

<b>Overview of Collateral Management Harmonisation Activities (CMHAs)</b>					
<b>CMHA</b>	<b>Title</b>	<b>Workstream</b>	<b>Priority 1</b>	<b>Priority 2</b>	<b>Priority 0</b>
1	<b>Triparty Collateral Management</b>	1	11	7	16
2	<b>Corporate Actions</b>	2	16	5	1
3	<b>Taxation Processes</b>	2	8	0	0
4	<b>Bilateral Collateral Management</b>	3	2	1	11
5	<b>Margin Calls</b>	3	1	0	0
6	<b>Fee and Billing Processes</b>	4	3	2	1
7	<b>Cut-Off Times</b>	4	0	0	0
8	<b>Collateral Data</b>	5	7	2	0
9	<b>Sourcing of Collateral</b>	1	10	0	0
10	<b>Non-Euro Collateral</b>	1&2	2	0	0
			<b>60</b>	<b>17</b>	<b>29</b>

**106 processes analysed in total, from which 77 harmonisation needs were identified**

Priority 1: Triparty Collateral Management						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Increase of Triparty Collateral Exposure (Global Amount)	An instruction sent by a trading party to its triparty agent 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 triparty agent on behalf of the trading party. In response a message is sent by the triparty agent 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. [Today the messaging and workflow differ per triparty agent where 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 the increase of a triparty collateral exposure amount.		TBC	TBC
2	Decrease of Triparty Collateral Exposure (Global Amount)	An instruction sent by a trading party to its triparty agent 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 triparty agent on behalf of the trading party. In response a message is sent by the triparty agent 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 the decrease of a triparty collateral exposure amount.		TBC	TBC
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.		TBC	TBC
4	Compulsory Decrease of Triparty Collateral Exposure Due to Deduction of Up-Coming Corporate Action Event	A compulsory decrease of the Triparty Collateral Exposure amount due to an upcoming corporate action event.	Eurosystem central banks will consider the implementation of a harmonised business process.		TBC	TBC
5	End-of-Day Reporting on Stocks	A message sent by a triparty agent to both the collateral giver and the collateral taker or to an account servicer, who manage the account at the triparty agent 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: after all collateral movements have been affected (after settlement-initiated) to show the end (fixed) positions (current status) or, 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.		TBC	TBC
6	Unilateral Removal of Specific Asset(s)	A request sent by the collateral giver / taker to the TPA requesting 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 specific asset(s)		TBC	TBC

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.		TBC	TBC
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.		TBC	TBC
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 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).		TBC	TBC
10	Handling of Cash Proceeds Related to Corporate Action Events	Identifies how cash positions related to the execution of a corporate action event are treated and reported	The Eurosystem central banks will consider the implementation of a harmonised business process.		TBC	TBC
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].		TBC	TBC

**Priority 2: Triparty Collateral Management**

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Initiation of a Triparty Collateral Transaction	An instruction sent by a trading party to its triparty agent 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 triparty agent 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].		TBC	TBC
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].		TBC	TBC
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"> <li>• Its status is NMAT,</li> <li>• Or its status is FUTU with an execution request date in the future (i.e. not the current date).</li> </ul>	There is a need to implement harmonised messaging and workflows for the cancellation of a triparty collateral exposure 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.		TBC	TBC
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) [TBC if 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		TBC	TBC
5	Usage 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.		TBC	TBC
6	Amendment of Trade Details (Rate, Basket, Termination Date)	Identifies how amendment 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).		TBC	TBC
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, that the communication with users is conducted in a harmonised way.		TBC	TBC

