

SCoREBOARD

Advisory Group on Market Infrastructures for Securities and Collateral

Second Compliance & Progress Report



Contents

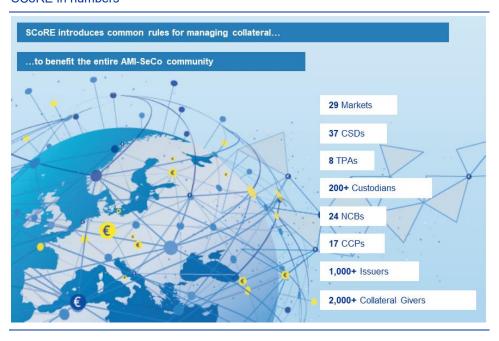
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SCoREBOARD: H1 2021

Introduction

Since the publication of the Collateral Management Harmonisation Report in December 2017, the Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) has made a number of significant breakthroughs in its ambition to create a Single Collateral Management Rulebook for Europe (SCoRE). In 2019 a first set of building blocks were developed related to Triparty Collateral Management, Corporate Actions and Billing Processes. A Single Triparty Model for Europe has been agreed which defines common processes for interaction between all major European triparty service providers and their participants. A detailed set of Standards has been developed in the highly complex area of Corporate Actions. Billing Processes have been harmonised to facilitate the transfer of billing information along the value chain. These achievements have been made possible by all relevant financial market stakeholders working together, and demonstrate the collective strength and commitment of the European financial market infrastructures, market participants and central banks which make up the AMI-SeCo community.

Overview SCoRE in numbers



Steps have been taken towards achieving compliance with the already-agreed Standards. National Stakeholder Groups (NSGs) have been established in AMI-SeCo markets in order to support these efforts. The Eurosystem also supports this initiative from an operational point of view and will adopt the agreed SCoRE Standards for its collateral management processes as of the go-live of the Eurosystem Collateral Management System (ECMS). Market stakeholders have also demonstrated their commitment to this initiative through the creation of detailed SCoRE Adaptation Plans whose implementation will be subject to regular review,

with the assessment results being made transparent in the form of a regular SCoREBOARD report.

The results presented in the second SCoREBOARD report confirm the strong commitment and willingness shown by all relevant stakeholders to implement the Standards in line with the agreed roadmap.

Executive summary

This is the second in 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 covers four main areas, as outlined in Box 1 below. The Executive Summary presents the key messages. Further details can then be found in the following sections.

Box 1 SCoREBOARD Overview

Participation

26 out of 29 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



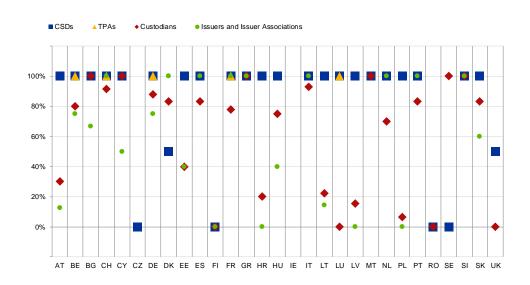
1) Participation

Most markets (26 out of 29) participated in the first SCoRE monitoring exercise.

- All triparty agents (TPAs) (8 out of 8) participated in the exercise.
- The majority of central securities depositories (CSDs) (31 out of 37) also participated in the exercise.

- There was a broad involvement of custodians in the exercise. There were
 usually at least five custodians reporting in most markets, thus ensuring a wide
 coverage of custody activities in each market. In some markets there is a need
 for further engagement in order to achieve a broader representation of
 custodians.
- **Issuer** engagement has commenced in the field of Corporate Actions. Further work on issuer engagement is needed in all markets.
- There was an increase in the number of markets (NSGs) that have reported the Polish and UK markets participated in the second monitoring, while Czech Republic, Romania and Sweden (the CSDs) have not yet participated. In particular, further engagement is planned with these markets with a view to putting in place the necessary reporting structures in order to ensure participation in future exercises.
- For the smaller number of markets without an NSG at present (i.e. the Czech Republic, Croatia, Sweden and the United Kingdom), most 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 1Participation rate per market



Notes: Percentages reflect the proportion of completed surveys submitted in H1 2021 per entity type by monitored entities in each AMI-SeCo market.

2) Progress

The majority of reporting markets are on schedule.

- In the area of Triparty Collateral Management:
 - Most Standards are on schedule. TPAs are currently focusing on conducting a detailed analysis of the Standards and are planning user communication..
 - Further clarity needed. Efforts to comply with Standards 1 to 11 (on ISO 20022 messaging and workflows) should be clarified in the Adaptation Plans in the case of three TPAs, namely Euroclear Bank, Euroclear France and SIX SIS. In addition, Eurex CCP has commenced efforts (in their role as user of triparty services). Further engagement with other CCPs is needed so the relevant adaptations will be introduced within the process of implementation of SCoRE (i.e. LCH.Clearnet SA and KDPW SA).

In the area of Corporate Actions:

- Most Standards are on schedule. Standards related to workflows and messaging are on schedule for most CSDs and TPAs. Some Standards have already been implemented in relation to market practices (e.g. rounding rules) and as a result of synergies with SRDII requirements. Compliance by custodians with many of the SCoRE Corporate Actions (CA) Standards is generally on track, i.e. in 17 (out of 29) markets. This means that 50% of custodians are on track (see Section 2.2.3).
- Further clarity needed. In three markets CSDs did not participate (i.e. CZ, RO and SE). A follow-up letter will be sent asking for an explanation. In the case of the UK there is no Adaptation Plan for CA which states if/how the Standards will be implemented, but the CSD did participate in the survey. The adaptation plans of CH, HR and MT should provide milestones.

• In the area of Billing Processes:

- Most Standards are on schedule. There is a large degree of compliance by CSDs and TPAs with Standards 2 (Billing cycle) and 3 (Cut-off date).
 Compliance by custodians is also generally on track.
- Behind Schedule. In some cases, Standards 1 and 4 have been assigned "behind schedule". In the next round, some CSDs should provide further details on the implementation status of Standards 1 and 4 (i.e. CH, CY, HR, HU, PL and SI).
- Further clarity needed. No feedback was received from some CSDs (CZ, RO and SE). In the case of DK and UK there is no Adaptation Plan for Billing Processes which states if/how the Standards will be implemented. The adaptation plans of CH, HR and MT should provide milestones.

Box 2Overview of progress per activity

	On schedule	Behind schedule	! Issues
DOD Triparty	BE – BNY Mellon DE – Clearstream FR – BNP Paribas LU – Clearstream LU – JP Morgan	BE – Euroclear Bank CH – SIX SIS FR – Euroclear France	N/A Clarify adaptation Plans: BE – Euroclear Bank CH – SIX SIS FR – Euroclear France
Corporate Actions	26 CSDS AT - OeKB	5 CSDs • CY – CSE (S1-4, 6-15) • FI – Euroclear FI (S1, 9, 13, 15) • PL – SKARBNET4 (S3, 15) • PT – Interbolsa (S15) • SI – KDD (S1-4, 9-15)	• CSDs • CZ – CSD Prague (N/R) • CZ – SKD (N/R) • RO – Dep. Central (N/R) • RO – NBR SSS (N/R) • SE – Euroclear SE (N/R) • UK – Euroclear UK (S2, 3, 12) Clarify adaptation Plans: • CH – SIX SIS • HR – SKDD • MT – MSE • UK – Euroclear UK
	BE – Euroclear Bank BE – BNY Mellon DE – Clearstream LU – Clearstream LU – JP Morgan	• CH – SIX SIS (S1) • FR – BNP Paribas (NA)	N/A
Billing	So.2% of Custodians Continue	5 CSDS • CH – SIX SIS (S1) • CY – CSE (S1, 2, 4) • HU – KELER (S1) • PL – SKARBNET (S1) • SI – KDD (S1)	N/A 5 CSDs • CZ – CSD Prague (N/R) • CZ – SKD (N/R) • RO – Dep. Cent (N/R) • RO – NBR-SSS (N/R) • SE – Euroclear SE (N/R) Clarify adaptation Plans: • CH – SIX SIS • DK – VP • HR – SKDD • MT – MSE • UK – Euroclear UK
	• UK - Euroclear L 5 TPAS • BE - Euroclear Bank France • DE - Clearstream • LU - Clearstrear • LU - JP Morgan	3 TPAs • BE – BNY Mellon (S1) • CH – SIX SIS (S1, 4)	N/A
	38.2% of Custodians	N/A	N/A

Notes: Box 2 provides an overview of the reporting entities that have commenced their analysis/implementation of the Standards as per Milestones 1 and 2: "On schedule" indicates that analysis has commenced and that initial high-level communication with external stakeholders has commenced; "Behind schedule" indicates that analysis and/or external communication will not commence until a later date; "Issues" indicates that analysis has not started and no timeline has been provided. For custodians, the percentages reflect the number of AMI-SeCo markets where an analysis of the Standards has been commenced by the majority of custodians.

3) Follow-up actions

In order to tackle the issues identified, a series of follow-up actions are planned.

• In the area of Triparty Collateral Management:

 Three TPAs (Euroclear Bank, SIX SIS and Euroclear France) should provide further information to confirm the final milestone and are therefore not assigned on schedule.

