



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Triparty Collateral Management

Collateral Management Harmonisation

CMH-TF

June / 2018



# Contents

<b>Contents</b> .....	<b>2</b>
<b>Executive Summary</b> .....	<b>3</b>
<b>1 Introduction</b> .....	<b>4</b>
1.1 Triparty Collateral Management .....	4
1.2 Harmonisation Needs .....	5
1.3 Approach to Triparty Collateral Management Harmonisation .....	5
1.4 Scope of the Document .....	6
1.5 Overview of current status of triparty harmonisation needs .....	6
<b>2 Harmonised Triparty Business Processes and Workflows</b> .....	<b>9</b>
2.1 Overview of Business Process, Workflow and Key Data Elements .....	9
2.2 Background to Harmonisation Proposals .....	9
2.3 Key Terminology .....	10
2.3.1 Initiation of Transaction .....	12
2.3.2 Increase of Transaction Amount .....	14
2.3.3 Decrease of Transaction Amount .....	16
2.3.4 Revaluation .....	18
2.3.5 Cancellation .....	20
2.3.6 Unilateral Removal .....	22
2.3.7 Reporting on Stocks .....	24
2.3.8 Reporting on Flows .....	26
2.3.9 Closure of Transaction .....	28
<b>3 ISO 20022 Messaging</b> .....	<b>31</b>
<b>Annex 1: Terminology</b> .....	<b>33</b>

## Executive Summary

**Significant progress has been made by the CMH-TF towards the delivery of a single, harmonised triparty model for Europe based on the ISO 20022 standard.** Of the harmonisation needs identified by AMI-SeCo in December 2017, harmonisation proposals for all core harmonisation needs (in particular those core to the ECMS) together with the relevant business processes and workflows have been agreed by the CMH-TF. Key data elements to be mapped to ISO 20022 messages have also been identified for each business process.

**The following assumptions underpin the harmonisation proposals contained in this document:**

- The Eurosystem plans to go live with the ECMS in November 2022.
- ECMS communication with relevant stakeholders will be based solely on ISO 20022 compliant messaging.
- ISO 20022 messages for triparty collateral management will be developed, respectively existing ISO 15022 compliant messages will be reverse engineered and implemented, taking into account the ECMS project planning.

**Further follow up work is planned in the following areas:**

- Definition respectively reverse engineering of ISO 20022 compliant messages for triparty collateral management to cover all of the business processes and workflows described in this document.
- Further follow-up work on detailing data elements.
- Remaining harmonisation needs (e.g. Priority 2 needs 5, 6 & 7 – please refer to pg. 8).

**The document is outlined as follows:** Section 1 provides a high level overview of triparty collateral management services and includes background information on the harmonisation needs identified by AMI-SeCo. It also explains the methodology and approach followed by the CMH-TF in the harmonisation of triparty collateral management. The current status of the harmonisation needs is then presented together with harmonisation proposals where applicable. Section 2 then introduces the harmonised workflows for the handling of the various triparty business processes and identifies the key data elements for each process which will be transmitted via the (to be defined/reverse engineered) ISO 20022 compliant messages. Section 3 outlines the key principles and timeline for the development / reverse engineering of ISO 20022 messages for triparty collateral management. The Annex then presents a list of terminology.

**AMI-SeCo is invited to approve the report on Triparty Collateral Management Harmonisation, prepared by the HSG's CMH-TF and agreed by the HSG.**

# 1 Introduction

## 1.1 Triparty Collateral Management

Triparty collateral management services (TCMS) provided by triparty agents (TPAs) allow counterparties to optimise the use of their portfolios of securities when collateralising credit and other exposures across different products and instruments (e.g. repo, securities lending, central bank credit, secured loans, and exposures arising from over-the-counter transactions). As part of their daily operations, TPAs provide services such as automatic selection and allocation of the collateral, valuation and substitution, optimisation of the composition of the triparty pool (“allocation cycles”) and corporate actions processing.

A collateral giver and collateral taker enter into a triparty transaction managed by a triparty agent<sup>1</sup>. The value of this transaction is referred to as the Transaction Amount. During the lifecycle of the triparty transaction the following business processes are relevant.

### Initiation / Increase of Triparty Transaction

Once the triparty transaction is agreed the TPA seeks to allocate securities to collateralise the agreed transaction amount to the extent that collateral is available and subsequently informs the collateral taker and collateral giver of the exposure amount. Accordingly the request to increase the transaction amount may be (i) fully settled (ii) partially settled or (iii) not settled. In case of partial settlement, the request may remain open in which case the TPA will seek to increase the Exposure Amount to equal the Transaction Amount as and when additional eligible securities become available. The same business process is applicable for increases to the Transaction Amount.

### Decrease / Closure of Triparty Transaction

The collateral giver may seek to decrease the value of the triparty transaction by sending a decrease request to the TPA. The TPA sends the request to the collateral taker to check if the collateral giver may reduce the Transaction Amount. After the check of collateral sufficiency, the collateral taker sends a message to the TPA either approving the request or putting it on hold. The same business process is applied for requests to terminate the Transaction Amount, in which case the transaction is permanently closed and future amendments are not possible.

### Revaluation

Throughout the lifecycle of the transaction, the Exposure Amount may change following a revaluation of the collateral allocated to the triparty transaction. The revaluation may be triggered by (i) price / eligibility changes, (ii) custody events or (iii) unilateral removal of specific asset(s).

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<sup>1</sup> Multiple transactions are possible

## Reporting

Reporting may be provided throughout the day on the status of all transactions, containing, inter alia, information on the exposure and the collateral allocated to the transaction.

Full details of these, and all other business processes and workflows, can be found in section 3 of this report.

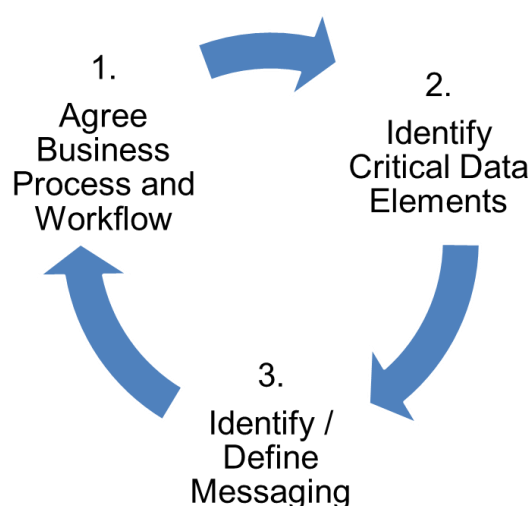
### 1.2 Harmonisation Needs

AMI-SeCo agreed on the need to implement a single harmonised model with common processes for interaction between triparty agents and central banks using (yet to-be defined) ISO 20022 messaging. Market participants also identified the need for common messaging and workflows to be adopted by all TPAs in order to reduce the costs associated with adapting to the differing messages and workflows employed by TPAs. Common messaging and workflows could also be seen as helping achieve triparty interoperability. A series of priority 1 triparty collateral management harmonisation needs have been identified related to the business processes, workflows and messaging. Priority 2 triparty collateral management harmonisation needs have also been identified with regard to business processes including (but not limited to) the initiation and termination of a triparty collateral transaction.

### 1.3 Approach to Triparty Collateral Management Harmonisation

A 3-step approach has been taken to the harmonisation of triparty collateral management as follows:

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 ISO20022 compliant message by which these data elements should be transmitted.



In the case of triparty collateral management no ISO 20022 compliant messaging exists today. Accordingly, the AMI-SeCo CMH-TF have involved SWIFT to launch work on the development of ISO

20022 compliant messages / reverse engineering of existing ISO 15022 messages for triparty collateral management. The work plan for the development of these messages is included in section 4 of this document.

## 1.4 Scope of the Document

This document identifies the relevant business processes and proposes harmonised workflows for the implementation of same. The key data elements underpinning these business processes are then introduced which will form the basis of the ISO 20022 messages by which these data elements should be transmitted. The annex to this document defines key terminology relevant to triparty collateral management.

The document presents, inter alia, for each business process:

- 1) a definition and description of the business process;
- 2) the actors involved, i.e. TPA, collateral giver, collateral taker etc.;
- 3) the harmonised workflow to be adopted in the execution of each business process;
- 4) the critical data elements required in the ISO 20022 message(s) to support the business processes.