**Priority 0: Triparty Collateral Management**

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
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 provide 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.	<b>No harmonisation need for end-of-day reporting on flows has been identified on the basis that intraday reporting on flows (securities movements) could be provided to the collateral taker / giver using harmonised messages.</b>			
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.	<b>The same harmonised messaging and workflows will be used as for the revaluation of a triparty collateral exposure amount.</b>			
3	Reporting Frequency	The frequency with which a collateral and exposure reporting statement is provided	<b>There is no harmonisation need for the timing of reporting - TPAs should provide frequencies acceptable to their clients.</b>			
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	<b>There is a need to further analyse whether it is feasible and desirable for the triparty agent to automatically increase / decrease the triparty collateral exposure amount following revaluation.</b>			
5	Accounting Modalities	The collateralisation technique employed in the triparty transaction	<b>There is no need to harmonise (with current different account structures employed by different TPAs, as long as this structure does not impeded the implementation of harmonised workflows and messaging).</b>			
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 or a Cancel and Replace basis	<b>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. [BNYM confirmed that Delta is only used in the US market and thus from a European perspective there is harmonised usage of the Cancel and Replace method]</b>			
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	<b>It is considered that the harmonised market practice should be to rely on the usage of the cancel and replace method rather than the amendment of such instructions.</b>			
8	Acknowledgment of Triparty Collateral Exposure Instruction Messages	Identifies whether the TPA sends a message to the collateral giver / taker acknowledging receipt of a triparty instruction	<b>No harmonisation need identified.</b>			
9	Handling of Pending Instructions - Unmatched Instructions	Specifies how pending instructions are treated when the instructions are not yet matched	<b>There is no harmonisation need as the cancellation process is to be used.</b>			
10	Handling of Pending Instructions - Undercollateralised Transactions	Specifies how pending instructions are treated when the exposure is matched but there is insufficient collateral to settle the instruction.	<b>There is no harmonisation need as the partial settlement process is to be used.</b>			

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 <i>(Suggested by Goldman Sachs)</i>	Once triparty transaction accepted and matched by collateral giver and taker, the TPA will perform the collateral allocation (either delivery vs cash or FOP depending on transaction type) to settle cash and securities between the transacting parties.	There is a no harmonisation need. It should be ensured that CSDs provide users of triparty services with standardised reporting on settlement. Users should get reporting when triparty instructions are un-matched, when they differ, when they match and when they settle. At the underlying level, users should receive reporting of collateral and cash.			
13	Collateral Substitution	Where collateral giver requires a recall of a security position allocated to the triparty collateral exposure. TPA will allocate a new security position of equivalent value to collateral taker and remove the old security position to credit back to 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 set up).			
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 yes, whether any differences exist in how these credit lines are provided.	No harmonisation need identified.			



Priority 1: Corporate Actions						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
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 message on Payment Date	<b>There is a need to implement a standardised workflow for the processing of mandatory events:</b> <b>1. Sending of CA Notification to Collateral Taker (Giver)</b> <b>2. Provision of final CA notification on or before the record date</b> <b>3. Provision of CA Confirmation message on Payment Date</b>		TBC	
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. Send 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 message on Payment Date	<b>There is a need to implement a standardised workflow for the processing of mandatory with choice or elective events:</b> <b>1. Sending of CA Notification to Collateral Taker (Giver)</b> <b>2. Send of CA Instruction by Collateral Taker (Giver) before event deadline</b> <b>3. Provision of CA Status and Processing Advice by (I)CSD to the Collateral Taker (Giver)</b> <b>4. Provision of final CA notification on or before the record date</b> <b>5. Provision of CA Confirmation message on Payment Date</b>		TBC	
3	Identification of Parties in a Collateral Transaction	There is a need to identify all parties to a collateral transaction in order to ensure that both the collateral giver and collateral taker can be identified and notified accordingly.	<b>There is a need to identify all parties to a collateral transaction in order to ensure that both the collateral giver and collateral taker can be identified and notified accordingly.</b>		TBC	
4	Provision of Sufficient Information to Calculate Expected Payment Amount / Security Movement in the Corporate Action Notification	In some cases, insufficient information is provided in the corporate action notification message in order to enable the collateral giver / collateral taker to calculate the expected payment amount / security movement in advance of the corporate action payment date.	<b>There is a need to ensure that a minimum set of information is provided in the CA notification in order to ensure the collateral giver / collateral taker can always estimate the impact of the corporate action event on the collateral pool in advance of the corporate action payment date (further analysis will be needed on identifying the minimum set of information required for relevant CA-event-types/messages).</b>		TBC	

