



EUROPEAN CENTRAL BANK

EUROSYSTEM

Collateral Management Harmonisation

Advisory Group on Market Infrastructures for
Securities and Collateral

Single Collateral Management Rulebook for Europe

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Executive summary

Financial market stakeholders support the need for collateral management harmonisation with a view to fostering the creation of a truly “domestic pan-European” financial market. Harmonisation reduces heterogeneity, increases collateral mobility, addresses the growing importance of collateral, contributes to ensuring a level playing field, allows scope for enhancing service levels and, overall, aims to achieve a higher degree of efficiency. All this would also contribute to the European Commission’s capital markets union (CMU) initiative.

Collateral management harmonisation is critical to the further integration of European financial markets. Market harmonisation of collateral management processes is a further milestone towards the establishment of a pan-European financial market with efficient and effective financial market infrastructures (FMIs) for managing liquidity and securities, thereby promoting the smooth implementation of monetary policy and financial stability. The harmonisation of collateral management procedures should also be viewed in the context of other Eurosystem deliberations on making collateral management procedures more efficient, particularly to further improve integration between cash and collateral. Significant progress has already been made in this regard through the introduction of TARGET2 (T2) and the completion of the final TARGET2-Securities (T2S) migration wave. There are also ongoing policy considerations in the Eurosystem to consolidate the mobilisation of marketable collateral in T2S.

Analysis shows that there are operational barriers to efficient and effective collateral management, which are related to differences in business processes, workflows and messaging. Operational impediments to the efficient use of collateral across European financial markets stem from diverging processes and interactions in collateral management activities. Other barriers to the post-trade arrangements of European financial markets, such as legal/regulatory barriers, also play a role, but they do not form part of this report as they are expected to be largely covered by other CMU initiatives. This report sets the collateral management harmonisation agenda to primarily remove operational barriers.

A holistic approach should be taken to removing the barriers to efficient and effective collateral management. The adoption of the latest international standards (such as ISO 20022) for collateral management offers an opportunity to move towards harmonised workflows and business processes, as well as a common set of messaging with interoperable market infrastructures based on a common set of data. Major FMIs in Europe have migrated (or will migrate) to the ISO 20022 standard, particularly for securities settlement (T2S) and cash settlement (T2). The Eurosystem will also use ISO 20022 to manage all processes related to the management of eligible assets as collateral in Eurosystem monetary policy operations (including triparty and corporate action (CA) processes). The focus is on standardised messaging based on ISO 20022 and efficiency improvements for FMIs, their users and the Eurosystem,

which would also leverage existing infrastructures and increase the interoperability of platforms to facilitate the sourcing of collateral¹.

Market stakeholders have identified and agreed upon a set of collateral management harmonisation activities (CMHAs) that they feel are the most attractive. The harmonisation activities are based on a set of guiding principles for safe and efficient collateral management, i.e. harmonisation should lead to a pan-European, single collateral management rulebook, the use of the latest international standards (such as ISO 20022), straight-through processing and increased availability of collateral. For each of the activities and business processes, the proposal is to assign priority levels that take the criticality and externalities of each process into account. In line with the initial thinking of the Eurosystem's Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo), it is proposed that the highest-priority (priority 1) processes be directly related to the markets that have migrated to T2S, are necessary for the safe and efficient functioning of FMI, monetary policy and collateral management arrangements in T2S markets², and can feasibly be implemented in line with the timing of European integration efforts in the CMU. Lower-priority (priority 2) processes are regarded as beneficial by market stakeholders but might not, at this stage, be absolutely necessary for the safe and efficient functioning of collateral management arrangements in T2S markets. Finally, no prioritisation is assigned to certain business processes that have, for example, already been harmonised, or where harmonisation might no longer be required or market practices are still evolving and it is too early to provide guidance (non-prioritised items).

The following ten CMHAs have been identified by market stakeholders. Each harmonisation activity consists of several business processes. Detailed overview tables, listing the business processes according to the priority level (see Annex 1), have been prepared.

¹ To this end, common messaging and workflows could also be a step towards achieving triparty collateral management via the network of triparty agents (triparty interoperability).

² In this report "T2S markets" is used to refer to the community of CSDs that have migrated to T2S and their CSD participants (including the central banks that use CSDs in T2S).

 <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> <p>£ DKK</p>

Market stakeholders welcome the significant progress that has been achieved towards the harmonisation of triparty collateral management processes.

Triparty agents (TPAs), together with market participants and the Eurosystem, have analysed the harmonisation of triparty processes (between TPAs and involved stakeholders) and are working on a proposal for the harmonisation of triparty collateral management that could be used in the context of both Eurosystem credit operations and market-related triparty transactions. Finalisation of the harmonisation proposal is subject to some further clarification/feedback from the Eurosystem and TPAs, as it would require changes to workflows/business processes.

The report takes account of the aspects and considerations that are relevant in the context of the Eurosystem’s investigations regarding a new Eurosystem Collateral Management System (ECMS). Areas covered by the report that are key elements for harmonisation include (but are not limited to) corporate actions, triparty collateral management services, taxation processes, non-euro collateral processes, billing processes and collateral data exchanges.

Approval of this report by the AMI-SeCo could launch the next steps in the process, i.e. the definition and implementation of the agreed harmonisation proposals. Approval of this report and the identified harmonisation activities and needs by the AMI-SeCo could lead to the conclusion of phase one of the collateral management harmonisation process and the launch of phase two, namely the definition and implementation of the agreed harmonisation proposals. The agreed CMHAs would serve as the basis for the next steps. These may include further work

on the possible definition of standards for harmonised business processes/workflows and a monitoring framework.

Substantial market efforts will be required for implementation. Market commitment is required to define concrete harmonisation proposals for the agreed harmonisation activities and needs. In this context, a decision also needs to be made on whether harmonisation proposals should take the form of harmonisation standards and/or harmonised best market practices. The dedication of market participants is also needed to review and (where necessary) enhance ISO 20022 messaging standards with harmonised workflows and data elements.

Implementation of the harmonisation proposals will require close market involvement. The AMI-SeCo is expected to play a major role in facilitating market involvement and assisting the market in the pursuit of CMHAs and needs. The AMI-SeCo will also incorporate other initiatives aimed at establishing a CMU in the European Union (EU) and removing barriers and bottlenecks impeding efficient and resilient cross-border post-trading.

1 Introduction

Part of the Eurosystem's mandate is to foster European financial market integration and promote the delivery of a truly domestic Single Market in Europe. It actively contributes to the creation of an integrated Capital Markets Union (CMU) and continues to promote the harmonisation of securities settlement with the T2S harmonisation agenda. The Eurosystem acts as a catalyst in discussions with market participants and providers of collateral management services.

The Eurosystem's Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) assists the Eurosystem by contributing to harmonisation in the areas of collateral management and securities clearing and settlement, with a view to fostering integrated financial market infrastructures (FMIs). At its March 2017 meeting, the AMI-SeCo invited its Harmonisation Steering Group (HSG) to develop a comprehensive list of collateral management harmonisation activities (CMHAs). Given the importance and complexity of the matter, the HSG decided to establish the Collateral Management Harmonisation Task Force (CMH-TF). In line with the mandate of the AMI-SeCo and its HSG, the CMH-TF was asked to analyse matters related to collateral management and to identify key harmonisation activities related to the efficient functioning of collateral management. The CMH-TF consists of Eurosystem central banks, market participants and market infrastructures primarily active in collateral management.

The CMH-TF analysed barriers to the efficient functioning of collateral management and considered existing market standards/practices and collateral management processes, with a view to overcoming fragmentation and operational constraints. The CMH-TF also considered recent market developments and earlier work by the Contact Group on Euro Securities Infrastructures (COGESI)³ and took account of aspects that may be relevant for harmonisation in the context of the Eurosystem's investigations regarding a new Eurosystem Collateral Management System (ECMS)⁴. For the Eurosystem central banks, the ECMS would manage eligible assets as collateral in Eurosystem credit operations and would establish harmonised functions and services for the Eurosystem and its counterparties.

The CMH-TF addressed a wide range of topics in order to identify the barriers to efficient and effective collateral management, including existing market arrangements, market standards and market best practice/guidance. This analysis led to a set of guiding principles for overcoming these barriers and steering the harmonisation of collateral management. Finally, the CMH-TF agreed on a set of harmonisation activities to overcome the barriers.

This report is structured as follows. Section 2 describes the barriers to efficient and effective collateral management identified and agreed upon by market stakeholders

³ Discussions in the COGESI led to a [preliminary list of proposals for collateral management harmonisation activities](#) (preliminary CMHAs).

⁴ In September 2016, the Eurosystem's Governing Council agreed to conduct the ECMS investigation phase (until December 2017). See the [presentation on the impact of ECMS on market participants](#).

and the CMH-TF. Section 3 sets out the CMH-TF's agreed guiding principles for collateral management harmonisation. Section 4 explains the approach to analysing the current differences in the mobilisation and management of collateral that allowed the list of harmonisation activities to be identified. Section 5 explains the list of harmonisation activities agreed by the CMH-TF and endorsed by the HSG. Section 6 outlines the next steps. Annex 1 provides a detailed overview of the proposed harmonisation activities in tabular form. Annex 2 provides a preliminary list of the terminology used in the context of collateral management to ensure a common understanding. Annex 3 provides a list of CMH-TF members and ad hoc observers.

2 Existing barriers to efficient and effective collateral management

Market participants now manage their collateral assets more proactively in view of market needs and regulatory developments, resulting in more frequent interactions and movements of assets from one location to another⁵. In view of these developments, market participants in the COGESI expressed the need for enhancements to existing arrangements to better support collateral and liquidity management activities (see “Euro Repo Market: Improvements for collateral and liquidity management”, 2014).⁶ Market participants in particular expressed the need to be able to move collateral quickly and manage it efficiently across Europe via triparty and bilateral collateral management processes. The mobilisation and management of collateral should meet the demand of market participants to use collateral when and where it is needed and to meet regulatory requirements. Market participants in the European Post Trade Forum (EPTF⁷) also underlined how important it is to be able to move collateral efficiently between counterparties, markets and accounts for the adequate functioning of financial markets.

