> <ul style="list-style-type: none"> Six TPAs (out of seven) have confirmed that they have documented all internal processes and procedures. One TPA, BNP Paribas, needs more time (expected by 09/2023). <p>M5 (Detailed External Communication):</p> <ul style="list-style-type: none"> Six TPAs have started to provide detailed communication. One TPA, BNP Paribas, has not yet provided detailed communication (expected by 09/23). <p>M6 (SCoRE Adaptation Started):</p> <ul style="list-style-type: none"> All TPAs have started adaptation. <p>M7 (SCoRE Adaptation Complete):</p> <ul style="list-style-type: none"> One TPA, BNP Paribas, reported a delay and indicated that it would complete its adaptations by 07/23. <p>M8 (Internal Testing Started for SCoRE):</p> <ul style="list-style-type: none"> One TPA, BNP Paribas, reported a delay and stated that it would start testing by 06/23. <p>Current milestone</p> <p>M9 (Internal Testing Complete for SCoRE):</p> <ul style="list-style-type: none"> Two TPAs indicated that they are experiencing delays in completing internal testing (SIX SIS and BNP Paribas). <p>Future milestones</p> <ul style="list-style-type: none"> All TPAs expect to achieve final implementation on time. Two TPAs (out of eight) reported delays in meeting future milestones (SIX SIS and BNP Paribas). 	<ul style="list-style-type: none"> N/A

Table 4

TPA expectations of meeting the milestones for the SCoRE Corporate Actions Standards

	Milestones 1-13												
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
BE - BNY Mellon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CH - SIX SIS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	09/23	10/23	10/23	Yes	Yes
FR - BNP Paribas	Yes	09/23	05/23	09/23	09/23	Yes	07/23	06/23	09/23	01/24	01/24	03/24	Yes
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

2.2.3 Custodian progress towards the milestones

Key takeaways	Action points
<p>Past milestones</p> <p>M1 (Analysis Started):</p> <ul style="list-style-type: none"> In 12 markets (out of 30), most custodians reported that they had started analysis. <p>M2 (Initial User Communication):</p> <ul style="list-style-type: none"> In 11 markets, most custodians reported that they had started communication. <p>M3 (Analysis Completed):</p> <ul style="list-style-type: none"> In 5 markets, most custodians have concluded their analysis. <p>M4 (Documentation Completed):</p> <ul style="list-style-type: none"> In 6 markets, most custodians have completed their documentation. <p>M5 (Detailed External Communication):</p> <ul style="list-style-type: none"> In 8 markets most custodians have provided detailed communication. <p>M6 (SCoRE Adaptation Started):</p> <ul style="list-style-type: none"> In 12 markets, most custodians have started their adaptations. <p>M7 (SCoRE Adaptation Complete):</p> <ul style="list-style-type: none"> In four markets, most custodians indicated that they have completed their adaptations. <p>M8 (Internal Testing Started for SCoRE):</p> <ul style="list-style-type: none"> In seven markets, most custodians indicated that they have started testing. <p>Current milestone</p> <p>M9 (Internal Testing Complete for SCoRE):</p> <ul style="list-style-type: none"> In five markets, most custodians indicated that they have completed internal testing <p>Future milestones</p> <ul style="list-style-type: none"> In 13 markets, at least half of custodians expects to complete implementation on time. 	<ul style="list-style-type: none"> Custodians should step up their preparations and report their progress towards achieving the milestones in the next round. Initial user communication by custodians should be stepped up to further improve awareness among market participants in time for the next monitoring exercise. There has been no response from custodians in three markets (LV, LU and UK).

Table 5

Custodian expectations of meeting the milestones for the SCoRE Corporate Actions Standards

	Milestones 1-13												
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
AT	20%	40%	20%	20%	20%	40%	20%	40%	40%	40%	40%	40%	40%
BE	60%	60%	20%	40%	40%	60%	20%	40%	20%	40%	20%	40%	20%
BG	33%	17%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
CH	50%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	33%
CY	43%	57%	43%	43%	29%	57%	43%	43%	43%	43%	43%	43%	57%
CZ	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	50%	50%	25%	38%	38%	50%	19%	25%	25%	25%	31%	44%	50%
DK	100%	100%	100%	75%	50%	100%	50%	75%	50%	100%	50%	100%	100%
EE	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ES	77%	69%	54%	54%	62%	54%	46%	54%	31%	46%	46%	62%	77%
FI	100%	75%	75%	75%	50%	50%	25%	50%	25%	75%	75%	75%	75%
FR	25%	25%	25%	25%	13%	25%	13%	13%	13%	13%	13%	25%	38%
GR	57%	57%	57%	57%	57%	57%	57%	57%	57%	71%	71%	86%	100%
HR	29%	29%	29%	29%	29%	43%	29%	43%	57%	57%	57%	57%	43%
HU	13%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	13%
IE	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	57%	57%	29%	43%	57%	57%	14%	43%	14%	14%	14%	43%	57%
LT	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LV	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	83%	83%	33%	33%	50%	50%	33%	67%	33%	33%	50%	50%	50%
NO	-	-	-	-	-	-	-	-	-	-	-	-	-
PL	43%	14%	14%	14%	14%	29%	14%	14%	14%	14%	29%	43%	43%
PT	44%	44%	22%	33%	22%	22%	22%	33%	22%	33%	56%	67%	78%
RO	67%	100%	33%	67%	67%	67%	67%	33%	33%	67%	67%	67%	67%
SE	100%	100%	100%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SI	50%	25%	25%	0%	25%	25%	25%	25%	25%	25%	25%	75%	75%
SK	33%	33%	33%	33%	33%	50%	33%	50%	50%	33%	33%	50%	50%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Notes: Entities were asked to report (on a yes/no basis) whether they had achieved the milestones by the survey closing date (the milestones shaded in blue) and whether they expected to comply with the dates for the next milestones (the subsequent milestones are shaded in green). The percentages reflect the share of custodians in AMI-SeCo markets who reported that they would be able to meet the milestones by their respective deadlines. (i.e. custodians that answered "yes"). Markets where no custodians were monitored are marked with a dash ("-"), while 0% indicates that all custodians in the AMI-SeCo market either replied "No" or did not reply to the survey.

2.3 Progress towards the milestones – Billing Processes Standards

CSDs, TPAs and custodians must be compliant with the Billing Processes Standards laid down in the SCoRE Billing Processes Rulebook. Annex 1 lists the markets and entities monitored. This section presents the findings of the survey for the three categories of entities that took part in the survey.

2.3.1 CSD progress towards the milestones – Billing Processes Standards

Key takeaways	Action points
<p>Past milestones</p> <p>Milestone 1 (Analysis Started): 35 CSDs (out of 38) have started their analysis.</p> <ul style="list-style-type: none"> Two CSDs will start their analysis at a later date, Euroclear Sweden (01/26) and Euroclear International (04/24). <p>Milestone 2 (Initial User Communication): 35 CSDs have provided initial communication to their users.</p> <ul style="list-style-type: none"> Two CSDs will start their initial communication at a later date, Euroclear Sweden (01/26) and Euroclear International (04/24). <p>Milestone 3 (Analysis Completed): 27 CSDs have completed their analysis.</p> <ul style="list-style-type: none"> 10 CSDs will complete their analysis at a later date – NBB-SS (06/23), CSE (03/24), SKD (12/23), Euroclear Finland (12/29), AthexCSD (03/24), KELER (09/23), KDPW (11/23), Depozitarul Central (09/23), Euroclear Sweden (01/26) and Euroclear International (03/23). <p>M4 (Documentation Completed): 26 CSDs have documented all their internal processes and procedures.</p> <ul style="list-style-type: none"> 11 CSDs will complete their documentation at a later date – OeKB CSD (06/23), CSE (04/24), CSD Prague (06/23), SKD (02/24) Euroclear Finland (12/29), AthexCSD (04/24), KELER (10/23), KDPW (11/23), Depozitarul Central (09/23) and Euroclear Sweden (01/26), EUI (04/24). <p>M5 (Detailed External Communication): 21 CSDs have provided detailed communication.</p> <ul style="list-style-type: none"> 16 CSDs will provide communication at a later date. <p>M6 (SCoRE Adaptation Started): 25 CSDs have started adaptation.</p> <ul style="list-style-type: none"> 12 CSDs will start adaptation at a later date. <p>M7 (SCoRE Adaptation Complete): 5 CSDs have completed their adaptations.</p> <ul style="list-style-type: none"> 32 CSDs reported that they have not yet completed their adaptations. This does not indicate any major obstacles, as the standards are expected to be implemented on time in most cases. <p>M8 (Internal Testing Started for SCoRE): 8 CSDs have started internal testing.</p> <ul style="list-style-type: none"> 29 CSDs reported that they have not yet started testing. This does not indicate any major obstacles as the standards are expected to be implemented on time in most cases. <p>Current milestone</p> <p>M9 (Internal Testing Complete for SCoRE):</p> <ul style="list-style-type: none"> 33 CSDs indicated that they have not yet completed internal testing <p>Future milestones</p> <ul style="list-style-type: none"> Many CSDs expect to achieve the remaining milestones at a later date. This does not indicate any major obstacles as some standards have already been implemented and the remainder will be implemented on time. One CSDs did not participate, Euronext Securities Oslo (NO). 	<ul style="list-style-type: none"> The CMH TF Secretariat will invite the missing CSD to participate and report on their milestones (NO).

Table 6

CSD expectations of meeting the milestones for the SCoRE Billing Processes Standards

	Milestones 1-13												
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
AT - OeKB CSD	Yes	Yes	Yes	06/23	06/23	07/23	10/23	10/23	11/23	12/23	12/23	Yes	Yes
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	09/23	11/23	Yes	Yes	Yes
BE - Euroclear Belgium	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	09/23	11/23	Yes	Yes	Yes
BE - NBB-SSS	Yes	Yes	06/23	Yes	Yes	Yes	06/23	06/23	06/23	06/23	06/23	Yes	Yes
BG - BNBGSSS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	12/23	03/24	10/24	12/24
BG - CD AD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CH - SIX SIS	Yes	Yes	Yes	Yes	11/23	Yes	10/23	Yes	12/23	01/24	10/23	Yes	Yes
CY - Cyprus Stock Exchange	Yes	Yes	03/24	04/24	05/24	06/24	09/24	09/24	09/24	10/24	11/24	10/24	11/24
CZ - CSD Prague	Yes	Yes	Yes	06/23	06/23	Yes	09/23	11/23	11/23	02/24	Yes	Yes	Yes
CZ - SKD	Yes	Yes	12/23	02/24	02/24	01/25	02/25	03/25	03/25	04/25	06/25	06/25	11/25
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	01/24	01/24	01/24	01/24	01/24	01/24	01/24	01/24	Yes
DK - Euronext Securities Copenhagen	Yes	Yes	Yes	Yes	Yes	Yes	06/23	07/23	08/23	07/23	Yes	Yes	Yes
EE - NASDAQ	Yes	Yes	Yes	Yes	Yes	Yes	11/23	11/23	11/23	11/23	Yes	Yes	Yes
ES - Iberclear	Yes	Yes	Yes	Yes	Yes	Yes	09/23	Yes	12/23	09/23	10/23	03/24	Yes
FI - Euroclear Finland	Yes	Yes	12/29	12/29	12/29	12/29	12/29	12/29	12/29	12/29	12/29	12/29	12/29
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	09/23	11/23	Yes	Yes	Yes
GR - BOGS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GR - AthexCSD	Yes	Yes	03/24	04/24	05/24	06/24	09/24	09/24	09/24	10/24	11/24	10/24	11/24
HR - SKDD	Yes	Yes	Yes	Yes	Yes	Yes	06/23	07/23	07/23	07/23	07/23	Yes	Yes
HU - KELER	Yes	Yes	09/23	10/23	10/23	Yes	10/23	11/23	12/23	Yes	05/24	Yes	11/26
IE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	09/23	11/23	Yes	Yes	Yes
IT - Euronext Securities Milan	Yes	Yes	Yes	Yes	Yes	Yes	06/23	06/23	11/23	11/23	Yes	Yes	Yes
LT - NASDAQ	Yes	Yes	Yes	Yes	Yes	Yes	11/23	11/23	11/23	11/23	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	01/24	01/24	01/24	01/24	01/24	01/24	01/24	01/24	Yes
LU - LuxCSD	Yes	Yes	Yes	Yes	01/24	01/24	01/24	01/24	01/24	01/24	01/24	01/24	Yes
LV - NASDAQ	Yes	Yes	Yes	Yes	Yes	Yes	11/23	11/23	11/23	11/23	Yes	Yes	Yes
MT - Malta Stock Exchange	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	06/23	07/23	Yes	Yes	Yes
NL - Euroclear Nederland	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	09/23	11/23	Yes	Yes	Yes
NO - Euronext Securities Oslo	R	R	R	R	R	R	R	R	R	R	R	R	R
PL - KDPW	Yes	Yes	11/23	11/23	11/23	11/23	11/23	11/23	11/23	11/23	11/23	Yes	Yes
PL - SKARBNET4	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	05/23	Yes	06/23	Yes	Yes
PT - Euronext Securities Porto	Yes	Yes	Yes	Yes	Yes	Yes	06/23	07/23	08/23	09/23	06/23	Yes	Yes
RO - Depozitarul Central	Yes	Yes	09/23	09/23	09/23	09/23	12/23	01/24	03/24	02/24	02/24	03/24	Yes
RO - SaFIR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SE - Euroclear Sweden	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26	01/26
SI - KDD	Yes	Yes	Yes	Yes	06/23	Yes	06/23	Yes	06/23	Yes	Yes	Yes	Yes
SK - CDCP	Yes	Yes	Yes	Yes	Yes	Yes	07/23	08/23	08/23	09/23	Yes	Yes	Yes
UK - Euroclear International	04/24	04/24	05/24	04/24	04/24	04/24	04/24	04/24	04/24	04/24	04/24	04/24	04/24

