CBF Release Information November 2018

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Foreword

Clearstream Banking AG, Frankfurt informs customers about the content of the releases that will be introduced in November 2018.

Based on the preannounced release plan, CBF will introduce enhancements in November 2018.

The deployment for the enhancements in the T2S and CBF software will be delivered on

Saturday, 17 November 2018 for business day Monday, 19 November 2018.

This document:

- Defines the scope of the T2S Release 2.2 and the CBF Release November 2018;
- Outlines required customer readiness activities; and
- Shows the further steps related to the CBF customer simulation.

Further information

For further information about our products and services, please visit our Website www.clearstream.com or contact Clearstream Banking Client Services or your Relationship Officer. Particular questions will be routed to the experts of the T2S Settlement Functionality team.

You will find the relevant contact details on our website under Contacts & Client Services.

Recorded telephone conversations may be listened to in order to:

- Clarify a sequence of events in cases of complaint or doubt from either party to a conversation that could lead to financial or any other damage;
- Enable the temporary supervision of calls while they occur, upon consent of the involved parties, to ensure the delivery of expected levels of professionalism, quality and service to customers.

The recorded telephone lines are the subject of an ongoing formal maintenance and quality control programme to ensure their continued effective and appropriate deployment and operation.

The recordings are kept on tape for a period of two years.

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Contents

Fore	word	iii			
Furth	ner information	iii			
1.	Introduction	7			
2.	Scope of T2S Release 2.2	8			
3.	Scope of CBF Release November 2018	9			
4.	CBF Instruction Management (CASCADE)	11			
4.1	CASCADE-LION Online queries - Usage of T2S "MITI"	11			
5 .	Cross-border Settlement Services	12			
5.1	Modification of the instruction management with DTCC	12			
6.	CBF registered shares service	15			
6.1	Introduction of the Legal Entity Identifier (LEI)	15			
7 .	Connectivity	18			
7.1 7.2	Validation for release requests	18 19			
8.	Custody	20			
8.1 8.2	Requirements related to the German withholding tax				
9.	Admission procedure	24			
9.1 9.2	OTC Reinstruction Procedure – Update "Subsequence Reason" Validation of eligibility criteria				
10.	Customer simulation activities	30			
11.	CBF Customer readiness plan	31			
Appe	endix A - CASCADE-LION screens related to "KVLI"	32			
Appendix B – CASCADE-RS sample "MT500"					
Appendix C - CASCADE-RS screenshot "KVCU"					
Appendix D – CASCADE-RS reporting					
Appendix E - Securities Static Data Concept					

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1. Introduction

With the Release November 2018, CBF will provide functional enhancements for the services of various business areas. In addition to these enhancements, CBF will also update applications that are available for T2S or SWIFT and, if necessary, enhance them according to the requirements.

The scope of the release is defined in chapter 3. Customers will find a table that provides an overview of the enhancement by business area and shows whether customer acting as indirectly connected participant (ICP) or directly connected participant (DCP). Customers are recommended to validate these scope elements and need to check whether operational and / or functional modifications in their procedures are required.

CBF will enable a dedicated customer simulation for the CBF software changes. The first details about the customer simulations activities are highlighted in the chapter 10. In addition, details about the customer readiness activities are outlined in the chapter 11.

Additionally, T2S announced software modifications that will provide a resolution of T2S Problem Tickets (PBIs). CBF's assessment related to these Problem Tickets shows that the fixes will not require software changes in CBF. Chapter 2 provides the latest information about the related PBIs that might have impact on CBF's customers acting in ICP and / or DCP mode.

The installation of the CBF Release and T2S Release 2.2 in November 2018 is foreseen on Saturday, 17 November 2018 for the business day, Monday, 19 November 2018. The deployment of the release will have no impact on the T2S or CBF Operational Day.

2. Scope of T2S Release 2.2

Based on the <u>T2S Release Concept</u>, T2S recently decided to deploy the resolution for four T2S Problem Tickets (PBIs) with the Release in November 2018. In case of urgency and if priority is given, the T2S Settlement Managers can request further functional updates. If changes in the scope of Release 2.2 are announced by T2S, CBF will update this Release Information in due time.

After the successful completion of the different test phases, the Market Infrastructure Board (MIB) can approve the production launch on 7 November 2018.

