



EUROPEAN CENTRAL BANK
EUROSYSTEM

SCoREBOARD

Advisory Group on Market Infrastructures for
Securities and Collateral

Third Compliance and Progress Report

March 2022



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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 H2 2021 monitoring exercise and covers four main areas, as outlined in Box 1 below.

Box 1

SCoREBOARD overview

Participation

29 out of 30 AMI-SeCo markets participated in the exercise



Progress

Detailed analysis of the Standards is underway



Compliance

Some compliance with the Standards has already been achieved: follow-up actions are required



Milestones

Full compliance expected by the majority of entities by AMI-SeCo deadlines



This report focuses on the milestones to be met by the end of November 2021, i.e. by the time the survey was closed. In this monitoring exercise, participants were expected to have reached Milestone 3 (completion of an in-depth analysis of all applicable SCoRE standards) by 31 July 2021.

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

Markets participating in the survey and the entities monitored

More markets engaged in the latest monitoring exercise, which covers the 30 AMI-SeCo markets. All eight triparty agents (TPAs) participated in the survey and most of them provided answers to the relevant surveys. In terms of the central securities depositories (CSDs), 35 out of 38 took part in the survey, which represents a slightly higher participation rate as compared with the previous monitoring exercise. However, the engagement of more custodians and issuers in AMI-SeCo markets is needed to increase the representativity of survey outcomes.

Progress towards the current milestones

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

In most cases the survey results did not point to any major obstacles to achieving full compliance with the SCoRE Standards at the current juncture. However, further efforts would need to be made by the entities concerned in order to achieve full compliance with all the standards on time.

- **For triparty collateral management**

Half of the TPAs have conducted their respective detailed analysis (Milestone 3). Most TPAs will be able to implement the standards (i.e. achieve the final milestone, Milestone 13), on time. Euroclear stated that it will implement the standards after their migration to T2S.

- **For corporate actions**

68% of the CSDs were confident that they would implement the standards (achieve the last milestone) on time.

More than half of the responding CSDs have conducted their respective detailed analysis (Milestone 3). This delay in analysis is explained by ongoing discussions in AMI-SeCo on certain aspects. AMI-SeCo agreed in the meantime on the open aspects.

Nearly all the TPAs indicated that they would be able to implement all the standards on time.

For custodians, further action is needed to increase their awareness and ensure that the deadline for achieving compliance with the standards will be met.

- **For billing processes**

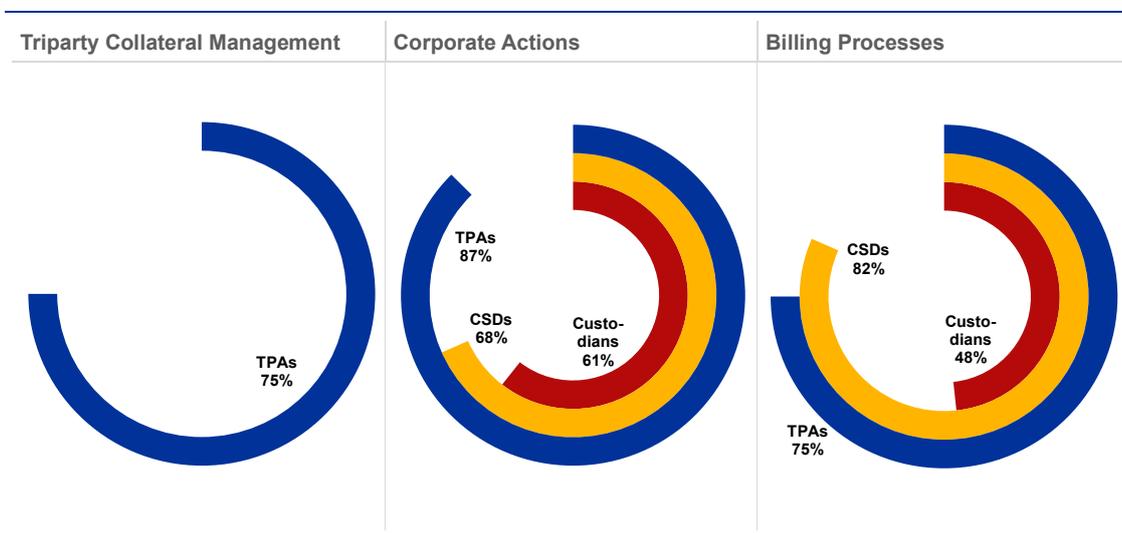
Most CSDs did not expect to meet all the intermediary milestones by the deadlines set but they were nevertheless confident that they would be able to meet the last milestone on time and thus implement the standards by November 2023.

All the TPAs, except BNP Paribas, expected to meet the last milestone on time, i.e. they were confident that they would implement all the standards by November 2023.

For custodians, further action is needed to increase their awareness and ensure that the deadline for compliance with the standards will be met

Box 2

Expectations of meeting the final milestone, Milestone 13, by 20 November 2023



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

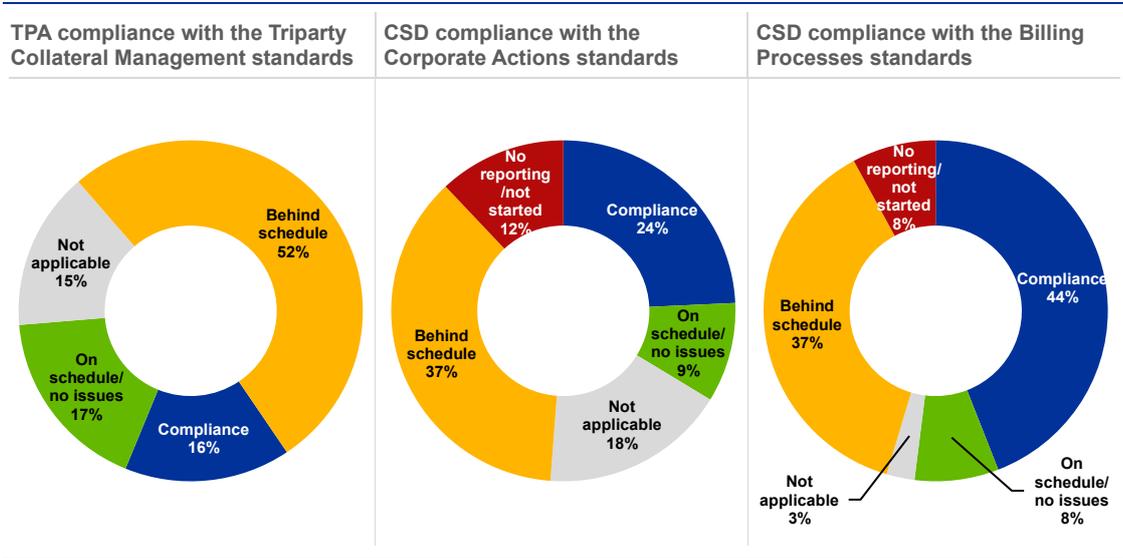
Compliance by TPAs with the triparty collateral management standards needs to be improved. In particular, efforts are needed to ensure greater progress to ensure that the requirements are implemented.

CSD compliance with the standards for corporate actions is not advanced. The AMI-SeCo agreement on the open aspects should allow CSDs to accelerate progress.

The level of compliance with the billing processes standards is already high, but further efforts will be needed in 2022 to ensure that all the relevant standards will be on track for full implementation by November 2023.

Box 3

TPA and CSD compliance with the standards



The percentages are calculated based on the colours assigned to the individual responses across all AMI-SeCo markets to the survey questions relating to the individual standards. For further details, please refer to the SCoREBOARD in Section 3.

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

Background

Since 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 **Single Collateral Management Rulebook for Europe (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 November 2023. 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.¹

¹ Please refer to the [collateral management harmonisation](#) report for further information.

Box 4

10 SCoRE activities

The 10 Collateral Management Harmonisation Activities

 <p>1. Triparty Collateral Management Harmonisation of Triparty Collateral Management workflows and messaging in order to facilitate interoperable processes allowing collateral mobility across Triparty Agents.</p>	 <p>6. Billing Processes Harmonisation of billing procedures, workflows and messaging.</p>
 <p>2. Corporate Actions Harmonisation of Corporate Actions processes, workflows and messaging by reinforcing existing harmonisation standards or adding new harmonisation standards (taking into account specific considerations from a collateral management perspective).</p>	 <p>7. Cut-Off Times Minimum requirements for end-of-day cut-off times to avoid possible different value dates in cross-infrastructure transactions in different markets, which may create frictions for market participants active in different markets.</p>
 <p>3. Taxation Processes Harmonisation of tax processing in the context of collateral management (taking into account identification of parties in collateralised transactions).</p>	 <p>8. Collateral Dynamic and Static Data Harmonisation of data exchanges to ensure that information / data is available where necessary. Market practices needed for use of data.</p>
 <p>4. Bilateral Collateral Management Harmonisation of workflows for bilateral collateral management (covering non-cleared OTC derivatives and securities financing). Interoperability and leverage of existing infrastructures and market platforms.</p>	 <p>9. Sourcing of Collateral Minimum requirements for sourcing/movement of collateral across Europe.</p>
 <p>5. Margin Calls Interoperability and leverage of existing infrastructures and market platforms for margin processes.</p>	 <p>10. Non-Euro Collateral Market practices for the handling of non-euro denominated collateral (including related corporate action processes).</p>

Each of these ten activities are being 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 to be important for collateral management within Europe, namely:

- **Triparty Collateral Management** - A Single Triparty Model for Europe has 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 securities to continue to be used 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 to be relevant to collateral management is ongoing.

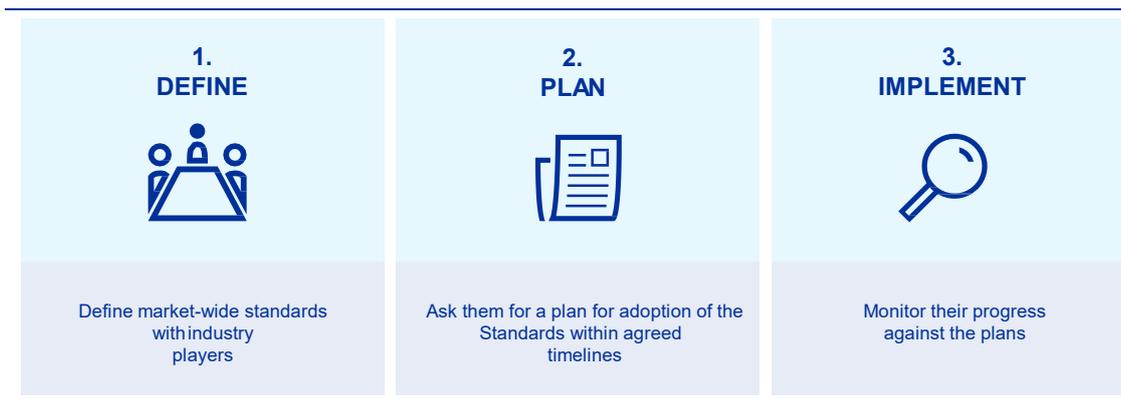
Implementation efforts

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** of the AMI-SeCo monitoring process is the definition of Standards for each of the aforementioned ten activities.
2. Once the Standards have been defined the focus then moves to the planning phase with the preparation of Adaptation Plans (**Phase 2**) in each market.
3. **Phase 3** focuses on monitoring implementation of the plans to ensure that this remains on schedule and in line with the agreed milestones.