2.3.2 TPA progress towards the milestones – Billing Processes Standards

Key takeaways	Action points
<p>Past milestones</p> <p>Milestone 1 (Analysis Started):</p> <ul style="list-style-type: none"> One TPA will start analysis at a later date (BNP Paribas). <p>Milestone 2 (Initial User Communication):</p> <ul style="list-style-type: none"> One TPAs will start communication at a later date (BNP Paribas). <p>Milestone 3 (Analysis Completed):</p> <ul style="list-style-type: none"> Two TPAs will complete their analysis at a later date (BNY Mellon, BNP Paribas). <p>M4 (Documentation Completed):</p> <ul style="list-style-type: none"> Two TPAs will complete their documentation at a later date (BNY Mellon, BNP Paribas). <p>M5 (Detailed External Communication):</p> <ul style="list-style-type: none"> Four TPAs will provide communication at a later date (BNY Mellon, SIX SIS, BNP Paribas and CBL). <p>M6 (SCoRE Adaptation Started):</p> <ul style="list-style-type: none"> Three TPAs will start adaptation at a later date (BNY Mellon, BNP Paribas and CBL). <p>M7 (SCoRE Adaptation Complete):</p> <ul style="list-style-type: none"> All TPAs reported that they have not yet completed their adaptations. This does not indicate any major obstacles as the standards will be implemented on time in most cases. <p>M8 (Internal Testing Started for SCoRE):</p> <ul style="list-style-type: none"> Six TPAs reported that they have not yet started testing. This does not indicate any major obstacles as the standards will be implemented on time in most cases. <p>Current milestones</p> <p>M9 (Internal Testing Complete for SCoRE):</p> <ul style="list-style-type: none"> All TPAs reported that they have not yet completed internal testing. <p>Future milestones</p> <ul style="list-style-type: none"> Most TPAs expect to achieve the final milestone (M13) on time. BNP Paribas should review its planning to comply with the Billing Processes Standards 	<ul style="list-style-type: none"> Many TPAs reported delays in meeting milestones. Attention needs to be paid to this in the next SCoRE monitoring round.

Table 7

TPA expectations of meeting the milestones for the SCoRE Billing Processes Standards

	Milestones 1-13												
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
BE - BNY Mellon	Yes	Yes	11/23	11/23	03/24	11/23	11/24	06/24	11/24	11/24	12/24	11/24	11/24
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	09/23	11/23	Yes	Yes	Yes
CH - SIX SIS	Yes	Yes	Yes	Yes	11/23	Yes	10/23	Yes	12/23	01/24	10/23	Yes	Yes
FR - BNP Paribas	01/25	03/25	07/25	12/25	12/25	01/26	06/26	07/26	12/26	02/27	04/27	10/27	11/27
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Yes	05/23	05/23	09/23	11/23	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	01/24	01/24	01/24	01/24	01/24	01/24	01/24	01/24	Yes
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Yes	06/23	06/23	06/23	Yes	Yes	Yes	Yes

2.3.3 Custodian progress towards the milestones – Billing Processes Standards

Key takeaways	Action points
<p>Past milestones</p> <p>Milestone 1 (Analysis Started):</p> <ul style="list-style-type: none"> In 17 markets, most custodians have not yet started analysis. <p>Milestone 2 (Initial User Communication):</p> <ul style="list-style-type: none"> In 17 markets, most custodians have not yet started communication. <p>Milestone 3 (Analysis Completed):</p> <ul style="list-style-type: none"> In 25 markets, most custodians have not completed analysis. <p>Milestone 4 (Documentation Completed):</p> <ul style="list-style-type: none"> In 25 markets, most custodians have not yet completed documentation for all internal processes and procedures. <p>Milestone 5 (Detailed External Communication):</p> <ul style="list-style-type: none"> In 25 markets, most custodians have not provided detailed communication. <p>Milestone 6 (SCoRE Adaptation Started):</p> <ul style="list-style-type: none"> In 25 markets, most custodians have not yet started adaptation. <p>M7 (SCoRE Adaptation Complete):</p> <ul style="list-style-type: none"> In 25 markets, most custodians reported that they have not yet completed their adaptations. <p>M8 (Internal Testing Started for SCoRE):</p> <ul style="list-style-type: none"> In 24 markets, most custodians reported that they have not yet started testing. <p>Current milestone</p> <p>M9 (Internal Testing Complete for SCoRE):</p> <ul style="list-style-type: none"> In 25 markets, most custodians reported that they have not yet completed internal testing. <p>Future milestones</p> <ul style="list-style-type: none"> In 10 markets, at least half of custodians expects to complete implementation on time. 	<ul style="list-style-type: none"> A larger number of custodians are expected to have started their preparations when reporting in the next SCoRE round. There has been no response from custodians in two markets (LU and UK).

Table 8

Custodian expectations of meeting the milestones for the SCoRE Billing Processes Standards

	Milestones 1-13												
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
AT	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
BE	40%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	40%
BG	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
CH	33%	33%	33%	33%	17%	33%	17%	33%	17%	17%	17%	33%	33%
CY	57%	57%	29%	29%	14%	43%	43%	57%	14%	43%	43%	43%	43%
CZ	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	69%	63%	31%	31%	31%	31%	31%	38%	38%	38%	38%	50%	56%
DK	50%	50%	25%	25%	25%	25%	25%	25%	25%	25%	25%	50%	50%
EE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ES	62%	62%	38%	46%	46%	38%	31%	31%	31%	38%	38%	38%	46%
FI	50%	50%	25%	25%	25%	25%	25%	25%	25%	25%	25%	50%	50%
FR	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	25%	25%
GR	71%	43%	43%	29%	43%	29%	29%	29%	29%	29%	43%	71%	71%
HR	29%	43%	43%	14%	29%	43%	43%	43%	43%	57%	57%	57%	57%
HU	13%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	13%
IE	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	57%	57%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%
LT	25%	25%	25%	25%	25%	25%	25%	0%	0%	25%	25%	25%	25%
LU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LV	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	0%	0%
MT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	40%	60%	20%	20%	20%	20%	20%	20%	40%	40%	40%	40%	40%
NO	-	-	-	-	-	-	-	-	-	-	-	-	-
PL	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	29%	29%
PT	33%	33%	33%	22%	33%	22%	22%	33%	44%	56%	56%	78%	78%
RO	67%	100%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%
SE	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SI	50%	50%	25%	25%	25%	25%	25%	25%	25%	25%	50%	100%	100%
SK	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	50%	50%	67%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Notes: Entities were asked to report (on a yes/no basis) whether they would have achieved the milestones by the survey closing date (the milestones shaded in blue) and whether they expected to comply with the dates for the next milestones (the subsequent milestones are shaded in green). The percentages reflect the share of custodians in AMI-SeCo markets who reported that they would be able to meet the milestones by the respective deadlines (i.e. custodians that answered "yes"). Markets where no custodians were monitored are marked with a dash ("-"), while 0% indicates that all custodians in the AMI-SeCo market either replied "No" or did not reply to the survey.

3 Compliance with the standards defined for each activity

This section provides an overview of the current status of compliance with the respective sets of Standards defined for each activity in the rulebooks for Triparty Collateral Management, Corporate Actions and Billing Processes.

CSDs and TPAs are monitored on an individual basis and assigned a colour-coded status applying the methodology outlined in **Figure 4**³. Custodians and issuers are monitored on an aggregated basis per market and assigned a percentage compliance status. Full details of the agreed milestones that form the basis of the colour-coded assessment can be found in Section 2.

Figure 4

SCoREBOARD – Level of compliance with the standards



- The Standard has been implemented
 - Implementation of the Standard is on schedule (based on the agreed milestones)
 - Implementation is behind schedule (based on the agreed milestones)
 - Implementation has not started
-

In this section, the report assesses the implementing entities progress towards achieving full compliance with each set of standards.

3.1 Compliance with the Triparty Collateral Management Standards

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains 17 Standards related to Triparty Collateral Management (published as the [SCoRE Standards for Triparty Collateral Management](#)). This section presents the compliance status of the monitored entities up to 21 April 2023.

The standards assessed are listed below.

³ For further details, please refer to the [AMI-SeCo Monitoring Framework](#).

Table 9
SCoRE Triparty Collateral Management Standards

No.	Name
1	ISO 20022 messages for triparty collateral management
2	Initiation of a triparty transaction
3	Increase of a triparty transaction
4	Decrease of a triparty transaction
5	Revaluation of a triparty transaction
6	Cancellation of a triparty instruction
7	Unilateral removal process
8	Reporting on flows
9	Reporting on stocks
10	Closure of a triparty transaction
11	Handling of corporate actions
12	Partial allocation
13	Reference data
14	Usage of baskets
15	Future dated processing
16	Operating hours
17	Cut-off times

Source: [Triparty Collateral Management: Single Collateral Management Rulebook for Europe](#).

On the provider side, the monitored entities are as follows.

- **Triparty agents (TPAs):** a dedicated survey was sent to triparty agents and their compliance is reported in Section 3.1.1.

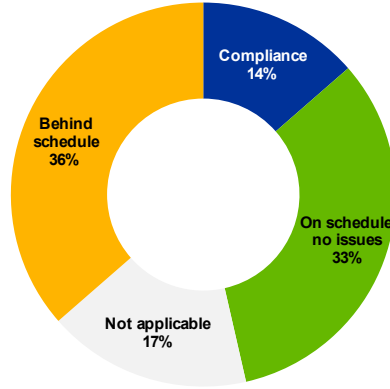
On the user side, the monitored entities are as follows.

- **Central counterparties (CCPs):** CCPs, as users of triparty collateral management services, are monitored by their NSGs, and are therefore assessed on their ability to communicate with their TPA using ISO 20022 messaging. Eurex Clearing AG CCP is preparing for adoption of ISO 20022 messaging by 8 April 2024. SIX x-Clear also intends to implement it (subject to confirmation on planning). Further efforts are needed by CCPs in France and Poland to finalise their planning.
- **Eurosystem national central banks (NCBs):** NCBs are monitored by the ECB in their role as users of triparty collateral management services. The overall level of confidence in readiness to go-live in April 2024 is high.