• In the area of Corporate Actions:

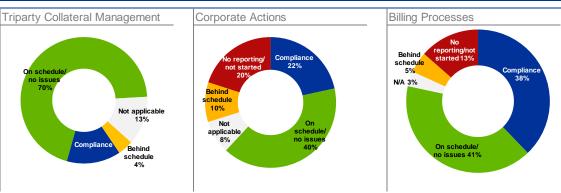
- Five CSDs (in CY, FI, PL, PT and SI) and two TPAs (in CH and FR) should provide further information the reasons for late implementation (for some Standards) and are therefore assigned behind schedule.
- Five CSDs (two in CZ, two in RO and one each in SE) have not yet started implementation and should provide information on the reasons for not starting implementation. Further information is also needed from one CSD (UK) for not starting implementation on some Standards (2, 3 and 12).
- Several CSDs (CH, HR, MT) should provide clarifications in the adaptation plans or should establish a plan (CZ, RO, SE and UK).

In the area of Billing Processes:

- Five CSDs (CH, CY, HU, PL and SI) and three TPAs (in BE, CH and FR) should provide further information the reasons for late implementation (for some Standards) and are therefore assigned behind schedule.
- Six CSDs (two in CZ, two in RO and one each in SE) have not yet started implementation and should provide information on the reasons for not starting implementation.
- Three CSDs (CH, HR and MT) should clarify the milestones in the adaptation plan. Some CSDs (CZ, RO, SE, DK and UK) should establish an adaptation plan.

In all cases, the follow-up actions underscore the importance of having a comprehensive Adaptation Plan with clear timelines in place.

Box 3Overview of compliance per activity



Notes: The graph provides a snapshot of the current status of compliance per activity by illustrating the colour codes assigned to (i) TPAs for the Triparty Collateral Management Standards and (ii) to CSDs for the Corporate Actions and Billing Processes Standards. Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets. For further details please refer to the SCoREBOARD in Section 2.

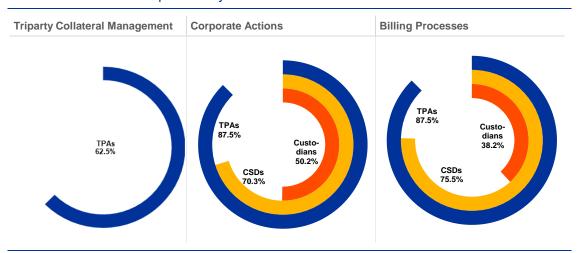
4) Milestones

In each survey, respondents are invited to indicate (i) whether milestones falling due within the current reporting period (see section 3 for more details) have been achieved and (ii) if they remain on track to achieve future milestones. 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 should be made to achieve full compliance on time.

- In the area of Triparty Collateral Management:
 - Almost all TPAs are on track and have started the analysis.
- In the area of Corporate Actions:
 - Many CSDs and TPAs are on track (18 CSDs have reported that they
 have met the first milestone analysis started while 12 CSDs have
 reported that they will meet it later). No blocking factor has been identified.
 - For custodians the numbers are low (only in 15 out of 29 markets are
 more than 50% of custodians are on track, see Section 3.2.3.) and further
 action is needed to increase awareness among custodians with a view to
 meeting the deadline for compliance on time.
- In the area of Billing Processes:
 - For CSDs and TPAs the majority of reporting entities expect to be compliant on time (i.e. 75.5% of CSDs and 87.5% of TPAs). As with Corporate Actions, the gap primarily relates to ongoing planning exercises in non-euro CSDs. The number is therefore expected to increase in the next monitoring exercise as the remaining Adaptation Plans are finalised.

 For custodians the numbers are low (only in 12 out of 29 markets, more than 50% of custodians are on track) and further action is need to increase awareness among custodians with a view to meeting the deadline for compliance on time.

Box 4Overview of Milestones per activity



Notes: Box 4 provides an overview of the reporting entities that expect to meet the final Milestone. Percentages are calculated based on the expected number of respondents across all AMI-SeCo markets. See Section 3 for further details.

The report is structured as follows:

- Section 1 provides an overview of the current status of the ten harmonisation activities.
- Section 2 presents the SCoREBOARD for the implementation phase.
- Section 3 focuses on the Milestones which determine whether markets are on track to achieve compliance in accordance with the timeframe agreed by AMI-SeCo.
- Section 4 monitors the evolution of market-wide adoption of the ISO 20022 messaging protocol.
- Annex 1 provides an overview of the reporting carried out per activity (e.g. Corporate Actions) at market level as conducted by each NSG.
- Annex 2 provides a glossary of the most commonly used terms throughout this
 document.

1 Introduction

The Single Collateral Management Rulebook for Europe (SCoRE) is an AMI-SeCo initiative to define common rules for managing collateral. The SCoRE initiative commenced in December 2017 with the identification of ten activities for which further harmonisation is needed in order to improve the efficiency of collateral management in Europe.¹

Box 5
SCoRE activities

Collateral Management Harmonisation Activities

The CMH-TF have identified 10 areas where further harmonisation is needed.



1. Triparty Collateral Management

Harmonisation of Triparty Collateral Management workflows and messaging in order to facilitate interoperable processes allowing collateral mobility across Triparty Agents.



6. Billing Processes

Harmonisation of billing procedures, workflows and messaging.



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).



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.



3. Taxation Processes

Harmonisation of tax processing in the context of collateral management (taking into account identification of parties in collateralised transactions).



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.



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.



9. Sourcing of Collateral

Minimum requirements for sourcing/movement of collateral across Europe.



5. Margin Calls

Interoperability and leverage of existing infrastructures and market platforms for margin processes.



10. Non-Euro Collateral

Market practices for the handling of non-euro denominated collateral (including related corporate action processes).

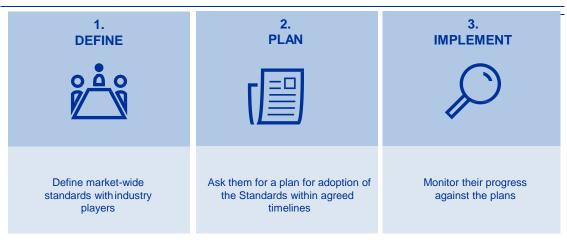
Each of these ten activities has been analysed / is being analysed by a dedicated AMI-SeCo task force on collateral management harmonisation (CMH-TF) with a view to defining harmonisation Standards (AMI-SeCo Standards).

AMI-SeCo has agreed on a Monitoring Framework which defines the methodology against which implementation of the Standards is monitored. The Framework consists of three phases.

Please refer to the Collateral Management Harmonisation report for further information.

- 1. The first phase 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 the monitoring of the implementation in order to ensure that implementation of the plans remains on schedule and in accordance with the agreed milestones.

Box 6SCoRE Monitoring – Overview of the three phases



1.1 Define

In 2019, AMI-SeCo endorsed the definition of the first set of AMI-SeCo Standards related to three of the ten activities, namely:

- Triparty Collateral Management
- Corporate Actions
- Billing Processes

1.2 Plan

Details of the Adaptation Plans prepared for the three activities related to Triparty Collateral Management, Corporate Actions and Billing Processes can be found in the SCoRE Adaptation Plans Status Report (status as at June 2021).

1.3 Implement

This report focuses on the implementation of the Standards that have already been defined. Full details of the implementation status across all AMI-SeCo markets can be found in Sections 2 and 3.

2 SCoREBOARD

Background

This Section provides an overview of the current status of compliance with the Standards defined for each activity. CSDs and TPAs are monitored on an individual basis and are assigned a colour-coded status in accordance with 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 which form the basis of the colour-coded assessment can be found in Section 3.

Box 7 SCoREBOARD – Compliance



- 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

FOR FUROPE

For custodians and issuers, progress is monitored and reported as a percentage; for example the percentage of custodians in a given market who have started internal adaptation of IT systems.

In this section, for each set of Standards the report assesses the implementing actors' progress towards achieving full compliance with the Standards. A summary chart is included to provide an overview of the compliance statuses presented in the SCoREBOARD.

A series of action points have also been identified which should be taken into account for the next monitoring exercise in order to enhance the quality of the information provided.

² For further details please refer to the AMI-SeCo Monitoring Framework.

2.1 Triparty Collateral Management

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains 17 Standards related to Triparty Collateral Management (published as the AMI-SeCo Standards for Triparty Collateral Management). This section presents the compliance status of the monitored entities as at May 2021.

The Standards being assessed are listed below.

Table 1SCoRE 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.

The monitored entities (on the provider side) are:

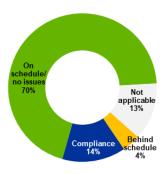
• TPAs: a dedicated survey was sent (see Section 2.1.1).

The monitored entities (on the user side) are:

- CCPs: CCPs are monitored by NSGs in their role as users of Triparty Collateral
 Management Services and are therefore assessed on their ability to
 communicate with their TPA using ISO 20022 messaging. Eurex Clearing AG
 CCP has started its internal analysis of the adoption of ISO 20022 messaging
 by November 2023. Further efforts are needed by CCPs in FR and PL.
- Eurosystem national central banks (NCBs): NCBs are monitored by the ECB in their role as users of Triparty Collateral Management Services. All Eurosystem NCBs are on track.

2.1.1 SCoRE Triparty Collateral Management Standards – TPA Compliance

Chart 1TPAs' 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). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
Compliance: Some of the Triparty SCoRE Standards are already being complied with (this relates mainly to Standard 12: Partial allocation, Standard 14: Usage of baskets, and Standard 15: Future dated processing).	A concrete plan with milestones is needed that supports the timely implementation (i.e. from Euroclear Bank, SIX SIS and Euroclear France).
On schedule: A large part of the remaining Standards are on schedule to achieve compliance on time (i.e. by November 2023). In many cases, Standards 1 to 10 were deemed to be on schedule (and it is noted that they cannot yet be fully implemented because of new elements which are still to be implemented)	
Behind schedule: Progress is behind schedule for Standard 1 (ISO 20022) and Standard 8 (Reporting Flow) / no implementation milestones have been provided for three TPAs TPAs (i.e. from Euroclear Bank, SIX SIS and Euroclear France).	
No reporting: N/A	
Not applicable: Standard 11 (Handling of corporate actions), Standard 16 (Operating hours) and Standard 17 (Cut-off times) are only applicable in the context of the collateralisation of central bank credit operations.	