Reference	T2S PBI Title	ICP / DCP	T2S PBI Short Description
PBI 203093	Business Rule MVSQ608 ("In case of a partially settled Settlement Instruction with exchange of securities and not related to a 'Corporate Action', the remaining Settlement Quantity must be equal to or greater than the Minimum Settlement Unit specified in T2S. ") is communicated to one counterpart, only.	Both	If during the Start of Day Revalidation process of recycled settlement instructions, a transaction is cancelled due to the fact that the remaining quantity to be settled is less than the "Minimum settlement Unit" specified for that ISIN, T2S erroneously communicates the feedback (MVSQ608) to one counterparty only.
PBI 202949	No partial settlement takes place during partial settlement window.	Both	If at the opening of the Partial Settlement Window a settlement instruction fails due to lack of securities, the recycling process might not consider this instruction as a "candidate for recycling" within the optimation process.
PBI 203003	Pending instruction received incorrectly the reason code SXAA018 ("The settlement attempt of a settlement instruction or settlement restriction fails if the settlement attempt of settlement instruction or settlement restriction, linked by a T2S Actor or automatically linked by T2S, has failed.")	Both	An erroneous error code was transmitted for an unsettled Settlement Instruction (SI). Even though this instruction was not linked with any other SI, the SI was reported pending with a reason text SXAA018. This issue occurs during the NTS processing, when the related SI has a lack of cash but there is no lack of securities.
PBI 203236	Bulk instructions on the same ISIN, nominal and counterparty did not match or settle as expected	Both	The T2S matching algorithm compares new Settlement Instructions (SI) with the repository of unmatched SIs in order to get a new instruction matched. If a very high volume of incoming SI with similar characteristics is transmitted, and they are all eligible to match among the other incoming SI, some of these SIs may erroneously remain unmatched even when there are still settlement instructions eligible for matching in the repository.

Table 1: List of T2S PBIs to be deployed with T2S Release 2.2 as of 7 August 2018

3. Scope of CBF Release November 2018

CBF informs customers about the content of the CBF Release in November 2018. The table on the next page provides an overview of the service enhancements in various business areas. The modifications might impact functional and organisational procedures of CBF customers. Therefore, we ask our customers to assess the CBF implementation requirements.

3. Scope of CBF Release November 2018

Business area	Modification / enhancement	Impact on ICP / DCP	Comment	
CBF Instruction Management (CASCADE)	CASCADE-LION Online queries - Usage of T2S "MITI"	ICP, if the CASCADE Online is used	Service upgrade; optional use	
Cross-border Settlement Services	Modification of instruction management with DTCC	Both	Mandatory requirement of DTCC	
CBF registered shares Processing	Introduction of Legal Entity Identifier (LEI)	ICP, if CASCADE-RS services are used	Service upgrade; optional use	
Connectivity	Validation for release requests	ICP, if automated connectivity channel is used	Mandatory requirement based on SMPG	
	CASCADE-PC update	ICP, if the CASCADE-PC is installed	Mandatory installation of CASCADE-PC version 9.5	
Custody	Requirements related to German withholding tax	Both	Service upgrade; optional use	
	Requirements related to European Central Securities Depositories Regulation (CSDR)	Both	Mandatory requirement	
Admission procedure	CBF as Issuer CSD: "OTC Reinstruction Procedure" - Processing settlement for non-issued securities	ICP	Service upgrade; enhancement of settlement functionality for the German market	
	CBF as Investor CSD: Validation of eligibility criteria	Both	Service upgrade; enhancement of settlement functionality for the German market	

Table 2: Overview of the service enhancements

The modifications and enhancements listed in the above-mentioned table are described in the following sections. Each section has the following structure: For each "Business area" a small introduction is given. Within this area, the enhanced functionality is outlined. Hereby, it shows the description of the changes and if applicable, provides indications on the potential customer impact.

4. CBF Instruction Management (CASCADE)

CBF's range of services offers products for various business areas. Settlement services are provided via the CASCADE application. Independent of the business case, CASCADE allows customers to keep track of the status of their settlement instruction.

The CASCADE instruction types developed by CBF and the related ISO transaction codes were adapted for the migration to T2S in order to allow the use in ICP and / or DCP mode. CBF customers can submit instructions via automated connectivity channels (in Straight-Through-Processing (STP) mode as well as via the CASCADE online functionality.

4.1 CASCADE-LION Online queries - Usage of T2S "MITI"

T2S creates for each instruction a unique identifier for further processing on T2S. This reference is called "Market Infrastructure Transaction Identification (MITI)". According to the T2S specification, the number is defined as a 16-character field. At T2S, the "MITI" serves as the attribute to amend, hold / release or cancel an instruction.

CBF informs customers about the "MITI" in the message types related to the settlement reporting, the CBF print reports and via the CASCADE Online functionality (HOST / PC). This unique reference allows the customer and its counterparties the usage of a common identifier to verify or reconcile instruction details.