3.1.1 TPA compliance with the SCoRE Triparty Collateral Management Standards

Chart 4

TPA compliance with SCoRE Triparty Collateral Management Standards



Notes: The graph summarises the colour codes assigned to the standards in the Triparty SCoREBOARD (see Table 10). The percentages are calculated based on the number of standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>Compliance: The greatest level of compliance has been achieved with respect to three standards – Standard 12 (Partial allocation), Standard 14 (Usage of baskets) and Standard 15 (Future dated processing).</p> <p>On schedule: For 4 TPAs, implementation is on track for compliance with Standards 2 to 6 (process/workflows), 9 and 10 (reporting on stock and closure). These standards cannot yet be considered fully implemented because new data elements must still be deployed.</p> <p>Behind schedule: For 5 TPAs, implementation is behind schedule for Standards 1 (ISO 20022). For 4 TPAs, implementation is behind schedule for Standards 7 (Unilateral removal), 8 (Reporting on flows) and 13 (Reference data). The standards will continue to have “behind schedule” status until the TPAs provide detailed confirmation that analysis has been completed for the workflows and implementation is on track.</p> <p>Not applicable: Implementation is not applicable for the collateralisation of non-central bank credit operations, i.e. Standard 11 (Handling of corporate actions), Standard 16 (Operating hours) and Standard 17 (Cut-off times).</p>	<p>Three TPAs should provide a concrete plan that supports the timely implementation of the standards (Euroclear Bank, SIX SIS and Euroclear France).</p>

Table 10

TPA compliance with the Triparty Collateral Management Standards

The table shows the implementation status of the respective TPA for each of the Triparty Collateral Management standards.

	BE BNY Mellon	BE Euroclear Bank	CH SIX SIS	FR BNP Paribas	FR Euroclear France	LU Clearstream Banking Luxembourg	LU JP Morgan
1	Y	Y	Y	Y	Y	G	G
2	G	Y	Y	G	Y	G	G
3	G	Y	Y	G	Y	G	G
4	G	Y	Y	G	Y	G	G
5	G	Y	Y	G	Y	G	G
6	G	Y	Y	G	Y	G	G
7	Y	Y	Y	G	Y	G	G
8	Y	Y	Y	G	Y	G	G
9	G	Y	Y	G	Y	G	G
10	G	Y	Y	G	Y	G	G
11	N/A	Y	N/A	N/A	Y	G	N/A
12	B	B	B	B	B	B	Y
13	Y	Y	Y	G	Y	G	G
14	B	B	B	B	B	B	B
15	Y	B	G	B	B	B	B
16	N/A	Y	N/A	N/A	B	G	N/A
17 Rule 1	N/A	Y	N/A	N/A	Y	G	N/A
17 Rule 2	N/A	Y	N/A	N/A	Y	G	N/A
17 Rule 3	N/A	Y	N/A	N/A	Y	G	N/A
17 Rule 4	N/A	Y	N/A	N/A	Y	G	N/A

Notes: The colour code reflects the current implementation status for each standard based on the methodology outlined in Annex 2, "Methodology". Green means that the entity is on schedule with the implementation of the standard at the survey closing date. Yellow means that the entity is behind schedule and blue means that the standard has already been implemented. The colour coding reflects the implementation status for each standard by the closing date for this monitoring survey and is in accordance with the methodology outlined in Figure 4.

3.2 Compliance with the Corporate Actions Standards

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains 15 standards on the processing of corporate actions (published as the [SCoRE Standards for Corporate Actions](#)). This section presents the standards compliance status of the monitored entities up to 21 April 2023.

The standards assessed are listed below.

Table 11
SCoRE Corporate Actions Standards⁴

No.	Name
1	Business processes and workflows
1A	Corporate action notification
1B	Corporate action instruction
1C	Corporate action advice
1D	Corporate action confirmation
1E	Corporate action reversal
1F	Meeting event notification
1G	Meeting event instruction
1H	Meeting event confirmation
2	Provision of data necessary for calculating proceeds
3	Consistency of information provided by issuer (I)CSDs, investor (I)CSDs and custodians
4	Rounding rules
5	Negative cash flows
6	Business day rule
7	Securities amount data
8	Payment time
9	Notification of processing status
10	Elective events
11	Availability of default options
12	Handling of fees for meeting events
13	Reversal of a corporate action
14	Processing of foreign currency payments
15	ISO 20022 messages for corporate actions

Source: [Corporate Actions: Single Collateral Management Rulebook for Europe](#).

From the provider side, the monitored entities are:

- CSDs (see Section 3.2.1);
- TPAs (see Section 3.2.2);
- Custodians (see Section 3.2.3).

From the user side, the monitored entities are:

- Issuers (see Section 3.2.4);
- Eurosystem national central banks (NCBs): NCBs are monitored by the ECB in their role as users of corporate actions services. All Eurosystem NCBs are on track.

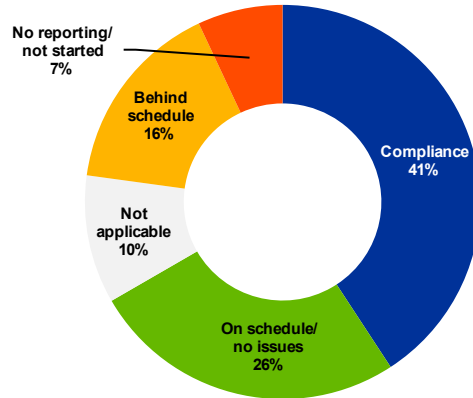
⁴ Corporate Action Standards 4, 7 and 10 are composed of different Rules, that are reported separately in Table 12a-12b. Standard 8 is composed of Rules and General Principles, that are also reported separately in Table 12b and Chart 6 below.

3.2.1 CSD compliance with the Corporate Actions Standards

Chart 5

CSD compliance status with SCoRE Corporate Actions Standards

The graph summarises the colour codes assigned to the CSDs for the Corporate Actions Standards (see Table 12 below, as well as Annex 2). The percentages are calculated based on the number of standards of a given colour across all AMI-SeCo markets.



Key takeaways	Action points
<p>Compliance: The greatest level of compliance by CSDs has been achieved in seven (out of 15) standards – Standards 4 to 8 (relating to rounding rules, negative cash flow, business day conventions, securities amount data and payment times), 11 (default options) and 14 (foreign currency).</p> <p>On schedule: Many CSDs are implementing two standards on schedule — Standards 1 and 13 (relating to workflows and reversals).</p> <p>Behind schedule: Many markets/CSDs are behind schedule in the implementation of six standards.</p> <ul style="list-style-type: none"> • Standard 1 (G to H on meeting events): ESES (BE, FR, NL), NBB-SSS, CSE, Euronext Securities Copenhagen, AthexCSD, KELER, Euronext Securities Milan, Nasdaq, CBL, LuxCSD, MSE, KDPW, Euronext Securities Milan Euronext Securities Porto, Depozitarul Central, Euroclear Sweden, KDD, CDCP. • Standard 2 (Provision of data necessary for calculating proceeds): EB, NBB-SSS (for new events/new functionality), SIX SIS, CSE, CSD Prague, SKD, Euroclear Finland (for new CA events and enhancements to existing CA events), AthexCSD, KELER, EB IE, Euronext Securities Milan, MSE, KDPW, Euroclear Sweden and CDCP. • Standard 3 (Consistency of information provided by the issuer): SIX SIS, CSE, CSD Prague, SKD, Euroclear Finland (for new CA events and enhancements to existing CA events), AthexCSD, KELER, Euronext Securities Milan, MSE, KDPW, Depozitarul Central, SaFIR Euroclear Sweden, KDD and CDCP. • Standard 9 (Notification of processing status): ESES (BE, FR, NL), NBB-SSS, BNBGSSS, CSE, Euroclear Finland, AthexCSD, KELER, Euronext Securities Milan and CDCP. • Standard 10 (Elective events): OeKB, SIX SIS, CSE, CSD Prague, Euronext Securities Copenhagen, AthexCSD, KELER, Euronext Securities Milan, KDPW and Euroclear Sweden. • Standard 12 (Handling of fees for meeting events): Euroclear Bank, ESES (BE, NL), SIX SIS, CSE, CSD Prague, CBF, Nasdaq EE/LT/LV, Iberclear, AthexCSD, KELER, EB IE, Euronext Securities Milan, CBL, LuxCSD, and Euroclear Sweden. <p>Not applicable: Several responses (for Standards 1F, 1G and 1H) were “Not applicable” (N/A) in previous rounds, but since then CSDs have started to upgrade their systems so that meeting events (results) can be processed through these entities. In addition, issuers (issuer agents) have been informed that they need to pass meeting information via the CSD.</p> <p>No reporting: There has been no feedback from one CSDs (NO).</p>	<p>The CMH Secretariat will reach out to NSGs to request action on the standards that are behind schedule.</p> <p>For Standards 1F-H, 8 and 9, the ultimate goal of SCoRE standards is to achieve market compliance with the standard, which requires coordination of all relevant actors involved in that market. Yellow (ongoing analysis) is assigned in some markets due to current non-compliance in the intermediary chain or issuers/agents, while the CSD is technically able to process according to the Standards. An action plan for the market should be developed to ensure compliance</p> <p>Standards 1F to 1H: all meeting event notifications must be announced by the CSDs. Since CSDs are dependent on information received from issuers or their agents, they have started to raise awareness in the agent's community.</p> <p>Participation in the surveys is needed from NO.</p>

Table 12a

CSD compliance with the Corporate Actions Standards (Standard 1A-6)

The table shows the implementation status of the respective CSDs for each of the Corporate Actions Standards.

	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4	4 Rule 5	5	6
AT - OeKB CSD	G	G	G	G	G	B	B	B	G	G	B	B	B	G	G	Y	B
BE - Euroclear Bank	G	G	G	G	G	G	G	G	Y	G	G	G	B	G	B	B	B
BE - Euroclear Belgium	G	G	G	G	G	Y	Y	Y	G	G	B	B	B	B	B	B	B
BE - NBB-SSS	Y	Y	B	Y	B	Y	Y	Y	Y	N/A	B	N/A	N/A	B	B	B	B
BG - BNBGSSS	G	N/A	G	G	G	N/A	N/A	N/A	G	B	B	B	B	G	B	Y	B
BG - CD AD	B	G	G	B	B	B	B	B	G	G	B	B	B	B	B	N/A	B
CH - SIX SIS	G	G	G	G	G	B	B	G	Y	Y	Y	B	B	B	B	B	B
CY - CYPRUS STOCK EXCHANGE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	B	B	B	Y	Y
CZ - CSD Prague	B	Y	Y	Y	Y	B	B	B	Y	Y	B	B	B	B	B	B	B
CZ - SKD	Y	N/A	Y	Y	Y	N/A	N/A	N/A	Y	Y	B	B	B	N/A	B	N/A	B
DE - Clearstream Banking Frankfurt	G	G	G	G	G	G	G	Y	G	G	R	R	R	G	B	N/A	G
DK - Euronext Securities Copenhagen	G	Y	G	G	G	B	B	R	G	G	B	B	B	G	G	G	B
EE - NASDAQ	G	B	G	G	B	B	B	Y	G	G	B	B	B	G	B	B	B
ES - Iberclear	G	G	G	G	G	G	G	G	G	G	B	G	G	G	B	B	G
FI - Euroclear Finland	Y	B	Y	Y	Y	B	B	B	Y	Y	B	B	B	G	B	B	G
FR - Euroclear France	G	G	G	G	G	Y	Y	Y	G	G	B	B	B	B	B	B	B
GR - BOGS	G	G	G	B	B	B	G	B	B	G	B	B	B	B	B	B	B
GR - AthexCSD	Y	Y	Y	Y	Y	Y	G	Y	Y	Y	Y	B	B	Y	B	Y	B
HR - SKDD	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	N/A	G
HU - KELER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	B	Y
IE - Euroclear Bank	G	G	G	G	G	G	G	G	Y	G	G	G	B	G	B	B	B
IT - Euronext Securities Milan	G	G	G	G	G	G	R	R	R	R	B	B	B	B	B	R	G
LT - NASDAQ	G	B	G	G	B	B	B	Y	G	G	B	B	B	G	B	B	B
LU - Clearstream Banking Luxembourg	G	G	G	G	G	G	G	Y	G	G	R	R	R	G	B	R	R
LU - LuxCSD	G	G	G	G	G	G	G	Y	G	G	R	R	R	G	B	R	G
LV - NASDAQ	G	B	G	G	B	B	B	Y	G	G	B	B	B	G	B	B	B
MT - Malta Stock Exchange	G	G	G	G	Y	G	Y	Y	Y	Y	B	B	B	G	G	Y	Y
NL - Euroclear Nederland	G	G	G	G	G	Y	Y	Y	G	G	B	B	B	B	B	B	B
NO - Euronext Securities Oslo	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PL - KDPW	G	G	G	G	G	G	G	Y	Y	Y	B	B	B	G	G	B	B
PL - SKARBNET4	G	N/A	N/A	N/A	N/A	N/A	N/A	N/A	G	G	N/A	N/A	N/A	N/A	N/A	N/A	B
PT - Euronext Securities Porto	G	G	G	G	G	B	R	R	G	G	B	B	B	G	B	B	B
RO - Depozitarul Central	G	N/A	B	B	Y	Y	R	R	B	Y	B	B	B	B	B	N/A	Y
RO - SaFIR	B	G	Y	G	Y	N/A	N/A	N/A	G	Y	B	B	B	Y	B	G	Y
SE - Euroclear Sweden	Y	R	B	B	R	R	R	R	R	R	B	B	B	B	R	N/A	B
SI - KDD	G	G	G	G	G	Y	Y	Y	B	Y	G	G	G	G	G	N/A	B
SK - CDCP	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	G	G
UK - Euroclear International	G	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	B	N/A	B	B	B	B