Table 2SCoREBOARD – 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	G	Y	Y	G	G	Y	G	G
2	G	G	G	G	G	G	G	G
3	G	G	G	G	G	G	G	G
4	G	G	G	G	G	G	G	G
5	G	G	G	G	G	G	G	G
6	G	G	G	G	G	G	G	G
7	G	G	G	G	G	G	G	G
8	G	Y	Y	G	G	Y	G	G
9	G	G	G	G	G	G	G	G
10	G	G	G	G	G	G	G	G
11	N/A	G	N/A	G	N/A	G	G	N/A
12	В	В	G	В	В	В	В	G
13	G	G	G	G	G	G	G	G
14	В	В	G	В	В	В	В	В
15	G	В	G	В	В	В	В	В
16	N/A	G	N/A	G	В	G	В	N/A
17 Rule 1	N/A	G	N/A	G	N/A	G	G	N/A
17 Rule 2	N/A	G	N/A	G	N/A	G	G	N/A
17 Rule 2	N/A	G	N/A	G	N/A	G	G	N/A

Notes: For TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above. A plausibility check was performed by the CMH-TF Secretariat.

2.2 Corporate Actions

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains 15 Standards relating to the processing of Corporate Actions (published as the AMI-SeCo Standards for Corporate Actions). This section presents the compliance status of the monitored entities as at May 2021.

The Standards being assessed are listed below.

Table 3SCoRE Corporate Actions Standards

No.	Name
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	Blocking of securities
11	Availability of default options
12	Handling of fees for meeting-related CA 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

The monitored entities (from the provider side) are:

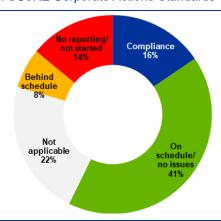
- CSDs (see Section 2.2.1)
- TPAs (see Section 2.2.2)
- Custodians (see Section 2.2.3)

The monitored entities (from the user side) are:

- Issuers (see Section 2.2.4)
- 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.

2.2.1 SCoRE Corporate Actions Standards – CSD Compliance

Chart 2
CSDs' compliance with SCoRE Corporate Actions Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Corporate Actions SCoREBOARD for CSDs (see Tables 4 and 5). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
Compliance: The highest levels of compliance with the SCoRE CA Standards are observed in Standards 4 to 14 (which are primarily related to market practices).	Standards that are behind schedule: Further information is needed in the cases of late implementation by CH, CY, FI, PL and SI.
On schedule: Standards 1 to 3 and Standard 15 related to workflows	• CY – CSE (S1-4, 6-15)
and messaging are on schedule and the implementation analysis has started.	• FI – Euroclear FI (S1, 9, 13, 15)
	• PL – SKARBNET4 (S3, 15)
Behind schedule: Some CSDs (CY, FI, PL, PT, SI) have some Standards which are behind schedule. In the case of Euroclear	• PT – Interbolsa (S15)
Finland Standards 1, 9, 13 and 15 are deemed to be behind schedule	• SI – KDD (S1-4, 9-15)
because – according to the Adaptation Plan – certain elements will be implemented post 2023. (See Action points).	Further information is needed on the milestones in the Adaptation Plan from one CSD
Not applicable: Several responses for Standards (1F, 1G and 1H) were "Not applicable" (N/A), although there will be a further review	• CH – SIX for S1-3 and 13
(See Action points). With regard to Standard 12 (Fees), consent/solicitation fees are not applied in some CSDs as a result of participation in a meeting event (on all assets held as an issuer CSD and an investor CSD). "N/A" should be provided as a response. With	Standards where implementation has not yet started: Participation to surveys is needed from CZ, PL, RO and SE.
regard to Standard 14 (Foreign currency), if no foreign currency is	

No reporting / Not started

No feedback was received from some non-euro CSDs (CZ, RO and SE). Not started for some Standards (UK) $\,$

handled in the CSD, the response "N/A" should be provided.

Further information is needed in cases of UK for Standards 2, 3 and 12 $\,$

Table 4SCOREBOARD – Corporate Actions Standards for CSDs (Standard 1A-4)

	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4
AT - Oesterreichische Kontrollbank	G	G	G	G	G	G	G	G	G	G	G	G	G	В
BE - Euroclear Bank	G	G	G	G	G	G	G	G	G	G	G	В	В	G
BE - Euroclear Belgium	G	G	G	G	G	N/A	N/A	N/A	G	G	В	В	В	В
BE - NBB-SSS	G	G	G	G	G	G	G	G	G	N/A	В	В	В	N/A
BG - BNBGSSS	G	N/A	G	G	G	N/A	N/A	N/A	G	В	G	В	В	В
BG - CD AD	G	G	G	G	G	G	G	G	G	G	В	В	В	В
CH - SIX SIS	G	G	G	G	G	G	G	G	G	G	В	В	N/A	В
CY - CYPRUS STOCK EXCHANGE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	В	N/A	N/A
CZ - CSD Prague	R	R	R	R	R	R	R	R	R	R	R	R	R	R
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	G	G	G	G	G	G	G	G	G	G	G	G	G	G
DK - VP Securities	G	G	G	G	G	N/A	N/A	N/A	G	G	G	G	В	В
EE - NASDAQ	G	G	G	G	G	G	G	G	G	G	G	В	В	В
ES - Iberclear	G	G	G	G	G	G	G	G	G	G	G	В	В	G
FI - Euroclear Finland	G	G	Y	Y	Y	G	G	G	G	G	G	В	В	В
FR - Euroclear France	G	G	G	G	G	G	N/A	N/A	G	G	В	В	В	В
FR - ID2S	G	N/A	G	G	G	N/A	N/A	N/A	G	G	В	В	G	G
GR - BOGS	G	G	G	G	G	G	N/A	N/A	G	G	G	G	G	В
GR - AthexCSD	G	G	G	G	G	G	G	G	G	G	G	В	G	В
HR - SKDD	G	G	G	G	G	G	G	G	G	G	G	G	G	G
HU - KELER	G	G	G	G	G	N/A	N/A	N/A	G	G	G	В	G	G
IT - Monte Titoli	G	G	G	G	G	G	N/A	N/A	В	В	В	В	В	В
LT - NASDAQ	G	G	G	G	G	G	G	G	G	G	В	В	В	В
LU - Clearstream Banking Luxembourg	G	G	G	G	G	G	G	G	G	G	G	В	G	G
LU - LuxCSD	G	G	G	G	G	G	G	G	G	G	G	В	G	G
LV - NASDAQ	G	G	G	G	G	G	G	G	G	G	G	В	В	В
M T - Malta Stock Exchange	G	G	G	G	G	G	G	G	G	G	G	G	В	В
NL - Euroclear Nederland	G	G	G	G	G	N/A	N/A	N/A	G	G	В	В	В	В
PL - KDPW	G	G	G	G	G	G	G	G	G	G	G	G	G	В
PL - SKARBNET4	G	G	G	G	G	G	G	G	G	Y	N/A	N/A	N/A	N/A
PT - Interbolsa	G	G	G	G	G	G	N/A	N/A	G	G	G	В	В	В
RO - Depozitarul Central	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
SE - Euroclear Sweden	R	R	R	R	R	R	R	R	R	R	R	R	R	R
SI - KDD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SK - CDCP	G	G	G	G	G	G	G	G	G	G	G	G	G	G
UK - Euroclear UK & Ireland	В	В	N/A	В	N/A	N/A	N/A	В	R	R	В	В	N/A	В

Notes: The colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above. A plausibility check was performed by the CMH-TF Secretariat.

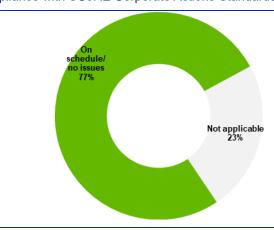
Table 5SCOREBOARD – Corporate Actions Standards for CSDs (Standards 5 to 15)