Barriers to the efficient use of collateral across financial markets are related, in particular, to operational impediments involving triparty and bilateral collateral management arrangements, i.e. differences in the business processes and messaging used for collateral management activities, which hamper collateral mobility. Local market practices and arrangements in particular hamper the efficient mobilisation of collateral across the euro area and the use of collateralised transactions at end-of-day for treasury adjustment operations. Using securities as collateral across Europe often requires the involvement of agents (custodians or central securities depositories – CSDs) that are able to handle multiple processes and requirements (e.g. for cash flows related to corporate actions (CAs) or taxation processes). Other barriers to the post-trade arrangements of European financial markets, such as legal/regulatory barriers, also play a role, but these are expected to be mainly covered by other initiatives, particularly in the context of the European Commission’s CMU efforts.

⁵ The overall demand for collateral has increased, e.g. due to the implementation of margin obligations. At the same time, the demand/scarcity of specific high-quality and liquid collateral types has increased, necessitating the implementation of more efficient collateral mobilisation techniques.

⁶ The COGESI analysed barriers and national restrictions that prevent a greater level of automation and connectivity between market infrastructures. This resulted in the identification of a first list of relevant barriers to collateral mobility that impede the movement of collateral and the provision of related services. Market participants in the COGESI also identified the following main areas for the harmonisation of collateral management arrangements: (i) prompt access to collateral and opportunities to use ISO 20022 for collateral messages in the various stages of the chain; (ii) improvements for cross-system transactions in commercial bank money; and (iii) triparty-related harmonisation.

⁷ In early 2016, the European Commission set up the [EPTF as an informal expert group on post-trading](#), including the areas of collateral markets and derivatives. Experts in the EPTF analysed the current state of post-trade reform and regulatory initiatives in the post-trade space, and provided a high level assessment of the dismantling of the Giovannini barriers. Barriers were identified that are afforded the highest priority for a required solution in the context of CMU.

Local collateral management arrangements have evolved over many years, resulting in fragmentation, so market participants and the Eurosystem counterparties therefore have to deal with different procedures when mobilising collateral with other market participants or the Eurosystem itself. These differences result in operational inefficiencies that can be particularly detrimental in times of financial stress and collateral shortage and involve unnecessary cost.

As the euro area's banking and financial markets become increasingly integrated, industry demand for more efficient and harmonised collateral management arrangements within the Eurosystem central bank community has also increased. The Eurosystem has explored the existing barriers and harmonisation prospects related to current monetary policy processes as part of its considerations for the development of a common ECMS. There are also ongoing policy considerations in the Eurosystem to consolidate the settlement of marketable collateral in T2S. The triggers for the Eurosystem's considerations were key post-trade developments in recent years, in particular the go-live of T2S, public announcements by international central securities depositories on making their services available on T2S, the entry into force of the Central Securities Depositories Regulation (CSDR)⁸ (in particular freedom of access to CSDs), and the European Commission's CMU initiative. The Eurosystem is therefore an active contributor to the drive to remove the impediments to efficient collateral management.

⁸ Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012 (Text with EEA relevance) (OJ L 257, 28.8.2014, pp. 1-72)

3 Guiding principles for collateral management harmonisation

In response to the issues affecting and impediments to efficient collateral management, the CMH-TF has agreed five guiding principles for collateral management harmonisation. These guiding principles should help address operational issues requiring progressive harmonisation/standardisation of business processes and messaging based on the ISO 20022 standard, and efficiency improvements for FMI, their users and the Eurosystem. Harmonisation does not necessarily cover all bank-to-bank or bank-to-buy side interaction and processes, although it is clear that the proposed harmonisation would lead to benefits for all market stakeholders in Europe.

Figure 1
Guiding principles



Principle 1: Harmonisation should lead to a single pan-European collateral management rulebook for interaction between FMIs and their users, including central banks. In the past, FMIs were free to impose local market practice rules to suit their business or local needs, with specific business processes and messaging. In a pan-European context, this leads to significant heterogeneity. Harmonisation should establish pan-European practices and rules for interaction between FMIs and their users (including central banks) to promote the safe and effective management of collateral relevant for processes related to market transactions and Eurosystem credit operations, involving triparty and bilateral collateral management arrangements.

Harmonisation should take account of and be compatible with existing TARGET2-Securities (T2S) harmonisation standards.

Principle 2: Harmonisation should lead to messaging based on the latest international standards. Harmonisation should promote the use of the latest international standards such as ISO 20022, which is emerging as the default messaging standard used by the Eurosystem (for TARGET2 (T2), T2S and the ECMS), FMIs and their communities, and should cover workflows, business processes and data formats relevant to collateral management. Standardisation and technical implementation of the latest international standards fosters automation, reduces cost and limits operational risk. There are also wider benefits of using standardised ISO 20022 messaging and data/workflows, e.g. for internal and external reporting, risk management, decision-making and to facilitate data aggregation.

Principle 3: Harmonisation should lead to interoperability. Harmonisation should lead to interoperable or compatible market infrastructures and arrangements (including data processing platforms/warehouse) to allow interaction across global networks regardless of their technical operating systems. Interoperability should facilitate collateral mobility based on harmonised interaction between market participants for collateral management according to international standards. This is also relevant for interaction between market participants and existing Eurosystem market infrastructures such as T2 and T2S.

Principle 4: Harmonisation should lead to straight-through processing (STP) Harmonisation should lead to the automation of collateral management, i.e. it should promote the processing of collateral transactions in real time on an STP basis, generally requiring minimum manual intervention. The sourcing of collateral to/from TPAs should also be possible using automated processes.

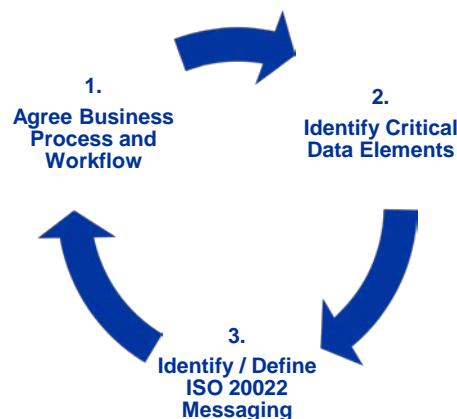
Principle 5: Harmonisation should remove operational restrictions which impede the availability, use and mobility of collateral. Harmonisation should improve the availability, use and mobility of securities in collateralised transactions and remove restrictions such as the need to remove securities from the collateral pool at the time of a CA event due to specific and operationally complex taxation processes. Harmonisation of the operational processes associated with the use of securities as collateral, through the implementation of harmonised workflows and messaging, is therefore needed to ensure maximum availability of securities for use as collateral.

4 The CMH-TF's approach to overcoming barriers

The CMH-TF's objective is to deepen the analysis of the initial AMI-SeCo/HSG deliberations on collateral management harmonisation with a view to presenting a detailed list of harmonisation needs and activities to the AMI-SeCo/HSG by Q4 2017. Subject to AMI-SeCo approval of the list of CMHAs, the next steps for the CMH-TF may include further work on the possible definition of standards for harmonised business processes/workflows, the identification of harmonised data elements necessary for the functioning of each process, and the identification/definition of ISO 20022-compliant messages. Finally, further work is needed to identify how compliance with the new harmonisation standards/best practices should be measured and at what level. The monitoring framework used for T2S harmonisation will be considered in this context.

The CMH-TF has agreed to take a three-step approach to structuring the work in each functional area and conducting an in-depth analysis:

1. define and agree the harmonised business process and workflow;
2. for each business process, identify the critical data elements necessary for the functioning of this process;
3. identify/define an ISO 20022-compliant message for transmitting these data elements.



The CMH-TF met four times in 2017. At its first meeting the CMH-TF established five substreams, consisting of members from the Eurosystem, market participants and market infrastructures. Each substream was coordinated by a substream lead.

Additional contributors were invited from outside the CMH-TF to become involved in the substreams and bring in expertise from other institutions:

- substream 1: Triparty Collateral Management (lead: Clearstream – 29 contributors);
- substream 2: Corporate Actions, Taxation Forms, Non-Euro Collateral Management (lead: Citi – 27 contributors);
- substream 3: Bilateral Collateral Management, Margin Calls (lead: BNPP – 30 contributors);
- substream 4: Billing Processes, Cut-Off Times (lead: Monte Titoli – 12 contributors);
- substream 5: Collateral Dynamic and Static Data (lead: Deutsche Bank – 12 contributors).

Weekly teleconference calls were organised for each substream, resulting in around 30 conference call meetings. Each substream launched detailed fact-finding surveys to identify the barriers to collateral management. The facts collected in the surveys identified differences in current procedures, workflows and messages, and the substreams actively discussed and analysed the merits of harmonised business processes for both central banks and market participants based on the ISO 20022 standard.

The CMH-TF also considered the Eurosystem's investigations regarding the ECMS. The Eurosystem analysis revealed a highly fragmented landscape of collateral management systems (CMSs) across the Eurosystem. Given the growing importance of collateral, the Eurosystem analysis also identified an opportunity for further financial integration within the Eurosystem's market infrastructure landscape. The ECMS aims to deliver several benefits such as reduced fragmentation and heterogeneity within the Eurosystem, allowing for the efficient mobilisation and management of collateral and contributing to the CMU. In principle, the ECMS will only support harmonised functionalities, services and processes. The ECMS will benefit from ongoing and future market harmonisation, notably in the following functional areas: use of ISO 20022 for all communication between the ECMS and all market participants (CSDs, TPAs, counterparties), use of harmonised triparty collateral management services when mobilising marketable assets in Eurosystem credit operations, and harmonised management of corporate actions. The CMH-TF's work offers a unique opportunity for market stakeholders to provide input to the Eurosystem's internal work on the ECMS, which is being conducted in parallel according to the timeline of the ECMS project.

5 Overview of collateral management harmonisation activities (CMHAs)

5.1 Ten CMHAs

The following list of harmonisation activities were identified and agreed by the CMH-TF:

 <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>£ DKK</p> <p>10. Non-Euro Collateral Market practices for the handling of non-euro denominated collateral (including related corporate action processes).</p>

Each harmonisation activity contains several business processes, which are explained below. A more detailed explanation of the business processes and harmonisation needs is provided in Annex 1, which includes overview tables. The tables present (i) an identification of each business process, (ii) a brief explanation of the business process, and (iii) the proposed harmonisation need.