Notes: The colour code reflects the current implementation status for each standard based on the methodology outlined in Annex 2, "Methodology". Green means that the entity is on track to implement the standard on time by the survey closing date. Yellow means the entity is behind schedule and blue means that the standard has already been implemented.

Table 12b

CSD compliance with the Corporate Actions Standards (Standards 7 to 15)

	7 Rule 1	7 Rule 2	7 Rule 3	7 Rule 4	8 Rule 1	8 Rule 2	8 Rule 3	8 Gen. Princ. 3	9	10 Rule 1	10 Rule 2	10 Rule 3	11	12	13	14	15
AT - OeKB CSD	B	B	B	B	G	B	B	Y	G	B	G	Y	B	G	G	B	G
BE - Euroclear Bank	B	B	B	B	B	B	G	B	B	B	B	B	B	Y	B	B	G
BE - Euroclear Belgium	B	B	B	B	Y	Y	Y	Y	Y	B	B	B	B	Y	B	B	G
BE - NBB-SSS	B	N/A	N/A	N/A	B	B	B	B	Y	Y	N/A	N/A	Y	N/A	B	B	Y
BG - BNBGSSS	B	N/A	N/A	N/A	B	N/A	B	B	Y	N/A	N/A	N/A	N/A	N/A	G	N/A	Y
BG - CD AD	B	B	B	B	B	B	B	B	G	B	B	B	G	N/A	B	B	G
CH - SIX SIS	B	B	B	B	B	B	B	Y	B	Y	B	B	B	B	G	B	G
CY - CYPRUS STOCK EXCHANGE	G	B	B	B	Y	N/A	Y	Y	Y	Y	Y	Y	Y	N/A	Y	N/A	Y
CZ - CSD Prague	B	B	B	B	B	B	B	B	G	Y	Y	Y	B	Y	Y	B	Y
CZ - SKD	B	N/A	N/A	N/A	B	B	B	B	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y
DE - Clearstream Banking Frankfurt	G	B	B	B	G	G	B	B	G	G	G	G	B	Y	G	B	G
DK - Euronext Securities Copenhagen	B	B	B	B	B	B	B	B	G	Y	Y	Y	B	N/A	G	B	G
EE - NASDAQ	B	N/A	B	B	B	B	G	B	G	B	B	B	B	Y	B	B	G
ES - Iberclear	B	B	B	N/A	G	N/A	G	B	G	B	B	G	B	Y	G	G	G
FI - Euroclear Finland	B	B	B	B	B	B	B	B	Y	B	B	G	B	N/A	Y	G	Y
FR - Euroclear France	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	B	B	B	B	B	B	G
GR - BOGS	B	N/A	N/A	N/A	B	N/A	B	B	B	B	B	B	B	N/A	B	N/A	G
GR - AthexCSD	Y	B	B	B	B	B	B	N/A	Y	B	Y	Y	B	Y	Y	B	Y
HR - SKDD	B	B	B	B	G	G	G	G	G	G	G	G	G	G	G	N/A	G
HU - KELER	B	B	B	B	Y	Y	Y	Y	Y	Y	Y	N/A	Y	Y	Y	N/A	Y
IE - Euroclear Bank	B	B	B	B	B	B	G	B	B	B	B	B	B	Y	B	B	G
IT - Euronext Securities Milan	B	B	B	B	B	B	G	B	R	G	B	R	R	R	G	R	R
LT - NASDAQ	B	N/A	B	B	B	B	G	B	G	B	B	B	B	Y	B	B	G
LU - Clearstream Banking Luxembourg	N/A	B	B	B	G	G	B	B	G	G	G	G	B	Y	G	B	G
LU - LuxCSD	B	B	B	B	G	G	B	B	G	G	G	G	B	Y	G	B	G
LV - NASDAQ	B	N/A	B	B	B	B	G	B	G	B	B	B	B	Y	B	B	G
MT - Malta Stock Exchange	B	N/A	B	B	B	B	B	Y	G	G	B	G	B	N/A	Y	B	Y
NL - Euroclear Nederland	B	B	B	B	Y	Y	Y	Y	Y	B	B	B	B	Y	B	B	G
NO - Euronext Securities Oslo	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PL - KDPW	Y	B	B	B	B	B	B	B	G	B	Y	G	B	G	G	B	Y
PL - SKARBNET4	B	N/A	N/A	N/A	B	N/A	B	B	N/A	B	N/A	N/A	N/A	N/A	N/A	N/A	G
PT - Euronext Securities Porto	B	B	B	B	B	B	G	G	G	B	B	G	G	N/A	G	B	G
RO - Depozitarul Central	B	N/A	B	B	B	N/A	G	B	G	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y
RO - SaFIR	B	N/A	N/A	N/A	B	B	B	B	G	N/A	N/A	N/A	N/A	N/A	G	B	G
SE - Euroclear Sweden	B	B	B	N/A	Y	N/A	B	B	B	B	B	R	B	R	R	N/A	R
SI - KDD	B	N/A	B	B	B	N/A	B	B	B	B	B	B	B	N/A	Y	N/A	Y
SK - CDCP	B	B	B	B	R	R	R	R	R	G	G	G	G	G	G	G	R
UK - Euroclear International	B	B	B	B	B	B	B	B	B	B	B	N/A	B	N/A	N/A	N/A	N/A

Chart 6

Corporate Actions Standard 8, General Principle 1 (for CSDs supporting night-time settlement) and General Principle 2 (for CSDs not supporting night-time settlement) – proportion of payments made overnight

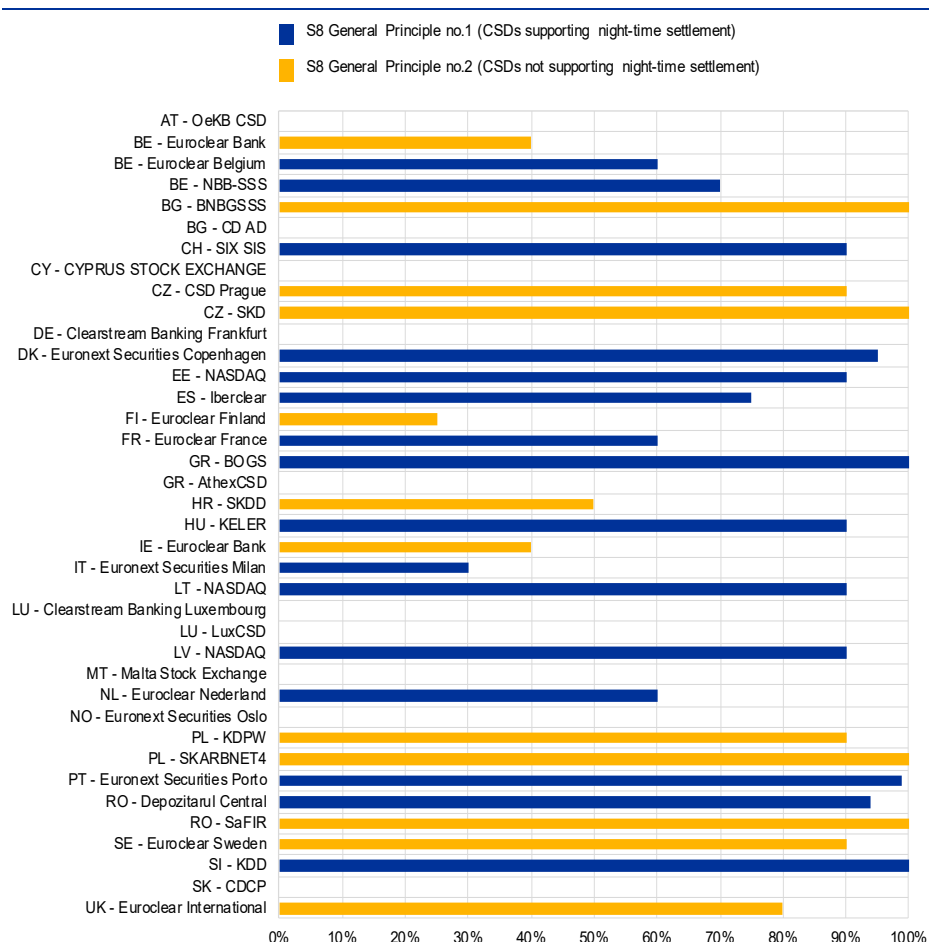


Chart 6 shows Corporate Actions Standard 8 on the proportion of payments made overnight: (1) General Principle 1 for CSDs in night-time settlement markets, and (2) General Principle 2 for CSDs in non-night-time settlement markets.

The chart sets out the cash proceeds paid by 9.30 a.m. (issuer CSD time), namely the percentage of payments made by that time over the last six months (i.e. since the last SCoRE monitoring exercise).

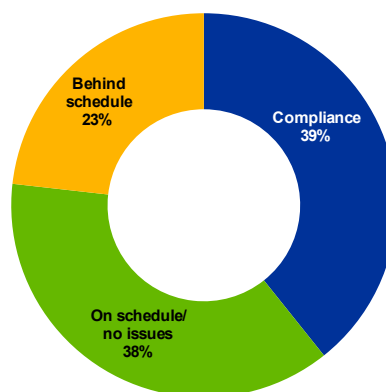
Key takeaways

The survey indicates that for 10 CSDs in T2S and 7 non-T2S CSDs, 90% or more of the cash proceeds payments were made by 9.30 a.m. (issuer CSD time). There are 15 CSDs for which 50% or less of their cash proceeds payments were made by that time. Euronext Securities Oslo (NO) did not respond.

3.2.2 TPA compliance with the SCoRE Corporate Actions Standards

Chart 7

TPA compliance with SCoRE Corporate Actions Standards



Notes: The graph summarises the colour codes assigned to the standards in the Corporate Actions SCoREBOARD for TPAs (see Table 13). The percentages are calculated based on the number of standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
On schedule: Most standards are expected to be implemented on schedule.	Compliance with Standards 1F to 1H should be stepped up or clarified by BNY Mellon and CBL in the next round. The status of implementation by BNP Paribas should be clarified

Table 13

TPA compliance with Corporate Actions Standards

The table shows the implementation status of the respective TPAs for each of the Corporate Actions Standards.