5	Consistency of Information Provided by Issuer CSD and Investor CSD for Same CA Event	<p>The are instances where the information provided by the Issuer CSD and the Investor CSD for the same underlying CA event differs.</p> <p>Such differences are due to the following reasons (amongst others):</p> <ul style="list-style-type: none"> <li>- ISO announcement messages are not always formatted the same way (each CSD has its own formatting)</li> <li>- each CSD has its own scope of events supported. In case the issuer CSD announces an event not supported by the Investor CSD, then the nearest suitable event type supported by the Investor CSD is used.</li> <li>- number of decimals used per CSD is different</li> <li>- the processing of market claim on flat bonds on the German market (use of TD i.o. SD)</li> </ul> <p>The deviation between Issuer and investor CSD might impact the processing of the event, and as such the possibility for a security to be used properly as collateral.</p>	<p><b>There is a need to ensure that the information provided by Issuer CSD is passed on in a consistent manner by the Investor CSD in line with the agreed market standards.</b></p>		TBC	
6	Usage of Standardised Calculation Formula	<p>Corporate actions payments are managed differently depending in the instrument type and the CA event type (which should follow international standards) which results in the need to handle different approaches to the calculation of the CA payment amount. Today four different international standards exist for the calculation of the payment amount: European/French Method, English, Effective and German method.</p>	<p><b>There is a need to implement a harmonised market practice for the calculation of CA payment amounts.</b></p>		TBC	
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"> <li>&gt; Change of rates vs. rate provided in previously announced notification</li> <li>&gt; Potential difference in entitlement calculation could take place due to different fractional rounding being applied, application of proration amount at different levels (market level, registered owner level, instruction level)</li> <li>&gt; Differences in no. of decimals used can lead to reconciliation failure</li> <li>&gt; Event update announced at depository but not updated in the CSD</li> <li>&gt; Change by another event, e.g. PRED</li> <li>&gt; Incorrect information in the securities database in EB</li> <li>&gt; Issuer/agent mistake</li> </ul>	<p><b>There is a need to implement harmonised market practices in order to reduce instances where the actual CA payment amount does not match the expected payment amount.</b></p>		TBC	



8	Payment Procedures per CSD	In some markets a single payment aggregating the total amount due for coupons and redemptions is made (in the case of the German market this practice will change in 2018), whilst in other cases a payment per ISIN per CA is made allowing a clear link to be made between the CA notification and the CA payment.	<b>There is a need to ensure that all markets comply with the market standard i.e. one payment per ISIN per CA rather than the aggregation of the payment.</b>		TBC	
9	Handling of Rounding Differences	The number of decimals used in the calculation of payment amounts differs per market e.g. usage of 6 or 8 decimals, which results in a need to handle rounding differences.	<b>There is a need to implement a harmonised market practice regarding the usage of decimals in order to eliminate the occurrence of rounding differences (which lead to cases of reconciliation failure).</b>		TBC	
10	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, whilst other CSDs always remit the FX proceeds.	<b>There is a need to implement a harmonised workflow for the payment of non-euro denominated corporate actions.</b>		TBC	
11	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. coll taker/giver). As negative cash flows are not currently handled by all CSDs no standardised procedure exists.	<b>There is a need to implement a harmonised workflow for the handling of negative cash flows.</b>		TBC	
12	Corporate Action Events Requiring Manual Processing	A significant number of CA events and business processes require manual processing today. Examples include: > Use of free text messaging - large amounts of free text are included in notification of certain events provided by Clearstream Euroclear > Non-compliance with ISO standards - some markets do not abide yet to swift ISO standards (Portugal/Spain/Germany/Austria/Switzerland/ESES), therefore preventing STP integration of incoming swifts, also events which do not fit easily into an event template will require manual processing. > Manual processing of CA instruction - Not possible to send outgoing MT565 to the agent currently (ESES markets), submission of instruction to the market requires the manual completion of physical forms, excel documents and manual transfer of rights/stock or cash to the agent on the agent instruction deadline.	<b>There is a need to conduct further analysis on the reason why free format messages are used, which should be conducted with a view to later defining harmonised rules and ISO 20022 messaging to allow the transmission of CA data in a structured message thus facilitating straight through processing of all CA events. Accordingly there will be a need to conduct further analysis at the level of the CA event.</b>		TBC	
13	Process for the Substitution of Fungible Securities	Processes for the execution of the substitution of fungible securities (Pari-Passu CA event) are different across markets.	<b>There is a need to implement a harmonised procedure and workflow for the execution of the Pari-Passu CA event.</b>		TBC	