	5	6	7	8 Rule 1	8 Rule 2	8 Rule 3	9	10	11	12	13	14	15
AT - Oesterreichische Kontrollbank	G	G	G	G	G	G	G	G	В	G	G	В	G
BE - Euroclear Bank	В	G	В	G	G	G	G	G	В	В	В	N/A	G
BE - Euroclear Belgium	В	В	В	N/A	G	G	В	G	В	N/A	В	В	G
BE - NBB-SSS	В	В	В	В	В	В	G	G	G	G	G	В	G
BG - BNBGSSS	G	В	В	В	N/A	В	N/A	N/A	N/A	N/A	G	N/A	G
BG -CDAD	G	В	В	N/A	В	G	В	G	G	N/A	G	N/A	G
CH - SIX SIS	В	В	В	N/A	N/A	N/A	В	G	N/A	В	G	N/A	G
CY - CYPRUS STOCK EXCHANGE	В	Y	Y	Y	Y	Y	Υ	Y	Y	N/A	Y	N/A	Y
CZ - CSD Prague	R	R	R	R	R	R	R	R	R	R	R	R	R
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	В	В	G	В	G	В	G	G	В	В	В	В	G
DK - VP Securities	G	В	В	В	В	В	G	N/A	N/A	N/A	G	В	G
EE - NASDAQ	G	В	G	В	В	В	G	G	В	G	В	В	G
ES - Iberclear	В	G	В	В	G	G	G	G	В	G	G	G	G
FI - Euroclear Finland	В	G	В	G	В	В	Υ	G	В	N/A	Y	G	Y
FR - Euroclear France	В	В	G	В	G	G	В	G	В	N/A	В	В	G
FR - ID2S	В	В	В	G	G	В	G	G	G	N/A	G	G	G
GR - BOGS	В	G	В	В	В	В	G	G	G	N/A	G	N/A	G
GR- AthexCSD	G	G	G	N/A	В	В	G	G	В	G	G	В	G
HR - SKDD	N/A	В	В	G	G	G	G	G	G	G	G	N/A	G
HU - KELER	В	G	G	G	G	G	G	G	G	G	G	N/A	G
IT - Monte Titoli	В	G	В	В	В	G	В	G	G	G	В	G	G
LT - NASDAQ	G	В	В	G	G	G	G	G	В	G	В	В	G
LU - Clearstream Banking Luxembourg	В	G	В	G	G	В	G	G	В	В	В	В	G
LU - LuxCSD	G	G	В	G	G	В	G	G	В	В	В	В	G
LV - NASDAQ	G	G	В	G	G	G	G	G	В	G	В	В	G
M T - Malta Stock Exchange	G	G	В	В	В	В	G	G	В	N/A	G	N/A	G
NL - Euroclear Nederland	В	В	В	G	G	G	В	G	В	N/A	В	В	G
PL - KDPW	В	В	G	G	В	В	G	G	В	В	G	В	G
PL - SKARBNET4	В	В	В	В	В	В	N/A	G	N/A	N/A	N/A	N/A	Y
PT - Interbolsa	В	G	В	G	В	G	G	G	G	N/A	G	В	Y
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	R	R	R	R	R	R	R	R	R	R	R	R	R
SI - KDD	N/A	В	В	В	В	В	Υ	Y	Y	Y	Y	N/A	Y
SK - CDCP	G	G	В	G	G	G	G	G	G	G	G	G	G
UK - Euroclear UK & Ireland	В	В	В	N/A	N/A	N/A	В	G	В	R	N/A	N/A	N/A

Notes: The colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above. A plausibility check was performed by the CMH-TF Secretariat.

2.2.2 SCoRE Corporate Actions Standards - TPA Compliance

Chart 3 TPAs' 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). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
On schedule: Most TPAs are on schedule to achieve full compliance with the SCoRE CA Standards.	Further information on the milestones in the Adaptation Plan is needed by CH (for Standard 1)
Not applicable: Standards 1F to 1H (meeting-related workflows) were reported as N/A by some TPAs, which are also CSDs (SIX SIS, Euroclear France), which should be clarified. (See Action points).	Compliance with Standard 1 by TPAs should encompass both CA event workflows (Standards 1A to 1E) and CA meeting workflows (Standards 1F to 1H). For the next round, SIX SIS and Euroclear France are invited to provide an update on Standards 1F to 1H.

Table 6 SCoREBOARD - Corporate Actions Standards for TPAs

	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
1A	G	G	G	G	N/A	G	G	G
1B	G	G	G	G	N/A	G	G	G
1C	G	G	G	G	N/A	G	G	G
1D	G	G	G	G	N/A	G	G	N/A
1E	G	G	G	G	N/A	G	G	G
1F	N/A	G	G	G	N/A	N/A	G	G
1G	N/A	G	G	G	N/A	N/A	G	G
1H	N/A	G	G	G	N/A	N/A	G	G

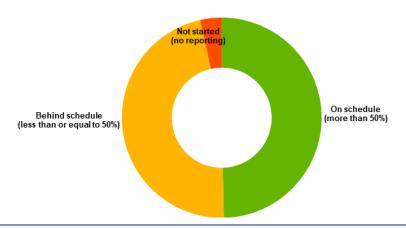
Notes: For CSDs and TPAs, the colour code reflects the current implementation status of each Standard in accordance with the

methodology outlined in Box 1 above.

TPAs are using custody services provided by CSDs or custodians in order to disseminate CA information to Collateral Givers and Collateral Takers. Monitoring of TPAs thus focuses on the implementation of triparty-specific workflows as described in Standard 1. Percentages are calculated on the basis of entities monitored in the market.

2.2.3 SCoRE Corporate Actions Standards – Custodian Compliance

Chart 4
Custodians' compliance with SCoRE Corporate Actions Standards



Notes: The graph summarises the percentages for each AMI-SeCo market where the Standard has either already been implemented or where implementation is on track, calculated from the Standards in the Corporate Actions SCOREBOARD for custodians (see Tables 7 and 8). The aggregation is divided into three groups: above 50%, below or equal to 50%, and no reporting or not started. In Finland custodians based their responses on an earlier Adaptation Plan from Euroclear Finland.

Key takeaways	Action points
Compliance and on schedule: Compliance by custodians with many of the SCoRE CA Standards is on track (i.e. in 15 markets, more than 50% of custodians were on track). Behind schedule: In some markets compliance efforts should be increased (less than 50% of custodians on track in EE, FR,	Custodians reported on the start of their efforts towards achieving compliance and results were aggregated per market/NSG to indicate the progress made by all custodians is relation to the market. Additional efforts are needed to involve custodians in CZ, EE,
HR, LT, LU, LV, PL and SK). No reporting: Custodians in some markets have not yet responded to the survey (CZ, IE, RO and UK).	FR, HR, IE, LT, LU, LV, PL, RO, SK and UK.

Table 7SCoREBOARD – Corporate Actions Standards for Custodians (Standards 1A-3)

	Office Composition Standards for Subtodians (Standards 1710)									/
	1A	1B	1C	1D	1E	1F	1G	1H	2	3
AT	63%	60%	60%	60%	60%	60%	60%	47%	60%	60%
BE	60%	60%	60%	60%	60%	36%	24%	27%	55%	57%
BG	71%	100%	83%	67%	83%	83%	83%	89%	58%	72%
СН	83%	83%	67%	80%	83%	83%	83%	83%	78%	79%
CY	100%	100%	100%	97%	100%	100%	100%	100%	80%	83%
CZ	-	-	-	-	-	-	-	-	-	-
DE	76%	76%	77%	68%	78%	64%	64%	65%	72%	73%
DK	100%	100%	89%	87%	67%	60%	67%	33%	45%	50%
EE	19%	20%	20%	40%	40%	40%	40%	40%	40%	40%
ES	73%	75%	69%	78%	71%	68%	68%	69%	69%	66%
FI	75%	75%	67%	65%	50%	75%	70%	58%	46%	42%
FR	36%	36%	36%	35%	36%	36%	36%	29%	31%	31%
GR	86%	86%	86%	83%	64%	86%	86%	86%	77%	85%
HR	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
HU	57%	56%	56%	53%	56%	56%	56%	56%	46%	51%
IE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
IT	98%	94%	100%	97%	100%	86%	86%	86%	92%	93%
LT	24%	22%	22%	22%	22%	24%	31%	22%	19%	19%
LU	43%	0%	0%	0%	0%	0%	0%	0%	40%	45%
LV	16%	17%	18%	17%	27%	25%	25%	26%	31%	31%
МТ	100%	100%	100%	25%	33%	100%	100%	100%	94%	10%
NL	100%	100%	100%	96%	100%	80%	60%	60%	96%	97%
PL	6%	6%	6%	6%	3%	6%	6%	6%	4%	4%
PT	50%	58%	50%	54%	50%	60%	52%	50%	47%	38%
RO	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SE	100%	100%	67%	60%	N/A	80%	80%	33%	57%	55%
SI	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
sĸ	45%	43%	43%	37%	43%	56%	43%	43%	42%	42%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Notes: For custodians, the percentage indicates that the Standard has either already been implemented, or that implementation is on track i.e. at a minimum that analysis has already started or that implementation has started per Standard.

Percentages are calculated on the basis of entities actually monitored in the market.

Table 8SCoREBOARD – Corporate Actions for Custodians (Standards 4-15)

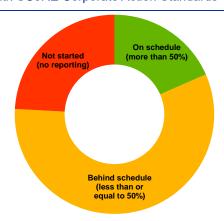
					- /						
	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4	5	9	10	11	12	13	15
AT	60%	60%	60%	60%	40%	40%	60%	60%	60%	60%	40%
BE	60%	60%	60%	60%	40%	60%	60%	60%	60%	60%	2%
BG	50%	50%	50%	67%	67%	83%	67%	83%	50%	67%	67%
СН	67%	83%	50%	83%	83%	83%	83%	67%	83%	33%	57%
CY	86%	100%	29%	43%	57%	86%	86%	100%	29%	100%	86%
CZ	-	-		-	-	-	-	-	-	-	-
DE	75%	81%	88%	88%	69%	81%	81%	75%	75%	75%	54%
DK	100%	67%	100%	100%	100%	100%	25%	67%	33%	50%	36%
EE	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	20%
ES	75%	83%	83%	75%	67%	75%	75%	83%	75%	75%	62%
FI	75%	50%	75%	75%	50%	75%	75%	75%	75%	75%	0%
FR	36%	36%	36%	36%	36%	36%	36%	36%	36%	36%	13%
GR	71%	100%	86%	100%	71%	86%	86%	100%	86%	86%	54%
HR	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
HU	56%	67%	56%	67%	67%	67%	67%	67%	67%	67%	44%
IE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
IT	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	51%
LT	33%	33%	33%	33%	33%	33%	33%	33%	22%	22%	11%
LU	50%	50%	0%	50%	0%	50%	50%	50%	0%	0%	0%
LV	31%	31%	31%	31%	31%	31%	31%	31%	31%	31%	8%
МТ	100%	100%	0%	100%	0%	100%	100%	100%	N/A	100%	0%
NL	100%	100%	100%	100%	80%	100%	100%	100%	100%	100%	18%
PL	3%	3%	3%	6%	6%	6%	6%	6%	6%	3%	5%
PT	50%	70%	60%	70%	20%	60%	50%	60%	40%	60%	28%
RO	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SE	100%	N/A	100%	100%	100%	100%	100%	100%	100%	100%	37%
SI	75%	100%	75%	100%	50%	75%	100%	100%	75%	75%	83%
SK	43%	43%	43%	43%	29%	43%	43%	43%	43%	57%	44%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Notes: For custodians, the percentage indicates that the Standard has either already been implemented, or that implementation is on track, i.e. at a minimum that analysis has already started or that implementation has started per Standard.