	BE BNY Mellon	BE Euroclear Bank	CH SIX SIS	FR BNP Paribas	FR Euroclear France	LU Clearstream Banking Luxembourg	LU JP Morgan
1A	B	B	G	Y	B	G	G
1B	B	B	G	Y	B	G	G
1C	B	B	G	Y	B	G	G
1D	B	B	G	Y	B	G	Y
1E	B	B	G	Y	B	G	G
1F	Y	B	B	Y	B	G	G
1G	Y	B	G	Y	B	G	G
1H	Y	B	G	Y	B	Y	G

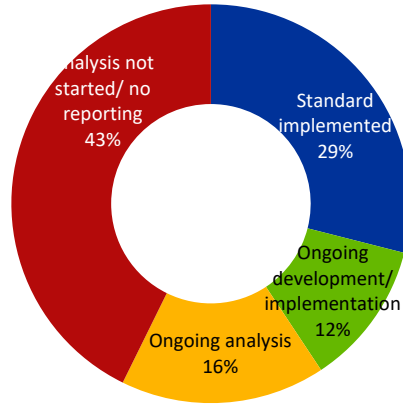
Notes:

TPAs are using custody services provided by CSDs or custodians to disseminate corporate action information to collateral givers and collateral takers. Therefore, monitoring TPAs focuses on the implementation of triparty-specific workflows as described in Standard 1. The colour code reflects the current implementation status of each standard based on the methodology outlined in Figure 3.1, as laid down in the framework document and in Annex 2, "Methodology". Green means that the entity is implementing the standards on schedule. Yellow means that the entity is behind schedule and blue means that the standard has already been implemented.

3.2.3 Custodian compliance with SCoRE Corporate Actions Standards

Chart 8

Custodian compliance with Corporate Actions Standards



The graph summarises the colour codes assigned to the responses to the Corporate Action SCoRE survey for custodians (see Table 14 below). Percentages represent the number of replies assigned a certain colour out of the applicable questions, across all markets. Each standard has been assigned the same relative weight (i.e. replies have different weights based on how many questions there are in the standard).

Key takeaways	Action points
<p>Compliance and on schedule: Implementation is on schedule for Standard 4 (Rounding rules) and Standard 11 (Availability of default options).</p> <p>Behind schedule: Implementation is behind schedule for the remaining standards. There is a dependency on implementation by CSDs, where some delays in the interim milestones are being addressed.</p> <p>No reporting: Custodians in some markets (LV, LU and UK) have not yet participated in the survey.</p>	<ul style="list-style-type: none"> NSGs should make further efforts to involve custodians.

Table 14a

Custodian compliance – Corporate Actions Standards (Standards 1A – 4, Rule 5)

The table shows the implementation status of custodians for each of the Corporate Actions Standards.

	Colour Code	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4	4 Rule 5
AT	B	10%	7%	12%	6%	10%	11%	2%	14%	13%	14%	20%	20%	20%	20%	20%
	G	18%	24%	20%	20%	17%	13%	18%	0%	7%	6%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	72%	69%	68%	74%	73%	76%	80%	86%	80%	80%	80%	80%	80%	80%	80%
BE	B	47%	36%	38%	43%	33%	29%	32%	29%	39%	31%	50%	50%	40%	50%	50%
	G	9%	15%	10%	10%	19%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%
	Y	21%	26%	29%	23%	26%	42%	39%	41%	33%	36%	0%	0%	40%	25%	25%
	R	23%	23%	24%	23%	22%	29%	29%	29%	27%	33%	50%	50%	20%	25%	25%
BG	B	50%	28%	23%	33%	19%	47%	28%	29%	23%	25%	20%	20%	33%	20%	20%
	G	0%	19%	13%	8%	14%	2%	19%	14%	24%	23%	20%	20%	17%	20%	20%
	Y	0%	4%	13%	5%	17%	0%	4%	0%	1%	0%	0%	0%	0%	0%	0%
	R	50%	50%	50%	54%	50%	51%	50%	54%	52%	52%	60%	60%	50%	60%	60%
CH	B	40%	40%	24%	24%	27%	100%	98%	70%	39%	38%	67%	100%	80%	80%	80%
	G	0%	0%	16%	9%	3%	0%	2%	22%	2%	1%	0%	0%	0%	0%	0%
	Y	58%	60%	60%	68%	70%	0%	0%	9%	59%	61%	33%	0%	20%	20%	20%
	R	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY	B	43%	38%	29%	31%	31%	43%	41%	28%	39%	40%	83%	67%	83%	86%	86%
	G	0%	0%	0%	0%	2%	0%	2%	10%	1%	1%	0%	0%	0%	0%	0%
	Y	43%	48%	57%	54%	52%	43%	43%	45%	43%	42%	0%	17%	0%	0%	0%
	R	14%	14%	14%	15%	14%	14%	14%	17%	17%	17%	17%	17%	17%	14%	14%
CZ	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	B	53%	50%	30%	33%	23%	40%	36%	15%	52%	44%	60%	47%	60%	38%	57%
	G	14%	14%	22%	22%	24%	34%	36%	38%	17%	17%	13%	20%	13%	23%	14%
	Y	25%	29%	40%	37%	46%	17%	20%	37%	23%	31%	20%	27%	20%	31%	21%
	R	7%	7%	7%	8%	8%	9%	9%	10%	8%	8%	7%	7%	7%	8%	7%
DK	B	63%	67%	64%	53%	23%	70%	68%	62%	70%	76%	100%	100%	100%	100%	100%
	G	38%	33%	36%	47%	32%	27%	32%	38%	30%	23%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	45%	3%	0%	0%	1%	1%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EE	B	0%	0%	0%	0%	0%	19%	25%	21%	23%	1%	50%	50%	25%	25%	25%
	G	0%	0%	0%	0%	0%	25%	0%	16%	2%	2%	0%	0%	0%	0%	0%
	Y	25%	25%	25%	19%	25%	6%	0%	0%	25%	25%	0%	0%	0%	0%	0%
	R	75%	75%	75%	81%	75%	50%	75%	63%	50%	72%	50%	50%	75%	75%	75%
ES	B	41%	36%	29%	24%	15%	35%	31%	18%	46%	48%	46%	38%	54%	46%	54%
	G	42%	47%	54%	57%	64%	40%	43%	55%	36%	34%	38%	38%	31%	38%	31%
	Y	0%	0%	0%	2%	4%	8%	9%	9%	0%	0%	0%	8%	0%	0%	0%
	R	17%	16%	17%	17%	16%	17%	17%	18%	17%	18%	15%	15%	15%	15%	15%
FI	B	65%	61%	53%	38%	0%	70%	71%	54%	60%	52%	100%	100%	100%	75%	75%
	G	10%	12%	18%	32%	33%	27%	26%	38%	17%	14%	0%	0%	0%	0%	25%
	Y	25%	27%	29%	32%	67%	3%	3%	8%	23%	34%	0%	0%	0%	25%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
FR	B	38%	33%	25%	27%	27%	32%	32%	13%	35%	35%	38%	38%	38%	38%	38%
	G	0%	0%	0%	5%	2%	0%	3%	10%	1%	0%	0%	0%	0%	0%	0%
	Y	0%	4%	13%	4%	8%	6%	3%	13%	1%	1%	0%	0%	0%	0%	0%
	R	63%	63%	63%	64%	63%	63%	63%	64%	63%	64%	63%	63%	63%	63%	63%
GR	B	57%	52%	20%	35%	25%	54%	46%	27%	28%	34%	57%	71%	57%	67%	71%
	G	31%	29%	51%	25%	47%	17%	25%	42%	38%	33%	14%	14%	14%	17%	14%
	Y	11%	19%	29%	40%	28%	29%	29%	30%	33%	33%	29%	14%	29%	17%	14%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

		1A	1B	1C	1D	1E	1F	1G	1H	2	3	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4	4 Rule 5
HR	B	19%	19%	14%	14%	0%	16%	16%	12%	16%	14%	43%	57%	57%	57%	57%
	G	24%	24%	17%	14%	17%	11%	27%	21%	27%	15%	14%	0%	0%	0%	0%
	Y	29%	29%	40%	43%	50%	44%	29%	36%	29%	42%	14%	14%	14%	14%	14%
	R	29%	29%	29%	29%	33%	29%	29%	30%	29%	29%	29%	29%	29%	29%	29%
HU	B	13%	13%	13%	13%	0%	13%	13%	8%	2%	2%	0%	0%	0%	0%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	13%	0%	0%	0%	6%	6%	13%	13%	13%	13%	13%
	R	88%	88%	88%	88%	88%	88%	88%	92%	92%	92%	88%	88%	88%	88%	88%
IE	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	B	69%	70%	40%	40%	45%	58%	56%	19%	66%	61%	71%	57%	71%	57%	71%
	G	3%	2%	26%	23%	7%	8%	6%	15%	1%	1%	0%	0%	0%	0%	0%
	Y	0%	0%	6%	8%	19%	0%	6%	30%	4%	8%	0%	14%	0%	14%	0%
	R	29%	29%	29%	29%	29%	35%	33%	37%	30%	30%	29%	29%	29%	29%	29%
LT	B	0%	0%	0%	0%	0%	19%	25%	21%	0%	25%	25%	25%	25%	25%	25%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	25%	25%	25%	19%	25%	6%	0%	0%	25%	25%	0%	0%	0%	0%	0%
	R	75%	75%	75%	81%	75%	75%	75%	79%	75%	75%	75%	75%	75%	75%	75%
LU	B	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
LV	B	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
MT	B	90%	100%	100%	100%	20%	100%	88%	100%	100%	100%	N/A	100%	100%	100%	100%
	G	0%	0%	0%	0%	60%	0%	0%	0%	0%	0%	N/A	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	N/A	0%	0%	0%	0%
	R	10%	0%	0%	0%	20%	0%	13%	0%	0%	0%	N/A	0%	0%	0%	0%
NL	B	83%	83%	77%	76%	58%	80%	80%	70%	81%	77%	83%	83%	83%	83%	83%
	G	0%	0%	7%	7%	25%	0%	0%	9%	1%	1%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	0%	0%	0%	0%	0%
	R	17%	17%	17%	17%	17%	20%	20%	22%	17%	18%	17%	17%	17%	17%	17%
NO	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PL	B	20%	21%	23%	21%	0%	23%	19%	15%	15%	26%	33%	43%	43%	33%	33%
	G	1%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%	0%	0%	0%
	Y	21%	22%	20%	19%	17%	19%	16%	15%	15%	1%	0%	0%	0%	0%	0%
	R	57%	57%	57%	60%	83%	58%	63%	70%	69%	72%	67%	57%	57%	67%	67%
PT	B	57%	61%	27%	32%	25%	63%	58%	43%	63%	63%	67%	67%	56%	56%	78%
	G	0%	0%	7%	9%	8%	0%	2%	13%	1%	1%	0%	0%	0%	0%	
	Y	14%	6%	33%	27%	33%	5%	0%	0%	1%	1%	11%	11%	22%	22%	0%
	R	29%	33%	33%	32%	33%	32%	40%	43%	35%	36%	22%	22%	22%	22%	22%
RO	B	43%	37%	47%	47%	28%	37%	35%	40%	30%	31%	67%	67%	67%	67%	67%
	G	0%	0%	0%	0%	6%	26%	0%	0%	1%	1%	0%	0%	0%	0%	
	Y	23%	30%	20%	16%	33%	30%	35%	27%	34%	34%	0%	0%	0%	0%	0%
	R	33%	33%	33%	37%	33%	7%	31%	33%	34%	34%	33%	33%	33%	33%	33%
SE	B	95%	100%	100%	90%	83%	100%	100%	100%	96%	97%	100%	100%	100%	100%	100%
	G	5%	0%	0%	10%	17%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SI	B	8%	3%	0%	7%	0%	26%	22%	0%	0%	50%	50%	50%	33%	50%	
	G	23%	20%	21%	15%	14%	6%	3%	21%	31%	25%	0%	0%	0%	0%	
	Y	50%	51%	53%	52%	57%	51%	50%	53%	37%	52%	25%	25%	25%	33%	25%
	R	20%	26%	26%	26%	29%	17%	25%	26%	31%	23%	25%	25%	25%	33%	25%
SK	B	36%	31%	40%	32%	17%	36%	40%	20%	52%	32%	60%	60%	60%	60%	60%
	G	24%	44%	24%	26%	43%	44%	20%	40%	27%	27%	0%	0%	0%	0%	0%
	Y	16%	0%	16%	21%	20%	0%	20%	0%	20%	0%	21%	20%	20%	20%	20%
	R	24%	24%	20%	21%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
UK	B	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes: The first row (blue) indicates the percentage of standards/rules that have already been implemented by custodians. The second row (green) indicates the percentage of standards/rules for which "development and implementation" is ongoing. The third row (yellow) indicates the percentage of standards/rules for which "analysis" is ongoing (i.e. Milestone 3 has not been reached yet). The fourth row (red) indicates the percentage of standards/rules for which analysis has not started yet (i.e. Milestone 1 has not been met yet) or for which responses were not submitted by custodians. The percentages are calculated on the basis of the custodians monitored in the market for which the standards are applicable. When a standard is not applicable for all custodians in an AMI-SeCo market, "N/A" is reported. A dash ("-"): indicates markets where no custodians are monitored.