14	Processing of CA Events Using 'Modified Following Business Day Convention'	In some markets corporate actions are apid using the 'Modified Following Business Day convention' which means that, for the purposes of payment, in the event that 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.	<b>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.</b>		TBC	
15	Handling of CA Events with Different Quotation Types	Today the calculation approach for UNIT securities (i.e. data fields to process in the message) is different to that used for FAMT securities.	<b>There is a need to implement a harmonised rule for the calculation of corporate action payments.</b>		TBC	
16	Handling of Elective CA Events	Today the processing of elective CA events requires a significant amount of manual intervention. Proceeds from voluntary events are not processed via T2S standard CA flows which means no ISO20022 messaging received to trigger the STP release of payments - all paydates are currently manually processed. Furthermore there are differences in how the collection of responses are handled.	<b>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)</b>		TBC	

Priority 2: Corporate Actions						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
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) corporate action notifications in advance of the payment date e.g. the corporate action notifications is 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)		TBC	
2	Processing of Delayed CA Payments	No standardised procedure or message is used to inform clients of delays in the execution (payment) of a corporate action 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 the processing of the CA payment.		TBC	
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 in order to clarify if the same set of CA events are subject to blocking across all CSDs. Accordingly there may be a need for harmonisation in this area.		TBC	
4	Usage of Default Options in CA Events	Identification of instances / markets where a default option for the processing of a CA event does not exist.	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. To note: default options will be supported in ESES CSDs as of March 2018 following ESES enhancement)		TBC	
5	Handling of Fees for Participation in Elective CA Events	There are differences in how early consolicitation fees (CA event ID CONS for the events BMET or XMET), often for consent to proposals for changing terms and conditions of company bonds, are handled.	There is a need to implement a standardised workflow for the payment of consent fees related to participation in certain CA events		TBC	

Priority 0: Corporate Actions						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
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 vs. Commercial Bank Money.	Payments may be made in either commercial bank money or central 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.		TBC	