Box 5

SCoRE monitoring – Overview of the three phases



Define

In 2019, AMI-SeCo endorsed the definition of the first set of AMI-SeCo Standards covering the first three of the ten activities concerned and published the corresponding rulebooks, which were 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 referred to above can be found in the [SCoRE Adaptation Plans Status Report](#) (status in June 2021).

Implement

This report focuses on the implementation of the Standards that have already been defined i.e. the Triparty Collateral Management Standards, the Corporate Actions Standards 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 with market-wide adoption of the ISO 20022 messaging protocol;
- **Section 5** contains the concluding remarks.
- Three annexes are also included, one of which describes the methodology applied to derive the results of this monitoring exercise.

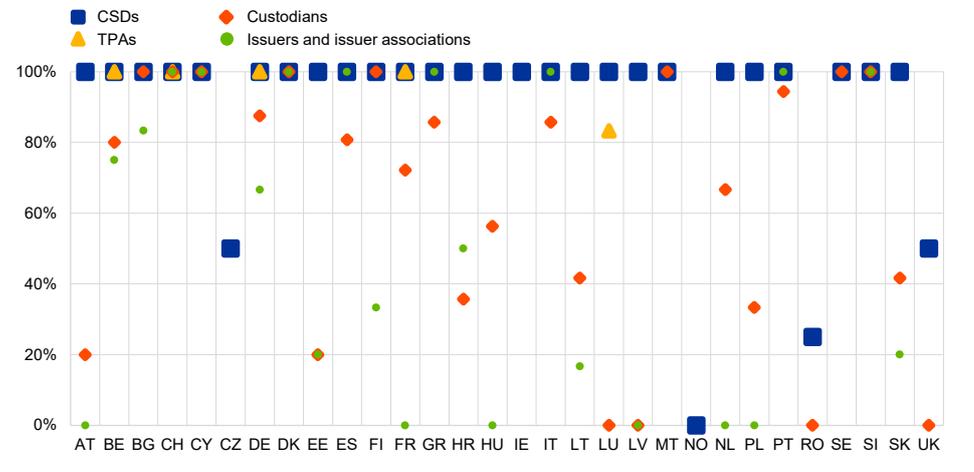
1 Participants in the H2 2021 monitoring exercise

Most markets (29 out of 30) participated in the first SCoRE monitoring exercise. Three more countries, namely the Czech Republic, Ireland and Romania, participated in the H2 2021 exercise as compared with the H1 2021 monitoring exercise.

- All triparty agents (**TPAs**) (8 out of 8) participated in the exercise.
- The majority of central securities depositories (**CSDs**) (35 out of 38) also participated in the exercise, as compared with the previous monitoring exercise, and four more custodians took part in the survey.
- There was broad involvement of **custodians** in the exercise. In most markets, at least four custodians took part in the reporting exercise, thus ensuring wide coverage of custody activities in each market. In some markets, there is a need for further engagement in order to achieve broader representation of custodians. Of the 200+ custodians in the AMI-SeCo community, about 113 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. So far, 39 issuers and issuer associations have taken part in the monitoring exercise.
- Among the participating **markets**, only Norway has not participated in this round and further engagement is planned with Norway with a view to putting in place the necessary reporting structures and ensuring participation in future exercises.
- For the smaller number of **markets without a national stakeholder group (NSG)** at present (i.e. the Czech Republic, 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 in these markets.

Chart 1

Participation rate per market by 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 thirteen milestones in total, as set out in the table below. The milestones shaded in green (i.e. M1 to M3) were expected to be achieved within the current monitoring cycle.

Milestone	Description	Date
M1	Analysis Started: Have you commenced an in-depth analysis of all applicable SCoRE Standards in order 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?	02/12/2022
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)?	05/12/2022
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?	01/04/2023
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)?	13/10/2023
M13	SCoRE Standards Implemented: have the SCoRE Standards been implemented?	20/11/2023

The current H2 2021 monitoring exercise focuses on the first, second, and third milestones (M1, M2 and M3) given that Milestone 3 (with a deadline of 31 July 2021) was meant to have been achieved by the time the survey closed at the end of November 2021.

Consequently, the blue colour code in each of the milestones tables is assigned to those milestones that had been successfully achieved by each respective entity by the time the survey was closed. Milestones that will only be achieved later are assigned a yellow status, while milestones that will be achieved with significant delays or for which work has not yet commenced are marked in red.

For the remaining milestones (i.e. 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, and a yellow status indicates that the milestone will only be achieved at a later date. The date of achievement anticipated is also indicated in the table if it differs from the milestone date set by AMI-SeCo.

2.1 Progress towards the milestones - Triparty Collateral Management Standards

All TPAs had to fill in the survey on triparty collateral management standards. Annex 3 lists the markets and entities monitored.

Key takeaways	Action points
<p>Milestone 1 (Analysis started): Most TPAs confirmed that they had achieved the first milestone on schedule. One TPA (SIX SIS) indicated that it would be achieved by the end of 2022. The impact on overall timelines needs further consideration.</p> <p>Milestone 2 (Initial user communication): Most TPAs confirmed that they had achieved the milestone. One TPA (SIX SIS) will not communicate until later (mid-2023), which is too late.</p> <p>Milestone 3 (Analysis completed): Many TPAs confirmed that they had completed their analysis. Three TPAs were still conducting analysis (BNY Mellon, Euroclear Bank and SIX SIS).</p> <p>Future milestones: Many TPAs expected to achieve future milestones (Milestones 4 to 13) on time. Some TPAs (BNY Mellon, Clearstream Banking Frankfurt/Luxembourg) expected delays with upcoming milestones that would not affect the go-live. For three TPAs (Euroclear Bank, SIX SIS and Euroclear France), achievement of final milestone M13 would need to be confirmed, as it could have an impact on compliance with the overall timelines.</p>	<ul style="list-style-type: none"> SIX SIS should set the milestones more rapidly and communicate earlier. Euroclear Bank and Euroclear France have indicated that implementation would follow as soon as Euroclear Bank joins the TARGET2-Securities (T2S) platform. They should set the milestones. BNY Mellon, Clearstream Banking Frankfurt/Luxembourg should explain the impact of the delays. Euroclear Bank, Euroclear France and SIX SIS should confirm the final milestone for implementation.

Table 1
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	11/22	11/22	12/22	Yes	09/23	Yes	10/23	10/23	10/23	11/23	Yes
BE - Euroclear Bank	No	No	No	No	No	No	No	No	No	06/22	No	No	No
CH - SIX SIS	11/22	07/23	07/22	07/22	07/22	08/22	07/23	Yes	Yes	Yes	Yes	Yes	Yes
FR - BNP Paribas	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR - Euroclear France	No	No	No	No	No	No	No	No	No	06/22	No	No	No
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	03/22	Yes	09/22	Yes	Yes	Yes	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	03/22	Yes	09/22	Yes	Yes	Yes	Yes	Yes	Yes
LU - JP Morgan	Yes	Yes	Yes	03/22	03/22	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: this table (and the following tables) were subject to a plausibility check by the CMH-TF Secretariat.

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 3 lists the markets and entities monitored. This section presents the results of the survey for the 3 categories of entities that took part in the survey.

2.2.1 CSD progress towards the milestones - Corporate Actions Standards

Key takeaways	Action points
<p>Milestone 1 (Analysis started): 22 CSDs reported that they had reached the first milestone, while 12 CSDs would achieve it at a later date.</p> <ul style="list-style-type: none"> 10 CSDs will allocate resources slightly later for the first milestone (CSE, CSD Prague, VP, Nasdaq EE/LT/LV, AthexCSD, SKDD, KDPW, and SKARBNET4), although this would have no impact on overall compliance with the deadline. No action is required. 2 CSDs (SIX SIS and Euroclear Sweden) will start the analysis at a later stage and will also achieve overall compliance with a delay. <p>Milestone 2 (Initial user communication): 24 CSDs reported that communication had started. 9 CSDs expected to communicate at a later stage (between January and December 2022), which is very late.</p> <p>Milestone 3 (Analysis completed): Some CSDs had completed their in-depth analysis of all the standards (7 CSDs). The delay among the other 26 CSDs was partly explained by ongoing discussions within AMI-SeCo on certain aspects of the corporate actions standards. AMI-SeCo had reached agreement, in the meantime, on the open aspects in December 2021, so that no further delays are expected on these aspects of the corporate actions standards.</p> <p>Future milestones: Some CSDs expected to achieve the future milestones but most CSD would be fully compliant on time.</p> <p>6 CSDs reported delays in implementing the standards:</p> <ul style="list-style-type: none"> NBB-SSS (BE – only for new functionalities that were not currently offered) by November 2025; SIX SIS (CH) by October 2025; Euroclear Finland (FI) and BNBSSS (BG) by January 2024; KELER (HU) by November 2024; Sweden (SE) by January 2026 (tbc). <p>There were delays for some milestones for 13 CSDs, in AT, CY, CZ, DE, DK, EE/LT/LV, GR, HR, IT, PL, PT).</p> <p>5 CSDs did not respond or only partially responded (CZ, NO, RO-2 CSDs and UK).</p>	<p>Several markets call for attention as regards the start of analysis (Milestone 1), initial communication (Milestone 2) and analysis completed (Milestone 3).</p> <p>Four markets need to reply (fully) to the survey to complete the picture (the CZ, NO, RO -2 CSDs, and UK markets).</p>

Table 2

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 - Oesterreichische Kontrollbank	Yes	Yes	01/22	06/22	07/22	Yes	12/22	Yes	Yes	02/22	Yes	Yes	Yes
BE - Euroclear Bank	Yes	Yes	No	Yes									
BE - Euroclear Belgium	Yes	Yes	No	Yes									
BE - NBB-SSS	Yes	Yes	07/23	12/23	12/23	Yes	11/25	Yes	12/24	Yes	04/25	10/25	11/25
BG - BNBGSSS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	01/24
BG - CD AD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CH - SIX SIS	10/22	10/22	07/23	07/23	06/22	07/25	10/25	05/25	04/25	05/25	01/24	01/24	10/25
CY - CYPRUS STOCK EXCHANGE	08/22	08/22	06/22	07/22	08/22	04/23	04/23	04/23	03/23	04/23	Yes	Yes	Yes
CZ - CSD Prague	12/22	12/22	01/23	02/23	04/23	03/23	03/23	03/23	06/23	04/23	06/23	Yes	Yes
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	Yes	Yes	12/21	Yes	03/22	Yes	09/22	Yes	Yes	Yes	Yes	Yes	Yes
DK - VP Securities	01/21	Yes	01/22	02/22	03/22	02/22	Yes	Yes	03/23	03/23	Yes	Yes	Yes
EE - NASDAQ	06/21	01/22	12/21	Yes	01/22	Yes							
ES - Iberclear	Yes	Yes	12/21	Yes									
FI - Euroclear Finland	Yes	Yes	01/24	01/24	Yes	01/24	01/24	01/24	01/24	01/24	01/24	01/24	01/24
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GR - BOGS	Yes	Yes	Yes	Yes	Yes	03/22	Yes						
GR - AthexCSD	07/21	Yes	06/22	07/22	08/22	07/22	12/22	01/23	03/23	04/23	Yes	Yes	Yes
HR - SKDD	12/21	Yes	12/21	Yes	03/22	06/22	12/22	01/23	02/23	02/23	05/23	Yes	Yes
HU - KELER	Yes	Yes	07/22	12/22	12/22	01/23	06/23	07/23	12/23	12/23	04/24	10/24	11/24
IE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IT - Monte Titoli	Yes	Yes	03/22	03/22	03/22	03/22	02/23	02/23	05/23	05/23	Yes	10/23	Yes
LT - NASDAQ	06/21	01/22	12/21	Yes	01/22	Yes							
LU - Clearstream Banking Luxembourg	Yes	Yes	12/21	Yes	03/22	Yes	09/22	Yes	Yes	Yes	Yes	Yes	Yes
LU - LuxCSD	Yes	Yes	12/21	Yes	03/22	Yes	09/22	Yes	Yes	Yes	Yes	Yes	Yes
LV - NASDAQ	06/21	01/22	12/21	Yes	01/22	Yes							
MT - Malta Stock Exchange	Yes	07/21	Yes										
NL - Euroclear Nederland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NO - VPS	R	R	R	R	R	R	R	R	R	R	R	R	R
PL - KDPW	Yes	Yes	04/22	04/22	04/22	04/22	03/23	04/23	05/23	06/23	10/23	Yes	11/23
PL - SKARBNET4	12/21	03/22	12/21	03/22	03/22	03/22	Yes						
PT - Interbolsa	Yes	Yes	01/22	03/22	03/22	Yes	Yes	Yes	Yes	03/23	Yes	Yes	Yes
RO - Depozitarul Central	R	R	R	R	R	R	R	R	R	R	R	R	R
RO - National Bank of Romania SSS	R	R	R	R	R	R	R	R	R	R	R	R	R
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	02/22	03/22	02/22	Yes							
SK - CDCP	Yes	Yes	01/22	02/22	Yes	01/22	Yes						
UK - Euroclear International	R	R	R	R	R	R	R	R	R	R	R	R	R