Table 14b

Custodian compliance – Corporate Actions (Standards 5-15)⁵

	Colour Code	5	9	10 Rule 1	10 Rule 2	10 Rule 3	11	12	13	15
AT	B	0%	0%	20%	0%	0%	20%	20%	0%	0%
	G	0%	0%	0%	20%	20%	0%	0%	20%	20%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	80%	80%	80%	80%	80%	80%	80%
BE	B	25%	0%	25%	25%	0%	75%	25%	0%	13%
	G	0%	25%	0%	0%	25%	0%	0%	0%	13%
	Y	25%	50%	50%	50%	50%	0%	50%	67%	28%
	R	50%	25%	25%	25%	25%	25%	25%	33%	45%
BG	B	20%	33%	33%	33%	20%	33%	25%	17%	2%
	G	20%	17%	17%	17%	20%	17%	0%	33%	38%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	60%	50%	50%	50%	60%	50%	75%	50%	60%
CH	B	80%	60%	80%	80%	80%	67%	60%	33%	28%
	G	20%	20%	0%	0%	0%	0%	0%	0%	3%
	Y	0%	20%	20%	20%	20%	33%	40%	67%	70%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY	B	67%	43%	43%	43%	50%	43%	40%	29%	19%
	G	0%	0%	0%	0%	0%	14%	0%	0%	2%
	Y	17%	43%	43%	43%	33%	29%	20%	57%	62%
	R	17%	14%	14%	14%	17%	14%	40%	14%	17%
CZ	B	-	-	-	-	-	-	-	-	-
	G	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-
DE	B	27%	21%	36%	38%	23%	50%	23%	14%	6%
	G	18%	21%	21%	31%	31%	25%	15%	21%	22%
	Y	45%	50%	36%	23%	38%	17%	54%	57%	59%
	R	9%	7%	7%	8%	8%	8%	8%	7%	13%
DK	B	25%	67%	67%	67%	33%	100%	50%	50%	9%
	G	50%	33%	33%	33%	33%	0%	50%	25%	54%
	Y	25%	0%	0%	0%	33%	0%	0%	0%	36%
	R	0%	0%	0%	0%	0%	0%	0%	25%	0%
EE	B	0%	0%	0%	0%	0%	25%	0%	0%	9%
	G	0%	0%	0%	0%	0%	0%	0%	0%	5%
	Y	25%	25%	25%	25%	25%	0%	25%	25%	15%
	R	75%	75%	75%	75%	75%	75%	75%	75%	71%
ES	B	36%	38%	50%	40%	22%	69%	38%	31%	4%
	G	45%	38%	33%	40%	44%	15%	31%	38%	43%
	Y	0%	8%	0%	0%	11%	0%	15%	15%	33%
	R	18%	15%	17%	20%	22%	15%	15%	15%	21%
FI	B	67%	25%	75%	25%	0%	100%	0%	25%	32%
	G	33%	50%	0%	25%	25%	0%	50%	25%	29%
	Y	0%	25%	25%	50%	75%	0%	0%	50%	38%
	R	0%	0%	0%	0%	0%	0%	50%	0%	0%
FR	B	38%	25%	38%	38%	38%	38%	25%	14%	4%
	G	0%	0%	0%	0%	0%	0%	0%	0%	6%
	Y	0%	13%	0%	0%	0%	0%	13%	14%	18%
	R	63%	63%	63%	63%	63%	63%	63%	71%	72%
GR	B	25%	33%	57%	50%	60%	86%	33%	17%	19%
	G	25%	33%	29%	33%	20%	0%	33%	17%	34%
	Y	50%	33%	14%	17%	20%	14%	33%	67%	47%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%

⁵ Corporate Action Standards 6, 7, 8 and 14 are not relevant for custodians.

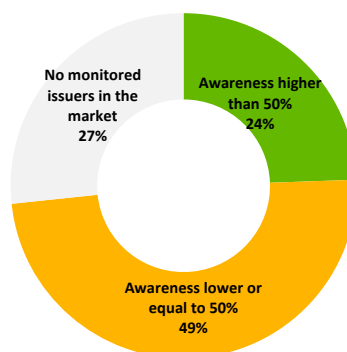
		5	9	10 Rule 1	10 Rule 2	10 Rule 3	11	12	13	15
HR	B	17%	43%	29%	17%	17%	43%	17%	0%	20%
	G	17%	14%	0%	0%	0%	14%	0%	17%	14%
	Y	33%	14%	43%	50%	50%	14%	50%	50%	29%
	R	33%	29%	29%	33%	33%	29%	33%	33%	37%
HU	B	0%	13%	0%	0%	0%	13%	0%	0%	3%
	G	0%	0%	0%	0%	0%	0%	0%	0%	9%
	Y	0%	0%	13%	13%	13%	0%	13%	13%	0%
	R	100%	88%	88%	88%	88%	88%	88%	88%	88%
IE	B	-	-	-	-	-	-	-	-	-
	G	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-
IT	B	14%	14%	43%	33%	33%	71%	17%	14%	8%
	G	29%	14%	14%	0%	17%	0%	17%	14%	9%
	Y	29%	43%	14%	33%	17%	0%	33%	43%	43%
	R	29%	29%	29%	33%	33%	29%	33%	29%	40%
LT	B	0%	0%	0%	0%	0%	25%	0%	0%	9%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	25%	25%	25%	25%	25%	0%	25%	25%	15%
	R	75%	75%	75%	75%	75%	75%	75%	75%	76%
LU	B	0%	0%	0%	0%	0%	0%	0%	0%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	100%	100%	100%	100%	100%	100%	100%
LV	B	0%	0%	0%	0%	0%	0%	0%	0%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	100%	100%	100%	100%	100%	100%	100%
MT	B	N/A	N/A	100%	100%	N/A	100%	N/A	N/A	N/A
	G	N/A	N/A	0%	0%	N/A	0%	N/A	N/A	N/A
	Y	N/A	N/A	0%	0%	N/A	0%	N/A	N/A	N/A
	R	N/A	N/A	0%	0%	N/A	0%	N/A	N/A	N/A
NL	B	67%	67%	67%	67%	67%	83%	60%	67%	28%
	G	0%	0%	0%	0%	0%	0%	0%	0%	32%
	Y	17%	17%	17%	17%	17%	0%	20%	17%	13%
	R	17%	17%	17%	17%	17%	17%	20%	17%	28%
NO	B	-	-	-	-	-	-	-	-	-
	G	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-
PL	B	17%	14%	29%	20%	17%	43%	0%	0%	20%
	G	0%	0%	0%	0%	0%	0%	0%	0%	1%
	Y	17%	14%	14%	0%	17%	0%	33%	43%	8%
	R	67%	71%	57%	80%	67%	57%	67%	57%	70%
PT	B	67%	57%	38%	50%	38%	63%	50%	57%	14%
	G	0%	0%	13%	13%	13%	0%	0%	0%	14%
	Y	0%	14%	25%	13%	25%	13%	17%	14%	13%
	R	33%	29%	25%	25%	25%	25%	33%	29%	59%
RO	B	33%	33%	33%	0%	33%	67%	33%	33%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	5%
	Y	33%	33%	33%	50%	33%	0%	33%	33%	50%
	R	33%	33%	33%	50%	33%	33%	33%	33%	45%
SE	B	100%	100%	100%	100%	50%	100%	50%	100%	26%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	50%	0%	0%	0%	41%
	R	0%	0%	0%	0%	0%	0%	50%	0%	33%
SI	B	0%	33%	0%	0%	0%	75%	0%	0%	38%
	G	0%	0%	25%	0%	0%	0%	0%	0%	20%
	Y	50%	33%	50%	67%	67%	0%	67%	67%	43%
	R	50%	33%	25%	33%	33%	25%	33%	33%	0%
SK	B	50%	40%	40%	20%	20%	60%	20%	20%	7%
	G	0%	20%	20%	40%	40%	0%	40%	40%	40%
	Y	25%	20%	20%	20%	20%	20%	20%	20%	31%
	R	25%	20%	20%	20%	20%	20%	20%	20%	23%
UK	B	0%	0%	0%	0%	0%	0%	0%	0%	0%
	G	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	100%	100%	100%	100%	100%	100%	100%

3.2.4 Issuers' awareness of their obligation to provide all relevant information to issuer CSDs – Corporate Action Standards

Chart 9

For issuers in all markets: percentage of issuers with a high or low awareness of their obligations to provide information to issuer CSDs

The chart below reflects the number of cells in Table 15 with a value higher than 50% (high-level of awareness in green), lower or equal to 50% (low level of awareness in yellow) or with a dash (no issuers monitored in the market in grey).



Key takeaways	Action points
<p>High awareness of SCoRE corporate actions standards in some markets (BE, BG, CY, EE, ES, FR, GR, IT, PT and SI).</p> <p>Low awareness in the remaining markets – issuer awareness should be increased.</p> <p>No reporting: Some markets should obtain feedback from the issuer community (HU, LV, NL and PL).</p>	<p>Issuers (and issuer agents) should be aware of the SCoRE Corporate Actions Standards, in particular:</p> <ul style="list-style-type: none"> • Standard 1 (Provision of corporate actions information) • Standard 2 (Key data elements) • Standard 3 (Consistent information) • Standard 4 (Rounding rules) • Standard 5 (Negative cash flow) • Standard 6 (Business day conventions) • Standard 7 (Securities amount data) • Standard 8 (Payment time) • Standard 9 (Delays) • Standard 11 (Default options) • Standard 12 (Solicitation fees) • Standard 13 (Reversal announcements)

Table 15a

Issuers' awareness of their obligations to provide all relevant information to the issuer CSDs for each of Corporate Action Standards 1A-6

(percentages)

	1A	1F	2	3	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4	4 Rule 5	5	6
AT	13%	13%	13%	13%	13%	13%	13%	13%	13%	0%	13%
BE	38%	25%	25%	25%	50%	50%	50%	50%	50%	25%	50%
BG	90%	80%	80%	80%	100%	100%	100%	80%	80%	60%	100%
CH	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CZ	-	-	-	-	-	-	-	-	-	-	-
DE	23%	10%	25%	13%	38%	38%	75%	50%	63%	38%	75%
DK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	75%
EE	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
ES	50%	0%	50%	50%	100%	100%	100%	100%	100%	50%	100%
FI	25%	25%	50%	50%	50%	50%	50%	50%	50%	25%	50%
FR	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%
GR	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	100%
HR	42%	25%	0%	0%	25%	25%	25%	25%	25%	0%	25%
HU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
IE	-	-	-	-	-	-	-	-	-	-	-
IT	100%	80%	33%	67%	100%	100%	100%	100%	100%	33%	100%
LT	0%	16%	0%	0%	20%	20%	20%	20%	20%	0%	20%
LU	-	-	-	-	-	-	-	-	-	-	-
LV	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MT	-	-	-	-	-	-	-	-	-	-	-
NL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NO	-	-	-	-	-	-	-	-	-	-	-
PL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PT	50%	0%	0%	0%	100%	100%	100%	100%	100%	100%	0%
RO	-	-	-	-	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-	-	-	-	-
SI	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SK	0%	0%	0%	20%	20%	0%	0%	0%	0%	20%	60%
UK	-	-	-	-	-	-	-	-	-	-	-

Notes: Issuers were asked to confirm (on a yes/no basis) whether they were aware of their obligation to provide all relevant information to the issuer CSD.