In May 2018, CBF enhanced the CASCADE Online query functionality for OTC instructions to allow a search using the "MITI". With the release in November 2018, this search functionality will be also available for non-CCP stock exchange trades (LION instructions).

Description of the changes

Customers using the CASCADE Online functionality (HOST / PC) will find the T2S reference "Market Infrastructure Transaction Identification (MITI)" on the detailed screens of each settlement instruction. In order to allow customers a dedicated search with a "MITI" the online query functionality for LION instructions will be enhanced. A sample of the updated screen ("TRAN: KVLI") can be found in Appendix A.

In future, the screen will show a new field to enter the "MITI". The "MITI" can be entered for the related customer accounts. This means, that if a third-party relationship (Head Office) has been entered in the static data of an account master, the respective accounts will be considered in the query. If the entered "MITI" does not belong to the CBF account master, CASCADE will display "KV0022I no data available for selection criteria".

Customers using:

• The CASCADE Online functionality HOST will find on the transaction screen "KVLI" a new line: "IR = Reference".

The default value "M = MITI" can be overwritten. It should not be changed however, as a change will create an error message. The new function code "IR" serves as an expert shortcut in the transaction line.

• PC (version 9.5) will find on the screen "Stock Exchange transactions display" a new search criteria "MITI reference" which can be used to retrieve the stock exchange trade.

Potential customer impact

The usage of the query functionality regarding "Market Infrastructure Transaction Identification (MITI)" depends on the requirements of the customer. This query enhancement will be deployed as an optional service offering. Customers must consider that the CASCADE access management (user rights) has to be enabled according to their internal requirements.

5. **Cross-border Settlement Services**

Clearstream Banking has a wide network of direct and indirect depositories. With the migration to T2S, the T2S concept of In- and Out-CSDs was established. Cross-border instructions on T2S are processed via omnibus and mirror accounts, which are set up in cooperation with the associated central securities depositories.

The processing of cross-border transactions with a T2S Out-CSD requires, on the one hand, the configuration of the processing parameters on T2S and, on the other hand, a direct link to the Out-CSD. When using the T2S Out-CSD concept, the final settlement must be achieved on the external settlement platform of the depository before CBF can release the successful settlement on T2S.

In order to maintain an efficient link to an Out-CSD, the local requirements for the external processing platform are regularly analysed by CBF in order to be able to support the service enhancements of this system and the related settlement procedures.

Modification of the instruction management with DTCC 5.1

In 1992, the Depository Trust & Clearing Cooperation, New York (DTCC) and CBF established their cross-border link for free of payment instructions using the Buyer link concept. This link has been maintained for more than 25 years and was configured with the migration to T2S on the new settlement platform with the accompanying parameters.

DTCC announced that their existing connectivity channel will be renewed and requested CBF to the upgrade the connectivity setup. In addition, DTCC will extend the current pool of account numbers and update all business application to support an alphanumeric account number format.

In future, both requirements will be considered in the configuration of the direct link between CBF and DTCC. The implementation phase started and the roll will take place on a dedicated migration date. This date is currently being agreed and will be announced once both parties conducted an extensive testing. As soon as the migration concept is approved, customers will be informed of further details in due time.

Description of the changes

Even if the message flow between DTCC and CBF and the format of the account numbers change, DTCC has confirmed to keep the validation of eligible CBF participant account master numbers as well as validation of eligible securities. CBF will also maintain the validation of DTCC account numbers and eligible securities. Additionally, the technical communication between CBF and T2S related to the T2S Out-CSD setup for DTCC remains unchanged. Settlement instructions can be transmitted or entered in ICP and DCP mode as today, there will be no changes in the instruction format for customers.

DTCC account number format change

The changes in the format of DTCC account numbers also impact CBF customers. DTCC will enhance the existing account number logic which is a 4-digit (numeric) ID format to a 4-character (alphanumeric) upper-case identifier.

CBF holds an omnibus account (with account number 2000) at DTCC for U.S. and Canadian securities, which is mirrored in CBF on account master 7911. Starting 19 November 2018, CBF customers must specify the DTCC account identifier with a proper 4-character length. Moreover, any identifier must have four characters, for example "0005" instead of "5" must be entered. If this format specification is not taken into account, the instruction is rejected.

Additionally, to reduce the number of system reclaims by DTCC, CBF will continue validating the participant data at DTCC. Cross-border instructions (instruction type "AA01") against DTCC will be rejected by CBF if the DTCC securities account of the receiving party ("RECE P1") is not stored as participant. Also, for the depositories of DTCC1, cross-border instructions will be rejected by CBF, when the client of the depository is not mentioned as a settlement party ("RECE P2").