Priority 1: Taxation Processes						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
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 to standardise 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"> <li>- Differences in withholding tax requirements Portugal, Spain, Italy, France and US (e.g. Corporate action payments with withholding taxes are executed for the following countries (depending on the collateral structure))</li> <li>- 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.</li> <li>- 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) tax services and some not (but do substitution).</li> <li>- Differences in processing by CSDs depending on the asset type and the role of the client.</li> <li>- The type of collateral (e.g. government bond, corporate bond), the market (issuer country) and the issuer.</li> <li>- Differences in taxation forms per (I)CSD in the context of withholding taxes.</li> <li>- The impact of various European foreign tax and US – tax requirements on the usage of certain securities as collateral.</li> </ul>	TBC	TBC	TBC
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. It could be further analysed whether it would be appropriate to apply the collateral giver tax status to the proceeds and whether this could become a harmonised rule for the tax treatment of collateral. It could be considered to further analyse this topic through examining similar mechanisms in other markets (e.g. US). In order to manage such a process there would be a need to:</p> <ol style="list-style-type: none"> <li>1/ identify the collateral transactions</li> <li>2/ record who is the collateral giver and collateral taker</li> <li>3/ apply the Tax status of collateral giver to the proceeds of the CA</li> <li>4/ potentially credit directly the collateral giver's account (in instances where consent is provided by the collateral taker)</li> </ol>	TBC	TBC	TBC
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 than the ones used for sell or purchase.	<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 standardise tax processing procedures for securities used as collateral. Today 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>	TBC	TBC	TBC
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 usage of certain assets as collateral in certain markets.	<p>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.</p> <ul style="list-style-type: none"> <li>- For instance, if the investor CSD does not offer tax reclaim service on some assets, then if the collateral taker want to benefit from tax reclaim, this collateral taker will need to use services of an agent on the local market to have that refund processed.</li> <li>- hence it can result in a complex process, and can be a burden to expan cross CSD CM activity</li> </ul> <p>Furthermore it should be analysed whether the CSD is able to provide tax services in all markets as today the CSD might not be in a position to directly offer tax services depending on the regulation in the market.</p>	TBC	TBC	TBC
5	Identification of Securities Subject to Withholding Tax	Identification of the securities used in a collateral transaction which are subject to withholding tax.	<p>There is a need to be able to identify counterparty holdings (securities) subject to withholding tax in advance of the record date of a corporate action event.</p>	TBC	TBC	TBC

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.	<b>There is a need to define a standardised workflow using ISO 20022 messages to transmit relevant information on a counterparty's tax status to the local (I)CSD. It should be analysed to what extent there are requirements to send paper documentation.</b>	TBC	TBC	TBC
7	Tax Reclaim Process for Securities Used as Collateral	Identification of differences in the tax reclaim process for collateral.	<b>There is a need to implement a harmonised workflow to manage the tax reclaim process.</b>	TBC	TBC	TBC
8	Handling of Tax Reduction	Identification of differences in rules for the handling of reduction in withholding tax depending on -market (issuer country) -security (e.g. government bond, corporate bond) -issuer	<b>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.</b>	TBC	TBC	TBC



Priority 1: Bilateral Collateral Management						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Exchanges for Substitutions	Email exchanges for substitutions implying operational risks and settlement issues. There is a growing interest from vendors in this space. [OTC derivatives (uncleared), REPO, SLAB]	<b>There is the need to promote wider use of electronic platforms for substitutions and to promote the interoperability between the various initiatives launched at particular points of the processing chain</b>		TBC	TBC
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 substantial development requirements to integrate the information from reports (for reconciliation, payments...) - Every onboarding is cumbersome as every clearer appears to have its own operational market standards as well. Upcoming EMIR deadlines for category 3 and 4 will imply a growing industry concern in this space.	<b>There is a need for a "Minimum market standards" framework across Clearers and CCPs to harmonize the information available to end-users and its format</b>		TBC	TBC

**Priority 2: Bilateral Collateral Management**

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Exchanges for Interests Payments	Email exchanges for interests payments. Several utilities already active in this space (Acadiasoft, Bloomberg/CloudMargin), but the industry needs to address the cost issue for some players especially buy-side, for complete harmonization. It is mentioned this point is being addressed by some market participants	<b>There is a need to promote wider use of electronic platforms and the interoperability between the various initiatives launched at particular points of the processing chain.</b>		TBC	TBC