Interdependencies were considered for each harmonisation activity and process (vis-à-vis other activities and processes). Where activities and processes are interrelated, these were taken into account when analysing the resulting harmonisation need. This resulted in certain processes being moved to other activities due to their relevance to collateral management. One aspect common to all the harmonisation activities is the ultimate implementation of ISO 20022 to ensure standardised business processes and messaging. It should be noted that the ECMS

would see the Eurosystem migrate its collateral management infrastructure towards the exclusive use of ISO 20022 messaging.

5.2 Description of the CMHAs

In the area of **triparty collateral management**, there is a need to implement a single harmonised model with common processes for interaction between TPAs and central banks using (yet to-be-defined) ISO 20022 messaging. Market participants have also identified a need for common messaging and workflows to be adopted by all TPAs in order to reduce the costs associated with adapting to the different messages and workflows used by TPAs. Common messaging and workflows could also be seen as helping to achieve triparty interoperability⁹. In line with the time horizon for Eurosystem considerations on the harmonisation of triparty procedures, there is a need to reach agreement on a harmonisation proposal in the area of triparty collateral management by Q2 2018 at the latest. A series of priority 1 harmonisation needs have been identified related to the business processes, workflows and messaging concerned. Priority 2 harmonisation needs have also been identified (see Annex 1) with regard to business processes including (but not limited to) the initiation and termination of a triparty collateral transaction. The methodology used for the prioritisation of CMHAs is presented in Section 5.3.

The CMH-TF has identified a strong need to harmonise the handling and processing of **CA events** relevant to collateral management. The need for accurate and timely CA information using harmonised messaging is seen as key to ensuring that the impact of upcoming CA events on the collateral pool is projected accurately. Furthermore, the current heterogeneous processes are seen as a barrier to the use of securities as collateral at the time of a CA event. Therefore, not least with a view to the ECMS, there is a need to implement automated processes using harmonised ISO 20022 messaging and harmonised workflows to ensure that such securities can remain part of the collateral pool at the time of the CA event in question (thus obviating the need to substitute these securities). Accordingly, priority 1 harmonisation needs have been identified in the following areas: (1) provision of CA information from the (I)CSD to the collateral taker/giver, (2) CA payments, (3) negative cash flows, (4) CA events requiring manual processing, (5) CA events requiring specific handling, and (6) handling of elective events. A smaller number of priority 2 harmonisation needs have also been identified (see Annex 1). Harmonisation proposals in the key areas

⁹ A distinction needs to be made between triparty settlement interoperability (TSI) and triparty inventory interoperability (TII). Both models allow participants to pool collateral efficiently across borders and choose their preferred TPA.

- TSI: The TSI model is currently worked upon by the (I)CSDs and Eurex Clearing AG (ECAG) in relation to ECAG's GC pooling services (see 2014 COGESI report on repo market improvements). TSI should promote collateral mobility through automated trading, CCP clearing, triparty collateral management services and settlement. The timing for the TSI deliverables should be reviewed and specified after full implementation of T2S and once the impact of the CSDR on the Bridge becomes clear.
- TII: The provision of inventory management services by a TPA to a collateral giver, enabling the automatic transfer of assets between their accounts with different TPAs using business processes (selection of assets, mark to market, generation of settlement instructions, etc.) that are similar or identical to those used for collateral management services.

relevant to workflows and messaging (particularly regarding interaction with the ECMS) should be agreed by the end of Q2 2018.

One particular element of CA handling, the need to handle heterogeneous **taxation forms** and procedures, has been identified as a barrier to the use of securities as collateral. Operational differences in taxation processes hinder the mobilisation of collateral and may therefore accelerate the scarcity of collateral. Given the importance of this topic, the CMH-TF proposes to assign a priority 1 status to all eight identified harmonisation needs.

A number of priority 1 harmonisation needs have been identified in the area of **bilateral collateral management**, primarily related to the need to promote wider automation of key processes through the use of interoperable electronic platforms for non-cleared over-the-counter (OTC) derivatives, repos and securities lending. In the case of cleared derivatives, there is also a need for a framework of minimum market standards across clearers and central clearing counterparties (CCPs) to harmonise both the information available to end users and the format of this information. Priority 2 needs have also been identified along with a list of non-prioritised items (see Annex 1).

In the area of **margin calls**, a priority 1 harmonisation need has been identified to promote the wider use of electronic platforms for margin calls.

In the area of **billing processes**, a combination of priority 1 and priority 2 harmonisation needs have been identified. The increasing move towards holding collateral in different CSDs imposes a subsequent requirement on collateral takers and collateral givers to manage the different CSD processes for the reconciliation and payment of fee invoices for the assets held as collateral. The need to implement harmonised ISO 20022 messaging for the transmission of fee invoices, together with the migration to harmonised monthly billing cycles (i.e. 1st to 31st of each calendar month), have been identified as priority 1 items in this area.

Analysis is currently ongoing in the area of **cut-off times** for the mobilisation of collateral using links between (I)CSDs on both a delivery versus payment (DVP) and free of payment (FOP) basis.

A series of core **collateral data elements** have been identified. There is a need to ensure that these are exchanged in a timely manner to ensure harmonised application of the most up-to-date (accurate) data by all parties (see Annex 2). At present, the most up-to-date information may only be available to participants in certain markets, meaning that collateral in other markets is not valued using the correct information (e.g. up-to-date pool factor information, data not always available on time). Processes for exchanging data and workflows to contribute to the collateral data evaluation process are listed in Annex 1.

A series of harmonisation needs related to the **sourcing of collateral** have been identified. They have all been assigned priority 1 status, as the taskforce considers the timely sourcing of collateral to be fundamental to the efficient functioning of collateral management processes. A series of needs have been identified related to aspects

such as the maximum time required to process collateral instructions and the need to further improve Bridge settlement processes. The market also sees a need to further encourage non-T2S participating CSDs to join T2S, as this would help non-T2S markets achieve the level of service required to ensure the efficient sourcing of collateral.

Processes related to the handling of **non-euro-denominated collateral** have been identified as being heterogeneous across markets. Accordingly, two priority 1 harmonisation needs have been identified to harmonise business processes and messaging in the settlement and custody layers. In particular, harmonisation is needed with regard to the sourcing of non-euro-denominated collateral and the handling of cash flows emanating from CA events involving non-euro-denominated assets.

5.3 Prioritisation and implementation of CMHAs

To determine the relevance of each harmonisation need vis-à-vis the other harmonisation needs, prioritisation has been applied to group the needs. In line with discussions in the AMI-SeCo, the methodology is largely based on the framework used in the context of the T2S harmonisation agenda¹⁰, but amended and complemented with the harmonisation needs specific to collateral management.

Priority 1	<p>Activities (business processes and messages) necessary for the safe and efficient functioning of collateral management arrangements in T2S markets (involving the Eurosystem, collateral management service providers (CMSPs) and users of collateral management services in T2S markets). The activities are only priority 1 if they are:</p> <ul style="list-style-type: none"> • directly related to the markets that have migrated to T2S, involving FMIs and their users including Eurosystem central banks; • necessary for the safe and efficient functioning of FMIs, monetary policy and collateral management arrangements in T2S markets; • implementable in line with the timing of European integration efforts in the CMU.
Priority 2	<p>Activities (business processes and messages) that are beneficial but not essential for the safe and efficient functioning of collateral management arrangements in T2S markets, and involve activities beyond T2S markets.</p>
Non-prioritised items	<p>Activities (business processes and messages) are not prioritised for several reasons, for example because market practices are still evolving and it is too early to provide guidance¹¹, or because guidance is not needed (e.g. several collateral management arrangements were considered as already harmonised and/or not related to workflows/interactions between stakeholders). Some business processes were also identified as not being required in the future.</p>

In addition to the key prioritisation criteria listed above, the criticality of processes and their dependencies/externalities should also be considered.

¹⁰ The T2S harmonisation agenda uses the following high-level approach. Priority 1 activities are necessary to ensure efficient and safe cross-CSD settlement in T2S. Priority 2 activities are not essential to ensure safe and efficient cross-CSD settlement in T2S, but are key to the enhancement of the competitive environment and efficiency of T2S and could continue to be pursued after markets have been migrated to T2S.

¹¹ It is too early to provide guidance on non-prioritised items, but there is a willingness among market participants to harmonise a wide range of these processes and market practices (to meet legal and regulatory requirements), and they are being discussed in industry fora (see Annex 1, Non-prioritised business processes).

Criticality of processes for priority 1 items refers to the key collateral management processes that are highly relevant in terms of compliance with the guiding principles set out in Section 3 of this report. Critical processes should establish harmonised rules for interaction between FMIs, their users and central banks in markets that have migrated to T2S. Harmonisation should allow stakeholders to “speak the same language” and operate in the “pan-European domestic market” (with harmonised key business processes). It should allow market participants in T2S markets to use providers outside their home country for the collateralisation of transactions using standardised processes and messages, for Eurosystem and market operations. Criticality of processes for priority 2 items indicates that harmonisation would be beneficial for collateralised transactions, but that these are beyond T2S markets and/or may not be essential for interaction between providers, users and the Eurosystem in T2S markets.

Interdependencies between processes should also be considered. For example, the harmonisation of triparty collateral management processes may introduce changes to other workflows and messaging activities. The harmonisation of CA processes may be closely linked to CMHAs related to the handling of taxation forms.

6 The next phase

After approval of the report by the AMI-SeCo, the next phase is to develop the next steps towards implementation for the harmonisation needs identified in this report. In this next phase (phase two) of the AMI-SeCo's collateral management harmonisation efforts, a harmonisation proposal should be defined for each agreed harmonisation need. The AMI-SeCo will have to determine whether harmonisation proposals should result in a standard or a market practice. Each harmonisation proposal should document the business process, the data elements necessary for the functioning of this process, and (if available) the ISO 20022 message to be used for the transmission of the required data elements. If no ISO 20022 message is available, the harmonisation proposals should define the timescale for developing the necessary messaging (i.e. what should the ISO 20022 message contain, who should develop it and by when?). The harmonisation proposals should take the existing T2S harmonisation standards into account.