Percentages are calculated on the basis of entities actually monitored in the market.

2.2.4 SCoRE Corporate Action Standards – Issuer Compliance

Chart 5
Issuers' compliance with SCoRE Corporate Action Standards



Notes: The graph summarises the percentages for each AMI-SeCo market where the issuers have confirmed awareness of their obligations, calculated from the Standards in the Corporate Actions SCoREBOARD for issuers (see Table 9). The aggregation is divided into three groups: above 50%, below or equal to 50%, and no reporting or not started.

Key takeaways	Action points
Compliance and on schedule: Compliance with the SCoRE CA Standards is on track in some markets (BE, BG, CY, ES, GR, IT,	Issuers (and issuer agents) should be aware of the SCoRE CA Standards, in particular:
NL and SI).	Standard 1 (provision of CA information)
Behind schedule: In some markets, compliance efforts are low and should be increased (AT, CH, DE, DK, EE, FR, HU, LV and	Standard 2 (key data elements)
PT)	Standard 3 (consistent information)
No reporting: Issuers (and issuer agents) in many markets have	Standard 4 (rounding)
not yet responded to the survey and efforts should be increased	Standard 5 (negative cash flow)
to receive feedback from the issuer community (CZ, FI, HR, LT, LU, MT, PL, RO, SE, SK and UK).	Standard 6 (business day conventions)
EG, MT, T E, NG, GE, GR and GNJ.	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 9SCoREBOARD – Corporate Actions Standards for Issuers (Standards 1A-4)

	1A	1F	2	3	4 Rule 1	4 Rule 2	4 Rule 3	4 Rule 4
AT	25%	25%	25%	25%	25%	25%	25%	25%
BE	50%	50%	50%	50%	50%	50%	50%	50%
BG	58%	50%	50%	50%	50%	67%	67%	67%
СН	0%	25%	0%	0%	0%	0%	0%	0%
CY	50%	50%	50%	50%	50%	50%	50%	50%
CZ	-	-	-	-	-	-	-	-
DE	23%	0%	25%	13%	38%	50%	38%	38%
DK	25%	13%	25%	25%	0%	0%	25%	0%
EE	20%	20%	20%	20%	40%	40%	40%	40%
ES	50%	50%	50%	50%	50%	100%	100%	50%
FI	0%	0%	0%	0%	0%	0%	0%	0%
FR	0%	0%	0%	0%	100%	100%	100%	100%
GR	100%	100%	50%	50%	100%	100%	100%	100%
HR	0%	0%	0%	0%	0%	0%	0%	0%
HU	57%	35%	60%	20%	40%	40%	40%	40%
IE	-	-	-	-	-	-	-	-
IT	94%	67%	67%	67%	100%	100%	100%	100%
LT	0%	0%	0%	0%	0%	0%	0%	0%
LU	-	-	-	-	-	-	-	-
LV	6%	3%	3%	3%	3%	3%	3%	3%
МТ	-	-	-	-	-	-	-	-
NL	100%	100%	100%	0%	100%	100%	100%	100%
PL	0%	0%	0%	0%	0%	0%	0%	0%
PT	42%	0%	50%	50%	50%	100%	50%	50%
RO	-	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-	-
SI	100%	100%	100%	100%	100%	100%	100%	100%
SK	0%	0%	0%	0%	0%	0%	0%	0%
UK	-	-	-	-	-	-	-	-

Notes: Issuers were asked to confirm whether they were aware of their obligation to provide all relevant information to the issuer CSD (on a yes/no basis). The percentage reflects the number of issuers who responded "yes" to the survey.

Percentages are calculated on the basis of entities actually monitored in the market.

Table 10SCoREBOARD – Corporate Actions Standards for issuers (Standards 5-13)

	5	6	7	8 Rule 1	8 Rule 2	8 Rule 3	9	11	13
AT	13%	25%	25%	25%	25%	25%	25%	25%	25%
BE	25%	50%	50%	50%	25%	50%	50%	50%	50%
BG	33%	67%	67%	50%	50%	67%	50%	50%	50%
СН	0%	0%	0%	0%	25%	25%	25%	25%	25%
CY	50%	50%	50%	50%	50%	50%	50%	50%	50%
CZ	-	-	-	-	-	-	-	-	-
DE	13%	75%	63%	50%	38%	63%	63%	50%	38%
DK	0%	100%	100%	0%	100%	100%	25%	100%	0%
EE	20%	40%	40%	40%	20%	40%	40%	40%	20%
ES	100%	50%	100%	50%	100%	100%	100%	100%	50%
FI	0%	0%	0%	0%	0%	0%	0%	0%	0%
FR	0%	0%	100%	0%	0%	0%	100%	0%	0%
GR	50%	50%	50%	50%	50%	100%	100%	100%	100%
HR	0%	0%	0%	0%	0%	0%	0%	0%	0%
HU	0%	20%	40%	0%	20%	40%	20%	40%	20%
IE	-	-	-	-	-	-	-	-	-
IT	33%	100%	100%	67%	100%	67%	100%	100%	100%
LT	14%	14%	14%	0%	0%	0%	14%	0%	0%
LU	-	-	-	-	-	-	-	-	-
LV	0%	3%	3%	0%	3%	3%	3%	3%	3%
MT	-	-	-	-	-	-	-	-	-
NL	0%	100%	100%	100%	0%	100%	100%	0%	100%
PL	0%	0%	0%	0%	0%	0%	0%	0%	0%
PT	50%	50%	100%	50%	100%	100%	50%	50%	50%
RO	-	-	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-	-	-
SI	100%	100%	100%	100%	0%	100%	100%	100%	100%
SK	0%	20%	0%	20%	0%	20%	0%	0%	0%
UK	-	-	-	-	-	-	-	-	-

Notes: Issuers were asked to confirm whether they were aware of their obligation to provide all relevant information to the issuer CSD (on a yes/no basis). The percentage reflects the number of issuers who responded "yes" to the survey.

Percentages are calculated on the basis of entities actually monitored in the market

2.3 Billing Processes

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains four Standards related to billing processes (published as the AMI-SeCo Standards for Billing Processes). This section presents the compliance status of the monitored entities as at May 2021.

The Standards being assessed are listed below:

Table 10SCoRE 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.

The monitored entities (from the provider side) are:

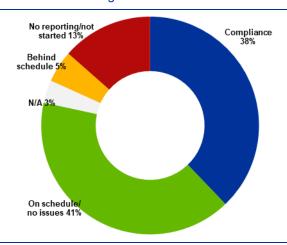
- CSDs (see Section 2.3.1)
- TPAs (see Section 2.3.2)
- Custodians (see Section 2.3.3)

The monitored entities (from the user side) 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.

2.3.1 SCoRE Billing Processes Standards – CSD Compliance

Chart 6
CSDs compliance with SCoRE Billing Processes Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Billing Processes SCoREBOARD for CSDs (see Table 11). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points		
Compliance: There is a large degree of compliance with Standard 2 (Billing cycle) and Standard 3 (Cut-off date).	Standard 1 (ISO 20022) and Standard 4 (Payment date): In the next round some CSDs (i.e. CH, CY, HU, PL and SI) should		
On schedule: Compliance with the remaining Standards 1 (ISO 20022) and Standard 4 (Date for payment fees) is largely on	provide further details on the implementation status of Stand 1 and 4.		
track.	DK and UK should provide an adaptation plan. CH, HR and M		
Behind schedule: In some cases Standards 1 and 4 are	should clarify the milestones in the adaptation plan.		
deemed to be behind schedule (CH, CY, HU, PL and SI).	CZ, RO and SE should participate.		
Not applicable:			
No reporting/not started: No feedback was received from some non-euro CSDs (CZ, RO and SE).			

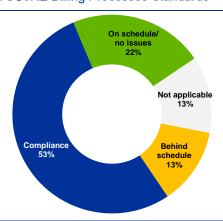
Table 11SCoREBOARD – Billing Processes Standards for CSDs

		1	1	1
	1	2	3	4
AT - Oesterreichische Kontrollbank	G	В	В	В
BE - Euroclear Bank	G	В	В	В
BE - Euroclear Belgium	G	В	G	G
BE - NBB-SSS	G	В	В	G
BG - BNBGSSS	G	G	G	G
BG - CD AD	G	В	В	В
CH - SIX SIS	Y	В	В	G
CY - Cyprus Stock Exchange	Y	Y	G	Υ
CZ - CSD Prague	R	R	R	R
CZ - SKD	R	R	R	R
DE - Clearstream Banking Frankfurt	G	В	В	В
DK - VP Securities	G	G	G	G
EE - NASDAQ	G	В	В	G
ES - Iberclear	G	В	В	G
FI - Euroclear Finland	G	В	В	G
FR - Euroclear France	G	В	G	G
FR - ID2S	G	В	В	G
GR - BOGS	G	В	В	G
GR - AthexCSD	G	В	В	В
HR - SKDD	G	В	В	G
HU - KELER	Y	G	G	G
IT - Monte Titoli	G	В	В	G
LT - NASDAQ	G	В	В	G
LU - Clearstream Banking Luxembourg	G	В	В	В
LU - LuxCSD	G	В	В	В
LV - NASDAQ	G	В	В	G
M T - M alta Stock Exchange	G	В	G	G
NL - Euroclear Nederland	G	В	G	G
PL - KDPW	G	В	В	G
PL - SKARBNET4	Y	N/A	N/A	N/A
PT - Interbolsa	G	В	В	G
RO - Depozitarul Central	R	R	R	R
RO - National Bank of Romania SSS	R	R	R	R
SE - Euroclear Sweden	R	R	R	R
SI - KDD	Y	В	В	В
SK - CDCP	G	В	В	G
UK - Euroclear UK & Ireland	N/A	G	N/A	G

Notes: For CSDs and TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above.