¹ For example the Canadian central securities depository (CDS)

Account setup at DTCC for German securities in the DTCC environment

DTCC maintains an omnibus account (7211) at CBF for German (DE) securities, which is mirrored in DTCC using account 6200. A peculiarity for DTCC participants is that no instructions can be entered against account 6200. Instead, DTCC participants are currently required to enter instructions against account 2000, while DTCC takes care of the necessary securities transfer from account 2000 to 6200. With the introduction of the system upgrade in DTCC, DTCC participants must deliver DE securities to account 6200, deliveries against account 2000 will be rejected. CBF customers should inform their counterparties of this change in order to reduce the risk of settlement fails due to automated rejections by DTCC.

Message flow with DTCC

For securities issued by DTCC, the delivery from DTCC is implemented as "Dump". CBF generates the necessary match instruction on behalf of customers and transmits these instructions to T2S. The match instruction will be created on behalf of customers independently of the account configuration regarding active or passive matching. If the securities delivered via DTCC were not expected by the customer, the customer can set up the redelivery – known as reclaim instruction – in ICP or DCP mode.

If customers wish to initiate a reclaim, a standard delivery instruction free of payment (DFoP) must created and the DTCC Reclaim Reason must be provided. Customers need to flag the instruction with the related "Übertragungsgrund" (Ueb-Grund 901). CBF recommends that a free-text information (:70E::SPRO//) will be added to mention the reclaim reason. The already existing <u>reason codes</u> remain unchanged.

DTCC requires the reference from the originator of the instruction to allow a proper settlement of the reclaim that needs to be entered as "REFERENZ-NR". The field "REFERENZ-NR" will become mandatory if Ueb-Grund 901 is used. CBF customers will find the "DTC IMS Transaction ID" of the original DTC delivery instruction in the CASCADE field REFERENZ-NR that corresponds to reference field :20::COMM presented in CBF outbound messages. (Sample :COMM//C7C1234567C901D).

Migration approach

The format of the DTCC account number will be modified with the CBF Release Weekend. From 19 November 2018, CBF customers must address their counterparties in the new 4-character (alphanumeric) format.

To enable a successful migration of the updated connectivity link CBF and DTCC will perform a number of transition tasks before the go-live can be confirmed. With the CBF Release in November 2018, all relevant enhancements will be technically implemented and can be activated at any time. The deployment date is currently aligned with DTCC.

After the migration, counterparties of CBF customers need to consider the following changes with respect to the CBF accounts identifiers at DTCC. DTCC will conduct a validation of the security in the settlement instructions for accounts 2000 and 6200. With the execution of the migration, DTCC customers need to deliver instructions in DE securities directly towards account 6200 and no longer towards account 2000. If the account change is not considered the instruction will be rejected by DTCC.

Potential customer impact

With the implementation of the CBF Release in November 2018, CBF customers need to consider DTCC's future alphanumeric account identifier and may have to check their setting in standing instructions. The DTCC account number, previously stored in CBF as a 5-digit (numeric) format, becomes a 4-character (alphanumeric) upper-case identifier. The existing numeric values are converted into the future format. In addition, in preparation for the changes in the message flow with the DTCC, customers are asked to check the use of the party levels and, if necessary, to modify them as described above.

The modification of the message flow with the DTCC will be implemented at the beginning of 2019. Customers should inform their counterparties at DTCC that they need to respect the change of the CBF account for DE securities.

5. Cross-border Settlement Services

In line with today's procedure, customers are requested to enter a reclaim reason for the return of unknown security positions (receipts), if not already established in their instruction management.

After the migration date has been agreed with DTCC, CBF will inform customers in due time.

6. CBF registered shares service

CBF offers customers a comprehensive service of registered shares held in collective safe custody (CSC). This allows financial institutions to present shareholder data to the company responsible for maintaining the share register. CBF customers can register or transfer shareholder data to the issuer's registrars, independently of the settlement processes in CASCADE or T2S.

Customer instructions for (re-)registrations and position transfers for processing in CASCADE-RS can either be entered directly in CASCADE-RS, sent via the automated connectivity channels or uploaded via the web-based Investors Portal as Excel or CSV files.

6.1 Introduction of the Legal Entity Identifier (LEI)

CBF started in 2017 with enhancements related to the Legal Entity Identifier (LEI)². Existing applications are being updated to support the 20-character code that identifies distinct legal identities that are engaged in financial transactions.

Based on the new requirements defined in the EU Shareholder Rights Directive II (SRD II)³, companies should be able to identify and obtain information regarding shareholders. As a consequence, the LEI will be introduced in CASCADE-RS.