2.2.2 TPA progress towards the milestones - Corporate Actions Standards

Key takeaways	Action points
<p>Milestone 1 (Analysis started): Most TPAs had reached the first milestone, although two TPAs (SIX SIS, BNP Paribas) had started their analysis late (03/2021 and 01/2023).</p> <p>Milestone 2 (Initial user communication): Most TPAs had reached the second milestone (apart from two TPAs (SIX SIS, BNP Paribas) which would communicate later (March 2022 and March 2023)). This is very late.</p> <p>Milestone 3 (Analysis completed): 5 TPAs (BNY Mellon, Euroclear Bank, SIX SIS, BNP Paribas, Clearstream) would complete the analysis later. The delay was partly explained by ongoing discussions within AMI-SeCo on certain aspects of the corporate action standards in December 2021. AMI-SeCo had, in the meantime, agreed on the open aspects, so no further delays were expected on these aspects of the corporate actions standards.</p> <p>Future milestones: Most TPAs expected to achieve future milestones (Milestones 3 to 13) on time.</p>	<ul style="list-style-type: none"> SIX SIS, BNP Paribas should review the start of analysis and communication.

Table 3
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	No	Yes									
BE - Euroclear Bank	Yes	Yes	No	Yes									
CH - SIX SIS	03/21	03/22	12/21	04/22	04/22	Yes							
FR - BNP Paribas	01/23	03/23	07/23	12/23	12/23	01/24	06/24	07/24	02/24	12/24	04/25	10/25	11/25
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DE - Clearstream Banking Frankfurt	Yes	Yes	12/21	Yes	03/22	Yes	09/21	Yes	Yes	Yes	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	03/22	Yes	09/22	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>Milestone 1 (Analysis started): In some markets, the majority of custodians reported that they had started analysis (BG, DK, FI, HU, IT and SE).</p> <p>Milestone 2 (Initial user communication): In nine markets, the majority of custodians reported that they had started communication (BG, DE, DK, FI, GR, IT, NL, SE, SK).</p> <p>Milestone 3 (Analysis completed): Most custodians had not yet concluded their analysis, but in some markets a majority of custodians had (DK, GR, SE, SK).</p> <p>Future milestones: The majority of custodians in 15 markets expected to implement the relevant corporate action standards by November 2023.</p>	<ul style="list-style-type: none">• Custodians should step up their preparations and report progress on achieving the milestones in the next round.• Initial user communication from CSDs to their participants (custodians) should be stepped up and serve as the basis for further improvement in awareness amongst custodians in time for the next monitoring exercise.

Table 4

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	40%	20%	20%	20%	20%	40%	20%	60%	40%	40%	60%	80%	80%
BE	40%	40%	0%	20%	20%	40%	20%	60%	40%	80%	40%	60%	80%
BG	67%	50%	33%	33%	33%	83%	33%	67%	83%	83%	100%	100%	100%
CH	17%	17%	33%	33%	33%	17%	17%	17%	17%	17%	33%	33%	33%
CY	14%	29%	29%	29%	29%	14%	43%	57%	29%	29%	86%	100%	100%
CZ	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	38%	50%	38%	31%	38%	44%	38%	50%	56%	56%	69%	81%	88%
DK	75%	75%	50%	50%	50%	75%	50%	75%	100%	100%	100%	100%	100%
EE	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	40%	40%
ES	38%	46%	38%	31%	38%	38%	38%	46%	38%	38%	62%	69%	69%
FI	50%	50%	25%	25%	25%	50%	25%	25%	75%	75%	100%	100%	75%
FR	44%	22%	33%	22%	22%	11%	22%	22%	22%	33%	44%	56%	56%
GR	43%	57%	57%	57%	71%	43%	43%	43%	71%	71%	86%	100%	100%
HR	14%	14%	0%	0%	0%	14%	0%	14%	29%	29%	29%	29%	14%
HU	50%	38%	38%	50%	50%	50%	63%	63%	63%	63%	63%	75%	75%
IE	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	57%	57%	43%	43%	57%	14%	29%	43%	57%	57%	71%	86%	100%
LT	17%	33%	0%	17%	17%	33%	33%	17%	17%	33%	33%	50%	50%
LU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LV	8%	8%	8%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
MT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	33%	50%	33%	17%	17%	33%	17%	33%	33%	33%	33%	33%	50%
NO	-	-	-	-	-	-	-	-	-	-	-	-	-
PL	17%	17%	33%	33%	33%	17%	17%	33%	17%	17%	50%	50%	50%
PT	33%	33%	33%	44%	44%	22%	33%	56%	44%	44%	78%	89%	89%
RO	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SE	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SI	25%	25%	25%	0%	25%	50%	50%	50%	75%	50%	100%	100%	75%
SK	33%	50%	50%	50%	50%	50%	50%	50%	67%	67%	67%	67%	83%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Entities were asked to report (on a yes/no basis) whether they had achieved the milestones to be met by the time the survey had closed (those are the milestones shaded in blue) and whether they expected to comply with the dates for the next milestones (those 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. The percentages are calculated on the basis of the share of custodians among the monitored entities in the AMI-SeCo market that answered "yes". Markets where no custodians were monitored are marked with a dash ("-"). While 0% indicates that custodians either replied "No" or did not reply to the question.

2.3 Progress towards the milestones - Billing Processes Standards

CSDs, TPAs and custodians must become compliant with the billing processes standards laid down in the SCoRE Billing Processes Rulebook. Annex 3 lists the markets and entities monitored. This section presents the results 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>Milestone 1 (Analysis started): 18 CSDs reported that they had started their analysis, while 16 CSDs would start this at a later date.</p> <ul style="list-style-type: none">• Most CSDs that would start their analysis later would do so in the first half of 2022. This would not have an impact on their compliance with the overall timelines. <p>Milestone 2 (Initial user communication): 17 CSDs had started communication and 18 CSDs would communicate at a later date. Most CSDs would communicate in 2022. This would not have an impact on their compliance with the overall timelines.</p> <p>Milestone 3 (Analysis completed): 9 CSDs had completed their analysis (AT, BG/BG, DE, GR, LU/LU, MT, RO).</p> <p>Future milestones: Many CSDs expected to achieve the remaining milestones at a later date. It does not point to major blocking factors, as some standards had already been implemented and the remainder would be implemented on time.</p>	<ul style="list-style-type: none">• Some CSDs did not participate and need to report on their milestones (CZ, NO, RO).

Table 5

CSD's 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	Yes	03/22	06/22	09/22	10/22	Yes	Yes	Yes	Yes	Yes
BE - Euroclear Bank	05/22	12/22	12/22	12/22	12/22	05/22	12/22	09/22	Yes	02/23	Yes	Yes	Yes
BE - Euroclear Belgium	05/22	12/22	12/22	12/22	12/22	05/22	12/22	09/22	Yes	02/23	Yes	Yes	Yes
BE - NBB-SSS	03/22	Yes	03/22	03/22	03/22	06/22	12/22	12/22	02/23	02/23	Yes	Yes	Yes
BG - BNBGSSS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	01/24
BG - CD AD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CH - SIX SIS	09/22	09/22	09/22	02/23	02/23	02/23	06/23	06/23	06/23	10/23	10/23	Yes	Yes
CY - Cyprus Stock Exchange	Yes	Yes	06/22	07/22	08/22	07/22	12/22	01/23	03/23	04/23	Yes	Yes	Yes
CZ - CSD Prague	12/22	12/22	03/23	04/23	05/23	06/23	06/23	06/23	06/23	06/23	07/23	Yes	Yes
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	03/22	Yes	09/22	10/22	Yes	Yes	Yes	Yes	Yes
DK - VP Securities	03/22	03/22	05/22	06/22	06/22	07/22	11/22	12/22	01/23	12/22	02/23	03/23	Yes
EE - NASDAQ	Yes	05/22	01/22	07/22	10/22	07/22	01/23	01/23	04/23	04/23	Yes	Yes	Yes
ES - Iberclear	Yes	Yes	12/21	Yes									
FI - Euroclear Finland	Yes	Yes	01/24	01/24	01/24	Yes	01/24	Yes	01/24	Yes	Yes	Yes	01/24
FR - Euroclear France	05/22	12/22	12/22	12/22	12/22	05/22	12/22	09/22	Yes	02/23	Yes	Yes	Yes
GR - BOGS	Yes	Yes	Yes	Yes	Yes	03/22	Yes						
GR - AthexCSD	07/21	Yes	06/22	07/22	08/22	07/22	12/22	01/23	03/23	04/23	Yes	Yes	Yes
HR - SKDD	12/21	Yes	12/21	Yes	03/22	06/22	12/22	01/23	02/23	02/23	05/23	Yes	Yes
HU - KELER	Yes	Yes	06/22	08/22	06/23	Yes	03/23	04/23	08/23	Yes	07/23	Yes	Yes
IE - Euroclear Bank	05/22	12/22	12/22	12/22	12/22	05/22	12/22	09/22	Yes	02/23	Yes	Yes	Yes
IT - Monte Titoli	Yes	Yes	03/22	03/22	03/22	03/22	02/23	02/23	05/23	05/23	Yes	01/22	Yes
LT - NASDAQ	Yes	05/22	01/22	07/22	10/22	07/22	01/23	01/23	04/23	04/23	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	03/22	Yes	09/22	10/22	Yes	Yes	Yes	Yes	Yes
LU - LuxCSD	Yes	Yes	Yes	Yes	03/22	Yes	09/22	10/22	Yes	Yes	Yes	Yes	Yes
LV - NASDAQ	Yes	05/22	01/22	07/22	10/22	07/22	01/23	01/23	04/23	04/23	Yes	Yes	Yes
MT - Malta Stock Exchange	Yes	07/21	Yes										
NL - Euroclear Nederland	05/22	12/22	12/22	12/22	12/22	05/22	12/22	09/22	Yes	02/23	Yes	Yes	Yes
NO - VPS	R	R	R	R	R	R	R	R	R	R	R	R	R
PL - KDPW	10/20	07/21	04/22	04/22	04/22	04/22	03/23	04/23	05/23	06/23	10/23	Yes	Yes
PL - SKARBNET4	12/21	03/22	12/21	03/22	03/22	03/22	Yes	Yes	02/22	Yes	Yes	Yes	Yes
PT - Interbolsa	03/22	03/22	05/22	06/22	06/22	07/22	11/22	12/22	01/23	12/22	02/23	03/23	Yes
RO - Depozitarul Central	R	R	R	R	R	R	R	R	R	R	R	R	R
RO - National Bank of Romania SSS	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	09/21	11/21	02/22	03/22	02/22	Yes							
SK - CDCP	Yes	Yes	01/22	01/22	Yes	02/22	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>Milestone 1 (Analysis started): Many TPAs would start analysis at a later time (Euroclear Bank, SIX SIS, BNP Paribas and Euroclear France).</p> <p>Milestone 2 (Initial user communication): Many TPAs would start communication at a later time (Euroclear Bank, SIX SIS, BNP Paribas and Euroclear France).</p> <p>Milestone 3 (Analysis completed): Many TPAs would complete their analysis at a later time (BNY Mellon, Euroclear Bank, SIX SIS, BNP Paribas and Euroclear France).</p> <p>Future Milestones: Most TPAs expected to achieve the future milestones (3 to 13) on time.</p>	<ul style="list-style-type: none"> Many TPAs reported later milestones. This needs to be kept as a point for attention in the next round. JP Morgan will be invited to participate in the next round.