2.3.2 SCoRE Billing Processes Standards – TPA Compliance

Chart 7
TPAs' compliance with SCoRE Billing Processes Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Billing Processes SCoREBOARD for TPAs (see Table 12). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
Compliance: There is a large degree of compliance with Standard 2 (Billing cycle) and Standard 3 (Cut-off date).	One TPAs (SIX SIS) is invited to clarify the milestones in its Adaption Plan
On schedule: The remaining Standards are largely on track.	
Behind schedule: Some of the adaptations on Standard 1 are yet to commence, but it is expected that work will begin after the further clarifications which were provided recently on the Standards.	
Not applicable: Standard 3 (Cut-off date) is only applicable for TPAs that are operated by a CSD (because the Standard requires CSDs to set a cut-off date for providing billing information to clients).	

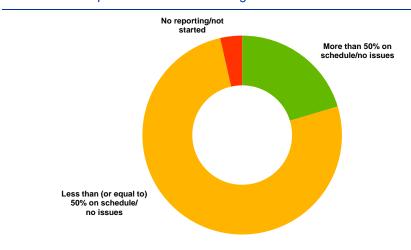
Table 12SCoREBOARD – Billing Processes Standards for TPAs

	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	G	Y	G	Y	G	G	G
2	В	В	В	В	В	В	В	В
3	N/A	В	В	В	N/A	G	В	N/A
4	В	В	Y	В	В	G	В	N/A

Notes: For CSDs and TPAs the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above.

2.3.3 SCoRE Billing Processes Standards – Custodian compliance

Chart 8
Custodians' compliance with SCoRE Billing Processes Standards



Notes: The graph summarises the percentages for each AMI-SeCo market where the Standard has either already been implemented or implementation is on track, calculated from the Standards in the Billing Processes SCoREBOARD for custodians (see Table 13). The aggregation is divided into three groups: above 50%, below or equal to 50%, and no reporting or not started. In Finland, custodians based their responses on an earlier Adaptation Plan from Euroclear Finland.

Key takeaways	Action points
Compliance and on schedule: At 52%, progress has been made towards compliance with Standard 2 (Billing cycle).	The low level of reporting among custodians is a point which should receive attention in the next rounds of the survey.
Behind schedule: None.	
No reporting/not started: No feedback was received from custodians (CZ, IE, LU, PL, RO and UK).	

Table 13SCoREBOARD – Billing Processes Standards for Custodians

	1	2	3	4
AT	9%	40%	20%	40%
BE	17%	60%	20%	40%
BG	13%	83%	50%	50%
CH	13%	83%	0%	17%
CY	38%	100%	29%	43%
CZ	-	-	-	-
DE	46%	82%	24%	39%
DK	0%	25%	25%	0%
EE	17%	17%	40%	40%
ES	43%	92%	58%	83%
FI	13%	50%	50%	25%
FR	18%	50%	30%	30%
GR	31%	71%	43%	38%
HR	0%	20%	0%	20%
HU	44%	67%	44%	56%
IE	0%	0%	0%	0%
ІТ	53%	86%	14%	38%
LT	28%	22%	22%	22%
LU	0%	0%	0%	0%
LV	7%	23%	15%	23%
MT	0%	100%	100%	N/A
NL	55%	100%	20%	40%
PL	0%	6%	0%	0%
PT	8%	60%	20%	20%
RO	0%	0%	0%	0%
SE	N/A	100%	100%	N/A
SI	56%	100%	50%	75%
SK	19%	38%	0%	13%
UK	0%	0%	0%	0%

Notes: For custodians, the percentage indicates that the Standard has either already been implemented, or that implementation is on track i.e. at a minimum that analysis has already started or that implementation has started per Standard.

Percentages are calculated on the basis of entities actually monitored in the market.

3 Milestones

On the basis of information contained in the Adaptation Plans, a series of key Milestones have been identified. These indicators serve as the basis for tracking preparations and assigning the colour-coded assessment throughout the implementation phase.

All implementing actors were invited to confirm (on a yes/no basis) whether the Milestones identified in the Adaptation Plans are being met / expected to be met. This tool was agreed in the NSGs to facilitate the consistent implementation across markets (given the long-term efforts that are needed) and avoids issues remaining undetected until the deadline for compliance. There are thirteen Milestones in total.

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 H1 2021 monitoring exercise focuses on the first and second milestones (M1 and M2). Consequently the blue colour code in each milestones table is assigned to those milestones which have been successfully achieved to date for each respective entity. Milestones which will only be achieved later are assigned a

yellow status while milestones which 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 which are only due to be achieved after the current reporting cycle) the green colour code indicates an entity's expected ability to achieve a future milestone on time and the yellow status indicates that the milestone will only be achieved at a later date. The expected date of achievement is also indicated in the table if it differs from the milestone date defined by AMI-SeCo.

3.1 Triparty Collateral Management

Milestones - SCoRE Triparty Collateral Management Standards - TPAs

Key takeaways	Action points
Milestone 1 (Analysis Started by 30/06/2020): Most TPAs confirmed that they had achieved the first milestone on schedule while one TPA (SIX SIS) indicated it would be achieved at a later date. The impact on respecting the overall timelines should be further considered. Milestone 2 (Initial User Communication by 01/03/2021): Most TPAs confirmed that they have achieved the milestone while two TPAs SIX SIS and JP Morgan will communicate later (This will not have an impact on respecting the overall timelines for JP Morgan).	For five TPAs, the milestones do not point to any blocking factor with regard to achieving full compliance with the Triparty SCoRE Standards (BNY Mellon, BNP Paribas, Clearstream Banking DE and Clearstream Banking LU). Three TPAs (Euroclear Bank, SIX SIS and Euroclear France) should confirm the final milestone and are therefore not assigned on schedule.
Future Milestones: Most TPAs expect to achieve future milestones (3 to 13) on time. For three TPAs (Euroclear Bank, SIX SIS and Euroclear France), achievement of the final milestone M13 should be confirmed, as it could have an impact on respecting the overall timelines.	

Table 14TPA Milestones – SCoRE Triparty Collateral Management Standards

	Milestones 1-13												
	M 1	M 2	М 3	M 4	M 5	M 6	М 7	M 8	М 9	M 10	M 11	M 12	M 13
BE - BNY Mellon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	06/22	Yes	Yes	Yes	Yes
CH - SIX SIS	07/22	03/23	11/21	03/23	03/23	07/22	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	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	06/22	Yes	Yes	Yes	Yes
DE - Clearstream Banking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LU - Clearstream Banking	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LU - JP Morgan	Yes	01/22	01/22	01/22	01/22	Yes	12/22	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Actors were asked to report for all Milestones, i.e. whether they meet the current milestones (1 & 2) and whether they expect to meet the dates for future Milestones. A plausability check was performed for M13.

3.2 Corporate Actions

3.2.1 Milestones – SCoRE Corporate Actions Standards – CSDs

Key takeaways	Action points
Milestone 1 (Analysis Started by 30/06/2020): 18 CSDs reported that they had reached the first milestone while 12 CSDs will achieve it at a later date.	The Milestones do not point to major blocking factors with regard to achieving full compliance with the SCoRE CA Standards, although the following action should be taken.
Some CSDs will allocate resources slightly later for the first milestone (CSE, VP, Nasdaq, Iberclear, AthexCSD, SKDD, KDPW, SKARBNET4 and KDD), although this has no impact on the overall compliance deadline. No action is required.	Five markets still need to reply to the survey in order to complete the picture (in the CZ, FI, RO, SE and UK markets).
One CSD (SIX SIS) will start the analysis later and will also achieve later overall compliance.	
Milestone 2 (Initial User Communication by 01/03/2021): 18 CSDs reported that communication had started. 12 CSDs expect to meet the interim milestones at a later date, but this will not have an impact on respecting the overall timelines.	
Future Milestones: Most CSDs expect to achieve future milestones (3 to 13) on time.	