Phase two also entails the creation of a framework for monitoring compliance with the agreed collateral management harmonisation proposals. The successful completion of this phase two work will therefore lead to the following deliverables:

- Define harmonised business processes and workflows to address the identified harmonisation needs, in line with the ISO 20022 standard, where applicable.
- Identify the data elements necessary for the functioning of each process.
- Identify/define ISO 20022-compliant messages for the transmission of these data elements. This includes identifying messages that will require updates and/or developing new messages required for collateral management (taking into account the schedule for updating/developing ISO 20022 messages).
- Identify the parties responsible for implementing each new harmonisation proposal and assess the level-specific monitoring requirements (e.g. only at the level of CMSPs, at the level of direct users of CMSPs, at national level) and methodology.
- Prepare a detailed timeline for the definition and implementation of each harmonisation proposal. The timeline should consider various criteria such as key timelines for implementation of the harmonisation proposal in the proposed ECMS, which will rely exclusively on the use of the ISO 20022 standard for communication with market participants.
- Further enhance the glossary of commonly used terminology relevant to CMHAs (work has already commenced in this regard).

A detailed timeline needs to be drawn up to plan the work towards the deliverables set out above. Rather than scheduling all deliverables for the same time, a timetable should be developed with different milestones (the first being the detailed description/definition of harmonised business processes and workflows). The

timetable should cover both short-term (2018) and longer-term (upcoming five years) planning, and must also take the timetable and planning for the ECMS project into account where relevant.

Regular updates should be provided to the AMI-SeCo over the coming months and years. The following documents on the status of the work should be presented to the AMI-SeCo by the end of Q2 2018:

- An intermediary report with a first set of harmonisation proposals for business processes, including particular proposals in areas of special relevance for FMIs and their users (including central banks);
- A longer-term plan (covering planning up to the end of 2022) with key milestones for the remaining harmonisation proposals and the next steps (including planning for the business processes/workflows, data elements and messaging).

The CMH-TF is ready to work on the deliverables identified for phase two, and any additional deliverables which may be identified in the course of this work.

Annex 1: Collateral management harmonisation activities (CMHAs) and harmonisation needs

Priority 1 harmonisation needs

Priority 1

Triparty collateral management (CMHA1)

No.	Process	Process description	Harmonisation need
1	Increase of Triparty Collateral Exposure (Global Amount)	An instruction sent by a trading party to its TPA to instruct the agent to perform a specific action on a collateral management transaction. It is also sent by an account owner to an account servicer where the account servicer manages the account at the TPA on behalf of the trading party. In response, a message is sent by the TPA after the receipt of a collateral instruction from its client. The receiver is either the collateral taker or the collateral giver or their account servicer. At present, the messaging and workflow differ per TPA; the increase of a triparty collateral exposure amount may be conducted (i) unilaterally or (ii) with the need for matching instructions depending on the TPA.	There is a need to implement harmonised messaging and workflows for an increase of a triparty collateral exposure amount.
2	Decrease of Triparty Collateral Exposure (Global Amount)	An instruction sent by a trading party to its TPA to instruct the agent to perform a specific action on a collateral management transaction. It is also sent by an account owner to an account servicer where the account servicer manages the account at the TPA on behalf of the trading party. In response, a message is sent by the TPA after the receipt of a collateral instruction from its client. The receiver is either the collateral taker or the collateral giver or their account servicer. This message provides valuation results as well as the status of the collateral instruction and the status of the proposed collateral movements (cash and securities).	There is a need to implement harmonised messaging and workflows for a decrease of a triparty collateral exposure amount.
3	Revaluation (Reception of a new Collateral Exposure Statement)	A statement sent by the TPA to the collateral taker following the revaluation of the assets allocated as a result of price or reference data changes (e.g. change in the haircut of the asset).	There is a need to implement harmonised messaging and workflows for the revaluation of a triparty collateral exposure amount.
4	Compulsory Decrease of Triparty Collateral Exposure Due to Deduction of Upcoming Corporate Action Event	In the context of Eurosystem triparty collateral management, the TPA may send a message to the central bank regarding a compulsory decrease of the triparty collateral exposure amount due to an upcoming CA event.	Eurosystem central banks will consider the implementation of a harmonised business process.
5	End-of-Day Reporting on Stocks	A message sent by a TPA to both the collateral giver and the collateral taker or to an account servicer who manages the account at the TPA on behalf of a trading party, providing the details of the valuation of both the collateral and the exposure. It is sent in the following circumstances: (i) after all collateral movements have been effected (after settlement has been initiated) to show the end (fixed) positions (current status), or (ii) taking into account all collateral management instructions (including "pending initiation" and/or "initiated").	There is a need to provide end-of-day reporting on stocks via a standardised message.
6	Unilateral Removal of Specific Asset(s)	A request sent by the collateral giver/taker to the TPA for the removal of (a) specific asset(s) from the basket of securities collateralising the collateral exposure.	There is a need to define a formatted ISO 20022 message for the communication of the unilateral removal of (a) specific asset(s).

No.	Process	Process description	Harmonisation need
7	Partial Settlement of Triparty Collateral Exposure Increase	Specifies whether partial settlement of the increase in collateral exposure is permitted.	There is a need to ensure that partial settlement of triparty collateral exposures is possible (to the extent that the product allows) using any TPA in order to improve market liquidity.
8	Provision of Real Time Information on Securities Collateralising Triparty Collateral Exposure	Identifies whether real-time information is available to the collateral giver/taker on the securities collateralising the triparty exposure amount.	There is a need to provide real-time availability of information on flows (securities movements) to the collateral taker/giver.
9	Handling of a Maximum Triparty Collateral Exposure Value	Identifies whether the TPA allows the setting of a maximum triparty collateral exposure amount.	[To be further analysed] There is a need to ensure that the handling of a maximum triparty collateral exposure amount is supported using a harmonised (possibly existing) workflow (relevant to Eurosystem central banks).
10	Handling of Cash Proceeds Related to Corporate Action Events	Identifies how cash positions related to the execution of a CA event are treated and reported.	The Eurosystem central banks will consider the implementation of a harmonised business process.
11	Rejection of Decrease Instruction	A rejection of a request to decrease the triparty collateral exposure. The rejection is sent from the collateral taker to the TPA.	There is a need to implement harmonised messaging and workflows for the rejection of a triparty collateral exposure decrease request (relevant to central banks).

Priority 1

Corporate actions (CMHA2)

No.	Process	Process description	Harmonisation need
1	Workflow for Mandatory CA Events	There is a need to implement a standardised workflow for the processing of mandatory events: 1. Sending of CA notification to collateral taker (giver). 2. Provision of final CA notification on or before the record date. 3. Provision of CA confirmation on the payment date.	There is a need to implement a standardised workflow for the processing of mandatory events: 1. Sending of CA notification to collateral taker (giver); 2. Provision of final CA notification on or before the record date; 3. Provision of CA confirmation on the payment date.
2	Workflow for Elective CA Events	There is a need to implement a standardised workflow for the processing of mandatory with choice or elective events: 1. Sending of CA notification to collateral taker (giver). 2. Sending of CA instruction by collateral taker (giver) before event deadline. 3. Provision of CA status and processing advice by (I)CSD to the collateral taker (giver). 4. Provision of final CA notification on or before the record date. 5. Provision of CA confirmation on the payment date.	There is a need to implement a standardised workflow for the processing of mandatory with choice or elective events: 1. Sending of CA notification to collateral taker (giver); 2. Sending of CA instruction by collateral taker (giver) before event deadline; 3. Provision of CA status and processing advice by (I)CSD to the collateral taker (giver); 4. Provision of final CA notification on or before the record date; 5. Provision of CA confirmation on the payment date.
3	Identification of Parties in a Collateral Transaction	There is a need to identify all parties to a collateral transaction to ensure that both the collateral giver and collateral taker can be identified and notified accordingly.	There is a need to identify all parties to a collateral transaction to ensure that both the collateral giver and collateral taker can be identified and notified accordingly.
4	Provision of Sufficient Information to Calculate Expected Payment Amount/Security Movement in the CA Notification	In some cases, the information provided in the CA notification is not sufficient to enable the collateral giver/collateral taker to calculate the expected payment amount/security movement in advance of the CA payment date.	There is a need to ensure that a minimum set of information is provided in the CA notification to ensure that the collateral giver/collateral taker can always estimate the impact of the CA event on the collateral pool in advance of the CA payment date (further analysis will be needed to identify the minimum set of information required for relevant CA event types/messages).