Table 6
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	12/21	Yes	03/23	01/23	04/23	05/23	06/23	07/23	06/23	Yes	Yes
BE - Euroclear Bank	05/22	12/22	12/22	12/22	12/22	05/22	12/22	09/22	Yes	02/23	Yes	Yes	Yes
CH - SIX SIS	09/22	03/23	12/22	12/22	03/23	01/23	06/23	06/23	11/23	07/23	12/23	11/23	Yes
FR - BNP Paribas	01/23	03/23	07/23	12/23	12/23	01/24	06/24	07/24	12/24	12/24	04/25	10/25	11/25
FR - Euroclear France	05/22	12/22	12/22	12/22	12/22	05/22	12/22	09/22	Yes	02/23	Yes	Yes	Yes
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	03/22	Yes	09/22	10/22	Yes	Yes	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	03/22	Yes	09/22	10/22	Yes	Yes	Yes	Yes	Yes
LU - JP Morgan	R	R	R	R	R	R	R	R	R	R	R	R	R

2.3.3 Custodian progress towards the milestones - Billing Processes Standards

Key takeaways	Action points
<p>Milestone 1 (Analysis started): In a few markets, analysis had been started by a majority of custodians (BG, IT).</p>	<ul style="list-style-type: none"> • A larger number of custodians should start their preparations in the next round.
<p>Milestone 2 (Initial user communication): Communication had started in some markets by a majority of custodians (BG, DE, DK, IT, NL).</p>	<ul style="list-style-type: none"> • There had been no response from custodians in 9 markets (CZ, IE, LU, MT, NO, RO, SE and UK).
<p>Milestone 3 (Analysis completed): Analysis had been completed in a few markets by a majority of custodians (BG, DK).</p>	
<p>Future milestones: In 13 markets, a majority of custodians expected to achieve future milestones on time.</p>	

Table 7
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%	0%	0%	0%	0%	0%	20%	0%	0%	0%	20%	20%
BE	40%	40%	0%	20%	0%	20%	20%	20%	40%	40%	20%	60%	80%
BG	50%	67%	50%	50%	50%	33%	33%	50%	50%	50%	67%	83%	83%
CH	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	33%	33%	33%
CY	29%	29%	14%	29%	14%	14%	57%	57%	29%	14%	57%	86%	86%
CZ	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	38%	56%	31%	31%	31%	38%	44%	50%	69%	63%	69%	75%	75%
DK	25%	50%	50%	50%	50%	50%	50%	50%	75%	75%	75%	75%	75%
EE	20%	20%	20%	20%	20%	20%	20%	0%	0%	0%	20%	40%	40%
ES	38%	46%	15%	31%	38%	38%	31%	46%	54%	62%	54%	62%	69%
FI	0%	0%	0%	0%	0%	0%	0%	0%	25%	25%	25%	25%	25%
FR	33%	22%	22%	33%	33%	33%	33%	33%	44%	44%	44%	56%	56%
GR	43%	29%	29%	14%	14%	29%	29%	29%	43%	43%	57%	57%	57%
HR	0%	0%	0%	0%	0%	14%	14%	14%	29%	14%	29%	29%	29%
HU	38%	38%	25%	38%	38%	38%	38%	38%	38%	38%	38%	38%	38%
IE	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	57%	57%	43%	43%	29%	29%	29%	29%	43%	43%	43%	57%	57%
LT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	33%
LU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
LV	8%	8%	8%	8%	15%	15%	15%	15%	15%	15%	15%	15%	15%
MT	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	33%	50%	17%	33%	17%	17%	17%	17%	33%	33%	33%	50%	50%
NO	-	-	-	-	-	-	-	-	-	-	-	-	-
PL	17%	33%	17%	17%	17%	17%	17%	17%	33%	33%	33%	33%	33%
PT	22%	44%	22%	22%	33%	33%	33%	44%	67%	56%	67%	78%	78%
RO	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SI	25%	25%	25%	25%	25%	25%	25%	25%	50%	50%	75%	75%	100%
SK	33%	33%	33%	33%	33%	33%	33%	33%	50%	50%	67%	67%	67%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Entities were asked to report (on a yes/no basis) whether they would have achieved the milestones to be met by the time the survey closed (those are the milestones shaded in blue) and whether they expected to comply with the dates for the next milestones (those 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. The percentages are calculated as the share of custodians that answered "yes" among the monitored entities in the AMI-SeCo market.
A dash ("-"): indicates markets where no custodians were monitored.
0% indicates that custodians either replied "No" or did not reply to the question.

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 Box 1.² 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.

Box 7

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 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 at the end of November 2021.

² For further details, please refer to the [AMI-SeCo Monitoring Framework](#).

The standards assessed are listed below.

Table 8
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.

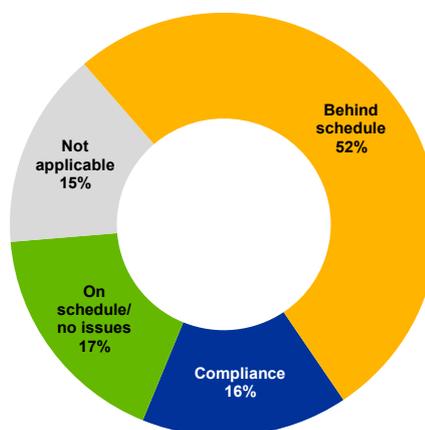
- **Triparty agents (TPAs):** a dedicated survey was sent to triparty agents and their compliance is reported in Section 3.1.1. below.

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 November 2023. 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 November 2023 is high.

3.1.1 TPA compliance with the SCoRE Triparty Collateral Management Standards

Chart 2
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 2). 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: Some of the triparty SCoRE standards are already complied with. This relates mainly to Standard 12 (Partial allocation), Standard 14 (Usage of baskets), and Standard 15 (Future dated processing), and, for some TPAs, also Standard 16 (Operating hours) and Standard 17 (cut-off times).</p> <p>On schedule: Some of the remaining standards are on target for compliance on schedule (i.e. Standards 2 to 10). It should be noted that these standards cannot yet be fully implemented because of new elements that are still to be implemented.</p> <p>Behind schedule: Progress is behind schedule for many standards. As part of the plausibility check, standards are assigned behind schedule status until the TPAs provide detailed confirmation that analysis has been completed for the workflows and implementation is on track.</p> <p>No reporting: /</p> <p>Not applicable: Standard 11 (Handling of corporate actions), Standard 16 (Operating hours) and Standard 17 (Cut-off times) are only applicable to the collateralisation of central bank credit operations.</p>	<p>Three TPAs should provide a concrete plan with milestones that supports timely implementation of the standards (i.e. from Euroclear Bank, SIX SIS and Euroclear France).</p> <p>Standards 2 to 10 should not be deemed to be implemented but should, at most, be held to be "on schedule" (these standards will only be assigned full compliance status when all the SCoRE data elements in the ISO 20022 messaging are implemented).</p> <p>Standard 8 (Reporting on flows) should not be considered "Not applicable" but should be implemented by all TPAs.</p>

Table 9
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	DE Clearstream Banking Frankfurt	FR BNP Paribas	FR Euroclear France	LU Clearstream Banking Luxembourg	LU JP Morgan
1	Y	Y	Y	Y	Y	Y	Y	Y
2	G	Y	Y	Y	G	Y	Y	G
3	G	Y	Y	Y	G	Y	Y	G
4	G	Y	Y	Y	Y	Y	Y	G
5	G	Y	Y	Y	G	Y	Y	G
6	G	Y	Y	Y	Y	Y	Y	G
7	Y	Y	Y	Y	Y	Y	Y	G
8	Y	Y	Y	Y	G	Y	Y	G
9	G	Y	Y	Y	G	Y	Y	G
10	G	Y	Y	Y	Y	Y	Y	G
11	N/A	Y	N/A	Y	N/A	Y	Y	N/A
12	B	B	G	B	B	B	B	G
13	Y	G	Y	Y	Y	G	Y	G
14	B	B	G	B	B	B	B	B
15	Y	B	G	B	B	B	B	B
16	N/A	Y	N/A	Y	N/A	B	B	N/A
17 Rule 1	N/A	Y	N/A	Y	N/A	B	Y	N/A
17 Rule 2	N/A	Y	N/A	Y	N/A	B	Y	N/A
17 Rule 3	N/A	Y	N/A	Y	N/A	B	Y	N/A
17 Rule 4	N/A	Y	N/A	Y	N/A	B	Y	N/A

The colour code reflects the current implementation status for each Standard based on the methodology outlined in Box 7 above and in Annex 3, "Methodology". Green means that the entity had implemented the standard on schedule by the time the survey had closed. Yellow means that the entity was behind schedule in implementing the standards, and blue means that the standard had already been implemented.

Notes: 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 Box 7 above.

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 at the end of November 2021.

The standards assessed are listed below.

Table 10
SCoRE corporate actions standards

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).

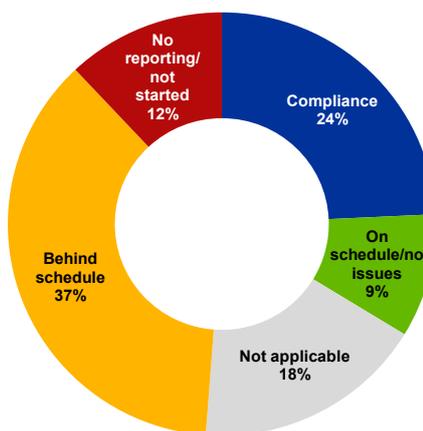
From the user side, the monitored entities are:

- 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.