**Priority 0: Bilateral Collateral Management**

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	FX Forwards and Swaps Collateralisation - Documentation / Treatment Not Aligned Between Jurisdictions	Very much an issue for everyday life and competitive mis-alignments between EU and other jurisdictions, however it will be a real struggle to negotiate any form of alignment. [The working group can make a general statement about this issue, but will consider that solving this issue is not part of its mandate.] [OTC derivatives (uncleared)]	No harmonisation need identified			
2	Bilateral Margin Rules - Settlement Timeline Obligations Not Aligned Between Jurisdictions (T0 / T+1)	Very much an issue for everyday life and competitive mis-alignments between EU and other jurisdictions, however it will be a real struggle to negotiate any form of alignment. [The working group can make a general statement about this issue, but will consider that solving this issue is not part of its mandate.] [OTC derivatives (uncleared)]	No harmonisation need identified			
3	Market Data Cutoffs (Rates, FX)	Divergence of market data cutoffs (rates, fx) in the valuation process could create disputes esp in relationships between EU and non EU counterparties. [OTC derivatives (uncleared)]	No harmonisation need identified			
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 Uncleared Margin Rules, a dispute threshold equal to the MTA was the general market practice. However since the Uncleared Margin Rules, some CSAs have very small MTA (several KEUR) and therefore requires a higher level in absolute terms. [OTC derivatives (uncleared)]	No harmonisation need identified			
5	Standard Settlement Instructions	Information related to collateral SSIs still mostly sits at each firm's level - The broader picture is that BCBS 261 is one important regulatory point that could require some form of harmonization.	No harmonisation need identified			
6	Settlement Sequencing	Maintaining Settlement efficiency to ensure collateral settles as early as it possibly can without friction and the need to effectively manage intra-day liquidity through credit usage.	No harmonisation need identified			
7	Asset Segregation	Inconsistent application of asset segregation rules for securities accounts	No harmonisation need identified			

8	Message Exchanges for Substitutions Implying Operational Risks and Settlement Issues	Email exchanges for substitutions implying operational risks and settlement issues	No harmonisation need identified			
9	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. [See "Mappin MSG" for details] [OTC derivatives (uncleared), REPO, SLAB]	No harmonisation need identified			
10	Post-Trade reporting structure	Regulatory reporting demand very large data flows that demand stringent data standardisation. Post-Trade reporting structure is too complex [OTC derivatives (uncleared), REPO, SLAB]	No harmonisation need identified			
11	Standardisation of Documentation	Lack of standardisation of documentation. Difficult to achieve 100% standardisation as a CSA needs to respond to some privately negotiated terms, depending on legal and risk/credit views. Point tackled at ISDA (probably). EFAMA explains the impact of collateral matrixes will make it difficult to reach. Workgroup agrees that a possible way to go 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 negotiation parties would agree to refer to.	No harmonisation need identified			

Priority 1: Margin Calls						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Exchanges for Margin Calls	Email exchanges are used for margin calls. Several utilities are already active in this space (Acadisoft, Bloomberg/ CloudMargin), but the industry needs to address the cost issue for some players especially buy-side, for complete harmonisation. It is mentioned this point is being addressed by some market participants. [OTC derivatives (uncleared), REPO, SLAB]	<b>There is the need to promote wider use of electronic platforms for margin calls and to promote the interoperability between the various initiatives launched at particular points of the processing chain</b>		TBC	TBC

**Priority 1: Fee and Billing Processes**

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Provision of Minimum Set of Data in billing (fees Invoice)	The current set of data provided in the fees invoice is heterogeneous. A minimum set of information needs to be provided in the fees invoice, per securities account held with the CSD.	<b>There is a need to provide a minimum set of information in the fee invoices. The invoice should provide (as a minimum) the following set of information (per securities account held with the CSD): Account No. at CSD, Gross Fee, Net Fee, Total V.A.T</b>		TBC	TBC [(I)CSDs]
2	Messaging Format for the Transmission of billing Information	Differences in current messages requires the definition of a standardised format by which fees information should be transmitted e.g. ISO 20022 message.	<b>There is a need to define a standardised ISO 20022 message format through which fees information should be transmitted in order to support the automation of the fee and billing process by market participants.</b>		TBC	TBC [(I)CSDs]
3	Billing Period and Billing Frequency	Differences in the current timing and frequency with which billing information is provided to market participants requires the introduction of a harmonised billing period.	<b>There is need to define a standardised billing period (monthly period covering the 1st of each month to the end of each month).</b>		TBC	TBC [(I)CSDs]