No.	Process	Process description	Harmonisation need
5	Consistency of Information Provided by Issuer CSD and Investor CSD for Same CA Event	<p>There are instances where the information provided by the issuer CSD and the investor CSD for the same underlying CA event differs.</p> <p>The reasons for such differences include the following:</p> <ul style="list-style-type: none"> - ISO announcement messages are not always formatted the same way (each CSD has its own formatting); - Each CSD has its own scope of events supported. <p>If the issuer CSD announces an event not supported by the investor CSD, the nearest suitable event type supported by the investor CSD is used.</p> <ul style="list-style-type: none"> - Number of decimals used by each CSD is different; - Processing of market claim on flat bonds on the German market (use of trade date instead of settlement date). <p>The deviation between the issuer CSD and the investor CSD might impact the processing of the event and therefore the ability to use a security properly as collateral.</p>	There is a need to ensure that the information provided by the issuer CSD is passed on in a consistent manner by the investor CSD in line with the agreed market standards.
6	Use of Standardised Calculation Formula	CA payments are managed differently depending on the instrument type and CA event type (which should follow international standards), creating a need to handle different approaches to calculating the CA payment amount. There are currently four different international standards for calculating the payment amount: European/French method, English, effective and German method.	There is a need to implement a harmonised market practice for calculating CA payment amounts.
7	Reconciliation of Actual CA Payment Amount vs Expected CA Payment Amount	<p>The following cases may occur which lead to a difference between the actual and expected CA payment amount:</p> <ul style="list-style-type: none"> > change of rates compared with rate provided in previously announced notification; > potential difference in entitlement calculation due to different fractional rounding being applied, application of proration amount at different levels (market level, registered owner level, instruction level); > differences in number of decimals used can lead to reconciliation failure; > event update announced at depository but not updated in the CSD; > change by another event, e.g. PRED; > incorrect information in the securities database in EB; > issuer/agent mistake. 	There is a need to implement a harmonised market practice to reduce instances where the actual CA payment amount does not match the expected payment amount.
8	Payment Procedures per CSD	In some markets, a single payment is made aggregating the total amount due for coupons and redemptions (in the case of the German market this practice will change in 2018), while in other cases a payment per ISIN per CA is made, creating a clear link between the CA notification and the CA payment.	There is a need to ensure that all markets comply with the market standard, i.e. one payment per ISIN per CA rather than aggregated payments.
9	Handling of Rounding Differences	The number of decimals used in the calculation of payment amounts differs between markets, e.g. 6 or 8 decimals, resulting in a need to handle rounding differences.	There is a need to implement a harmonised market practice regarding the use of decimals to eliminate the occurrence of rounding differences (which lead to cases of reconciliation failure).
10	Handling of Negative Cash Flows	The current process for handling negative cash flows is heterogeneous and may involve a number of complex processes (e.g. collateral taker/giver). As negative cash flows are not currently handled by all CSDs, no standardised procedure exists.	There is a need to implement a harmonised workflow for handling negative cash flows.

No.	Process	Process description	Harmonisation need
11	CA Events Requiring Manual Processing	<p>A significant number of CA events and business processes currently require manual processing. Examples include:</p> <ul style="list-style-type: none"> > Use of free text messaging. Large amounts of free text are included in notifications of certain events provided by Clearstream/Euroclear. > Non-compliance with ISO standards. Some markets do not yet abide by SWIFT ISO standards (Portugal/Spain/Germany/Austria/Switzerland/ESE S), preventing STP integration of incoming SWIFT messages. Events which do not fit easily into an event template also require manual processing. > Manual processing of CA instruction. It is not currently possible to send an outgoing MT565 message to the agent (ESES markets), submission of the instruction to the market requires the manual completion of physical forms and Excel documents and the manual transfer of rights/stock or cash to the agent on the agent instruction deadline. 	<p>There is a need to conduct further analysis on the reason why free format messages are used, with a view to later defining harmonised rules and ISO 20022 messaging to allow the transmission of CA data in a structured message and thus facilitating straight-through processing of all CA events. Accordingly, there will be a need to conduct further analysis at CA event level.</p>
12	Process for the Substitution of Fungible Securities	<p>Processes for the substitution of fungible securities (pari passu CA event) are different across markets.</p>	<p>There is a need to implement a harmonised procedure and workflow for executing pari passu CA events.</p>
13	Processing of CA Events Using "Modified Following Business Day Convention"	<p>In some markets, corporate actions are paid using the "Modified Following Business Day Convention", which means that, for the purposes of payment, if the payment date falls on a holiday, the payment will be due on the immediately following day or, if that day falls in the following month, on the day immediately preceding the original payment date. In the case of Monte Titoli, a CA notification message is sent containing the balances and indicating the "record time" on which the payment will be based.</p>	<p>As the practice appears to be specific to securities issued in one market, there is a need to implement a standardised procedure and workflow in line with that adopted in other markets.</p>
14	Handling of CA Events with Different Quotation Types	<p>The calculation approach for UNIT securities (i.e. data fields to be processed in the message) is currently different from that used for FAMT securities.</p>	<p>There is a need to implement a harmonised rule for calculating CA payments.</p>
15	Handling of Elective CA Events	<p>The processing of elective CA events currently requires a significant amount of manual intervention. Proceeds from voluntary events are not processed via T2S-standard CA flows, which means no ISO 20022 messaging is received to trigger the STP release of payments – all pay dates are currently processed manually. There are also differences in how the collection of responses is handled.</p>	<p>There is a need to support automated processing of voluntary events where more than one deadline and several options with detailed differences exist (more than one deadline and several options – mostly exist in those cases where an early deadline is offered).</p>
16	Collateral Valuation Process	<p>The instrument price (obtained from marketplaces or data vendors) is used for collateral valuation, but in some cases the most recent price already reflects a corporate action which has been announced but not yet processed. This may lead to swings in the collateral value (example: a stock split has been announced and the security is trading under the new price, but the split has not yet been processed).</p>	<p>There is a need to harmonise the use of instrument prices around pending corporate actions for calculating collateral values (potential for a best market practice: refer to last available price prior to the start of the corporate actions).</p>

Priority 1

Taxation processes (CMHA3)

No.	Process	Process description	Harmonisation need
1	Identification of Existing Differences per Market Relevant to Collateral Management	Identification of differences per market which may impact the use of certain securities as collateral. An overview is needed to identify the differences and the common issues before analysing the possibilities for standardising processes.	<p>There is a need to create a comprehensive map which should show the different national withholding tax requirements and the (I)CSD processes per market. The map should focus on analysing the following elements:</p> <ul style="list-style-type: none"> - Differences in withholding tax requirements in Portugal, Spain, Italy, France and the US. (e.g. CA payments with withholding taxes are executed for the following countries (depending on the collateral structure)). - Identification of national specificities. E.g. Spain: withholding tax for each payment, France: special bonds, requirements depending on the (foreign) counterparty and/or (foreign) assets. - Differences in the tax services which (I)CSDs offer (or are allowed to offer since it may not be possible for CSDs to offer certain services). Some offer tax services and some do not (but do offer substitution). - Differences in processing by CSDs depending on the asset type and the role of the client. - The type of collateral (e.g. government bond, corporate bond), the market (issuer country) and the issuer. - Differences in taxation forms per (I)CSD in the context of withholding taxes. - The impact of various European foreign tax and US tax requirements on the use of certain securities as collateral.
2	Identification of Collateral Transaction (and Relevant Parties) for Taxation Purposes	Identification of all parties to a collateral transaction together with their tax status for the purposes of managing the related tax processes.	<p>There is a need to identify all parties to a collateral transaction together with their tax status for the purposes of managing the related tax processes. Further analysis could be carried out to determine whether it would be appropriate to apply collateral giver tax status to the proceeds and whether this could become a harmonised rule for the tax treatment of collateral. Consideration could be given to further analysing this topic by examining similar mechanisms in other markets (e.g. the US). Managing such a process would involve:</p> <ol style="list-style-type: none"> 1/ identifying the collateral transactions; 2/ recording who is the collateral giver and the collateral taker; 3/ applying the tax status of collateral giver to the proceeds of the CA; 4/ potentially crediting the collateral giver's account directly (where consent is given by the collateral taker).
3	Identification of Tax Treatment of Securities Depending on Collateral Transaction Type	Identification of differences in the tax treatment of securities when used as collateral, for example securities used in a repo or securities lending transaction could have a different treatment to those used in sale or purchase transactions.	<p>There is a need to identify the collateral transaction type (e.g. using existing ISO transaction types such as Reverse Repo (RVPO), Sell Buy Back (SBBK)) and to standardise tax processing procedures for securities used as collateral. Currently, a security used in a repo or securities lending transaction could have a different tax treatment to that applied to the sale or purchase of a security. The transaction type may also be relevant when considering the parties/ownership in view of the country of residence and tax processes/rates.</p>

No.	Process	Process description	Harmonisation need
4	Provision of Tax Service by (I)CSDs	Identification of differences in the tax services provided by CSDs together with the potential impact on the use of certain assets as collateral in certain markets.	There is a need to further analyse how the tax service offered by the various CSDs impacts the tax handling of securities used in collateral management operations across different CSDs. - For instance, if the investor CSD does not offer a tax reclaim service on some assets, then if the collateral taker wants to benefit from tax reclaim, this collateral taker will need to use the services of an agent in the local market to have that refund processed. This can result in a complex process and can be a barrier to expanding cross-CSD CM activity. Analysis should also be carried out to determine whether the CSD is able to provide tax services in all markets, as the CSD might not currently be in a position to directly offer tax services depending on regulation in the market.
5	Identification of Securities Subject to Withholding Tax	Identification of the securities used in a collateral transaction that are subject to withholding tax.	There is a need to be able to identify counterparty holdings (securities) that are subject to withholding tax in advance of the record date of a CA event.
6	Transmission of Information on Counterparty Taxation Status to Local (I)CSD	There is a requirement for the collateral taker to pass on relevant information on a counterparty's tax status to the local (I)CSD.	There is a need to define a standardised workflow using ISO 20022 messages for transmitting relevant information on a counterparty's tax status to the local (I)CSD. The extent of requirements to send paper documentation should be analysed.
7	Tax Reclaim Process for Securities Used as Collateral	Identification of differences in the tax reclaim process for collateral.	There is a need to implement a harmonised workflow for managing the tax reclaim process.
8	Handling of Tax Reduction	Identification of differences in rules for the handling of reductions in withholding tax depending on -market (issuer country); -security (e.g. government bond, corporate bond); -issuer.	There is a need to further analyse the differences which exist in the handling of reductions in withholding tax with a view to determining whether a harmonised workflow can be put in place.

Priority 1

Bilateral collateral management (CMHA4)

No.	Process	Process description	Harmonisation need
1	Exchanges for Substitutions	Email exchanges for substitutions implying operational risks and settlement issues. There is a growing interest from vendors in this space. (For OTC derivatives (uncleared), REPO, SLAB.)	There is a need to promote wider use of electronic platforms for substitutions and to promote interoperability between the various initiatives launched at particular points of the processing chain.
2	Minimum Market Standards Framework for Cleared Derivatives Across Clearers and CCPs	For cleared derivatives, the connectivity between clearers and clients/asset servicers is diverse. There is no common framework, implying that substantial development is required to integrate the information from reports (for reconciliation, payments, etc.). Every onboarding is cumbersome, as every clearer also appears to have its own operational market standards. Upcoming European Market Infrastructure Regulation (EMIR) deadlines for category 3 and 4 will imply a growing industry concern in this space.	There is a need for a minimum market standards framework across clearers and CCPs to harmonise both the information available to end users and its format.