## 1.5 Overview of current status of triparty collateral management harmonisation needs

The table below recalls the harmonisation needs identified by AMI-SeCo with respect to triparty collateral management and provides a status update on the harmonisation efforts to date together with a reference to the relevant harmonisation proposals where applicable.

Priority 1 Harmonisation Needs			
No.	Process	Harmonisation Need	Status
1	Increase of Triparty Collateral Exposure (Global Amount)	There is a need to implement harmonised messaging and workflows for the increase of a triparty collateral exposure amount.	Harmonisation proposal contained in section 2.3.2 of this note.
2	Decrease of Triparty Collateral Exposure (Global Amount)	There is a need to implement harmonised messaging and workflows for the decrease of a triparty collateral exposure amount.	Harmonisation proposal contained in section 2.3.3 of this note.
3	Revaluation (Reception of a new Collateral Exposure Statement)	There is a need to implement harmonised messaging and workflows for the revaluation of a triparty collateral exposure amount.	Harmonisation proposal contained in section 2.3.4 of this note.
4	Compulsory Decrease of Triparty Collateral Exposure Due to Deduction of Up-Coming Corporate Action Event	Eurosystem central banks will consider the implementation of a harmonised business process.	Harmonisation proposal under consideration [TBC].
5	End-of-Day Reporting on Stocks	There is a need to provide end-of-day reporting on stocks via a standardised message.	Harmonisation proposal contained in section 2.3.7 of this note.

No.	Process	Harmonisation Need	Status
6	Unilateral Removal of Specific Asset(s)	There is a need to define a formatted ISO 20022 message for the communication of the unilateral removal of specific asset(s)	Harmonisation proposal contained in section 2.3.6 of this note.
7	Partial Settlement of Triparty Collateral Exposure Increase	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.	Partial settlement is possible.
8	Provision of Real Time Information on Securities Collateralising Triparty Collateral Exposure	There is a need to provide real time availability of information on flows (securities movements) to the collateral taker / giver.	Harmonisation proposal contained in section 2.3.8 of this note.
9	Handling of a Maximum Triparty Collateral Exposure Value	[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).	The Eurosystem and eligible TPAs agreed that this service would be supported in the future using the bilateral collateral management workflow.
10	Handling of Cash Proceeds Related to Corporate Action Events	The Eurosystem central banks will consider the implementation of a harmonised business process.	Harmonisation proposal under consideration [TBC].
11	Rejection of Decrease Instruction	There is a need to implement harmonised messaging and workflows for the rejection of a triparty collateral exposure decrease request [relevant to central banks].	Further analysis showed that this process was not required as the request should remain pending until end of day at which point it would be cancelled.

Priority 2 Harmonisation Needs			
No.	Process	Harmonisation Need	
1	Initiation of a Triparty Collateral Transaction	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].	Harmonisation proposal contained in section 2.3.1 of this note [TBC].
2	Termination (Closure) of a Triparty Collateral Transaction	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].	Harmonisation proposal contained in section 2.3.9 of this note [TBC].
3	Cancellation of a Pending Triparty Collateral Exposure Instruction	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.	Harmonisation proposal contained in section 2.3.5 of this note [TBC].



No.	Process	Harmonisation Need	
4	Future Dated Processing	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	Proposal for future dated decrease requests pending [TBC].
5	Usage of Baskets (Including Messaging Used)	There is a need to implement a standardised format of communication (including selection criteria) for lists of eligible assets.	Harmonisation proposal pending.
6	Amendment of Trade Details (Rate, Basket, Termination Date)	There is a need to implement harmonised messaging and workflow for the communication of information on amendments of trade details (rate, basket, termination date).	Harmonisation proposal pending.
7	Trade Type Supported by TPA	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.	Harmonisation proposal pending.



## 2 Harmonised Triparty Business Processes and Workflows

### 2.1 Overview of Business Process, Workflow and Key Data Elements

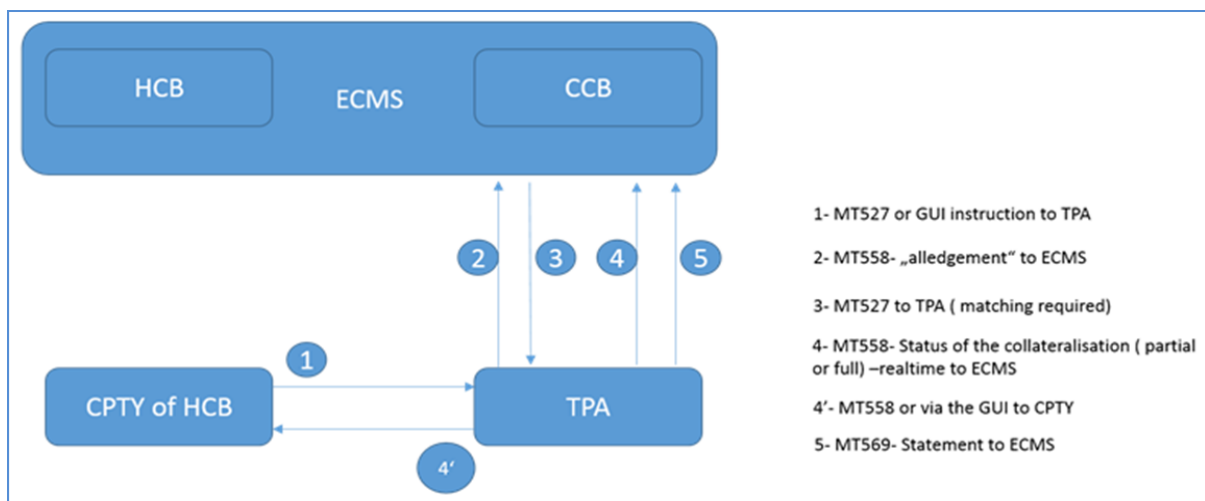
This section provides an overview of the full lifecycle of a triparty collateral transaction. The text below and the accompanying workflow diagram focuses on the role of 3 key actors in the process:



### 2.2 Background to Harmonisation Proposals

In Phase I of the AMI-SeCo CMH-TF work on collateral management harmonisation, the following general business process was discussed. It serves as the basis of the harmonisation proposals contained in this document. The general principles are applied to all workflows, for example, communication flows are between (i) the collateral giver and the TPA and then (ii) the TPA and the collateral taker. The messages referenced below are indicative only as communication between the TPA and ECMS (as a minimum) will be performed using ISO 20022 compliant messaging.

#### Box 1: General Principles of Harmonisation



An initial list of key data elements per business process are also identified in this document. The key data elements identified are indicative only at this point and will be further refined as part of the ISO 20022 messaging definition process. For example agreement upon the usage of a standard reference to link all messages related to a triparty transaction may remove the importance of fields such as PTYA and PTYB as the identity of the parties to the transaction can be derived from the unique triparty transaction ID. Similarly terms such as Collateral Value (COVA) and Allocated Amount (ALAM) may refer to the same concept and thus may be reported in a single field in the future ISO 20022 message.