3.2.1 CSD compliance with the Corporate Actions Standards

Chart 3
CSD compliance status with SCoRE Corporate Actions Standards

The graph summarises the colour codes assigned to the CSDs for the corporate actions standards (see Tables 4 and 5 below, as well as Annex 3, “Methodology”). 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 highest levels of compliance with the SCoRE corporate actions standards are observed in Standards 4 to 8 and 11 to 14 (which primarily relate to market practices, such as rounding rules, business day conventions, securities amount data and payment times).</p> <p>On schedule: Standards 1 and 15 relating to workflows and messaging are on schedule with some CSDs.</p> <p>Behind schedule: Most standards are behind schedule.</p> <p>Standard 1: BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HR, HU, IT, LT, LU, LV, MT, PL, PT, SE, SI, SK.</p> <p>Standard 2: BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GR, IT, LT, LU, LV, MT, NL, PL, PT, SI, SK.</p> <p>Standard 3: AT, BE, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GR, IT, LT, LU, LV, MT, NL, PL, PT, SI, SK.</p> <p>Standard 9: AT, BE, CY, DE, DK, EE, ES, FI, GR, HR, HU, LT, LU, LV, PT, SI, SK.</p> <p>Standard 10: AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, GR, HR, HU, IT, LT, LU, LV, PL, PT, SI, SK.</p> <p>Standard 15: BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, GR, HR, HU, IT, LT, LU, LV, MT, PL, PT, SI, SK.</p> <p>Not applicable: Several responses for standards (1F, 1G and 1H) were “Not applicable” (N/A), but a further review is needed (further explanations are needed to ascertain whether or not meeting events (results) are currently processed through the CSDs).</p> <p>No reporting: No feedback was received from some CSDs (CZ, RO and UK).</p>	<p>Further attention will needed to be given in the next round to the standards that are behind schedule.</p> <p>Standards 1F to 1H should be further reviewed as several responses marked those standards as “Not applicable”. In particular, Standard 1F needs to be reviewed because all meeting event notifications must be announced by the CSDs.</p> <p>Participation in the surveys is needed from CZ (SKD), NO (VPS), RO and UK.</p>

Table 11

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 - Oesterreichische Kontrollbank	G	G	G	G	G	B	G	B	G	Y	Y	B	B	G	Y	Y	Y
BE - Euroclear Bank	G	G	G	G	G	G	G	G	Y	Y	B	G	B	G	B	B	B
BE - Euroclear Belgium	G	G	G	G	G	B	G	N/A	Y	Y	B	B	B	B	B	B	B
BE - NBB-SSS	Y	Y	B	Y	Y	Y	Y	Y	Y	N/A	B	N/A	N/A	B	B	B	B
BG - BNBGSSS	Y	N/A	Y	G	Y	N/A	N/A	N/A	G	B	B	B	Y	Y	B	Y	B
BG - CD AD	G	Y	Y	Y	Y	Y	Y	Y	Y	G	B	B	B	B	B	Y	B
CH - SIX SIS	Y	Y	Y	Y	Y	G	G	G	Y	Y	N/A	B	B	B	B	B	B
CY - CYPRUS STOCK EXCHANGE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	N/A	N/A	B	B	Y
CZ - CSD Prague	B	Y	Y	Y	Y	B	B	B	Y	Y	B	B	B	B	B	B	B
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
DK - VP Securities	Y	Y	Y	Y	Y	N/A	N/A	N/A	Y	Y	B	B	B	Y	Y	Y	B
EE - NASDAQ	Y	Y	Y	Y	Y	Y	B	Y	Y	Y	B	B	B	Y	B	Y	B
ES - Iberclear	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	Y	Y	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	B	B	N/A	Y	Y	B	B	B	B	B	B	B
GR - BOGS	Y	Y	Y	Y	Y	Y	N/A	N/A	Y	Y	Y	B	B	Y	Y	B	B
GR - AthexCSD	G	G	G	G	G	Y	G	Y	Y	Y	Y	B	B	Y	B	Y	Y
HR - SKDD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	G	Y	N/A	Y
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	Y	B	G	B	G	B	B	B
IT - Monte Titoli	Y	Y	Y	Y	Y	Y	N/A	N/A	Y	Y	B	B	B	B	B	Y	Y
LT - NASDAQ	Y	Y	Y	Y	Y	Y	B	Y	Y	Y	B	B	B	B	B	Y	B
LU - Clearstream Banking Luxembourg	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	Y
LU - LuxCSD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	Y
LV - NASDAQ	Y	Y	Y	Y	Y	Y	B	Y	Y	Y	B	B	B	B	B	Y	B
MT - Malta Stock Exchange	G	G	G	G	Y	G	Y	Y	Y	Y	B	B	B	Y	Y	Y	Y
NL - Euroclear Nederland	G	G	G	G	G	B	G	N/A	Y	Y	B	B	B	B	B	B	B
NO - VPS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PL - KDPW	G	G	Y	Y	Y	Y	G	Y	Y	Y	Y	B	B	Y	Y	B	B
PL - SKARBNET4	Y	N/A	Y	Y	N/A	N/A	N/A	N/A	N/A	B	B						
PT - Interbolsa	Y	Y	Y	Y	Y	Y	N/A	N/A	Y	Y	B	B	B	Y	B	B	B
RO - Depozitarul Central	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
RO - National Bank of Romania SSS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
SE - Euroclear Sweden	B	N/A	B	B	Y	B	Y	Y	B	N/A	B	B	B	Y	Y	Y	B
SI - KDD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N/A	B
SK - CDCP	G	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
UK - Euroclear International	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

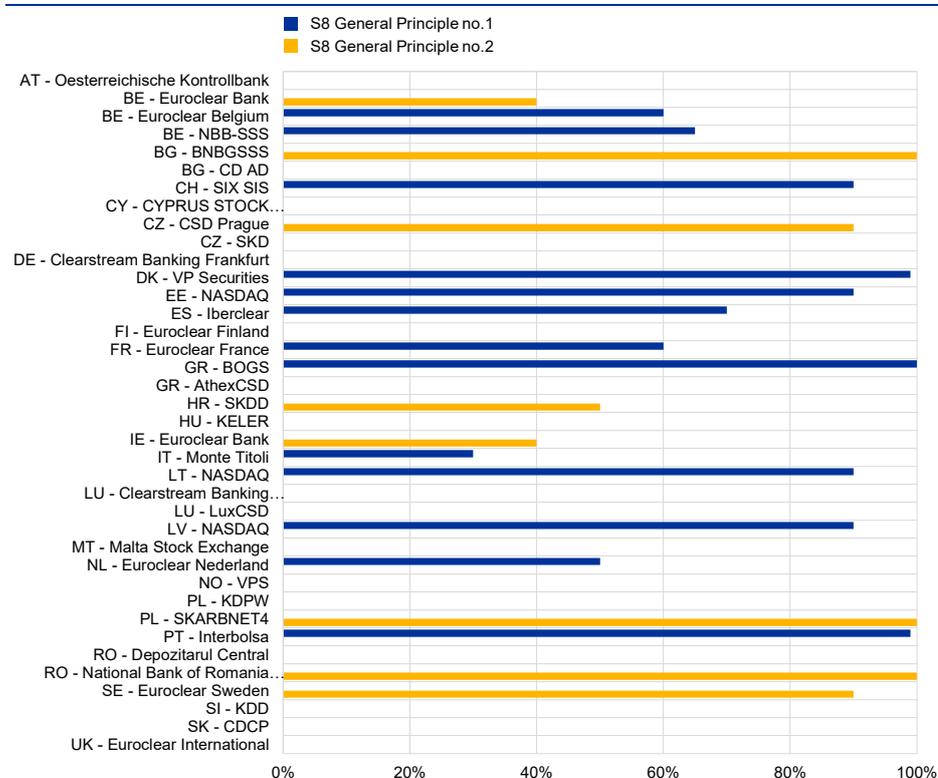
The colour code reflects the current implementation status for each standard based on the methodology outlined in Box 7 above and in Annex 3, "Methodology". Green means that the entity had implemented the standard on time by the time that the survey had closed. Yellow means the entity was behind schedule in implementing the standards, and blue means that the standard had already been implemented.

Table 12
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 General Principle 3	9	10 Rule 1	10 Rule 2	10 Rule 3	10 Rule 4	10 Rule 5	11	12	13	14	15	
AT - Oesterreichische Kontrollbank	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	Y	B	G	
BE - Euroclear Bank	B	B	B	B	G	G	B	G	G	G	G	G	G	B	B	B	B	G	
BE - Euroclear Belgium	B	B	B	B	G	G	B	B	G	N/A	N/A	G	N/A	B	N/A	B	B	G	
BE - NBB-SSS	B	N/A	N/A	N/A	B	B	B	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	
BG - BNBGSS	B	N/A	N/A	N/A	B	B	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	
BG - CDAD	G	B	B	B	B	G	N/A	B	G	G	N/A	G	Y	G	N/A	Y	G	Y	
CH - SIX SSS	B	B	B	Y	B	Y	B	Y	B	Y	B	G	G	G	B	G	Y	Y	
CY - CYPRUS STOCK EXCHANGE	Y	B	B	B	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N/A	Y	N/A	Y	
CZ - CSD Prague	B	B	B	B	B	B	Y	B	Y	Y	Y	Y	Y	B	Y	Y	B	Y	
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	Y	Y	B	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	B	B	Y	
DK - VP Securities	B	Y	B	B	B	B	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	
EE - NASDAQ	B	N/A	B	B	B	Y	B	Y	G	Y	Y	Y	Y	B	Y	B	B	Y	
ES - Berclear	B	B	B	N/A	G	G	B	Y	B	B	Y	Y	Y	B	Y	Y	Y	Y	
FI - Euroclear Finland	B	B	B	B	B	B	Y	B	N/A	N/A	Y	N/A	B	N/A	Y	G	Y	Y	
FR - Euroclear France	G	B	B	B	G	G	B	B	G	N/A	N/A	G	N/A	B	N/A	B	B	G	
GR - BOGS	B	N/A	N/A	N/A	B	B	Y	B	N/A	N/A	Y	N/A	Y	N/A	Y	N/A	Y	N/A	
GR - AthexCSD	Y	B	B	B	B	B	N/A	G	G	G	G	G	G	B	Y	G	B	Y	
HR - SKDD	B	B	B	B	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N/A	Y	
HU - KELER	G	B	B	B	Y	Y	Y	Y	Y	Y	N/A	Y	Y	Y	Y	Y	N/A	Y	
IE - Euroclear	B	B	B	B	G	G	B	G	G	G	G	G	G	B	B	B	B	G	
IT - Monte Titoli	B	B	B	B	B	Y	B	Y	N/A	N/A	Y	N/A	Y	Y	Y	Y	Y	Y	
LT - NASDAQ	B	N/A	B	B	B	Y	B	Y	G	Y	Y	Y	Y	B	Y	B	B	Y	
LU - Clearstream Banking Luxembourg	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	Y	B	Y	
LU - LuxCSD	Y	Y	B	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	B	Y	B	B	Y	
LV - NASDAQ	B	N/A	B	B	B	Y	B	Y	G	Y	Y	Y	Y	B	Y	B	B	Y	
MT - Malta Stock Exchange	B	Y	B	B	G	B	Y	G	G	B	N/A	G	N/A	B	N/A	Y	N/A	Y	
NL - Euroclear Nederland	B	B	B	B	G	G	B	B	G	N/A	N/A	G	N/A	B	N/A	B	B	G	
NO - VPS	R	R	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	Y	G	Y	G	Y	Y	Y	B	Y	Y	B	Y	
PL - SKARBNET4	B	N/A	N/A	N/A	B	B	B	N/A	B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	
PT - Interbolsa	B	B	B	B	B	Y	Y	Y	Y	Y	Y	N/A	Y	N/A	Y	N/A	Y	Y	
RO - Depozitarul Central	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
RO - National Bank of Romania SSS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
SE - Euroclear Sweden	B	B	B	N/A	Y	B	B	B	Y	Y	N/A	N/A	N/A	B	N/A	N/A	N/A	Y	
SI - KDD	B	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N/A	Y	
SK - CDCP	B	B	B	B	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
UK - Euroclear International	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

Chart 4

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



The chart above relates to 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.