Priority 1

Margin calls (CMHA5)

No.	Process	Process description	Harmonisation need
1	Exchanges for Margin Calls	Email exchanges are used for margin calls. Several utilities are already active in this space, but the industry needs to address the cost issue for some players, especially on the buy side, for complete harmonisation. This point is being addressed by some market participants. (For OTC derivatives (uncleared), REPO, SLAB.)	There is a need to promote wider use of electronic platforms for margin calls and to promote interoperability between the various initiatives launched at particular points of the processing chain.

Priority 1

Fee and billing processes (CMHA6)

No.	Process	Process description	Harmonisation need
1	Provision of Minimum Set of Data in Billing (Fee Invoice)	The current set of data provided in the fee invoice is heterogeneous. A minimum set of information needs to be provided in the fee invoice for each securities account held with the CSD.	There is a need to provide a minimum set of information in the fee invoice. The invoice should provide (as a minimum) the following information (for each securities account held with the CSD): account no. at CSD, gross fee, net fee and total VAT.
2	Messaging Format for the Transmission of Billing Information	Owing to differences in current messages, there is a need to define a standardised format in which information on fees should be transmitted, e.g. ISO 20022 message.	There is a need to define a standardised ISO 20022 message format in which information on fees should be transmitted in order to support the automation of the fee and billing process by market participants.
3	Billing Period and Billing Frequency	Owing to differences in the current timing and frequency with which billing information is provided to market participants, there is a need to introduce a harmonised billing period.	There is a need to define a standardised billing period (monthly period covering the 1st of each month to the end of each month).

Priority 1

Collateral data (CMHA8)

No.	Process	Process description	Harmonisation need
1	Data Exchange – Availability of Prices for Collateral	CSDs typically do not have prices on their databases but have to obtain them from marketplaces or data vendors. These prices (in particular theoretical prices for instruments not traded on an exchange) are not always available on time. This could limit the availability and eligibility of collateral in some CMSs.	There is a need to define a harmonised approach to ensure that information is available in a CMS when it is needed for collateral management processes.
2	Data Exchange – Outstanding Amount	For some asset classes (Italian stripped bonds, UK gilts), the outstanding amount is not public information. This information is needed to determine the eligibility of collateral, making it difficult for a CMS to ascertain whether the use of a given security might exceed agreed concentration limits for a bond.	There is a need to obtain information on the outstanding amount (for example, should Debt Management Offices make information on outstanding amounts public on their website or provide this information to CMSs and CSDs through data vendors).
3	Data Exchange – Pool Factor	The pool factor is used to calculate the correct notional amount still outstanding. This is typically provided by the calculation agent, but is not always provided in time for the correct calculation of the collateral value.	There is a need to make the pool factor available to all parties in a timely manner to facilitate harmonised data exchange and ensure that the latest information is applied. Considerations could include whether the information is made available centrally from issuer CSDs or data vendors (if applicable). Calculation agents should in any case provide information directly to the issuer CSD.
4	Data Exchange – Minimum Denomination Amount	For some asset-backed securities, the minimum denomination amount is used instead of the pool factor. If the correct and up-to-date minimum denomination amount is not available, correct and timely processing of collateral management events cannot be ensured.	There is a need to ensure that the exchange of data on the minimum denomination amount takes place in a harmonised and timely manner.

No.	Process	Process description	Harmonisation need
5	Data Exchange – Unit Size	For assets which are denominated in units, accurate information on unit size is required for collateral management purposes. The relevant parties therefore need to have the correct information when a collateral management event takes place.	There is a need to ensure that the exchange of data on the unit size takes place in a harmonised and timely manner.
6	Data Exchange – All Other Data Elements	Parties involved in the collateral management process need to have accurate and up-to-date information on data elements related to collateral management stored in their system. The harmonised, efficient and timely exchange of these other data elements not specifically mentioned in the list are therefore of utmost importance to ensure correct and prompt execution of collateral management processes.	There is a need to exchange all other data elements relevant to collateral management activities in a harmonised, efficient and timely manner to ensure correct processing of all collateral transaction events.

Priority 1

Sourcing of collateral (CMHA9)

No.	Process	Process description	Harmonisation need
1	Real Time or Quasi Real Time Settlement	Members are of the view that collateral transactions should be settled in real time or quasi-real time. CSDs must therefore support real-time or quasi-real-time settlement.	There is a need to ensure that all EU CSDs can support real-time or quasi-real-time settlement.
2	Automated Processing at CSD Level	Collateral instructions sent to the (I)CSD should be processed by the (I)CSD in a fully automated manner, and manual procedures in some CSDs should be removed (if any still exist).	There is a need to ensure that fully automated processes are in place at CSD level to facilitate the timely processing of collateral movements. Manual procedures in some CSDs should be removed (if any still exist).
3	Same Day Settlement	Same-day settlement of collateral should be possible.	There is a need to ensure that same-day settlement is possible for all collateral instructions.
4	Pre-Matching of Collateral Instructions	Some markets have a pre-matching process for settlement instructions. This process should be automated or considered as not required for collateral transfers.	There is a need to ensure that the pre-matching process is either fully automated or considered as not required for collateral transfers.
5	Maximum Time Limit for Settlement of Collateral	A transfer of collateral should take less than 20 minutes from initiation of the instruction to finalisation of the settlement, especially when an agent/global custodian is involved in the settlement process.	There is a need to ensure that a transfer of collateral takes less than 20 minutes from initiation of the instruction to settlement.
6	Elimination of National Specificities/Processes Impacting Collateral Mobility	Further harmonisation of settlement/tax-specific requirements in certain markets should be reviewed in the context of collateral. Members cited as examples the Italian tax process, Turkish tax identification number (TIN), Spanish equities for loans and UK stamp duty as just some of the exceptions in EU markets which require special (often manual) processes to be put in place – this impacts the mobility of collateral. Members explained that country-specific requirements/processes could reduce collateral mobility. First, collateral movements are not currently identified as collateral transfers (versus settlement transactions), and there is a need to identify and communicate collateral information. Second, and in addition to the identification of collateral transactions in settlement at CSDs, there is also a need to enrich the securities instruction in the light of the tax process requirements. Tax obligations are different and make it complex. This might reduce the willingness of counterparties to mobilise an asset as collateral.	There is a need to further harmonise and eliminate specific requirements which remain in certain markets and thus impact the mobility of collateral. These specificities increase the complexity of using such assets as collateral, the result being a reduction in the willingness of the collateral giver and/or collateral taker to accept such assets as collateral.
7	Effect of Omnibus Account Structure on Settlement Efficiency	Members identified a need to further analyse the overall impact on collateral mobility of the need to ensure asset segregation (e.g. because of upcoming regulation/market practices).	There is a need to further analyse whether the use of an omnibus account structure at CSD level can help to increase collateral mobility.

No.	Process	Process description	Harmonisation need
8	Eligibility of Euro-Denominated EU Securities for Use in T2S or via the Bridge	As a minimum, all securities in EU markets should be Bridge or T2S-eligible.	There is a need to ensure that all securities in EU markets should be Bridge or T2S-eligible as a minimum.
9	Settlement Efficiency via the Bridge	Improvements to the Bridge are needed to further improve settlement efficiency. A second phase of enhancements was successfully implemented on 19 June 2017 (further improving Bridge input deadlines, increasing the number of exchanges files in order to reduce turnaround settlement times to 10-40 minutes, compared with 35-90 minutes previously).	There is a need for further improvements to the Bridge to further improve settlement efficiency.
10	T2S Participation	The market sees it as highly beneficial to encourage CSDs that are not currently T2S participants to join T2S, thereby improving collateral fluidity and access to all markets in order to source collateral according to harmonised procedures. An effort should be made to reach out to these CSDs/markets to make these assets available for use as collateral in all EU markets in a harmonised way.	Market participants have identified a need to encourage CSDs that are not currently T2S participants to join T2S, thereby improving collateral fluidity and access to all markets in order to source collateral according to harmonised procedures.

Priority 1

Non-euro collateral management (CMHA10)

No.	Process	Process description	Harmonisation need
1	Handling of Non-Euro Corporate Action Payments	The process is heterogeneous across CSDs. Some (I)CSDs convert the cash proceeds of a CA event related to non-euro-denominated collateral into the euro equivalent before crediting the collateral taker, while other CSDs always remit the FX proceeds.	There is a need to implement a harmonised workflow for the payment of non-euro-denominated corporate actions.
2	Eligibility of Non-Euro-Denominated EU Securities for Use in T2S or via the Bridge	All non-euro-denominated EU securities eligible in Euroclear or Clearstream should be Bridge-eligible where possible.	There is a need to ensure that all non-euro-denominated EU securities eligible in Euroclear or Clearstream are Bridge-eligible where possible.

Priority 2 harmonisation needs

Priority 2

Triparty collateral management (CMHA1)

No.	Process	Process description	Harmonisation need
1	Initiation of a Triparty Collateral Transaction	An instruction sent by a trading party to its TPA to instruct the agent to initiate a collateral management transaction. It is also sent by an account owner to an account servicer where the account servicer manages the account at the TPA on behalf of the trading party.	There is a need to implement harmonised messaging and workflows for the initiation of a triparty collateral transaction (relevance of process for central banks to be confirmed by TPA. For market participants, only one TPA does not adopt a standard workflow).
2	Termination (Closure) of a Triparty Collateral Transaction	A request to terminate the triparty transaction sent by the collateral giver to both the collateral taker and the TPA.	There is a need to implement harmonised messaging and workflows for the termination of a triparty collateral transaction (relevance of process for central banks to be confirmed by TPA. For market participants, only one TPA does not adopt a standard workflow).
3	Cancellation of a Pending Triparty Collateral Exposure Instruction	A request sent by the collateral giver/taker to the TPA to cancel a pending instruction. An instruction may only be cancelled if: <ul style="list-style-type: none"> its status is NMAT; or its status is FUTU with an execution request date in the future (i.e. not the current date). 	There is a need to implement harmonised messaging and workflows for the cancellation of a triparty collateral exposure. There is a need to ensure that all TPAs allow for the cancellation of unmatched trades and matched trades for future value so that communications are consistent and comparable across the TPAs.