## 2.3 Key Terminology

In addition to the key terminology contained in the Annex of this document, the box below provides a summary of the key concepts referred to in this document:

### Box 2: Key Terminology

<p><b>1. Triparty Agent</b> – the entity that provides triparty services, the agent performs the automated functions used within their triparty service. Triparty agents ensure that triparty transactions remain collateralised.</p> <p><b>2. Transaction Amount / Triparty Exposure</b> – the amount agreed between the collateral giver and the collateral taker (central bank) and reflects the post haircut value of securities to be transferred or earmarked.</p> <p><b>3. Collateral Value</b> – This is the actual post haircut value of securities transferred to the collateral taker – this is normally equal to or greater than the Transaction Amount.</p> <p><b>4. Execution Date</b> – This is the date on which the triparty agent will attempt to initiate, amend or close a triparty transaction.</p> <p><b>5. Triparty Instruction</b> – this is the instruction to the triparty agent to undertake an action on a triparty transaction i.e. initiate, amend, close, cancel.</p>	<p><b>6. Collateral Schedule</b> – the schedule specifies the securities that the collateral taker is willing to accept.</p> <p><b>7. Triparty Allocation</b> – this is an automated process undertaken by the triparty agent throughout the day (either in scheduled batches or continuously), the process allocates securities to the collateral taker based upon the triparty schedule's parameters and collateral operations i.e. changes to the transaction from new instructions.</p> <p><b>8. Optimisation Run</b> – this process ensures that the collateral provided to the collateral taker is optimised according to rules set by the collateral giver.</p> <p><b>9. Automatic Substitution</b> – the collateral giver may want to remove securities that have been provided to the collateral taker and provide alternative securities. This process ensures that alternative securities to at least the value of the securities being removed are automatically selected and provided simultaneously.</p>
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This section presents harmonisation proposals for the following business processes and workflows:

#### Initiation of Transaction

- Workflow covering the initiation of a triparty collateral transaction
- Key data elements

#### Increase of Transaction Amount

- Workflow covering the increase of a triparty collateral transaction
- Key data elements

#### Decrease of Transaction Amount

- Workflow covering the decrease of a triparty collateral transaction
- Key data elements

### **Revaluation**

- Workflow covering the revaluation of a triparty collateral exposure
- Key data elements

### **Cancellation**

- Workflow covering the cancellation of a previously sent triparty collateral instruction
- Key data elements

### **Unilateral Removal**

- Workflow covering the request to remove specific asset(s) from the triparty pool
- Key data elements

### **Reporting on Stocks**

- Workflow covering the reporting of details of securities in the triparty pool
- Key data elements

### **Reporting on Flows**

- Workflow covering the reporting of intraday movements of securities in the triparty pool
- Key data elements

### **Closure of Transaction**

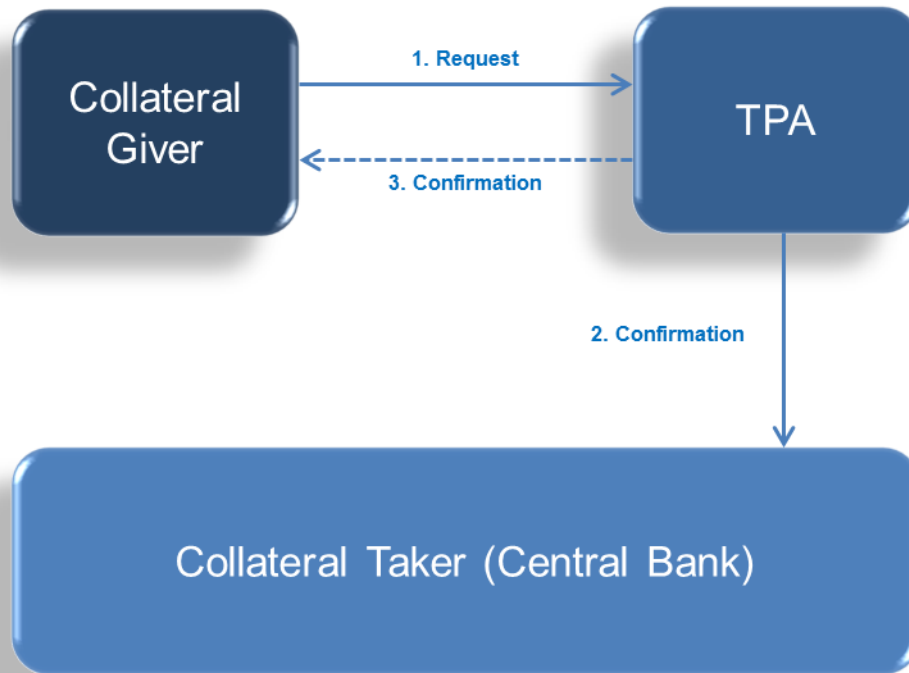
- Workflow covering the termination of a triparty collateral transaction
- Key data elements

Initiation of Triparty Collateral Transaction

CMHA1 (P2.1)

The counterparty sends a message to the TPA to initiate a triparty transaction. The TPA forwards the message to the collateral taker who initiates the transaction in their collateral management system.

Workflow Description of Steps



Pre-conditions

- All parties to the transaction have signed the relevant documentation and performed the necessary account setup

1. The collateral giver sends a request to the TPA to initiate a triparty collateral transaction with the collateral taker.
2. The TPA sends a message to the collateral taker\* confirming that a triparty transaction has been initiated following the allocation of the securities to the collateral taker.
3. The TPA, on an optional basis, sends a message to the collateral giver confirming the initiation of the triparty transaction.

\* If the execution request date is in the future the TPA could forward the request to the collateral taker on the execution date.

*It is considered that in the case of initiation and increase, an alledgement message from the collateral taker (central bank) to the TPA will not be needed as increases are always accepted by the central bank.*

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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## Key Data Elements

Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Initiation</b>	Indicates that the instruction is related to an initiation of a triparty collateral transaction.	:22H::CINT//INIT
<b>Termination Date</b>	Indicates that the transaction is open-ended (relevant for transactions involving Eurosystem NCBs)	:98B::TERM//OPEN
<b>Transaction Amount</b>	Intended Transaction Amount	:19A::TRAA/3!a15d
<b>Allocated Amount</b>	Amount allocated to triparty transaction	:19A::ALAM
<b>Party A</b>	Identifier of the message sender	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Identifier of the message receiver	:95R::PTYB//[8c]/5!n

As part of the definition of the ISO20022 messages it will be analysed if ALAM and COVA means the same and only one could be used going forward.

<b>Initiation of Transaction</b>	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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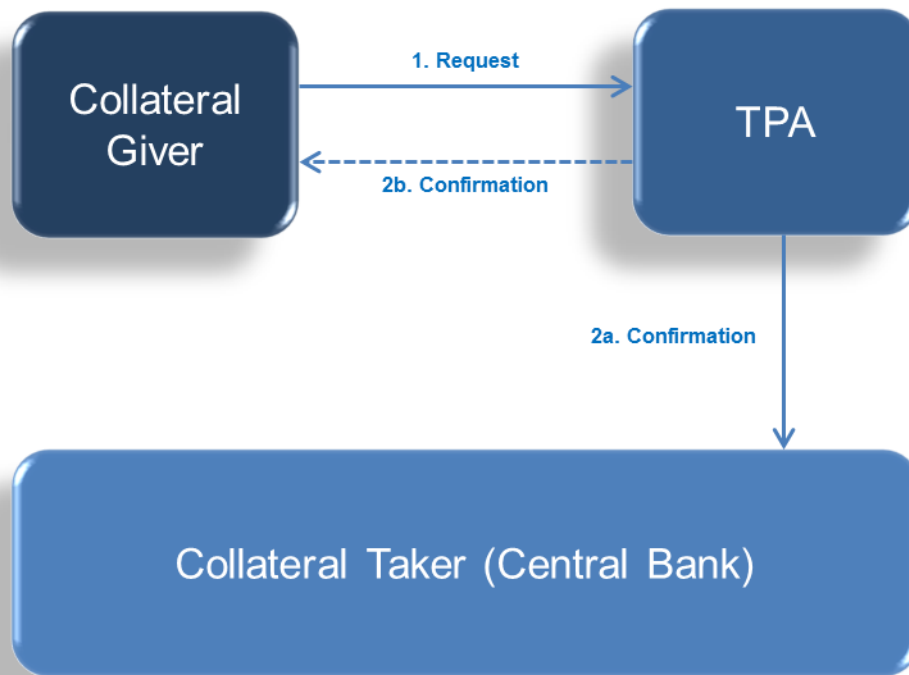
2.3.2 Increase of Transaction Amount

**Increase of Triparty Collateral Transaction**

**CMHA1 (P1.1 & P1.7)**

Business process covering the increase of a transaction amount between the collateral giver and collateral taker. The collateral giver sends a message to the TPA seeking an increase in the transaction amount held with the collateral taker. The TPA seeks to allocate securities to the extent that collateral is available. Accordingly the request to increase the transaction amount may be (i) fully settled (ii) partially settled or (iii) not settled. If insufficient collateral is available the request will remain open and the TPA will seek to increase the transaction amount as and when additional eligible securities become available.

**Workflow** | **Description of Steps**



1. The collateral giver sends a triparty instruction to the triparty agent to request an increase of the transaction amount.
2. The TPA automatically allocates eligible securities to the extent collateral is available. Three outcomes are possible:

Scenario 1: the requested increased transaction amount is immediately fully covered; in this case the TPA will send a message to the collateral taker (2a) and, on an optional basis, the collateral giver (2b) confirming the full amount allocated.