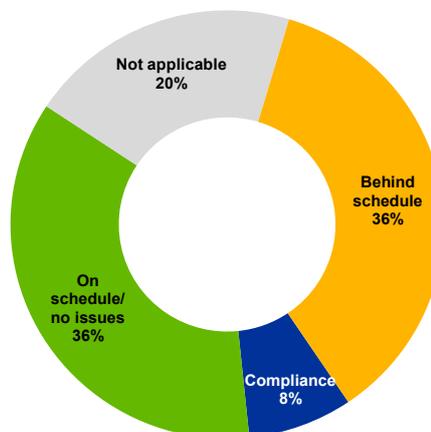
The chart sets out the cash proceeds paid by 9.30 a.m. (issuer CSD time), namely the % of payments made by that time over the last 6 months (i.e. since the last SCoRE monitoring exercise).

Key takeaways

The survey indicates that for 12 CSDs, 90% or more of the cash proceeds payments were made by 9.30 a.m. (issuer CSD time). There are 4 CSDs for which less than 50% of their cash proceeds payments were made by that time (Euroclear Bank (BE), SKDD (HR), Monte Titoli (IT) and Euroclear Nederland (NL)).

3.2.2 TPA compliance with the SCoRE Corporate Actions Standards

Chart 5
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 6). The percentages are calculated based on the number of standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>On schedule: 2 TPAs are on schedule to achieve full compliance with the SCoRE corporate actions standards.</p> <p>Behind schedule: 5 TPAs still need to conduct further analysis on the standards.</p> <p>Not applicable: Standards 1F to 1H (meeting-related workflows) were reported as N/A by some TPAs, (BNY Mellon, BNP Paribas, Euroclear France), which should be clarified. (See Action points).</p>	<ul style="list-style-type: none"> Standards 1A to E should only be assigned full compliance status when all SCoRE workflows and all data elements are implemented. <p>Compliance with Standards 1F to 1H should be reported or clarified by all TPAs in the next round.</p>

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	DE Clearstream	FR BNP Paribas	FR Euroclear France	LU Clearstream	LU JP Morgan
1A	G	Y	Y	Y	N/A	G	Y	G
1B	Y	G	Y	Y	N/A	G	Y	G
1C	G	G	Y	Y	N/A	G	Y	G
1D	G	G	Y	Y	N/A	G	Y	N/A
1E	G	G	Y	Y	N/A	G	Y	G
1F	N/A	B	Y	Y	N/A	B	Y	G
1G	N/A	B	G	Y	N/A	B	Y	G
1H	N/A	B	Y	Y	N/A	N/A	Y	G

Notes: For CSDs and TPAs, the colour code reflects the current implementation status for each standard based on the methodology outlined in Box 1 above. TPAs are using custody services provided by CSDs or custodians to disseminate corporate action information to collateral givers and collateral takers. Monitoring of TPAs thus 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 Box 7 above, as laid down in the framework document and in Annex 3, "Methodology". Green means that the entity was on schedule in implementing the standards. Yellow means that the entity was behind schedule in implementing the standards, and blue means that the standard had already been implemented.

3.2.3 Custodian compliance with the SCoRE Corporate Actions Standards

Key takeaways	Action points
<p>Compliance and on schedule: In 14 markets, compliance by custodians with the SCoRE corporate actions standards is on track (i.e. in the BG, CH, CY, DE, DK, ES, GR, HU, IT, MT, NL, PT, SE, SI markets, more than 50% of custodians were on track).</p> <p>Behind schedule: In several markets, many custodians had not yet started analysis or few custodians replied (AT, BE, FR, EE, FR, HR, LT, LU, LV, PL, RO, SK, UK).</p> <p>No reporting: Custodians in some markets had not yet responded to the survey (CZ, IE, RO and UK).</p>	<ul style="list-style-type: none"> Additional efforts are needed to involve custodians.

Table 14
Custodian compliance – Corporate Actions Standards (Markets AT – GR; 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	G	50%	44%	48%	49%	27%	38%	40%	39%	32%	38%	60%	60%	0%	60%	60%
	Y	32%	29%	28%	34%	33%	36%	33%	35%	40%	40%	40%	40%	40%	40%	40%
	R	18%	27%	24%	17%	40%	27%	27%	26%	28%	22%	0%	0%	60%	0%	0%
BE	G	77%	77%	76%	77%	78%	70%	63%	71%	74%	67%	75%	75%	80%	75%	75%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	3%	8%	0%	0%	0%	0%	0%
	R	23%	23%	24%	23%	22%	30%	38%	29%	24%	25%	25%	25%	20%	25%	25%
BG	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
CH	G	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Y	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY	G	100%	100%	100%	100%	100%	100%	100%	100%	93%	94%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	7%	6%	0%	0%	0%	0%	0%
CZ	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	G	98%	97%	97%	98%	95%	96%	96%	96%	96%	97%	100%	100%	93%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	2%	3%	3%	2%	5%	4%	4%	4%	4%	3%	0%	0%	7%	0%	0%
DK	G	100%	100%	100%	100%	100%	100%	100%	100%	98%	99%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EE	G	23%	23%	23%	34%	27%	31%	31%	32%	31%	33%	40%	40%	20%	40%	40%
	Y	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	75%	78%	77%	66%	73%	69%	69%	68%	69%	67%	60%	60%	80%	60%	60%
ES	G	89%	87%	88%	80%	77%	79%	71%	68%	65%	69%	75%	83%	77%	75%	83%
	Y	0%	0%	0%	0%	0%	0%	8%	12%	9%	5%	8%	0%	0%	8%	0%
	R	11%	13%	13%	20%	23%	21%	20%	20%	26%	26%	17%	17%	23%	17%	17%
FR	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
GR	G	64%	59%	58%	54%	56%	54%	43%	51%	50%	57%	57%	50%	57%	57%	57%
	Y	8%	10%	13%	14%	12%	13%	13%	24%	14%	15%	14%	14%	13%	14%	14%
	R	28%	31%	30%	32%	32%	33%	33%	32%	35%	35%	29%	29%	38%	29%	29%
HU	G	100%	100%	100%	100%	89%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	11%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%

The first row (green) indicates the percentage of custodians on track with implementation (i.e. the standard has been implemented, or development and implementation are ongoing or analysis is ongoing). The second row (yellow) indicates the percentage that have not yet started analysis. The third row (red) indicates the share of missing replies. The percentages are calculated on the basis of entities monitored in the market.

A dash ("-") indicates markets where no custodians are monitored.
0% indicates that custodians either replied "No" or did not reply to the question.

Table 15
Custodian compliance – Corporate Actions (Markets HR – UK; Standards 1A – 4, Rule 5)

		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	G	43%	43%	43%	43%	33%	42%	43%	39%	43%	43%	43%	43%	43%	43%	43%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	57%	57%	57%	57%	67%	58%	57%	61%	57%	57%	57%	57%	57%	57%	57%
HU	G	68%	63%	65%	67%	58%	64%	64%	65%	60%	62%	71%	75%	50%	75%	75%
	Y	13%	13%	13%	13%	13%	13%	13%	13%	14%	14%	13%	13%	13%	13%	13%
	R	20%	24%	23%	20%	29%	24%	24%	23%	26%	24%	14%	13%	38%	13%	13%
IE	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	G	96%	90%	94%	96%	90%	93%	93%	93%	93%	100%	100%	100%	86%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	4%	10%	6%	4%	10%	7%	7%	7%	7%	0%	0%	0%	14%	0%	0%
LT	G	52%	50%	50%	50%	50%	50%	50%	50%	48%	48%	50%	50%	50%	50%	50%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	48%	50%	50%	50%	50%	50%	50%	50%	52%	52%	50%	50%	50%	50%	50%
LU	G	32%	0%	0%	0%	0%	0%	0%	0%	24%	30%	0%	50%	0%	50%	50%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	68%	100%	100%	100%	100%	100%	100%	100%	76%	70%	100%	50%	100%	50%	50%
LV	G	12%	10%	11%	13%	9%	14%	14%	16%	16%	19%	31%	31%	0%	31%	31%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	88%	90%	89%	87%	91%	86%	86%	84%	84%	81%	69%	69%	100%	69%	69%
MT	G	90%	100%	100%	100%	83%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%
	Y	10%	0%	0%	0%	17%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	G	95%	93%	93%	95%	89%	91%	90%	90%	92%	93%	100%	100%	83%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
	R	5%	7%	7%	5%	11%	9%	10%	10%	8%	6%	0%	0%	17%	0%	0%
NO	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PL	G	45%	43%	43%	44%	27%	42%	43%	43%	35%	36%	40%	50%	33%	40%	40%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	55%	57%	57%	56%	73%	58%	57%	57%	65%	63%	60%	50%	67%	60%	60%
PT	G	86%	86%	83%	84%	83%	86%	83%	83%	78%	77%	89%	89%	89%	89%	89%
	Y	14%	14%	17%	16%	17%	14%	17%	17%	16%	16%	11%	11%	11%	11%	11%
	R	0%	0%	0%	0%	0%	0%	0%	0%	6%	7%	0%	0%	0%	0%	0%
RO	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%
SE	G	100%	100%	100%	100%	0%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SI	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
SK	G	56%	51%	52%	50%	47%	58%	51%	52%	49%	49%	60%	60%	40%	60%	60%
	Y	14%	11%	12%	15%	7%	4%	11%	12%	10%	12%	20%	20%	0%	20%	20%
	R	30%	38%	36%	35%	47%	38%	38%	36%	41%	39%	20%	20%	60%	20%	20%
UK	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%

Table 16
Custodian compliance – Corporate Actions (Markets AT – GR; Standards 5-15)

	% Colour Reported	5	9	10 Rule 1	10 Rule 2	10 Rule 3	10 Rule 4	10 Rule 5	11	12	13	15
AT	G	50%	50%	60%	0%	0%	0%	0%	60%	60%	60%	40%
	Y	50%	50%	40%	40%	40%	40%	40%	40%	40%	40%	40%
	R	0%	0%	0%	60%	60%	60%	60%	0%	0%	0%	20%
BE	G	67%	75%	75%	75%	75%	75%	67%	75%	75%	75%	4%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	59%
	R	33%	25%	25%	25%	25%	25%	33%	25%	25%	25%	37%
BG	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CH	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CZ	G	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-
DE	G	100%	100%	100%	92%	92%	92%	91%	100%	100%	100%	86%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%
	R	0%	0%	0%	8%	8%	8%	9%	0%	0%	0%	0%
DK	G	100%	100%	67%	67%	100%	100%	67%	100%	100%	75%	89%
	Y	0%	0%	33%	33%	0%	0%	33%	0%	0%	25%	11%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EE	G	40%	40%	40%	20%	20%	20%	20%	40%	40%	40%	25%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	60%	60%	60%	80%	80%	80%	80%	60%	60%	60%	75%
ES	G	73%	75%	75%	64%	64%	67%	67%	75%	75%	75%	71%
	Y	9%	8%	8%	9%	9%	8%	8%	8%	8%	8%	0%
	R	18%	17%	17%	27%	27%	25%	25%	17%	17%	17%	29%
FI	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
FR	G	57%	57%	57%	50%	50%	50%	50%	57%	57%	63%	33%
	Y	14%	14%	14%	13%	13%	13%	13%	14%	14%	13%	37%
	R	29%	29%	29%	38%	38%	38%	38%	29%	29%	25%	30%
GR	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	81%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 17
Custodian compliance – Corporate Actions (Markets HR – UK; Standards 5-15)