No.	Process	Process description	Harmonisation need
4	Future Dated Processing	Indicates whether it is possible for the collateral giver/taker to send a triparty instruction in advance of the execution date of the instruction.	There is a need to ensure that all TPAs allow the sending of future-dated instructions for all relevant exposure types (to the extent that the product allows). It needs to be confirmed if it is needed for central bank operations. Currently, future-dated instructions are not handled by all TPAs in the case of (1) bilateral pledges and (2) PADJ instructions.
5	Use of Baskets (Including Messaging Used)	Outlines whether and how the collateral giver/taker can restrict the use of triparty services to a certain group of eligible assets.	There is a need to implement a standardised format of communication (including selection criteria) for lists of eligible assets.
6	Amendment of Trade Details (Rate, Basket, Termination Date)	Identifies how amendments of trade details (e.g. rate, basket, termination date) are communicated to the TPA.	There is a need to implement harmonised messaging and workflow for the communication of information on amendments of trade details (rate, basket, termination date).
7	Trade Type Supported by TPA	Identifies which trade types are supported by TPAs.	There is a need to ensure that, in cases where a TPA offers the same type of product as another TPA, communication with users is conducted in a harmonised way.

Priority 2

Corporate actions (CMHA2)

No.	Process	Process description	Harmonisation need
1	Provision of Complete Corporate Action Notification in Advance of the Payment Date	In some instances, the collateral giver/taker is not in receipt of final (complete) CA notifications in advance of the payment date e.g. CA notifications are sent late or with incomplete information.	There is a need to identify, and subsequently eliminate, all barriers to providing sufficient information on upcoming CA events to the collateral giver/collateral taker in a timely manner (i.e. in advance of the payment date).
2	Processing of Delayed CA Payments	No standardised procedure or message is used to inform clients of delays in the execution (payment) of a CA event. In some markets the client is not informed of a delay in the payment.	There is a need to implement a standardised market practice and message to inform clients of a delay in processing a CA payment.
3	CA Events where Participation Requires the Blocking of Securities	Identification of those CA events where participation in the CA event requires the blocking of securities.	Further input/analysis is required to clarify whether the same set of CA events are subject to blocking across all CSDs. Accordingly, there may be a need for harmonisation in this area.
4	Use of Default Options in CA Events	Identification of instances/markets where no default option for processing a CA event exists.	There is a need to ensure that a default option for each CA event is provided in all CSDs. (To be confirmed with all CSDs. N.B.: Default options will be supported in ESES CSDs as of March 2018 following ESES enhancement).
5	Handling of Fees for Participation in Elective CA Events	There are differences in the handling of early consent solicitation fees (CA event ID CONS for the events BMET or XMET), often for consent to proposals for changing terms and conditions of company bonds.	There is a need to implement a standardised workflow for the payment of consent fees related to participation in certain CA events.

Priority 2

Bilateral collateral management (CMHA4)

No.	Process	Process description	Harmonisation need
1	Exchanges for Interest Payments	Email exchanges for interest payments. Several utilities are already active in this space, but the industry needs to address the cost issue for some players, especially on the buy side, for complete harmonisation. This point is being addressed by some market participants.	There is a need to promote wider use of electronic platforms and interoperability between the various initiatives launched at particular points of the processing chain.
2	Settlement Sequencing	Maintaining settlement efficiency to ensure collateral is settled as early as possible without friction and the need to effectively manage intraday liquidity through the use of credit.	There is a need to promote early settlement for collateral-related transactions.

Priority 2

Billing processes (CMHA6)

No.	Process	Process description	Harmonisation need
1	Identification of Fees Related to Collateral Management Activities	The billing invoice differs across markets and identification of collateral management-related activities is not harmonised. A common billing process is required for collateral management and other services.	There is a need to identify fees related to collateral management activities. (Further analysis is needed and could potentially be achieved by setting up a separate account for collateral management activities which would allow the provision of a detailed statement).
2	Identification of the Asset Class used for Billing Purposes	Common information on the asset class is needed in the fee invoice. A common definition of asset classes for fee billing purposes could be adopted by all (I)CSDs.	There is a need to define a common asset classification for use across all CSDs to facilitate the reconciliation and payment of fees.

Priority 2

Collateral data (CMHA8)

No.	Process	Process description	Harmonisation need
1	Multiple Places of Settlement and Safekeeping	Some securities have multiple places of settlement and safekeeping. This creates additional complexity and barriers to efficient settlement processes if correct information on the settlement and safekeeping locations is not available to all parties in a timely manner. This process does not only apply to collateral management procedures but is also mainly valid for general settlement and custody activities.	There is a need to ensure that information on multiple places of settlement and safekeeping is transmitted to all relevant parties in a harmonised and timely manner.

Non-prioritised business processes

Non-prioritised business processes

Triparty collateral management (CMHA1)

No.	Process	Process description	Harmonisation need
1	End-of-Day Reporting on Flows (Securities Movements)	A message sent by an account servicer (account servicing institution) to an account owner or its designated agent providing the details of increases and decreases of holdings which occurred during a specified period, for all or selected securities in the specified safekeeping account or sub-safekeeping account which the account servicer holds for the account owner.	No harmonisation need for end-of-day reporting on flows has been identified on the basis that intraday reporting on flows (securities movements) can be provided to the collateral taker/giver using harmonised messages.
2	Compulsory Decrease of Triparty Collateral Exposure Due to Revaluation	A compulsory decrease of the triparty collateral exposure amount following a change in the eligibility status or valuation of the underlying securities collateralising the triparty transaction.	The same harmonised messaging and workflows will be used as for the revaluation of a triparty collateral exposure amount.
3	Reporting Frequency	The frequency with which a collateral and exposure reporting statement is provided.	There is no harmonisation need for the timing of reporting – TPAs should provide frequencies acceptable to their clients.
4	Automatic Increase/Decrease of Triparty Collateral Exposure following Revaluation	Identifies whether a revaluation of the collateral leads to an automatic increase or decrease of the triparty exposure amount.	There is a need to further analyse whether it is feasible and desirable for the TPA to automatically increase/decrease the triparty collateral exposure amount following revaluation.
5	Accounting Modalities	The collateralisation technique employed in the triparty transaction.	There is no need to harmonise (with current different account structures employed by different TPAs, as long as this structure does not impede the implementation of harmonised workflows and messaging).

No.	Process	Process description	Harmonisation need
6	Handling of Adjustment to Triparty Collateral Exposure	Identifies whether the request to adjust the exposure amount is communicated to the TPA on a delta basis or a "cancel and replace" basis.	There is a need to have a single method (i.e. "cancel and replace" instead of delta) for the handling of adjustments to the triparty collateral exposure amount. However, delta is only used in the US market and thus from a European perspective there is harmonised use of the "cancel and replace" method.
7	Amendment of Triparty Collateral Exposure Instruction	Identifies whether the TPA provides the possibility for the collateral giver/taker to amend the triparty instruction already sent to the TPA.	It is considered that the harmonised market practice should be to rely on the use of the "cancel and replace" method rather than the amendment of such instructions.
8	Acknowledgement of Triparty Collateral Exposure Instruction Messages	Identifies whether the TPA sends a message to the collateral giver/taker acknowledging receipt of a triparty instruction.	No harmonisation need identified.
9	Handling of Pending Instructions – Unmatched Instructions	Specifies how pending instructions are treated when the instructions are not yet matched.	There is no harmonisation need as the cancellation process is to be used.
10	Handling of Pending Instructions – Under-collateralised Transactions	Specifies how pending instructions are treated when the exposure is matched but there is insufficient collateral to settle the instruction.	There is no harmonisation need as the partial settlement process is to be used.
11	Opening Hours	The hours during which triparty services are available for use.	There is a need for extended opening hours in order to facilitate optimal transfer of liquidity and triparty interoperability.
12	Settlement of a Triparty Collateral Transaction	Once the triparty transaction has been accepted and matched by the collateral giver and the collateral taker, the TPA will perform the collateral allocation (either DVP or FOP depending on transaction type) to settle cash and securities between the transacting parties.	There is no harmonisation need. It should be ensured that CSDs provide users of triparty services with standardised reporting on settlement. Users should be provided with reporting when triparty instructions are unmatched, when they differ, when they match and when they settle. At the underlying level, users should be provided with reporting of collateral and cash.
13	Collateral Substitution	Where a collateral giver requires a recall of a security position allocated to the triparty collateral exposure, the TPA will allocate a new security position of equivalent value to the collateral taker and remove the old security position to credit this back to the collateral giver.	There is no need for harmonisation. Substitution should be universally offered and automated to the maximum extent possible in order to aid liquidity. Both FOP and DVP should be offered (depending on the account setup).
14	Settlement of Collateral on an SSS	Identifies where the settlement of the underlying collateral takes place.	No harmonisation need identified.
15	Governing Law	Identifies the governing law under which the triparty transaction takes place.	While TPAs should be allowed to operate under different laws, for true interoperability it should be clear how exposures between one TPA and another TPA are handled legally.
16	Credit Lines	Identifies whether credit lines are provided by TPAs and, if so, whether any differences exist in how these credit lines are provided.	No harmonisation need identified.

Non-prioritised business processes

Corporate actions (CMHA2)

No.	Process	Process description	Harmonisation need
1	Corporate Action Payments in CoBM and CeBM	Identifies any differences which may emerge in the handling of CA payments made in central bank money versus commercial bank money.	Payments may be made in either central bank money or commercial bank money depending on the account setup of the participant (i.e. the (I)CSD). Foreign currency payments are always made in commercial bank money.