Scenario 2: the requested transaction amount cannot be covered (i.e. no (partial) collateral is available). In such case, no message will be sent.

Scenario 3: the requested increased transaction amount is not immediately fully covered, i.e., is first partially covered. In this case, the TPA will send a message to the collateral taker (2a) and, on an optional basis, collateral giver (2b) stipulating the partial amount allocated. If and when the requested transaction amount becomes fully collateralised, a message will be sent to the collateral taker (2a) and, on an optional basis, collateral giver (2b).

*If the function of the message is not taken into consideration, the treatment of Initiation or Increase should be the same and therefore these scenarios are also valid for Initiation*

Initiation of Transaction	<b>Increase of Transaction</b>	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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## Key Data Elements

### Increase Request (Step 1)

Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Principal / Exposure Adjustment</b>	Indicates that the instruction is related to a change of principal / exposure adjustment.	:22H::CINT//PADJ
<b>Termination Date</b>	Indicates that the transaction is open-ended (relevant for transactions involving Eurosystem NCBs)	:98B::TERM//OPEN
<b>Transaction Amount</b>	New Intended Transaction Amount	:19A::TRAA//3!a15d
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

### Increase Confirmation (Step 2)

Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Principal/Exposure Adjustment</b>	Indicates that the instruction is related to a change of principal/exposure adjustment.	:22H::CINT//PADJ
<b>Collateral Value</b>	Value of collateral held	:19A::COVA//3!a15d
<b>Allocated Amount</b>	Amount allocated to triparty transaction	:19A::ALAM
<b>Transaction Amount</b>	Intended Transaction Amount	:19A::TRAA//3!a15d
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

As part of the definition of the ISO20022 messages it will be analysed if ALAM and COVA means the same and only one could be used going forward.

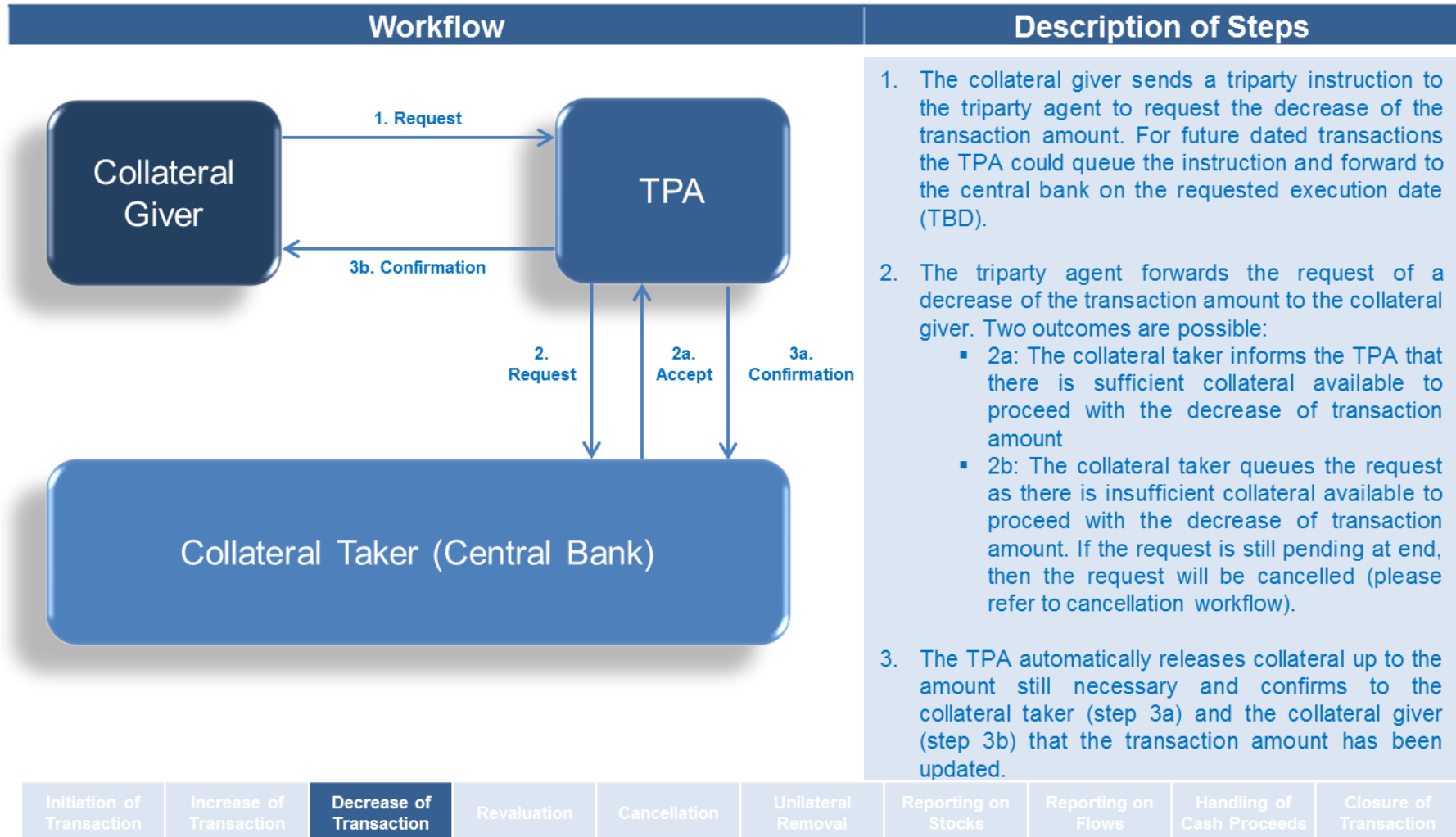
Initiation of Transaction	<b>Increase of Transaction</b>	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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Decrease of Triparty Collateral Transaction

CMHA1 (P1.2 & P1.11)

This process describes a request from the collateral giver to the TPA to decrease the triparty collateral transaction amount. The TPA sends the collateral giver's request to the collateral taker to check if the collateral giver may reduce the transaction amount. After the check of collateral sufficiency, the collateral taker sends a message to the TPA either approving or rejecting the request.



## Key Data Elements

### Decrease Request (Step 1)

Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Principal/Exposure Adjustment</b>	Indicates that the instruction is related to a change of principal/exposure adjustment.	:22H::CINT//PADJ
<b>Termination Date</b>	Indicates that the transaction is open-ended (relevant for transactions involving Eurosystem NCBs)	:98B::TERM//OPEN
<b>Transaction Amount</b>	New Intended Transaction Amount	:19A::TRAA//3!a15d
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

### Decrease Acceptance (Step 2)

Data Element	Definition	Represented in ISO Message Field*
<b>TBD</b>	TBD as part of ISO 20022 message definition process	TBD

### Decrease Confirmation (Step 3)

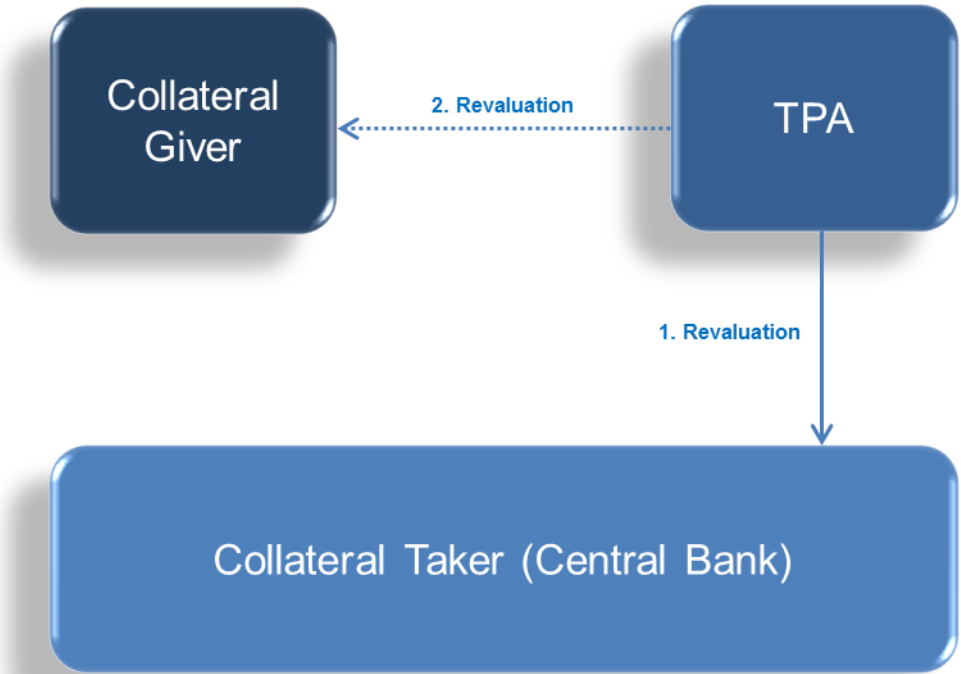
Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Principal/Exposure Adjustment</b>	Indicates that the instruction is related to a change of principal/exposure adjustment.	:22H::CINT//PADJ
<b>Collateral Value</b>	Value of collateral held	:19A::COVA//3!a15d
<b>Transaction Amount</b>	Intended Transaction Amount	:19A::TRAA//3!a15d
<b>Transaction Status</b>	Indicates if the transaction is fully covered (AOLF) or partially covered (AOLP)	:25D::TRAN//4!c
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