Table 15Milestones – SCoRE Corporate Actions Standards – CSDs

	Milestones 1-13												
	M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12 M13												
AT - Oesterreichische Kontrollbank	Yes	05/21	09/21	Yes									
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BE - Euroclear Belgium	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BE - NBB-SSS	Yes	Yes	07/23	12/23	12/23	Yes	11/25	Yes	Yes	12/24	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	05/25	04/25	01/24	01/24	10/25
CY - CYPRUS STOCK EXCHANGE	07/21	07/21	12/21	01/22	02/22	Yes	12/22	Yes	01/23	12/22	Yes	Yes	Yes
CZ - CSD Prague	R	R	R	R	R	R	R	R	R	R	R	R	R
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DK - VP Securities	01/21	06/21	Yes	Yes	Yes	Yes	Yes	Yes	01/23	12/22	Yes	Yes	Yes
EE - NASDAQ	06/21	01/22	12/21	Yes	01/22	Yes							
ES - Iberclear	04/21	Yes											
FI - Euroclear Finland	R		R	R	R	R	R	R	R	R	R	R	R
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FR - ID2S	Yes	Yes	10/21	Yes									
GR - BOGS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GR - AthexCSD	07/21	Yes	12/21	01/22	02/22	Yes	Yes	Yes	01/23	12/22	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
IT - Monte Titoli	Yes	Yes	12/21	Yes									
LT - NASDAQ	06/21	01/22	12/21	Yes	01/22	Yes							
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LU - LuxCSD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LV - NASDAQ	06/21	01/22	12/21	Yes	01/22	Yes							
M T - Malta Stock Exchange	Yes	07/21	Yes										
NL - Euroclear Nederland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PL - KDPW	10/20	06/21	Yes	02/23	Yes	Yes	Yes						
PL - SKARBNET4	07/21	03/22	12/21	03/22	03/22	03/22	Yes						
PT - Interbolsa	Yes	06/21	12/21	Yes	Yes	Yes	Yes	Yes	01/23	Yes	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	
SE - Euroclear Sweden	R		R			R			R			R	
SI - KDD	09/21	11/21	02/22	03/22	02/22	Yes							
SK - CDCP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
UK - Euroclear UK & Ireland	R		R	R	R	R	R	R	R	R	R	R	R

Notes: Actors were asked to report for all Milestones, i.e. whether they meet the current milestones (1 & 2) and whether they expect to respect the dates for future Milestones.

3.2.2 Milestones – SCoRE Corporate Actions Standards – TPAs

Key takeaways	Action points
Milestone 1 (Analysis Started by 30/06/2020): Most TPAs reported that they had reached the first milestone, although two TPAs expect to achieve it at a later date. They need more time to perform an in-depth analysis of some aspects (SIX SIS, BNP Paribas)	The milestones do not point to any blocking factor with regard to achieving compliance with the SCoRE Corporate Action Standards, except for BNP Paribas which is invited to clarify their timelines.
Milestone 2 (Initial User Communication by 01/03/2021): Most TPAs have reached the second milestone (apart from two TPAs BNP Paribas and SIX SIS, which will communicate later).	
Future Milestones: Most TPAs expect to achieve future milestones (3 to 13) on time.	

Table 16Milestones – SCoRE Corporate Actions Standards – TPAs

	M ilestones 1-13												
	M 1	M 2	М 3	M 4	M 5	M 6	M 7	M 8	М 9	M 10	M 11	M 12	M 13
BE - BNY Mellon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CH - SIX SIS	07/21	12/21	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	12/24	02/24	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	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Actors were asked to report for all Milestones, i.e. whether they meet the current Milestones (1 & 2) and whether they expect to meet the dates for future Milestones.

3.2.3 Milestones – SCoRE Corporate Actions Standards – Custodians

Key takeaways	Action points
Milestone 1 (Analysis Started by 30/06/2020): In some markets, the majority of custodians reported that they had met the first milestone (BG, DK, IT, NL and SE). In some other markets, a large proportion of custodians expect to meet the milestone (AT, BE, DE, ES, FR, GR, HU, PT and SK).	The reason for the small proportion of custodians which expect to meet the milestones should be further investigated. One explanation for this could be that current work has mainly involved CSDs and TPAs. Another possible explanation is the lower response rate due to the current coronavirus (COVID-19)
Milestone 2 (Initial User Communication by 01/03/2021): The number of custodians which expect to meet the remaining milestones varies (either increases or decreases).	situation. Custodians should, however, step up their preparations and report progress on achieving the milestones in the next round.
Future milestones: There is an increase for most markets.	

Table 17Milestones – SCoRE Corporate Actions Standards for Custodians

		M ilestones 1-13											
	M 1	M 2	М 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13
АТ	40%	20%	20%	20%	20%	20%	20%	40%	20%	20%	20%	40%	40%
BE	40%	20%	0%	40%	40%	20%	40%	40%	40%	40%	60%	80%	80%
BG	67%	50%	83%	83%	67%	83%	100%	100%	100%	100%	100%	100%	100%
СН	17%	17%	33%	33%	33%	17%	17%	17%	17%	17%	33%	33%	33%
CY	14%	29%	29%	29%	29%	14%	57%	57%	29%	29%	86%	100%	100%
cz	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	38%	38%	38%	50%	50%	56%	56%	63%	69%	69%	75%	88%	88%
DK	67%	67%	67%	67%	33%	67%	33%	100%	100%	100%	100%	100%	100%
EE	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	40%	40%
ES	42%	42%	50%	58%	67%	67%	58%	58%	67%	67%	83%	83%	83%
FI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
FR	33%	11%	22%	22%	22%	11%	11%	11%	22%	22%	44%	56%	56%
GR	43%	57%	57%	57%	71%	43%	71%	57%	71%	57%	86%	100%	100%
HR	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%	20%	20%	20%
ни	38%	38%	38%	50%	63%	63%	63%	63%	63%	63%	75%	75%	75%
IE	-	-	-	-	-	-	-	-	-	-	-	-	-
IT	71%	57%	57%	86%	86%	43%	71%	71%	71%	71%	86%	100%	100%
LT	11%	11%	11%	11%	11%	11%	22%	11%	11%	11%	11%	22%	22%
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%
мт	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	60%	40%	40%	60%	60%	40%	60%	60%	60%	60%	60%	60%	60%
PL	3%	3%	6%	6%	6%	3%	3%	3%	3%	3%	6%	6%	6%
PT	33%	44%	44%	67%	67%	33%	44%	44%	56%	56%	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%	25%	50%	75%	75%	75%	75%	75%	100%	100%	75%
sĸ	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%

Notes: Actors were asked to report for all Milestones, i.e. whether they meet the current Milestones (1 & 2) and whether they expect to respect the dates for future Milestones (on a yes/no basis). The percentages reflect the number of custodians in AMI-SeCo markets for which implementation is on track for the Milestone, i.e. they responded "yes" to the survey. Percentages are calculated as the share of custodians that answered "yes" among the monitored entities in the AMI-SeCo market.

3.3 Billing Processes

3.3.1 Milestones – SCoRE Billing Processes Standards – CSDs

Key takeaways	Action points
Milestone 1 (Analysis Started by 30/06/2020): 14 CSDs reported that they had reached the first milestone for the SCoRE Standards for Billing Processes, while 16 CSDs will achieve it at a later date.	The milestones do not point to any blocking factor with regard to achieving compliance with the SCoRE Billing Standards. Later interim milestones do not have an impact on achieving full compliance in most cases.
 Most CSDs that will start the analysis later will do so as of the second half of 2021 or in 2022. This will not have an impact on their respecting the overall timelines. 	 Several CSDs reported a later date for Indicators 3 to 10. This should be explained further by the CSDs and is a point of attention for the next round.
Milestone 2 (Initial User Communication by 01/03/2021): 14 CSDs have started communication and 15 CSDs will communicate at a later date.	Several CSDs need to report on their milestones (CZ, DK, FI, RO, SE and UK).
Most CSDs that will communicate by the second half of 2021 or in 2022. This will not have an impact on their respecting the overall timelines.	
Future Milestones: Most CSDs expect to achieve future milestones (3 to 13) on time.	

Table 18Milestones – SCoRE Billing Processes Standards for CSDs

		•				Mile	stones	1-13					•
	M 1	M 2	М 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13
AT - Oesterreichische Kontrollbank	Yes	05/21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BE - Euroclear Bank	10/21	12/22	12/21	12/22	12/22	Yes	Yes	Yes	02/23	Yes	Yes	Yes	Yes
BE - Euroclear Belgium	10/21	12/22	12/21	12/22	12/22	Yes	Yes	Yes	02/23	Yes	Yes	Yes	Yes
BE - NBB-SSS	12/22	Yes	12/22	12/22	Yes	12/22	12/22	12/22	12/22	12/22	Yes	Yes	Yes
BG - BNBGSSS	Yes	Yes	Yes	Yes	Yes	Yes	01/24						
BG - CD AD	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
CH - SIX SIS	05/22	05/22	05/22	12/22	12/22	12/22	06/23	06/23	10/23	06/23	10/23	Yes	Yes
CY - Cyprus Stock Exchange	07/21	07/21	12/21	01/22	02/22	Yes	Yes	Yes	01/23	12/22	Yes	Yes	Yes
CZ - CSD Prague	R	R	R	R	R	R	R	R	R	R	R	R	R
CZ - SKD	R		R				R			R			R
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
DK - VP Securities	R		R	R	R	R	R	R	R	R	R	R	R
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	04/21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FI - Euroclear Finland	R		R	R	R	R	R	R	R	R	R	R	R
FR - Euroclear France	10/21	12/22	12/21	12/22	12/22	Yes	Yes	Yes	02/23	Yes	Yes	Yes	Yes
FR - ID2S	Yes	Yes	12/21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GR - BOGS	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
GR - AthexCSD	07/21	Yes	12/21	01/22	02/22	Yes	Yes	Yes	01/23	12/22	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	01/21	Yes	06/22	08/22	06/23	Yes	03/23	04/23	Yes	08/23	07/23	Yes	Yes
IT - Monte Titoli	Yes	Yes	12/21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	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	Yes	Yes	Yes						
LU - LuxCSD	Yes	Yes	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	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NL - Euroclear Nederland	10/21	12/22	12/21	12/22	12/22	Yes	Yes	Yes	02/23	Yes	Yes	Yes	Yes
PL - KDPW	10/20	06/21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	02/23	Yes	Yes	Yes
PL - SKARBNET4	07/21	03/22	12/21	03/22	03/22	03/22	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT - Interbolsa	03/21	06/21	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	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
SE - Euroclear Sweden	R		R				R			R			R
SI - KDD	09/21	11/21	02/22	03/22	02/22	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SK - CDCP	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
UK - Euroclear UK & Ireland	R		R	R	R	R	R	R	R	R	R	R	R

Notes: Actors were asked to report for all Milestones, i.e. whether they have achieved the current Milestones 1 and 2 (highlighted in Blue) and whether they expect to respect the dates for future Milestones.