**Priority 2: Fee and Billing Processes**

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Identification of Fees Related to Collateral Management Activities	The billing invoice differs across markets and identification of collateral management related activities is not provided in a harmonised manner. A common invoice process is required for collateral management and other services.	<b>There is a need to identify fees related to collateral management activities, by setting up a separate account for collateral management activities. This would allow the provision of a detailed statement per account.</b>		TBC	TBC [(I)CSDs]
2	Identification of the Asset Class used for Billing Purposes	Common information on the asset class is needed in the fees invoice and a common definition of asset classes for the purpose of fee billing could be adopted by all (I)CSDs.	<b>There is a need to define a common asset classification for use across all CSDs in order to facilitate the reconciliation and payment of fees.</b>		TBC	TBC [(I)CSDs]

Priority 0: Fee and Billing Processes						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Identification of Relevant Data Elements for the Fee Calculation	Those elements of asset valorisation relevant to the calculation of the fee (as a minimum pool factors) should be taken into account by all (I)CSDs in calculating custody fees	<b>The pool factor is taken into account in the calculation of custody fees in all CSDs.</b>			

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Collateral Valuation Process	For collateral valuation the instrument price is used (obtained from market places or data vendors), however 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: stock-split announced and security trading under new price but the split has not yet been processed)	<b>There is a need to harmonise the use of instrument prices around pending corporate actions for the calculation of collateral values (potential for a best market practise: refer to last available price prior to the start of the corporate actions)</b>		TBC	CMS provider Data provider
2	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 CMS.	<b>There is a need to determine a harmonised approach to ensure that information is available at CMS when it is needed for the collateral management processes</b>		TBC	Issuer CSDs Investor CSDs Data Provider
3	Data Exchange - Outstanding Amount	For some asset classes (Italian Stripped bonds, UK Gilts) the outstanding amount is not public information. As this information is needed for the eligibility of collateral, CMS have difficulties to determine, whether the use of a given security might exceed agreed concentration limits on a bond	<b>There is a need to obtain information on outstanding amount (for example it could be considered whether DMOs should make information on the outstanding amounts public on their website or provide that information through data vendors to CMS and CSDs)</b>		TBC	Debt Management Offices Issuer CSDs Data Providers CMS Providers
4	Data Exchange - Pool Factor	The pool factor is used to calculate the right notional amount which is still outstanding. Typically this is provided by the calculation agent but not always provided in time for the correct calculation of the collateral value	<b>There is a need that the pool factor becomes available to all parties in a timely manner to ensure harmonised data exchange in order to apply the latest information. It could be considered whether the information is made centrally available from issuer CSDs or data vendors (if applicable) - Calculation agents to provide information in any case directly to the Issuer CSD</b>		TBC	Data Providers Calculation Agents CMS Providers
5	Data Exchange - Minimum Denomination Amount	For some ABSs the minimum denomination amount is used instead of the poolfactor. If the correct and up-to-date minimum denomination amount is not available, the correct and timely processing of collateral management events cannot be ensured.	<b>It has to be ensured that the data exchange on the minimum denomination amount takes place in an harmonised an timely manner.</b>		TBC	
6	Data Exchange - Unit Size	For assets which are denominated in units, accurate information on unit size is required for Collateral Management purposes. Therefore, the relevant parties need to have the correct information when a Collateral Management event takes place.	<b>There is a need to ensure that the data exchange on the unit size takes place in an harmonised an timely manner.</b>		TBC	

7	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. Therefore, an harmonised, efficient and timely exchange of these other data elements not specifically mentioned in the list are of utmost importance in order to ensure correct and prompt execution of Collateral Management processes.	<b>There is a need to exchange all other data elements relevant to Collateral Management Activities in a harmonised, efficient and timely manner as to ensure the correct processing of all collateral transaction events.</b>		TBC	Data Providers Calculation Agents CMS Providers
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**Priority 2: Collateral Data**