Initiation of Transaction	Increase of Transaction	<b>Decrease of Transaction</b>	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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Revaluation	CMHA1 (P1.3)
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Workflow by which the TPA informs the Collateral Taker (and optionally the Collateral Giver) of the new exposure amount following a revaluation of triparty positions. The collateral value may change as a result of (i) price / eligibility changes, (ii) custody events or (iii) unilateral removal of specific asset(s).

Workflow	Description of Steps
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1. The triparty agent sends intraday reports for revaluation of triparty positions to the collateral taker and the collateral taker updates the credit line of the collateral giver accordingly. The intraday reports also serve the purpose of confirming collateral allocations in case an increase instruction was partially covered / not covered; in the same manner, the collateral taker cancels and replaces the previous collateral amount.
2. The triparty agent may optionally send the revaluation statement to the collateral giver.

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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## Key Data Elements

### Revaluation (Step 1 & Optionally 2)

Data Element	Definition	Represented in ISO Message Field*
<b>Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Collateral Value</b>	Value of collateral held	:19A::COVA//3!a15d
<b>Transaction Amount</b>	Intended Transaction Amount	:19A::TRAA//3!a15d
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

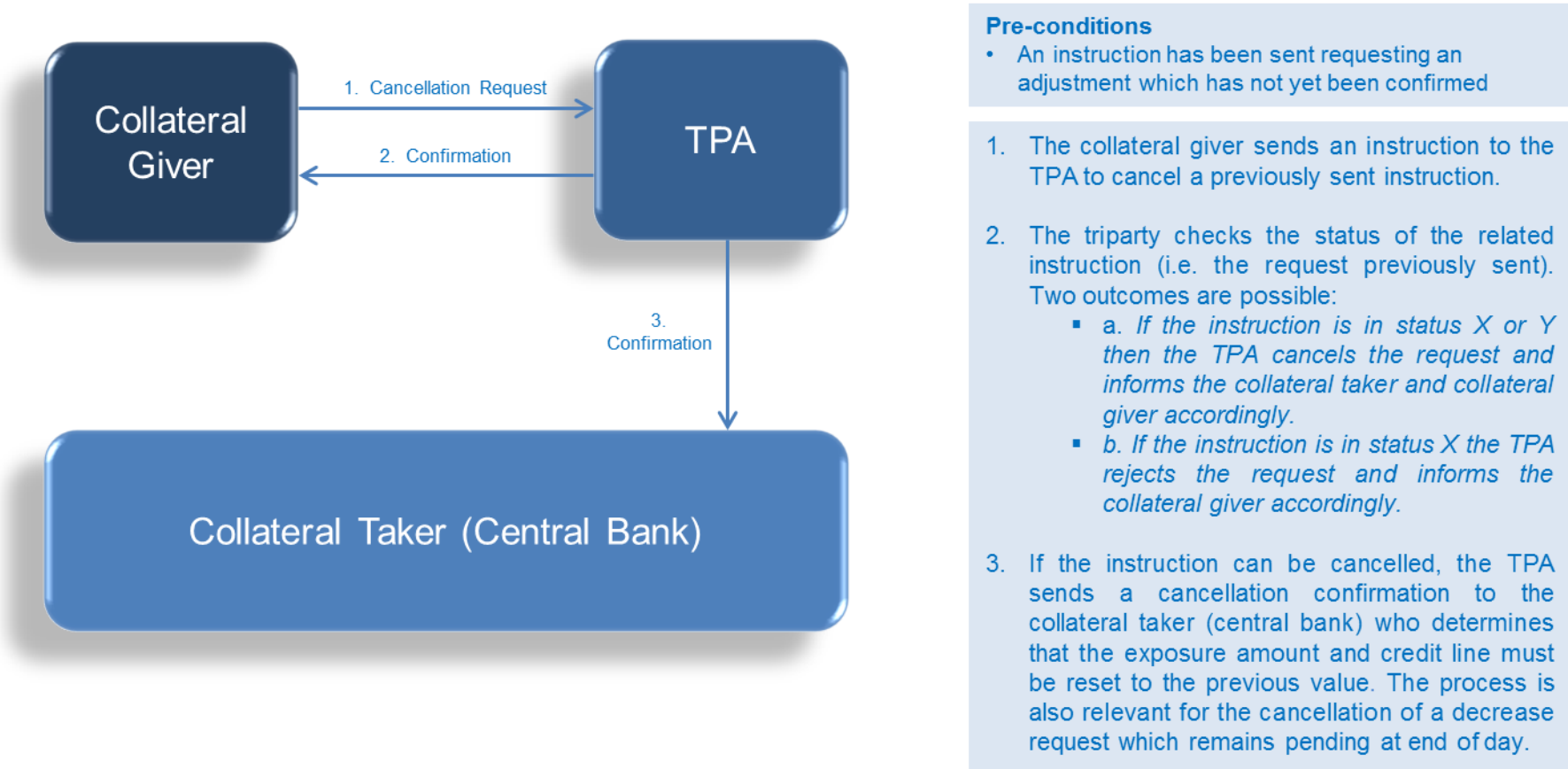
On reception of the revaluation, the collateral taker updates the exposure amount with the minimum of the Collateral Value or Transaction Amount {COVA,TRAA}

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	<b>Revaluation</b>	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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Cancellation	CMHA1 (P2.3)
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This workflow covers the cancellation of a previously received increase or decrease instruction. Instructions can only be cancelled if they are either (i) not matched or (ii) matched but the settlement date is in the future. For communication between the TPA and the collateral taker, only the decrease workflow is relevant (as the collateral taker will only be informed of a decrease).

Workflow	Description of Steps
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**Pre-conditions**

- An instruction has been sent requesting an adjustment which has not yet been confirmed

- The collateral giver sends an instruction to the TPA to cancel a previously sent instruction.
- The triparty checks the status of the related instruction (i.e. the request previously sent). Two outcomes are possible:
  - a. If the instruction is in status X or Y then the TPA cancels the request and informs the collateral taker and collateral giver accordingly.
  - b. If the instruction is in status X the TPA rejects the request and informs the collateral giver accordingly.
- If the instruction can be cancelled, the TPA sends a cancellation confirmation to the collateral taker (central bank) who determines that the exposure amount and credit line must be reset to the previous value. The process is also relevant for the cancellation of a decrease request which remains pending at end of day.