3.3.2 Milestones – SCoRE Billing Processes Standards – TPAs

Key takeaways	Action points
Milestone 1 (Analysis Started by 30/06/2020): Most TPAs reported some delay in meeting the first milestone for the SCoRE Standards for Billing Processes. However, almost all TPAs expect to meet the overall implementation deadline. • Some TPAs need more time for an in-depth analysis (BNY Mellon, Clearstream, Euroclear and SIX SIS).	The milestones do not point to any blocking factor with regard to achieving compliance with the SCoRE Billing Standards: • Some TPAs which planned milestones at a later date (BN Mellon, Euroclear, SIX SIS and BNP Paribas) should provide updates
Milestone 2 (Initial User Communication by 01/03/2021): Similar to Milestone 1.	
Future Milestones: Most TPAs expect to achieve future milestones (3 to 13) on time.	

Table 19Milestones – SCoRE Billing Processes Standards for TPAs

						Mile	stones	1-13					
	M 1	M 2	М 3	M 4	M 5	M 6	М 7	M 8	М 9	M 10	M 11	M 12	M 13
BE - BNY Mellon	03/21	Yes	10/21	Yes	03/22	03/22	09/22	10/22	02/23	01/23	Yes	Yes	Yes
BE - Euroclear Bank	10/21	12/22	12/21	12/22	12/22	Yes	Yes	Yes	02/23	Yes	Yes	Yes	Yes
CH - SIX SIS	09/22	03/23	12/22	12/22	03/23	01/23	06/23	06/23	07/23	11/23	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	10/21	12/22	12/21	12/22	12/22	Yes	Yes	Yes	02/23	Yes	Yes	Yes	Yes
DE - Clearstream Banking Frankfurt	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
LU - Clearstream Banking Luxembourg	Yes	Yes	Yes	Yes	Yes	Yes	Yes						
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Yes	Yes						

Notes: Actors were asked to report for all Milestones, i.e. whether they meet the current Milestones 1 and 2, and whether they expect to respect the dates for future Milestones.

3.3.3 Milestones – SCoRE Billing Processes Standards – Custodians

Key takeaways	Action points
Milestone 1 (Analysis Started by 30/06/2020): In some markets good progress has been made.	The milestones suggest that custodians are making slow progress in many markets.
 In two markets (i.e. BG and ES) the majority of custodians reported that they had achieved the first milestone for the SCoRE Standards for Billing Processes. 	A larger number of custodians should start their preparations in the next round. There was no response from custodians in eight markets
 In nine markets (AT, BE, DE, FR, HU, IT, NL, SI and SK) many custodians also reported progress. 	(CZ, FI, IE, LU, MT, RO, SE and UK).
Milestone 2 (Initial User Communication by 01/03/2021): Results similar to those for the first milestone.	
Future Milestones: In 12 markets, a majority of custodians expect to achieve future milestones (3 to 13) on time	

Table 20Milestones – SCoRE Billing Processes Standards for Custodians

	Compliance indicators (Milestones 1-13)												
	M 1	M 2	М 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12	M 13
АТ	20%	20%	0%	0%	0%	0%	0%	20%	0%	0%	0%	20%	20%
BE	20%	40%	0%	20%	0%	20%	20%	20%	20%	20%	40%	60%	80%
BG	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	67%	83%	83%
СН	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	33%	33%	33%
CY	14%	14%	14%	29%	14%	14%	86%	86%	29%	43%	71%	86%	86%
cz	-	-	-	-	-	-	-	-	-	-	-	-	-
DE	24%	35%	24%	29%	29%	35%	47%	47%	41%	47%	53%	59%	59%
DK	0%	0%	0%	33%	0%	0%	0%	33%	33%	33%	33%	33%	33%
EE	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	40%	40%
ES	50%	50%	25%	42%	58%	50%	42%	50%	58%	50%	58%	58%	67%
FI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
FR	22%	22%	11%	33%	33%	22%	22%	22%	22%	22%	33%	44%	44%
GR	14%	43%	14%	14%	29%	43%	43%	43%	57%	57%	57%	71%	71%
HR	0%	0%	0%	0%	0%	0%	20%	20%	20%	20%	20%	20%	20%
HU	38%	38%	25%	38%	38%	38%	38%	38%	38%	38%	50%	50%	50%
IE	-	-		-	-	-	-	-	-	-	-	-	-
IT	43%	57%	43%	57%	43%	43%	43%	43%	43%	43%	57%	57%	57%
LT	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	22%	22%
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%
мт	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NL	40%	60%	40%	60%	40%	40%	40%	40%	40%	40%	60%	60%	60%
PL	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
РТ	11%	33%	22%	33%	33%	22%	22%	33%	44%	44%	44%	56%	56%
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%	50%	50%	50%	50%	50%	75%	75%	100%	100%	100%
sĸ	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%

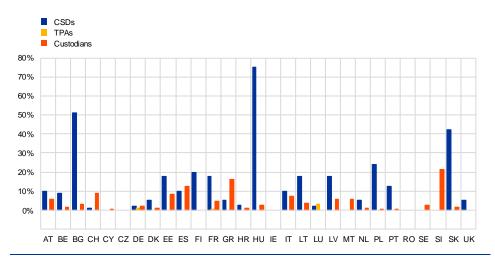
Notes: Actors were asked to report for all Milestones, i.e. whether they have achieved the current Milestones 1 and 2, and whether they expect to respect the dates for future Milestones (on a yes/no basis). The percentages reflect the number of custodians in AMI-SeCo markets for which implementation is on track for the Milestone, i.e. they responded "yes" to the survey. Percentages are calculated as the share of custodians which answered "yes" among the monitored entities in the AMI-SeCo market.

4 ISO 20022 Adoption

In order to track progress in the market-wide adoption of ISO 20022 messaging, information is collected from reporting entities on the percentage of their clients / counterparties who have the capability to communicate in Application-to-Application (A2A) format using ISO 20022 messages.

The chart below represents the percentage of CSD, TPA and custodian clients who have the capability to communicate A2A using ISO 20022 messages as at May 2020.

Chart 1 ISO 20022 adoption – May 2021



Notes: CSDs, TPAs and custodians were asked to provide an estimate of the percentage of their clients who have the capability to communicate A2A using ISO 20022 messages as at May 2021. The percentages in the table reflect the average per entity type per AMI-SeCo market.

Annex 1: NSG Reporting

NSG	Triparty Collateral Management	Corporate Actions	Billing Processes
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
СН	1 TPA	1 CSD 1 TPA 6 Custodians 4 Issuers	1 CSD 1 TPA 6 Custodians
CY	N/A	1 CSD 7 Custodians 2 Issuer	1 CSD 7 Custodians
CZ	N/A	No reporting in H1 2021	No reporting in H1 2021
DE	1 TPA	1 CSD 1 TPA 16 Custodians 8 Issuers	1 CSD 1 TPA 17 Custodians
DK	N/A	1 CSD 3 Custodians 4 Issuers	1 CSD 3 Custodians
EE	N/A	1 CSD 5 Custodians 5 Issuers	1 CSD 5 Custodians
ES	N/A	1 CSD 12 Custodians 2 Issuers	1 CSD 12 Custodians
FI	N/A	No reporting in H1 2021	No reporting in H1 2021
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 5 Custodians 1 Issuer	1 CSD 5 Custodians
HU	N/A	1 CSD 8 Custodians 5 Issuers	1 CSD 8 Custodians
IE	N/A	No reporting in H1 2021	No reporting in H1 2021
ІТ	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

NSG	Triparty Collateral Management	Corporate Actions	Billing Processes
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 5 Custodians 1 Issuer	1 CSD 5 Custodians
PL	N/A	2 CSDs 31 Custodians 2 Issuers	2 CSDs 31 Custodians
PT	N/A	1 CSD 9 Custodians 1 Issuer 1 Issuer association	1 CSD 9 Custodians
RO	N/A	No reporting in H1 2021	No reporting in H1 2021
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	No reporting in H1 2021	1 CSD Custodians no reporting in H1 2021

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 the contracts traded, becoming the buyer to every seller and the seller to every buyer and thereby guaranteeing the performance of open contracts.			
Commercial bank processes	Business processes relevant to commercial bank operations.			
Custodians	Commercial banks acting in their capacity as account servicers.			
ESES	Euroclear Settlement of Euronext-zone Securities			
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 custodial services (e.g. the administration of Corporate Actions and redemptions), and (3) plays an active role in ensuring the integrity of securities issues. Securities can be held in a physical (but immobilised) form or in a dematerialised form (whereby they exist only as electronic records).			
Issuers (agent)	The issuer of an Underlying Security including the agent mandated by the Issuer for Corporate Actions purposes.			
Monitoring Framework	Description and methodology for the regular monitoring and assessment by National Stakeholder Groups of 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 based on common business processes, workflows and ISO 20022 messaging for asset servicing and managing collateral 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.			

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

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