The percentage reflects the number of questions that were answered "yes" in the survey.

The percentages are calculated on the basis of the entities monitored (i.e. all entities that committed to taking part in the survey are included in the calculation, irrespective of whether or not they submitted answers).

A dash ("-") indicates markets where no issuers are monitored.

0% indicates that all issuers in the AMI-SeCo market either replied "No" or did not reply to the question.

Table 15b

Issuers' awareness of their obligation to provide all relevant information to the issuer CSDs for each of the Corporate Actions Standards 7-13

(percentages)

	7 Rule 1	7 Rule 2	7 Rule 3	7 Rule 4	8 Rule 1	8 Rule 2	8 Rule 3	8 General Principle 3	9	11	13
AT	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%
BE	50%	50%	50%	50%	50%	50%	75%	75%	50%	50%	25%
BG	100%	60%	60%	60%	80%	60%	80%	80%	80%	80%	80%
CH	0%	0%	0%	0%	0%	20%	20%	0%	20%	20%	20%
CY	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CZ	-	-	-	-	-	-	-	-	-	-	-
DE	75%	63%	50%	50%	63%	25%	63%	50%	63%	38%	25%
DK	75%	75%	75%	75%	75%	50%	75%	0%	0%	50%	0%
EE	50%	50%	0%	0%	50%	50%	50%	50%	50%	50%	50%
ES	100%	50%	50%	50%	100%	50%	100%	100%	50%	100%	0%
FI	75%	75%	75%	75%	50%	75%	50%	25%	50%	75%	50%
FR	100%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%
GR	100%	100%	100%	100%	100%	100%	100%	50%	100%	100%	100%
HR	0%	0%	0%	25%	25%	25%	25%	0%	25%	25%	25%
HU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
IE	-	-	-	-	-	-	-	-	-	-	-
IT	100%	100%	100%	67%	100%	100%	100%	67%	100%	100%	100%
LT	20%	20%	20%	20%	0%	0%	0%	0%	0%	20%	0%
LU	-	-	-	-	-	-	-	-	-	-	-
LV	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MT	-	-	-	-	-	-	-	-	-	-	-
NL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NO	-	-	-	-	-	-	-	-	-	-	-
PL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PT	100%	100%	0%	0%	100%	100%	100%	100%	100%	0%	100%
RO	-	-	-	-	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-	-	-	-	-
SI	100%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
SK	20%	20%	40%	40%	40%	40%	20%	20%	0%	20%	20%
UK	-	-	-	-	-	-	-	-	-	-	-

3.3 Compliance with the Billing Processes Standards

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains four standards relating to billing processes (published as the [SCoRE Standards for Billing Processes](#)). This section presents the compliance status of the monitored entities as at 21 April 2023.

The standards being assessed are listed below:

Table 16
SCoRE Billing Processes Standards

No	Name
1	ISO 20022 messages for billing information
2	Harmonised billing cycles
3	Cut-off date for provision of billing information by (I)CSDs
4	Harmonised dates for payment of fees to (I)CSDs

Source: [Billing Processes: Single Collateral Management Rulebook for Europe](#).

On the provider side, the monitored entities are:

- CSDs (see Section 3.3.1);
- TPAs (see Section 3.3.2);
- Custodians (see Section 3.3.3).

On the user side, the monitored entities are:

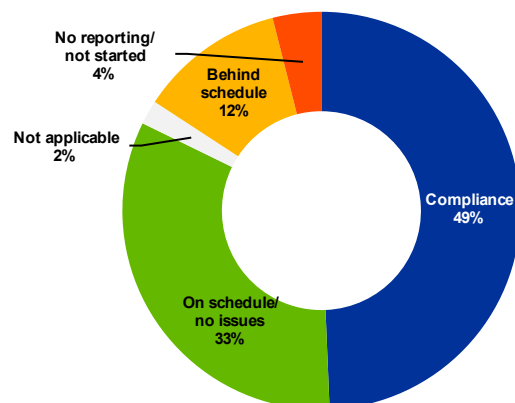
- Eurosystem national central banks: NCBs are monitored by the ECB in their role as users of corporate actions services. All Eurosystem NCBs are on track.

3.3.1 CSD compliance with SCoRE Billing Processes Standards

Chart 10

CSD compliance with SCoRE Billing Processes Standards

The graph summarises the colour codes assigned to the standards in the Billing Processes SCoREBOARD for CSDs (see Table 17 below). The percentages are calculated based on the number of standards of a certain colour across all AMI-SeCo markets.



Key takeaways	Action points
<p>Compliance: There has been a high level of compliance with Standard 2 (Billing cycle) and Standard 3 (Cut-off date).</p> <p>On schedule: The implementation is on schedule for Standard 1 (ISO 20022) and Standard 4 (Payment dates) in some markets.</p> <p>Behind schedule: The implementation is behind schedule for Standards 1 and 4 in many markets (but no showstoppers have emerged that could affect the overall migration).</p> <p>No reporting/not started: No feedback was received from one CSDs, i.e. NO (Euronext Securities Oslo).</p>	<ul style="list-style-type: none"> • NO should participate.

Table 17

CSD compliance with Billing Processes Standards

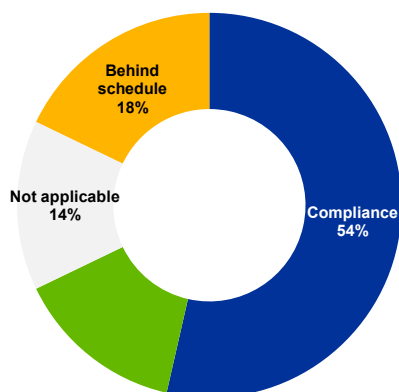
	1	2	3	4
AT - OeKB CSD	G	B	B	B
BE - Euroclear Bank	G	B	B	B
BE - Euroclear Belgium	G	B	B	G
BE - NBB-SSS	G	B	B	B
BG - BNBGSSS	Y	G	G	G
BG - CD AD	G	B	B	B
CH - SIX SIS	Y	B	B	G
CY - Cyprus Stock Exchange	G	G	G	G
CZ - CSD Prague	G	B	B	G
CZ - SKD	Y	B	B	Y
DE - Clearstream Banking Frankfurt	Y	B	B	B
DK - Euronext Securities Copenhagen	Y	B	B	B
EE - NASDAQ	G	B	B	G
ES - Iberclear	G	B	B	G
FI - Euroclear Finland	Y	B	B	G
FR - Euroclear France	G	B	B	G
GR - BOGS	G	B	B	G
GR - AthexCSD	Y	B	B	B
HR - SKDD	G	B	B	G
HU - KELER	R	Y	Y	Y
IE - Euroclear	G	B	B	B
IT - Euronext Securities Milan	G	B	B	G
LT - NASDAQ	G	B	B	G
LU - Clearstream Banking Luxembourg	Y	B	B	B
LU - LuxCSD	Y	B	B	B
LV - NASDAQ	G	B	B	G
MT - Malta Stock Exchange	G	B	G	G
NL - Euroclear Nederland	G	B	B	G
NO - Euronext Securities Oslo	R	R	R	R
PL - KDPW	Y	B	B	Y
PL - SKARBNET4	G	N/A	N/A	N/A
PT - Euronext Securities Porto	G	B	B	B
RO - Depozitarul Central	Y	B	G	G
RO - SaFIR	G	G	G	G
SE - Euroclear Sweden	Y	B	B	R
SI - KDD	G	B	B	B
SK - CDCP	G	B	B	G
UK - Euroclear International	Y	B	B	B

Notes: For CSDs and TPAs, the colour code reflects the current implementation status for each standard based on the methodology outlined in Annex 2, "Methodology". Green means that the entity is on schedule for implementing the standards. Yellow means that the entity is behind schedule and blue means that the standard has already been implemented.

3.3.2 TPA compliance with Billing Processes Standards

Chart 11

TPA compliance with SCoRE Billing Processes Standards



The graph summarises the colour codes assigned to the standards in the Billing Processes SCoREBOARD for TPAs (see Table 18 below). The percentages are calculated based on the number of standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>Compliance: There is a high level of compliance with Standard 2 (Billing cycle), Standard 3 (Cut-off date) and Standard 4 (Payment date).</p> <p>Behind schedule: TPAs have not yet concluded their analysis for Standard 1. No showstoppers have emerged that could affect overall migration.</p> <p>Not applicable: Standard 3 (Cut-off date) is only applicable to TPAs that are operated by a CSD (because the standard requires CSDs to set a cut-off date for providing billing information to clients). Standard 3 is therefore not applicable to BNY Mellon, BNP Paribas and J.P. Morgan, which are not operated by CSDs.</p>	

Table 18

TPA compliance with Billing Processes Standards

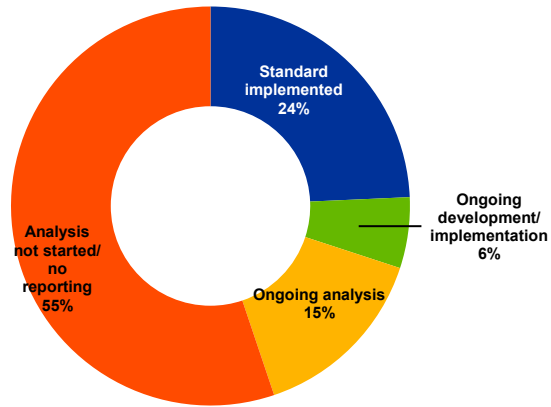
	BE BNY Mellon	BE Euroclear	CH SIX SIS	FR BNP Paribas	FR Euroclear	LU Clearstream	LU JP Morgan
1	Y	G	Y	Y	G	Y	Y
2	B	B	B	B	B	B	B
3	N/A	B	B	N/A	B	B	N/A
4	B	B	G	B	G	B	N/A

Notes: For CSDs and TPAs, the colour code reflects the current implementation status for each standard based on the methodology outlined in Figure 4 above and in Annex 2, "Methodology". Green means that the entity is implementing the standards on schedule. Yellow means that the entity is behind schedule and blue means that the standard has already been implemented.

3.3.3 Custodian compliance with Billing Processes Standards

Chart 12

Custodian compliance with Billing Processes Standards



The graph summarises the colour codes assigned to the responses to the Billing Processes SCoRE survey for custodians (see Table 19 below). Percentages represent the number of replies assigned a certain colour out of the applicable questions, across all markets. Each standard has been assigned the same relative weight (i.e. replies have different weights based on how many questions there are in the standard).