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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## Key Data Elements

### Cancellation Request

Data Element	Definition	Represented in ISO Message Field*
<b>Related Reference</b>	Reference assigned to the original instruction which is subject to cancellation	:20C::CLCI//16x
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Cancellation</b>	Indicates that the instruction is related to a cancellation.	:22H::CINT//PADJ
<b>Transaction Amount</b>	New Intended Transaction Amount	:19A::TRAA//3!a15d
<b>Party A</b>	Identifier of the message sender	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Identifier of the message receiver	:95R::PTYB//[8c]/5!n

### Cancellation Confirmation

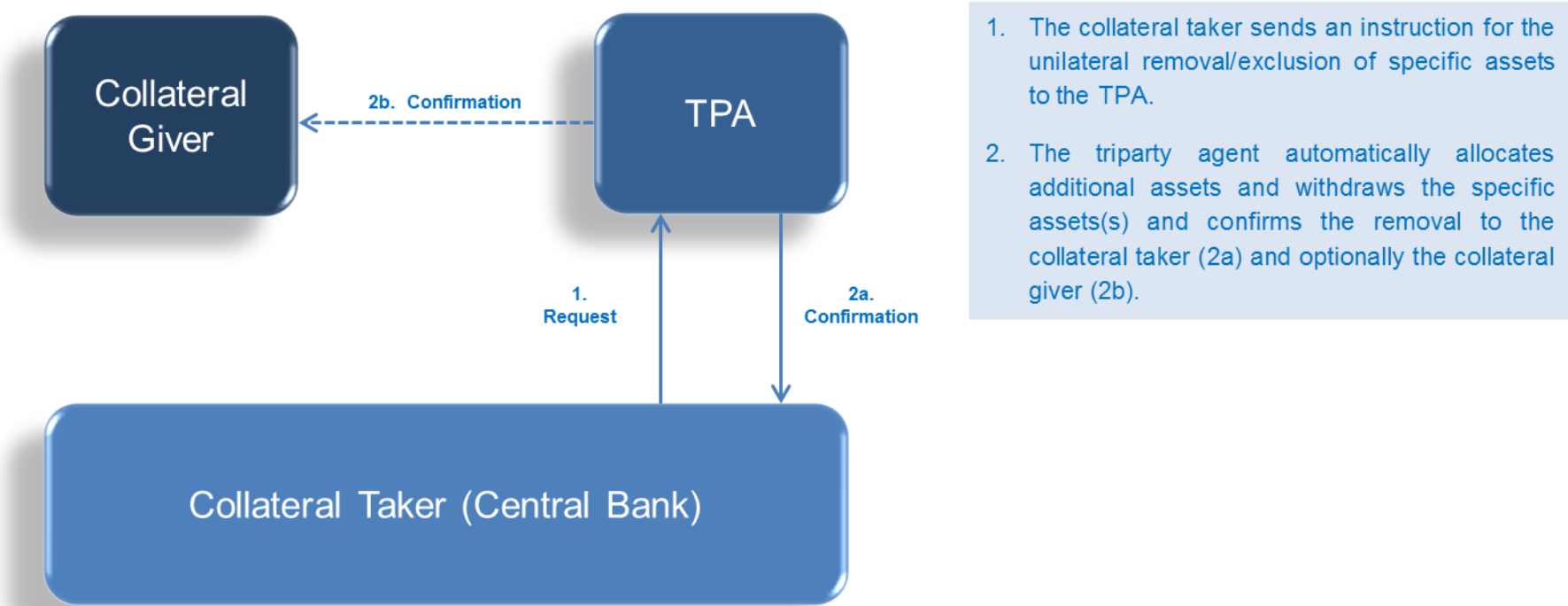
Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Transaction Status</b>	Indicates if the instruction is cancelled or not	:25D::TRAN//4!c
<b>Party A</b>	Identifier of the message sender	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Identifier of the message receiver	:95R::PTYB//[8c]/5!n

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	<b>Cancellation</b>	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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Unilateral Removal of Asset(s)	CMHA1 (P1.6)
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Workflow covering a request from the collateral taker to the TPA seeking the removal of specific asset(s) allocated to the triparty transaction which do not meet the collateral taker’s risk control criteria (e.g. concentration limit breach).

Workflow	Description of Steps
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1. The collateral taker sends an instruction for the unilateral removal/exclusion of specific assets to the TPA.
2. The triparty agent automatically allocates additional assets and withdraws the specific assets(s) and confirms the removal to the collateral taker (2a) and optionally the collateral giver (2b).

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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## Key Data Elements

### Removal Request (Step 1)

Data Element	Definition	Represented in ISO Message Field*
<b>Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	NEW
<b>Removal of Securities</b>	Indicates that the instruction is related to a request to remove specific assets(s) from the collateral pool.	NEW
<b>ISIN</b>	List of securities which should be excluded from the collateral pool	NEW
<b>Reason Code</b>	Reason for removal of assets	NEW
<b>Safekeeping Account</b>	Account where financial instruments are maintained	NEW
<b>Ineligibility Start Date</b>	Start date from which the asset should be excluded from the collateral pool	NEW
<b>Ineligibility End Date</b>	End date from which the asset should be excluded from the collateral pool	NEW

### Confirmation of Removal Request (Step 2)

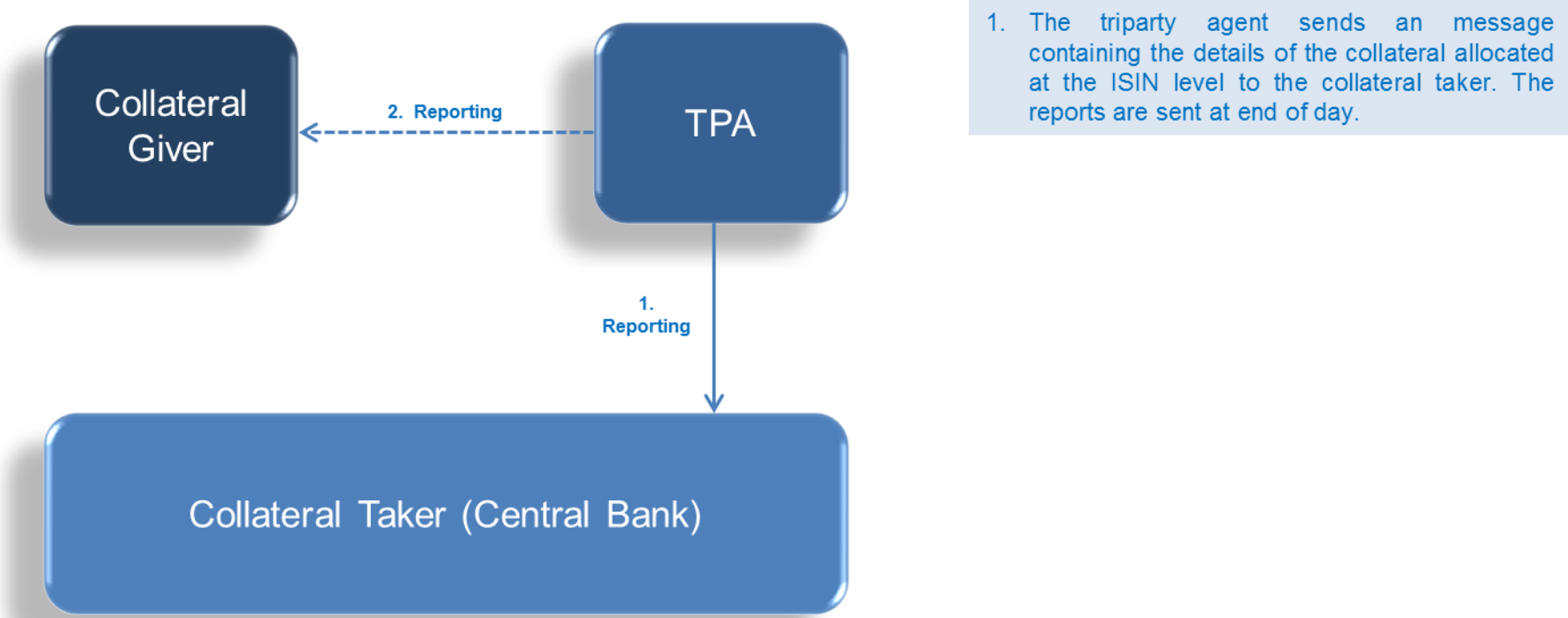
TBD – message should confirm the processing of the removal request

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	<b>Unilateral Removal</b>	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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Reporting on Stocks	CMHA1 (P1.5)
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Report containing the global collateral status of all transactions, in the reporting currency, that is, the total of the exposure amount, of the posted collateral, of the margin amounts, of the accrued interest, of the fees or commissions and of the principals. In addition, it provides collateral-specific information.

Workflow	Description of Steps
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1. The triparty agent sends an message containing the details of the collateral allocated at the ISIN level to the collateral taker. The reports are sent at end of day.