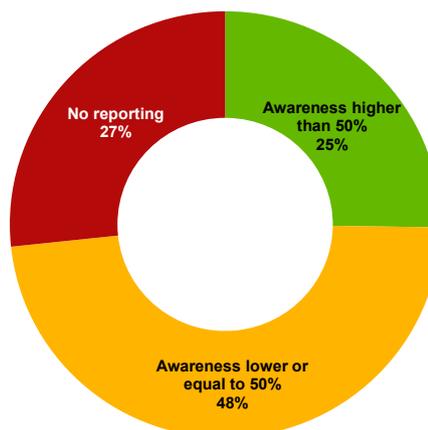
		5	9	10 Rule 1	10 Rule 2	10 Rule 3	10 Rule 4	10 Rule 5	11	12	13	15
HR	G	33%	43%	43%	33%	33%	33%	33%	43%	33%	33%	34%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%
	R	67%	57%	57%	67%	67%	67%	67%	57%	67%	67%	57%
HU	G	75%	75%	75%	50%	50%	50%	50%	75%	75%	75%	71%
	Y	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	14%
	R	13%	13%	13%	38%	38%	38%	38%	13%	13%	13%	14%
IE	G	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-
IT	G	100%	100%	100%	86%	86%	86%	86%	100%	100%	100%	74%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	26%
	R	0%	0%	0%	14%	14%	14%	14%	0%	0%	0%	0%
LT	G	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	40%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	60%
LU	G	0%	50%	50%	0%	0%	0%	0%	50%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	50%	50%	100%	100%	100%	100%	50%	100%	100%	100%
LV	G	31%	31%	31%	0%	0%	0%	0%	31%	31%	31%	8%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	69%	69%	69%	100%	100%	100%	100%	69%	69%	69%	92%
MT	G	0%	100%	100%	100%	0%	100%	0%	100%	0%	100%	0%
	Y	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	G	100%	100%	100%	83%	80%	83%	83%	100%	100%	100%	60%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%
	R	0%	0%	0%	17%	20%	17%	17%	0%	0%	0%	20%
NO	G	-	-	-	-	-	-	-	-	-	-	-
	Y	-	-	-	-	-	-	-	-	-	-	-
	R	-	-	-	-	-	-	-	-	-	-	-
PL	G	50%	50%	50%	20%	20%	33%	20%	50%	50%	40%	46%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
	R	50%	50%	50%	80%	80%	67%	80%	50%	50%	60%	53%
PT	G	80%	88%	86%	86%	86%	86%	86%	88%	83%	88%	67%
	Y	20%	13%	14%	14%	14%	14%	14%	13%	17%	13%	33%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
RO	G	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SE	G	100%	100%	100%	100%	0%	100%	0%	100%	100%	100%	67%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SI	G	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SK	G	50%	60%	60%	40%	40%	40%	40%	60%	60%	80%	77%
	Y	25%	20%	20%	0%	0%	0%	0%	20%	20%	20%	23%
	R	25%	20%	20%	60%	60%	60%	60%	20%	20%	0%	0%
UK	G	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	R	100%	100%	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 6

For issuers in all markets: % 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 11 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 red).



Key takeaways	Action points
<p>Compliance and on schedule: Compliance with the SCoRE corporate actions standards is on track in some markets (BE, BG, CY, ES, GR, IT, NL and SI).</p> <p>Behind schedule: In some markets, issuers' awareness is low and should be increased (CH, FR, LT, LV, PL and SK).</p> <p>No reporting: Issuers (and issuer agents) in many markets have not yet responded to the survey and efforts should be increased to obtain feedback from the issuer community (CZ, IE, LU, MT, NO, RO, SE and UK).</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) • 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 18

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

(in percentages)

	1A	1F	2	3	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4	4 Rule 5	5	6
AT	25%	20%	25%	25%	25%	25%	0%	25%	25%	13%	25%
BE	38%	35%	25%	50%	50%	50%	50%	50%	50%	25%	50%
BG	75%	67%	67%	67%	83%	83%	67%	67%	83%	50%	83%
CH	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CZ	-	-	-	-	-	-	-	-	-	-	-
DE	20%	0%	22%	11%	33%	33%	44%	44%	56%	22%	78%
DK	25%	15%	25%	25%	25%	0%	25%	0%	0%	0%	100%
EE	40%	36%	40%	40%	40%	40%	20%	40%	40%	40%	40%
ES	50%	50%	50%	50%	100%	50%	100%	50%	100%	100%	50%
FI	14%	17%	33%	33%	33%	33%	33%	17%	33%	17%	17%
FR	0%	0%	0%	0%	100%	100%	0%	100%	100%	0%	0%
GR	100%	100%	50%	50%	100%	100%	100%	100%	100%	50%	50%
HR	56%	53%	0%	0%	67%	67%	67%	67%	67%	0%	67%
HU	57%	28%	60%	20%	40%	40%	20%	40%	40%	0%	20%
IE	-	-	-	-	-	-	-	-	-	-	-
IT	100%	73%	33%	67%	100%	100%	100%	100%	100%	33%	100%
LT	17%	17%	0%	0%	0%	0%	0%	0%	0%	17%	17%
LU	-	-	-	-	-	-	-	-	-	-	-
LV	6%	2%	3%	3%	3%	3%	0%	3%	3%	0%	3%
MT	-	-	-	-	-	-	-	-	-	-	-
NL	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%
NO	-	-	-	-	-	-	-	-	-	-	-
PL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PT	67%	0%	100%	100%	100%	100%	100%	100%	100%	0%	0%
RO	-	-	-	-	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-	-	-	-	-
SI	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%
UK	-	-	-	-	-	-	-	-	-	-	-

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 issuers who responded "yes" to 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 issuers either replied "No" or did not reply to the question.

Table 19

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

(in percentages)

	7 Rule 1	7 Rule 2	7 Rule 3	7 Rule 4	8 Rule 1	8 Rule 2	8 General Principle 3	9	11	13
AT	25%	0%	0%	0%	0%	0%	0%	25%	25%	25%
BE	50%	50%	50%	50%	50%	75%	75%	50%	50%	25%
BG	83%	50%	50%	50%	83%	83%	83%	67%	67%	67%
CH	0%	0%	0%	0%	0%	25%	0%	25%	25%	25%
CY	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CZ	-	-	-	-	-	-	-	-	-	-
DE	78%	56%	44%	44%	44%	33%	33%	67%	44%	33%
DK	100%	75%	75%	75%	75%	75%	25%	25%	75%	0%
EE	40%	20%	0%	0%	20%	20%	20%	40%	40%	40%
ES	100%	100%	100%	100%	100%	50%	100%	100%	100%	50%
FI	33%	33%	33%	33%	17%	17%	17%	17%	33%	17%
FR	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%
GR	50%	50%	50%	50%	100%	100%	50%	100%	100%	100%
HR	33%	33%	33%	33%	33%	33%	0%	67%	33%	33%
HU	40%	20%	20%	20%	20%	0%	0%	20%	40%	20%
IE	-	-	-	-	-	-	-	-	-	-
IT	100%	100%	100%	67%	100%	100%	67%	100%	100%	100%
LT	17%	0%	0%	0%	0%	0%	0%	17%	0%	0%
LU	-	-	-	-	-	-	-	-	-	-
LV	3%	0%	0%	0%	0%	0%	0%	3%	3%	3%
MT	-	-	-	-	-	-	-	-	-	-
NL	100%	100%	100%	100%	0%	0%	100%	100%	0%	100%
NO	-	-	-	-	-	-	-	-	-	-
PL	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PT	100%	100%	0%	0%	100%	100%	100%	100%	0%	100%
RO	-	-	-	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-	-	-	-
SI	100%	0%	0%	0%	0%	0%	100%	100%	100%	100%
SK	0%	20%	20%	20%	0%	20%	20%	0%	0%	0%
UK	-	-	-	-	-	-	-	-	-	-

3.3 Compliance with the Billing Processes Standards

3.3.1 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 at the end of November 2021.

The standards being assessed are listed below:

Table 20
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](#).

From 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).

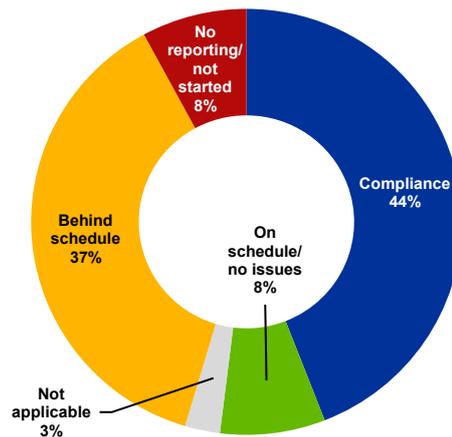
From the user side, the monitored entities are:

- 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.

3.3.2 CSD compliance with SCoRE Billing Processes Standards

Chart 7
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 13). 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 was a large degree of compliance with Standard 2 (Billing cycle) and Standard 3 (Cut-off date).</p> <p>On schedule: Some markets were on schedule with Standard 1 (ISO 20022) and Standard 4 (Payment dates).</p> <p>Behind schedule: Many markets were behind schedule with Standards 1 and 4.</p> <p>Not applicable: Some markets reported non-applicability, but this should be clarified further as all standards are applicable (PL and UK).</p> <p>No reporting/not started: No feedback was received from some CSDs, i.e. CZ (SKD), NO (VPS), RO (Depozitarul Central).</p>	<ul style="list-style-type: none"> • Standard 1 (ISO 20022) and Standard 4 (Payment date) should be a point for attention in the next round. • CZ, RO and SE should participate. • Non-applicability should be clarified further (PL and UK).

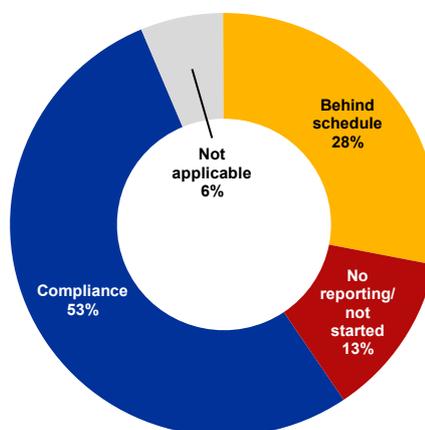
Table 21
CSD compliance with Billing Processes Standards

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

For CSDs and TPAs, the colour code reflects the current implementation status for each standard based on the methodology outlined in Box 7 above and in Annex 3, "Methodology". Green means that the entity was on schedule in implementing the standards. Yellow means that the entity was behind schedule in implementing the standards, and blue means that the standard had already been implemented.

3.3.3 TPA compliance with Billing Processes Standards

Chart 8
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 14 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 was a large degree of compliance with Standard 2 (Billing cycle), Standard 3 (Cut-off date) and Standard 4 (Payment date).</p> <p>On schedule: For Standard 1, no TPAs were on schedule.</p> <p>Behind schedule: For Standard 1, some TPAs had not yet concluded their analysis.</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 JP Morgan, which are not operated by CSDs.</p>	<p>JP Morgan should participate in the survey.</p>

Table 22
TPA compliance with Billing Processes Standards

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

For CSDs and TPAs, the colour code reflects the current implementation status for each standard based on the methodology outlined in Box 7 above and in Annex 3, "Methodology". Green means that the entity was on schedule in implementing the standards. Yellow means that the entity was behind schedule in implementing the standards, and blue means that the standard had already been implemented.