No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
1	Usage of Correct SSI Data	Correct and updated Standard Settlement Instructions need to be available in order to ensure prompt settlement and straight through processing.	<b>There is a need to transmit SSI information to the relevant parties in a harmonised, timely and efficient manner so that storage and usage of correct data is ensured when the exchange of collateral is instructed.</b>		TBC	TBC
2	Multiple Places of Settlement and Safekeeping	Some securities have multiple places of settlement and safekeeping which creates additional complexity and barriers to efficient settlement process if correct information on the settlement and safekeeping locations is not available to all parties in a timely manner. This process not only applies to collateral management procedures, but is mainly valid for general settlement and custody activities.	<b>There is a need to ensure that information on multiple places of settlement and safekeeping are transmitted to all relevant parties in a harmonised and timely manner.</b>		TBC	TBC

Priority 1: Sourcing of Collateral						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
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. Accordingly CSD's must 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.		TBC	
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).		TBC	
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.		TBC	
4	Pre-Matching of Collateral Instructions	Some market have pre-matching process for settlement instruction – 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 instead considered as not required for collateral transfers.		TBC	
5	Maximum Time Limit for Settlement of Collateral	A transfer of collateral should take less than 20 minutes from the initiation of the instruction until the finalisation of the settlement especially when there is an Agent/Global custodian involved in the settlement process.	There is a need to ensure that a transfer of collateral should take less than 20 minutes from the initiation of the instruction to the settlement.		TBC	
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 the examples of the Italian Tax process, Turkish Tin number, Spanish Equities for loan, UK Stamp duty as being just some of the exceptions in EU markets which require special processes to be put in place ( often manual process) – this impacts mobility of collateral. Members explained that national specific requirements/processes could reduce collateral mobility.  First, currently collateral movements are not 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 the need to enrich the securities instruction in 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 with the result being a reduction in the willingness of the collateral giver and / or collateral taker to accept such assets as collateral.		TBC	
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 usage of an omnibus account structure at CSD level can help to increase collateral mobility.		TBC	
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, as a minimum, all securities in EU markets should be Bridge or T2S eligible.		TBC	



9	Settlement Efficiency via the Bridge	Improvements of the Bridge are needed to further improve settlement efficiency. A second phase of enhancements were successfully implemented on 19 June 2017 (further improving the Bridge input deadlines, increase the number of exchanges files in order to decrease the turnaround settlement times to between 10-40 minutes compared to 35-90 minutes before.	<b>There is a need for further Improvements to the Bridge to further improve settlement efficiency.</b>		TBC	
10	T2S Participation	The market sees it as highly beneficial to encourage non-T2S participating CSDs to join T2S to improve collateral fluidity and access to all markets in order to source collateral according to harmonised procedures. There should be an effort to reach out to these CSDs / markets to make these assets available for use as collateral in all EU markets in a harmonised way.	<b>Market participants have identified a need to encourage non-T2S participating CSDs to join T2S to improve collateral fluidity and access to all markets in order to source collateral according to harmonised procedures.</b>		TBC	

Priority 1: Non-Euro Collateral Management						
No.	Process	Process Description	Harmonisation Need	Interdependencies	Timeline	Actors
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, whilst other CSDs always remit the FX proceeds.	<b>There is a need to implement a harmonised workflow for the payment of non-euro denominated corporate actions.</b>		TBC	TBC
2	Eligibility of Non-Euro Denominated EU Securities for Use in T2S or via the Bridge	All EU non euro-securities eligible in Euroclear or Clearstream should be Bridge Eligible where possible	<b>There is a need to ensure that all EU non euro-securities eligible in Euroclear or Clearstream should be Bridge Eligible.</b>		TBC	TBC