*It is expected that the message used will be similar to the revaluation message*

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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## Key Data Elements

### Reporting on Stocks (Step 1)

Data Element	Definition	Represented in ISO Message Field*
<b>Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Statement Basis</b>	Indicator of the frequency with which the report is sent	:22F::STBA//
<b>Transaction Amount</b>	This field contains the Intended Transaction Amount	:19A::TRAA/EUR
<b>Collateral Value</b>	This field contains the Aggregate Margined Value of all assets delivered as collateral in all transactions with the given Counterparty in the given Exposure Type, expressed in the Reporting currency.	:19A::COVA/EUR
<b>ISIN</b>	This field contains the identification and description of the financial instrument (ISIN or Common Code).	:35B::ISIN//
<b>Quantity of Securities Valued</b>	This field contains the quantity of collateral or loaned securities, with quantity type code FAMT for debt and UNIT for equities	:36B::SECV//
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

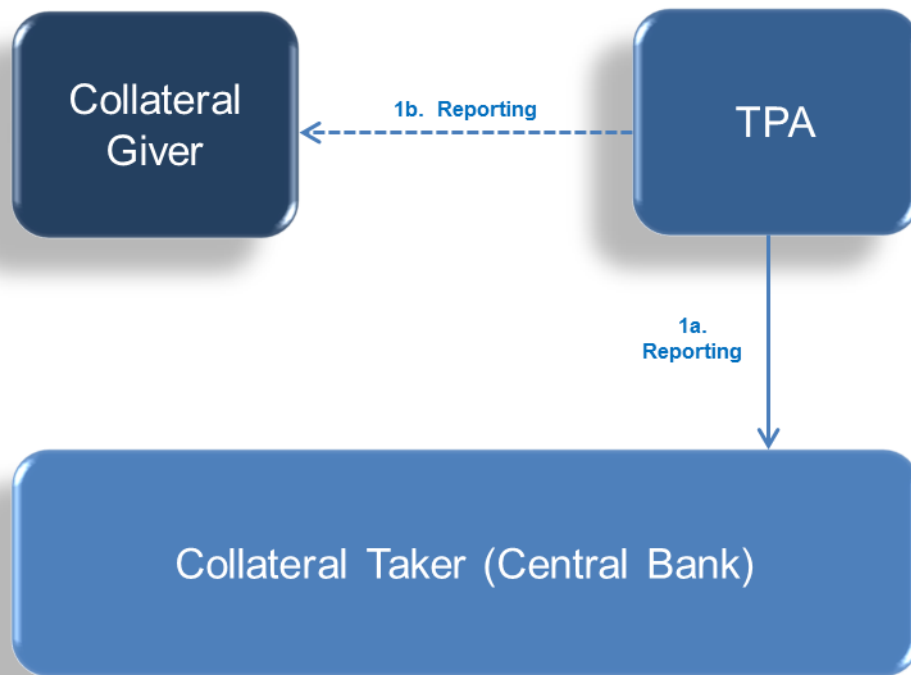
The collateral taker should use the min. value of [TRAA, COVA] fields as the new collateral value. > this value could be added as a dedicated field in the new ISO 20022 message.

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	<b>Reporting on Stocks</b>	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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### 2.3.8 Reporting on Flows

Reporting on Flows	CMHA1 (P1.8)
<p>A report 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. After each allocation cycle, if the composition of the triparty collateral pool changes, the TPA will send information in an ISO 20022 message on the security movements i.e. the securities added or removed from the triparty pool. The message will identify the ISIN and the Quantity of the ISIN added/removed.</p>	

Workflow	Description of Steps
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1. After each allocation run, in case a security movement has occurred, the TPA will send a triparty message informing the collateral taker (and optionally the collateral giver) of the ISIN and Quantity added/removed from the collateral pool.

*The possibility to have a single reporting message containing information on stocks and on flows will be further analysed. The reporting on flows message could also be used to provide real-time information*

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	Closure of Transaction
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## Key Data Elements

### Reporting on Flows (Step 1)

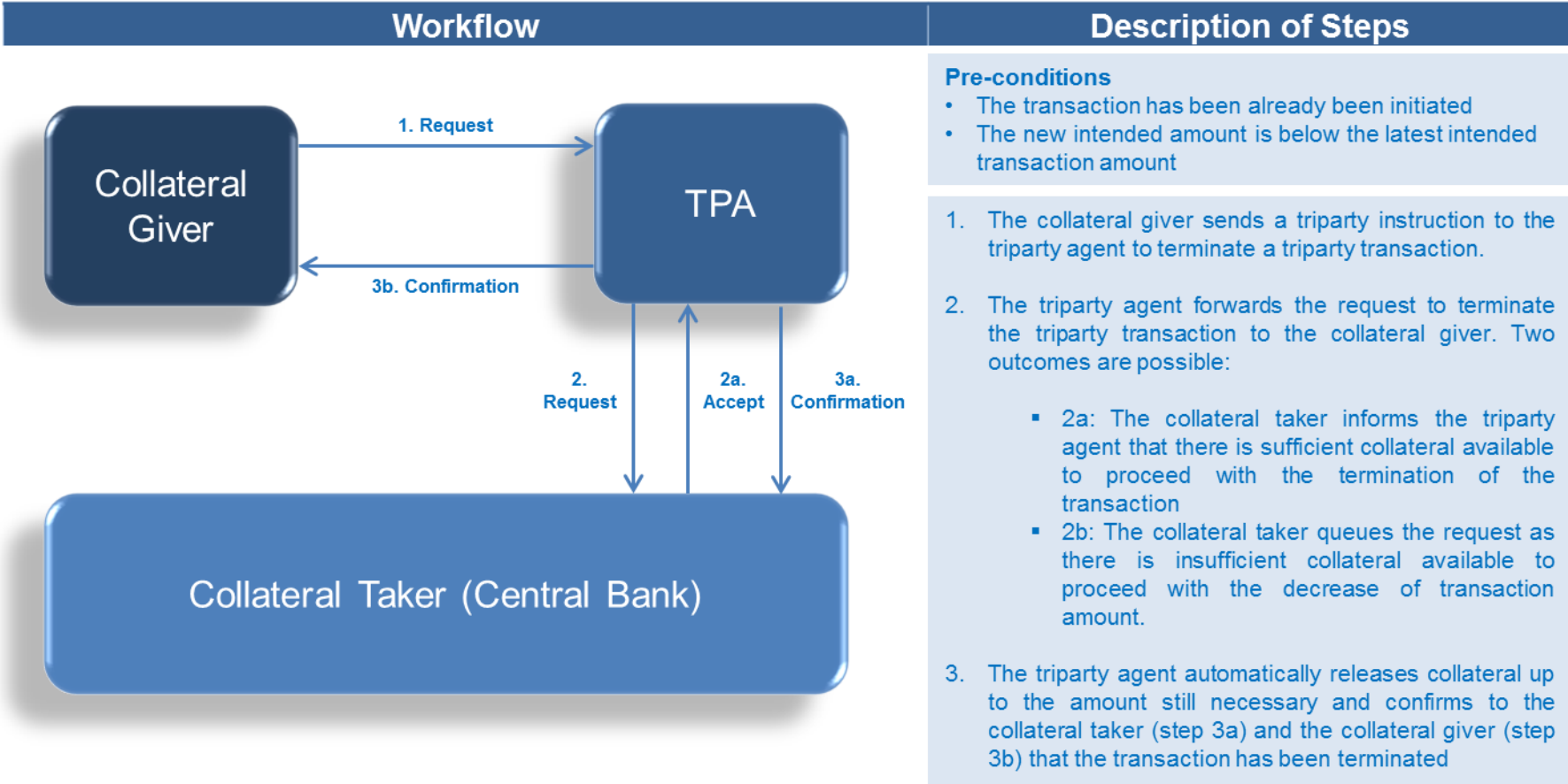
Data Element	Definition	Represented in ISO Message Field*
<b>Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>ISIN</b>	This field contains the identification and description of the financial instrument (ISIN or Common Code).	:35B::ISIN//
<b>Quantity of Securities Valued</b>	This field contains the quantity of collateral or loaned securities, with quantity type code FAMT for debt and UNIT for equities	:36B::SECV//
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	<b>Reporting on Flows</b>	Handling of Cash Proceeds	Closure of Transaction
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Closure of Triparty Collateral Transaction

CMHA1 (P2.2)

This process describes a request from the collateral giver to the TPA requesting a termination of a triparty collateral transaction. The TPA sends the collateral giver's request to the collateral taker to check if the collateral giver may terminate the transaction and thus reduce the exposure amount to zero. After the check of collateral sufficiency the collateral taker sends a message to the TPA either approving or rejecting the request.



Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	<b>Closure of Transaction</b>
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## Key Data Elements

### Closure Request (Step 1)

Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Termination</b>	Indicates that the instruction is related to the closure of a triparty transaction	:22H::CINT//TERM
<b>Termination Date</b>	Indicates that the termination date of the transaction	:98A::TERM//
<b>Transaction Amount</b>	New Intended Transaction Amount (equal to zero)	:19A::TRAA//3!a15d
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

### Closure Acceptance (Step 2)

Data Element	Definition	Represented in ISO Message Field*
<b>TBD</b>	TBD as part of ISO 20022 message definition process	TBD

### Closure Confirmation (Step 3)

Data Element	Definition	Represented in ISO Message Field*
<b>Sender's Collateral Transaction Reference</b>	Unique reference identifying the collateral management transaction from the collateral taker's point of view	:20C::STCR//16x
<b>Principal/Exposure Adjustment</b>	Indicates that the instruction is related to a change of principal/exposure adjustment.	:22H::CINT//PADJ
<b>Collateral Value</b>	Value of collateral held	:19A::COVA//3!a15d
<b>Transaction Amount</b>	Intended Transaction Amount	:19A::TRAA//3!a15d
<b>Transaction Status</b>	Indicates if the transaction is fully covered (AOLF) or partially covered (AOLP)	:25D::TRAN//4!c
<b>Party A</b>	Instructing party sending the collateral instruction.	:95R::PTYA//[8c]/5!n
<b>Party B</b>	Counterparty of party A.	:95R::PTYB//[8c]/5!n

Initiation of Transaction	Increase of Transaction	Decrease of Transaction	Revaluation	Cancellation	Unilateral Removal	Reporting on Stocks	Reporting on Flows	Handling of Cash Proceeds	<b>Closure of Transaction</b>
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### 3 ISO 20022 Messaging

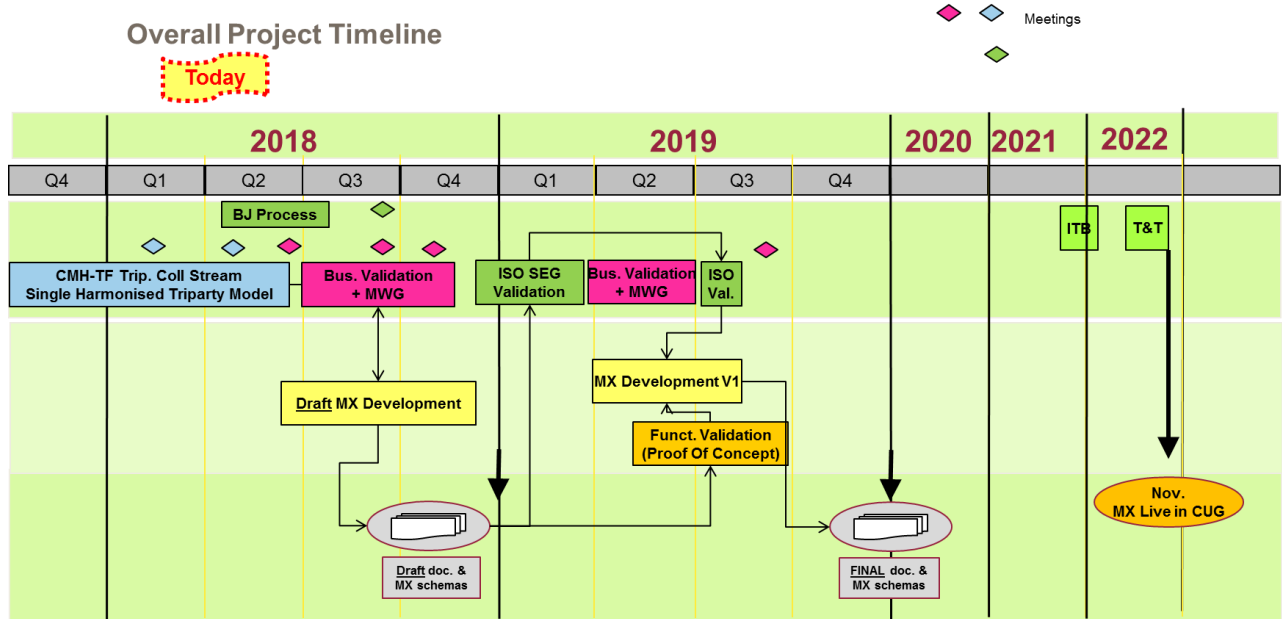
As part of the next phase of the harmonisation of triparty collateral management, ISO 20022 compliant messages will be developed / existing ISO 15022 messages be reverse engineered to support the transmission of the relevant data elements for each of the harmonised business processes and workflows identified above. To support this exercise, SWIFT, as a member of the AMI-SeCo CMH-TF, will:

- design the ISO 20022 messages with mapping to ISO 15022 in mind to ensure the same levels of STP as today.
- make sure the ISO 20022 functionality covers the functionality available in ISO 15022 during the coexistence period.
- include any additional functionalities missing today, solve existing issues and cater for any gaps with the ECMS requirements.
- ensure the ISO 20022 philosophy principles. ‘One function, one message’ are respected. There should be one way to process a specific functionality (there should not be 2 ways to do the same thing), reusability of messages and existing components when creating new messages.
- synchronise the maintenance between use of the ISO 15022 standard and the use of the ISO 20022 standard in terms of timing, review process and content.
- provide coexistence support, e.g., the necessary mapping/translation documentation - TBD.
- ensure SMPG market practices are adhered to.
- ensure additional requirements identified by harmonisation initiatives are included, in both ISO 15022 and ISO 20022.
- ensure additional requirements identified by regulatory initiatives are included, in both ISO 15022 and ISO 20022 (i.e. LEI).

The timeline for the development of these messages together with the identification of key actors involved is presented below:

<b>Actor</b>	<b>Action</b>	<b>From - To</b>
CMH-TF	<b>Single harmonised triparty model</b>	January 2018 - June 2018
CMH-TF (SWIFT)	<b>ISO 15022 reverse engineering high level process</b>	April – June 2018 [tbc]
CMH-TF (ECMS and SWIFT)	<b>Business justification process</b>	April 2018 - July 2018 [tbc]
RMG1	<b>Business justification approval</b>	September 2018 [tbc]
CMH-TF (ECMS and SWIFT)	<b>Draft messages development</b>	June 2018 - December 2018
SEG3 (setting up of an evaluation team)	<b>Message final approval</b>	1st quarter 2019

Diagram 1: ISO 2022 Messaging Process Draft Timeline



## Annex 1: Terminology

Terminology: Triparty Collateral Management	
Name	Description
Triparty Agent (TPA)	The triparty service provider (referred to as “triparty agent” or “TPA”) responsible for the processing of instructions on behalf of both collateral giver and the collateral taker
Triparty Collateral Management Services (TCMS)	Triparty collateral management services (TCMS) provided by triparty agents (TPAs) allow counterparties to optimise the use of their portfolios of securities when collateralising credit and other exposures across different products and instruments (e.g. repo, securities lending, central bank credit, secured loans, and exposures arising from over-the-counter 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 actions processing
Triparty Transaction	A transaction created by the triparty agent upon receipt of the deal information from the two trading parties. A transaction is created, can be changed and is terminated.
Lifecycle of Triparty Transaction	When a transaction is initiated, agreed on by both parties, accepted and declared valid by the triparty agent, 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	The trading parties will request the triparty agent to perform certain instructions on the collateral management transaction. An instruction can be to initiate a transaction, modify the terms of a transaction, or close a transaction (non-exhaustive list of instructions). The triparty agent will send feedback on the requested instruction.
Lifecycle of Triparty Instruction	The lifecycle of a triparty instruction starts when the user of the triparty service sends an instruction message. At receipt of the instruction message, the triparty agent will process the instruction and assign a status (that is, 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, two initiation- instructions from party A and B need to match) it can have a 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.