3.3.4 Custodian compliance with Billing Processes Standards

Key takeaways	Action points
<p>Compliance and on schedule: Standard 2 (Billing cycle) was on track in some markets.</p> <p>Behind schedule: Most custodians had not started analysis.</p> <p>No reporting/not started: No feedback was received from custodians (CZ, IE, LU NO, RO and UK).</p>	<p>The low level of reporting among custodians is a point for attention in the next rounds of the survey.</p>

Table 23
Custodian compliance – Billing Processes Standards (Markets AT-HU)

	Colour Code	1	2		Colour Code	1	2
AT	G	11%	40%	IE	G	-	-
	Y	11%	0%		Y	-	-
	R	78%	60%		R	-	-
BE	G	43%	75%	IT	G	90%	100%
	Y	29%	0%		Y	0%	0%
	R	29%	25%		R	10%	0%
BG	G	40%	100%	LT	G	33%	33%
	Y	60%	0%		Y	0%	0%
	R	0%	0%		R	67%	67%
CH	G	29%	100%	LU	G	0%	0%
	Y	71%	0%		Y	0%	0%
	R	0%	0%		R	100%	100%
CY	G	75%	100%	LV	G	8%	23%
	Y	25%	0%		Y	8%	0%
	R	0%	0%		R	85%	77%
CZ	G	-	-	MT	G	0%	100%
	Y	-	-		Y	0%	0%
	R	-	-		R	0%	0%
DE	G	73%	100%	NL	G	80%	100%
	Y	23%	0%		Y	0%	0%
	R	4%	0%		R	20%	0%
DK	G	0%	67%	NO	G	-	-
	Y	100%	33%		Y	-	-
	R	0%	0%		R	-	-
EE	G	40%	40%	PL	G	20%	50%
	Y	20%	20%		Y	20%	0%
	R	40%	40%		R	60%	50%
ES	G	73%	92%	PT	G	33%	78%
	Y	18%	0%		Y	50%	11%
	R	9%	8%		R	17%	11%
FI	G	25%	67%	RO	G	0%	0%
	Y	75%	33%		Y	0%	0%
	R	0%	0%		R	100%	100%
FR	G	50%	86%	SE	G	0%	100%
	Y	25%	0%		Y	0%	0%
	R	25%	14%		R	0%	0%
GR	G	50%	80%	SI	G	100%	100%
	Y	25%	0%		Y	0%	0%
	R	25%	20%		R	0%	0%
HR	G	0%	33%	SK	G	30%	50%
	Y	33%	0%		Y	40%	33%
	R	67%	67%		R	30%	17%
HU	G	57%	75%	UK	G	0%	0%
	Y	21%	13%		Y	0%	0%
	R	21%	13%		R	100%	100%

The first row (green) indicates the percentage of custodians on track with the implementation (i.e. the standard has been implemented, or development and implementation are ongoing or analysis is ongoing). The second row (yellow) indicates the percentage that has not yet started the analysis. The third row (red) indicates the share of missing replies. A dash ("-") indicates that no custodians are monitored in the market. The percentages are calculated on the basis of entities monitored in the market. 0% indicates that custodians either replied "No" or that they did not reply to the question.

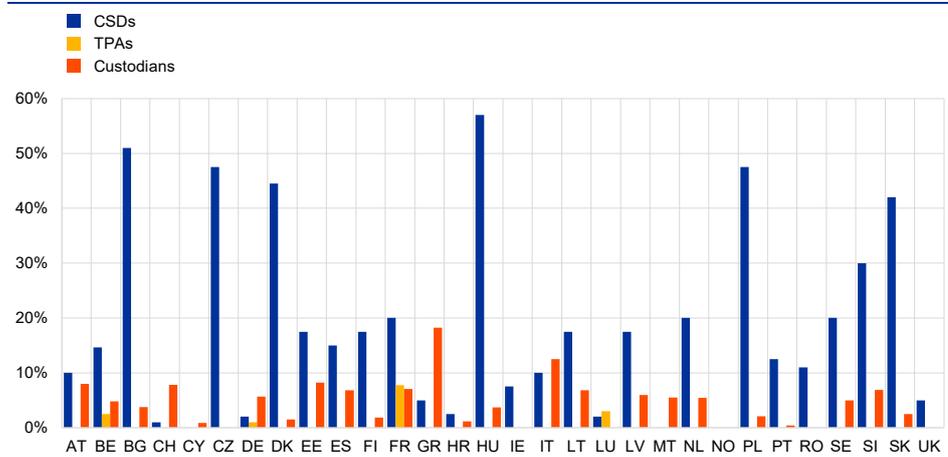
4 ISO 2022 adoption

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 who have the capability of communicating in Application-to-Application (A2A) format using ISO 2022 messages.

The chart below illustrates the percentage of CSD, TPA and custodian clients who have the capability of communicating in A2A using ISO 2022 messages.

Chart 9

% of CSD, TPA and custodian clients who have the capability of communicating in A2A using ISO 2022 messages (at the end of November 2021)



Notes: CSDs, TPAs and custodians were asked to provide an estimate of the percentage of their clients who had the capability of communicating in A2A using ISO 2022 messages in November 2021. The percentages in the table reflect the average by entity type per AMI-SeCo market.

Annex 1: Markets participating in the surveys and the monitored³ entities

Participating markets	Triparty Collateral Management survey	Corporate Actions survey	Billing Processes survey
AT	N/A	1 CSD 5 Custodians 8 Issuers	1 CSD 5 Custodians
BE	2 TPAs	3 CSDs 2 TPAs 5 Custodians 4 Issuers	3 CSDs 2 TPAs 5 Custodians
BG	N/A	2 CSDs 6 Custodians 6 Issuers	2 CSDs 6 Custodians
CH	1 TPA	1 CSD 1 TPA 6 Custodians 4 Issuers	1 CSD 1 TPA 6 Custodians
CY	N/A	1 CSD 7 Custodians 1 Issuer	1 CSD 7 Custodians
CZ	N/A	2 CSDs	2 CSDs
DE	1 TPA	1 CSD 1 TPA 17 Custodians 8 Issuers	1 CSD 1 TPA 17 Custodians
DK	N/A	1 CSD 4 Custodians 4 Issuers	1 CSD 4 Custodians
EE	N/A	1 CSD 5 Custodians 5 Issuers	1 CSD 5 Custodians
ES	N/A	1 CSD 13 Custodians 2 Issuers	1 CSD 13 Custodians
FI	N/A	1 CSD 4 Custodians 6 Issuers	1 CSD 4 Custodians
FR	2 TPAs	2 CSDs 2 TPAs 9 Custodians 1 Issuer	2 CSDs 2 TPAs 9 Custodians
GR	N/A	2 CSDs 7 Custodians 2 Issuers	2 CSDs 7 Custodians
HR	N/A	1 CSD 7 Custodians 4 Issuers	1 CSD 7 Custodians
HU	N/A	1 CSD 8 Custodians 5 Issuers	1 CSD 8 Custodians
IE	N/A	1 CSD	1 CSD

For Triparty collateral management survey: N/A indicates that the market does not have a TPA.

³ Monitored or participating entities are those that received a token to be able to fill in the survey. This does not necessarily mean they submitted answers to the survey.

Annex 1: Markets participating in the surveys and the monitored entities (continued)

Participating markets	Triparty Collateral Management survey	Corporate Actions survey	Billing Processes survey
IT	N/A	1 CSD 7 Custodians 3 Issuers	1 CSD 7 Custodians
LT	N/A	1 CSD 9 Custodians 7 Issuers	1 CSD 9 Custodians
LU	2 TPAs	2 CSDs 2 TPAs 2 Custodians	2 CSDs 2 TPAs 2 Custodians
LV	N/A	1 CSD 13 Custodians 33 Issuers	1 CSD 13 Custodians
MT	N/A	1 CSD 1 Custodian	1 CSD 1 Custodian
NL	N/A	1 CSD 6 Custodians 1 Issuer	1 CSD 5 Custodians
PL	N/A	2 CSDs 6 Custodians 2 Issuers	2 CSDs 6 Custodians
PT	N/A	1 CSD 9 Custodians 1 Issuer	1 CSD 9 Custodians
RO	N/A	3 Custodians 2 CSDs	3 Custodians 2 CSDs
SE	N/A	1 CSD 1 Custodian	1 CSD 1 Custodian
SI	N/A	1 CSD 4 Custodians 1 Issuer	1 CSD 4 Custodians
SK	N/A	1 CSDs 6 Custodians 5 Issuers	1 CSDs 6 Custodians
UK	N/A	9 Custodians 1 CSD	9 Custodians 1 CSD

For Triparty collateral management survey: N/A indicates that the market does not have a TPA.

Annex 2: Glossary

Term	Explanation
Account servicer	Party that manages the account on behalf of the account owner (i.e. it manages the registration and booking of entries on the account, calculates balances on the account and provides information about the account). Account servicers include triparty agents, (international) central securities depositories ((I)CSDs) and custodians.
Account owner	Party that legally holds the account or the party in a contractual relationship with the account servicer.
AMI-SeCo community	Financial market infrastructures, market participants and central banks participating in AMI-SeCo and AMI-SeCo National Stakeholder Groups (NSGs) in the European Union, United Kingdom and Switzerland.
AMI-SeCo markets	Financial markets and relevant financial market stakeholders in the European Union, the United Kingdom and Switzerland.
Central Clearing Counterparty (CCP)	An entity that interposes itself, in one or more markets, between the counterparties to contracts traded, becoming the buyer to every seller and the seller to every buyer, and thereby guaranteeing the performance of open contracts.
Custodians	Commercial banks acting in their capacity as account servicers.
Eurosystem central banks	The national central banks of the countries that have adopted the euro as their single currency, acting in their role as collateral takers for Eurosystem credit operations.
(International) central securities depositories ((I)CSDs)	Issuer and investor (international) central securities depositories also acting as account servicers. An (I)CSD is defined as an entity that (1) enables securities transactions to be processed and settled by book entry, (2) provides custody services (e.g. the administration of corporate actions and redemptions), and (3) plays an active role in ensuring the integrity of securities issues. Securities may be held in a physical (but immobilised) form or in a dematerialised form (whereby they exist only as electronic records).
Issuers (agents)	The issuer of an underlying security, including the agent mandated by the issuer for corporate actions purposes.
Monitoring framework	Description and methodology for regular monitoring and assessment by national stakeholder groups of the relevant markets' degree of compliance with the agreed AMI-SeCo standards.
SCoRE	Single Collateral Management Rulebook for Europe.
SCoRE Standards	Part of a single rulebook setting out common business processes, workflows and ISO 20022 messaging for asset servicing and collateral management with central banks and/or with commercial banks.
Triparty agents (TPAs)	Agents regulated as (international) central securities depositories and/or custodians/commercial banks that act as providers of triparty services.
Users	Collateral givers and collateral takers (including central banks, commercial banks and central clearing counterparties) that use the services of collateral management and asset servicing providers.

Annex 3: 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.

Milestone	Description	Date
M1	Analysis Started: Have you commenced an in-depth analysis of all applicable SCoRE Standards in order 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?	02/12/2022
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)?	05/12/2022
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?	01/04/2023
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)?	13/10/2023
M13	SCoRE Standards Implemented: have the SCoRE Standards been implemented?	20/11/2023

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.

SCoREBOARD

SINGLE COLLATERAL MANAGEMENT RULEBOOK
FOR EUROPE

- 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 8 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)**
- **In the case of CSD and TPA compliance with standards:** NA means that a specific standard is not applicable to a specific entity.
- **For custodians:** when they answer NA, it is equivalent as if they did not respond to the survey. NA may only be given in response to the questions to which a standard response is required

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

Monitored entities are those entities that were invited 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 the case for the participation rate (1st chart 1), the charts for visualisations on the level of compliance with standards for custodians and issuers, and the milestones tables for custodians.

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.

Entities that did not submit answers are counted as 0% in the numerator but are counted as participants in the denominator.

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For specific terminology please refer to the [ECB glossary](#) (available in English only).

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