Non-prioritised business processes

Bilateral collateral management (CMHA4)

No.	Process	Process description	Harmonisation need
1	FX Forwards and Swaps Collateralisation – Documentation/Treatment Not Aligned Between Jurisdictions	This is very much an issue for everyday life and misalignments between EU and other jurisdictions, but it will be challenging to negotiate any form of alignment. (For OTC derivatives (uncleared)).	No priority assigned as the process relates to a global requirement which is beyond the remit of the CMH-TF. Harmonisation would be welcomed but is dependent on regulatory and policy initiatives rather than industry initiatives.
2	Bilateral Margin Rules – Settlement Timeline Obligations Not Aligned Between Jurisdictions (T0/T+1)	This is very much an issue for everyday life and misalignments between EU and other jurisdictions, but it will be challenging to negotiate any form of alignment. (For OTC derivatives (uncleared)).	No priority assigned as the process relates to a global requirement which is beyond the remit of the CMH-TF. Harmonisation would be welcomed but is dependent on regulatory and policy initiatives rather than industry initiatives.
3	Market Data Cut-Offs (Rates, FX)	Divergence of market data cut-offs (rates, fx) in the valuation process could create disputes, especially in relationships between EU and non-EU counterparties. (For OTC derivatives (uncleared)).	No priority assigned due to ongoing analysis of cut-off times (CMHA7).
4	Collateral Disputes	Collateral disputes – market practice issues: tolerance thresholds not aligned – disputes sometimes not significant for a given firm 1 could be significant for the other firm 2 (and need traction for resolution from firm 1) – Before the Uncleared Margin Rules (UMR) came into force, the general market practice was a dispute threshold equal to the minimum transfer amount (MTA). Since UMR implementation, however, some credit support annexes (CSAs) have very small MTAs (several KEUR) and therefore require a higher level in absolute terms. (For OTC derivatives (uncleared)).	No priority assigned as this relates to a private legal framework, meaning that terms imposed by the law/regulation become a non-negotiable point of the contract. It is considered that members of matching utilities will drive work in this area.
5	Standard Settlement Instructions	Information related to collateral standard settlement instructions (SSIs) still mostly sits at company level. The broader picture is that BCBS 261 is one important regulatory point that could require some form of harmonisation.	No priority assigned. This topic relates more to collateral data (CMHA8), as it covers a specific data issue.
6	Asset Segregation	Inconsistent application of asset segregation rules for securities accounts.	No priority assigned as this topic is being assessed separately in a regulatory context in other fora.
7	Message Exchanges for Substitutions Implying Operational Risks and Settlement Issues	Email exchanges for substitutions implying operational risks and settlement issues.	No harmonisation need identified as covered by CMHA2 (corporate actions) and fall under the wider recommendations for interoperability.
8	Messaging Standards for Exchanging Legal Documentation to Trade Lifecycle Management	Proprietary standards. Lack of convergence and harmonisation in information messaging standards. This concerns all fields from legal documentation to trade lifecycle management. (For OTC derivatives (uncleared), REPO, SLAB).	No harmonisation need identified, as the Securities Financing Transactions Regulation (SFTR) will drive harmonisation in this area due to the many common and harmonised data fields that will be needed for SFT. This will also promote the spread of ISO 20022 messaging to other asset classes.
9	Post-Trade Reporting Structure	Regulatory reporting involves very large data flows that demand stringent data standardisation. The post-trade reporting structure is too complex. (For OTC derivatives (uncleared), REPO, SLAB).	No harmonisation need identified, as this will be covered by the SFTR (additional relevant points could also be analysed under CMHA8 – Collateral data if needed).
10	Standardisation of Documentation	Lack of standardisation of documentation. Difficult to achieve 100% standardisation, as CSAs need to cover certain privately negotiated terms depending on legal and risk/credit views. Point may be tackled by the International Swaps and Derivatives Association. The European Fund and Asset Management Association (EFAMA) explains that the impact of collateral matrices will make this difficult to achieve. The working group agrees that a possible way forward would be to recommend an industry-wide central HQLA matrix administered by a central party (still to be determined) that the parties to a CSA could agree to refer to.	No prioritisation assigned due to the fact that standardisation of bilateral documentation would not be possible. A centralised data warehouse could be beneficial in this regard, but would be difficult to establish.

Non-prioritised business processes

Billing processes (CMHA6)

No.	Process	Process description	Harmonisation need
1	Identification of Relevant Data Elements for the Fee Calculation	The elements of asset valuation relevant to fee calculation (as a minimum, pool factors) should be taken into account by all (I)CSDs in calculating custody fees.	All CSDs should take the pool factor into account in calculating custody fees.

Non-prioritised business processes

Collateral data (CMHA8)

No.	Process	Process description	Harmonisation need
1	Use of Correct SSI Data	Correct and updated SSIs need to be available to ensure prompt settlement and straight-through processing.	There is a need to transmit SSI information to the relevant parties in a harmonised, timely and efficient manner so that storage and use of correct data is ensured when the exchange of collateral is instructed.

Annex 2: Terminology

Terminology

Triparty collateral management

Term	Explanation
Triparty agents (TPAs)	Agents regulated as (international) central securities depositories ((I)CSDs) and/or custodians/commercial banks which act as providers of triparty collateral management services.
Triparty collateral management services (TCMS)	Services provided by triparty agents (TPAs) that allow counterparties to optimise the use of their securities portfolios when collateralising credit and other exposures across different products and instruments (e.g. repos, securities lending, central bank credit, secured loans and exposures arising from OTC transactions). As part of their daily operations, TPAs provide services such as collateral (auto)selection, valuation and substitution, optimisation of the composition of the triparty pool ("allocation cycles") and corporate action processing.
Triparty securities lending services (TSLs)	Triparty collateral management and settlement services for bilaterally agreed securities loans.
Triparty securities lending services 1 (TSLS1)	TSLS1 provides settlement and valuation of a securities loan as well as the related collateral management for the duration of the trade. The simultaneous exchange of the loaned securities against collateral enables the settlement of both sides of the transaction.
Triparty securities lending services 2 (TSLS2)	TSLS2 provides collateral management and valuation services but not the settlement of loaned securities, as the latter is done bilaterally.
Triparty transaction	A transaction created by the TPA upon receipt of the deal information from the two trading parties. A transaction is created, can be changed and is terminated.
Lifecycle of a triparty transaction	When a transaction is initiated, agreed on by both parties, and accepted and declared valid by the TPA, the lifecycle of the transaction starts. The transaction will normally last as long as the underlying deal. At the end of its lifecycle a transaction is closed.
Triparty instruction	In a collateral management transaction, the trading parties will ask the TPA to carry out certain instructions. An instruction can be to initiate a transaction, modify the terms of a transaction or close a transaction (non-exhaustive list of instructions). The TPA will send feedback on the requested instruction.
Lifecycle of a triparty instruction	The lifecycle of a triparty instruction starts when the user of the triparty service sends an instruction message. On receipt of the instruction message, the TPA will process the instruction and assign a status (either "valid" or "rejected"). At each step in the lifecycle of an instruction, a different status will be assigned. For example, an instruction can be valid for processing or rejected because it is incorrect. If an instruction needs to be matched (for example, if two initiation instructions, one from party A and one from party B, need to match), it can have the status "matched" or "unmatched". Other statuses describe the sufficiency or eligibility of the collateral.
Initiation	Creation of a triparty transaction.
Termination	Closing of the triparty transaction.
Principal/exposure adjustment	Change of principal/exposure adjustment.
Transaction amount	The intended amount of the triparty transaction.
Value of collateral held	The total value (after haircuts) of posted collateral for the transaction.
Total exposure amount	The total exposure amount to be covered by collateral.

Terminology

Collateral data

Term	Explanation
ISIN	Securities identification number.
Maturity date	Maturity date of the security used as collateral.
First/last trading day	First or last trading day of a security.
UNIT size information (for assets where quantity is expressed as UNIT)	Determines the quantity of one unit of a bond.
Minimum deliverable amount	Minimum amount to be instructed for a single settlement instruction.
Minimum denomination amount	Lowest denomination of issue available for purchase.
Outstanding amount	Amount of the security that exists in the market.
Pool factor	Partial repayment without reduction of nominal amount.
Index factor	Determines the extent to which a certain index influences the price of an asset.
Primary exchange	Exchange where the instrument is first listed.
Settlement location	Possible settlement locations (description of issuer CSD and possible investor CSDs).
Place of issuance	Issuer CSD, where the global note is located.
Asset rating information	Evaluation of credit risk associated with the asset.
Collateral quality	Code that classifies the risk of the security used as collateral (e.g. investment grade, non-investment grade).
Classification of a security used as collateral	CFI code of the security used as collateral.
Jurisdiction of the issuer	Jurisdiction of the issuer of the security used as collateral. In the case of securities issued by a foreign subsidiary, the jurisdiction of the ultimate parent company must be reported, or if not known, the jurisdiction of the subsidiary.
LEI of the issuer	Legal entity identifier (LEI) of the issuer of the security used as collateral.

Annex 3: List of members of the AMI-SeCo HSG Collateral Management Harmonisation Task Force (CMH-TF)

Institution	Name
Chair and Secretariat	
BNY Mellon	Gesa Benda (Chairperson)
European Central Bank	Benjamin Hanssens (Rapporteur)
Members	
Banca d'Italia	Valentino Baglioni
Banque de France	Françoise Chevriz
BME Clearing	Teresa Castilla
BNP Paribas Securities Services	Hélène Virello
BNY Mellon	Claire Allum
Citi	Michael Payne
Clearstream	Fabrice Tomenko
Danske Bank A/S	Rebekka Schultz
Deutsche Bank	Marko Niederheide
Deutsche Bundesbank	Antje Heikamp
DZ Bank	Oliver Deutscher
European Central Bank	Gary McNamara
EFAMA	Vincent Dessard
Eurex Clearing	Oliver Bartel
Euroclear	Jan Grauls
Goldman Sachs	Kathleen Bendernagel
JP Morgan	Michele Filippini
LCH	Caroline Colette Jones
Morgan Stanley	Adam Bate
Monte Titoli	Umberto Granata
Northern Trust	Anna Matson
Société Générale	Pierre Lebel
UBS	Sally Shackleton
Chair of substream 2 (Citi)	Marcello Topa
Additional experts	
Euroclear France	Caroline Derocle
European Central Bank	Markus Mayers
European Central Bank	Audren Plancon
Clearstream Banking Frankfurt	Dirk Rothenbach

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

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