Key takeaways	Action points
<p>Compliance and on schedule: Implementation of Standard 2 (Billing cycle) is on track in some markets.</p> <p>Behind schedule: Most custodians have not started analysis for Standard 1 (but this is expected to take place after the CSDs' internal implementations).</p> <p>No reporting/not started: No feedback was collected from some custodians (LU and UK).</p>	<p>NSGs should address the low levels of reporting among custodians.</p>

Table 19

Custodian compliance – Billing Processes Standards

	Colour Code	1	2		Colour Code	1	2
AT	B	0%	20%	IE	B	-	-
	G	20%	0%		G	-	-
	Y	0%	0%		Y	-	-
	R	80%	80%		R	-	-
BE	B	0%	50%	IT	B	0%	71%
	G	0%	0%		G	0%	0%
	Y	43%	25%		Y	45%	0%
	R	57%	25%		R	55%	29%
BG	B	0%	33%	LT	B	14%	50%
	G	0%	0%		G	0%	0%
	Y	0%	0%		Y	29%	0%
	R	100%	67%		R	57%	50%
CH	B	0%	67%	LU	B	0%	0%
	G	0%	0%		G	0%	0%
	Y	33%	17%		Y	0%	0%
	R	67%	17%		R	100%	100%
CY	B	10%	29%	LV	B	8%	14%
	G	10%	14%		G	0%	0%
	Y	20%	29%		Y	0%	0%
	R	60%	29%		R	92%	86%
CZ	B	-	-	MT	B	N/A	100%
	G	-	-		G	N/A	0%
	Y	-	-		Y	N/A	0%
	R	-	-		R	N/A	0%
DE	B	8%	54%	NL	B	0%	60%
	G	12%	8%		G	33%	0%
	Y	58%	15%		Y	17%	0%
	R	23%	23%		R	50%	40%
DK	B	0%	75%	NO	B	-	-
	G	0%	0%		G	-	-
	Y	50%	0%		Y	-	-
	R	50%	25%		R	-	-
EE	B	0%	25%	PL	B	0%	29%
	G	0%	0%		G	0%	0%
	Y	25%	0%		Y	0%	0%
	R	75%	75%		R	100%	71%
ES	B	0%	64%	PT	B	0%	67%
	G	25%	9%		G	27%	0%
	Y	25%	0%		Y	9%	11%
	R	50%	27%		R	64%	22%
FI	B	0%	100%	RO	B	25%	67%
	G	0%	0%		G	0%	0%
	Y	50%	0%		Y	75%	33%
	R	50%	0%		R	0%	0%
FR	B	0%	25%	SE	B	N/A	100%
	G	0%	13%		G	N/A	0%
	Y	0%	0%		Y	N/A	0%
	R	100%	63%		R	N/A	0%
GR	B	33%	83%	SI	B	17%	75%
	G	17%	0%		G	17%	0%
	Y	17%	17%		Y	33%	0%
	R	33%	0%		R	33%	25%
HR	B	0%	43%	SK	B	0%	40%
	G	17%	14%		G	25%	0%
	Y	50%	14%		Y	25%	20%
	R	33%	29%		R	50%	40%
HU	B	0%	13%	UK	B	0%	0%
	G	0%	0%		G	0%	0%
	Y	13%	0%		Y	0%	0%
	R	88%	88%		R	100%	100%

Notes: The first row (blue) indicates the percentage of standards that have already been implemented by custodians. The second row (green) indicates the percentage of standards for which "development and implementation" is ongoing. The third row (yellow) indicates the percentage of standards for which "analysis" is ongoing (i.e. Milestone 3 has not been reached yet). The fourth row (red) indicates the percentage of standards for which analysis has not started yet (i.e. Milestone 1 has not been met yet) or for which responses were not submitted by custodians. The percentages are calculated on the basis of the custodians monitored in the market for which the standards are applicable. When a standard is not applicable for all custodians in an AMI-SeCo market, "N/A" is reported. A dash ("-"): indicates markets where no custodians are monitored

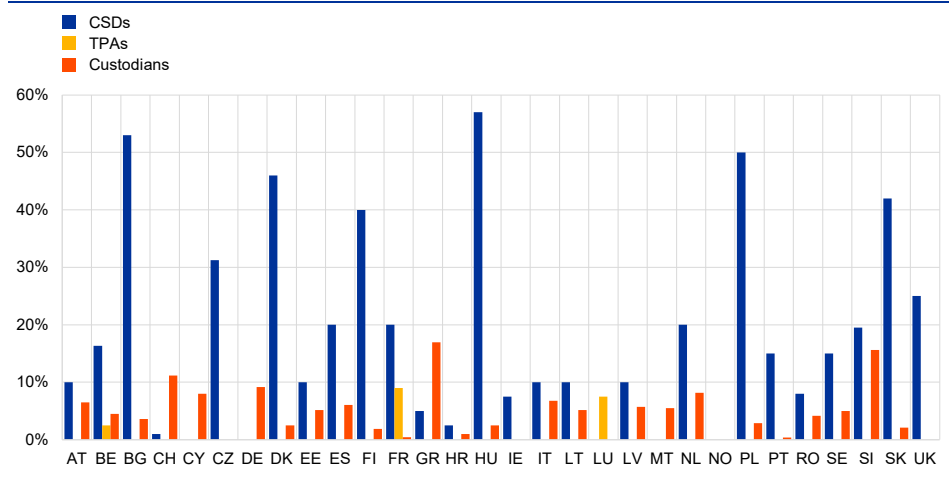
4 ISO 2022 adoption

In order to track progress with market-wide adoption of ISO 2022 messaging, information was collected from reporting entities on the percentage of their clients/counterparties with the capability to communicate in Application-to-Application (A2A) format using ISO 2022 messages.

Chart 13 illustrates the percentages of CSD, TPA and custodian clients with the capability to communicate in A2A using ISO 2022 messages.

Chart 13

Percentages of CSD, TPA and custodian clients with the capability to communicate in A2A using ISO 2022 messages



Notes: CSDs, TPAs and custodians were asked to provide an estimate of the percentage of their clients with the capability to communicate in A2A using ISO 2022 messages. The percentages in the table reflect the average by entity type for each AMI-SeCo market.

Annex 1: Markets participating in the surveys and monitored entities⁶

Participating markets	Triparty Collateral Management survey	Corporate Actions survey	Billing Processes survey
AT	N/A	1 CSD 5 Custodians (3) 8 Issuers (7)	1 CSD 5 Custodians (4)
BE	2 TPAs	3 CSDs 2 TPAs 5 Custodians (1) 4 Issuers (1)	3 CSDs 2 TPAs 5 Custodians (1)
BG	N/A	2 CSDs 6 Custodians (3) 5 Issuers	2 CSDs 6 Custodians (3)
CH	1 TPA	1 CSD 1 TPA 6 Custodians 5 Issuers (3)	1 CSD 1 TPA 6 Custodians (1)
CY	N/A	1 CSD 7 Custodians (1) 1 Issuer	1 CSD 7 Custodians (2)
CZ	N/A	2 CSDs	2 CSDs
DE	N/A	1 CSD 16 Custodians (1) 8 Issuers (2)	1 CSD 16 Custodians (3)
DK	N/A	1 CSD 4 Custodians 4 Issuers (1)	1 CSD 4 Custodians (1)
EE	N/A	1 CSD 4 Custodians (2) 2 Issuers (1)	1 CSD 4 Custodians (3)
ES	N/A	1 CSD 13 Custodians (2) 2 Issuers	1 CSD 13 Custodians (3)
FI	N/A	1 CSD 4 Custodians 4 Issuers (1)	1 CSD 4 Custodians
FR	2 TPAs	1 CSD 2 TPAs 8 Custodians (5) 1 Issuer	1 CSD 2 TPAs 8 Custodians (5)
GR	N/A	2 CSDs 7 Custodians 2 Issuers	2 CSDs 7 Custodians

⁶ Monitored or participating entities are those that received the token needed to fill in the survey. This does not necessarily mean they submitted answers to the survey. The number of entities that did not submit answers is indicated in parenthesis.

HR	N/A	1 CSD 7 Custodians (2) 4 Issuers (2)	1 CSD 7 Custodians (2)
HU	N/A	1 CSD 8 Custodians (7) 5 Issuers (5)	1 CSD 8 Custodians (7)
IE	N/A	1 CSD	1 CSD
IT	N/A	1 CSD 7 Custodians (2) 3 Issuers	1 CSD 7 Custodians (2)
LT	N/A	1 CSD 4 Custodians (3) 5 Issuers (4)	1 CSD 4 Custodians (2)
LU	2 TPAs	2 CSDs 2 TPAs 2 Custodians (2)	2 CSDs 2 TPAs 2 Custodians (2)
LV	N/A	1 CSD 7 Custodians (7) 1 Issuer (1)	1 CSD 7 Custodians (6)
MT	N/A	1 CSD 1 Custodian	1 CSD 1 Custodian
NL	N/A	1 CSD 6 Custodians (1) 1 Issuer (1)	1 CSD 5 Custodians (1)
NO	N/A	1 CSD (1)	1 CSD (1)
PL	N/A	2 CSDs 7 Custodians (4) 1 Issuer (1)	2 CSDs 7 Custodians (5)
PT	N/A	1 CSD 9 Custodians (1) 1 Issuer	1 CSD 9 Custodians (1)
RO	N/A	2 CSDs 3 Custodians	2 CSDs 3 Custodians
SE	N/A	1 CSD 2 Custodian	1 CSD 2 Custodian
SI	N/A	1 CSD 4 Custodians 1 Issuer	1 CSD 4 Custodians
SK	N/A	1 CSDs 6 Custodians (1) 5 Issuers (1)	1 CSDs 6 Custodians (1)
UK	N/A	1 CSD 12 Custodians (12)	1 CSD 12 Custodians (12)

Note: For the Triparty Collateral Management survey: N/A indicates that the market does not have a TPA.

Annex 2: Methodology applied for the monitoring exercise

As indicated in the [framework document](#) of December 2019, reporting on progress with implementation is undertaken twice a year. The monitoring activity involves assessing the progress being made with implementation of the SCoRE Standards. Progress is also monitored against a set of 13 milestones to be achieved by their respective dates.

The compliance status of all relevant actors with the AMI-SeCo standards is displayed using a four-colour scheme.

Colour coding

As set out in the [framework document](#) of December 2019, the colour coding applied to the responses to the questions on standards is as follows.



- The Standard has been implemented
 - Implementation of the Standard is on schedule (based on the agreed milestones)
 - Implementation is behind schedule (based on the agreed milestones)
 - Implementation has not started
-

Presentation of the figures

- **CSDs and TPAs:** The replies of the 38 CSDs and 7 TPAs in the AMI-SeCo community are presented on an individual basis. The status of implementation of their standards is assigned a colour-coded status applying in accordance with the methodology outlined above.
- **Custodians and issuers:** There are too many to represent individually. The replies of custodians and issuers from the AMI-SeCo community participating in the monitoring are presented on an aggregated basis per market and assigned a percentage representing their compliance status.
- **N/A (not applicable):** N/A may only be given in response to the questions related to standards.
- **In the case of CSD and TPA compliance with standards:** when N/A is represented in the tables/charts, N/A means that a specific standard is not applicable to the specific CSD or TPA.

- **For custodians:** When a custodian answers N/A to a standard, the reply is not considered for the calculation of the aggregated percentages (neither at the numerator nor at the denominator).

Monitored entities (i.e. expected number of respondents)

Monitored entities are those entities that were invited to participate in the surveys (and thus received tokens to participate in the surveys). This does not necessarily mean that those entities submitted answers to the survey.

Nevertheless, all the entities that committed to taking part to the survey are counted in the computation, irrespective of whether or not they submitted answers. This is notably particularly for the participation rate (Chart 3), the charts for visualisations on the level of compliance with standards for custodians and issuers (Chart 8, 9 and 12; Tables 14, 15 and 19), and the milestones tables for custodians (Tables 5 and 8).

The **percentages** are thus calculated based on the expected number of respondents (i.e. all entities which have received a token to answer the surveys) across all AMI-SeCo markets.

Unless differently specified in the visualisations footnote, entities that did not submit answers are counted as 0% in the numerator but are counted as participants in the denominator.

© **European Central Bank, 2023**

Postal address 60640 Frankfurt am Main, Germany
Telephone +49 69 1344 0
Website www.ecb.europa.eu

All rights reserved. Any reproduction, publication and reprint in the form of a different publication, whether printed or produced electronically, in whole or in part, is permitted only with the explicit written authorisation of the ECB or the authors.

This paper can be downloaded without charge from the [ECB website](#) or from [RePEc: Research Papers in Economics](#). Information on all of the papers published in the ECB Statistics Paper Series can be found on the ECB's website.

PDF ISBN 978-92-899-5462-4, ISSN 2600-2396, doi:10.2866/083871, QB-CL-22-004-EN-N