Customers acting in ICP mode will be enabled to enter the LEI when they send any type of registration orders towards CBF. Hence, the customer outbound functionalities and the CASCADE Online functionalities will be enhanced. In addition, the feedback transmitted by CBF to customers will be enhanced where possible to contain this data.

CBF informed the third parties that maintain the share register about the functional enhancement to allow an update of their systems and services. The LEI information will be transmitted to the registrar and hence is available for an end-to-end processing. A list of <u>registered shares in collective safe</u> <u>custody</u> is available on the Clearstream website (only visible if logged in as Premium user).

The enhanced service will not impact the processing with T2S. Currently in CASCADE-RS related settlement restrictions (semt), no information on beneficial owners or trustees / third parties is transmitted to the platform.

Description of the changes

CBF is going to update its connectivity channels allowing customers to enter the (LEI in CASCADE-RS instructions. Customers acting in ICP mode can use a connectivity channel that is suitable for their needs. Therefore, the automated connectivity channels (SWIFT, MQ and File Transfer) and the CASCADE Online functionality (HOST / PC) will be enhanced.

• Customers using SWIFT, MQ or File Transfer (A2A)

In line with the SWIFT standards for Instruction to Register (MT500), Modification of Client Details (MT519) and Confirmation of Registration or Modification (MT501), CBF can support the transmission of the LEI in the "Optional Subsequence C2 Personal Details" using the field :70C: "Additional Text" with the format :70::ADTX//:4!c//1*35x. The qualifier is "LEID"

Even though no dedicated tag is currently available in the SWIFT message, the entry of a valid format for the LEI is required. In this respect, new error codes will be implemented. Please see below for additional information.

Although the LEI will be introduced as an additional identifier, the previous shareholder information will be required. This means that all currently valid mandatory fields in the above-mentioned message types remain unchanged. An extract is available for the MT500 in Appendix B.

² The format description is available on https://www.gleif.org/en/about-lei/iso-17442-the-lei-code-structure#.

³ More information is available on http://europa.eu/rapid/press-release MEMO-17-592 en.htm.

6. CBF registered shares service

Customers using the CASCADE Online functionality (HOST / PC)

The CASCADE-RS screens (U2A) will be updated in order to incorporate the information on LEI for legal entities. On all screens for the management of shareholder data, that is:

- Transaction "KVCE" for registration, "KVCU" for re-registration and "KVCA" for modification of shareholder data via CASCADE HOST;
- Section "RS" via CASCADE-PC

the field "LEI" will be added. A sample of the updated screen ("TRAN: KVCU") can be found in Appendix C.

Hereby, information for a legal entity can be entered, modified, deleted, verified / displayed.

CASCADE will validate the format of the LEI entered. The LEI cannot be entered for individual or natural persons.

Customers using the Investors Portal

The <u>current description of the product and file format</u> is available on the Clearstream website for the following CASCADE-RS services:

- Re-registration (transaction type 1);
- Twin instruction (transaction type 5);
- o De-registration (transaction type 9).

A new field will be added in the file formats XLS, XLSX (Microsoft Excel®) and CSV (Comma Separated File) that can be uploaded by customers to the Investors Portal. It will be added at the end of the respective file:

Field	Field name	Allowed value	Syntax	Mandatory
AC	LEI	The Legal Entity Identifier is a 20-character code which identifies participants in the financial market. (ISO 17442)	Alphanumeric (20)	No

Table 3: CBF Investors Portal - Field description LEI

CASCADE-RS will validate the format of the entered LEI. The LEI cannot be entered for individual or natural persons.

• New CBF error codes related to the LEI

In order to support customers with the correct format of the LEI, the following new error codes will be introduced:

Error code	Error message in German	Error message in English	Relevant channel
KV5450F	LEI ist nur bei juristische Personen erlaubt	LEI entry only permitted for legal persons	A2A and Investors Portal
KV5451F	LEI muss 20-stellig sein	LEI has to be 20-digits numeric	A2A, Investors Portal and U2A
KV5452F	LEI enthält ungültige Zeichen	LEI contains invalid characters	A2A, Investors Portal and U2A

Table 4: LEI format error codes

These error codes will be added to the directory of <u>CBF Message and Error Codes</u> with the transition phase of the release in November 2018.

6. CBF registered shares service

The LEI information will be available as output in the related CASCADE-RS reports. A list of the reports is available in Appendix D.

Potential customer impact

The introduction of the LEI information is an optional service, which is offered to the customers. Customers will be responsible for the data provided via the various connectivity channels. Besides the format check of the LEI, no further functional verification will be conducted by CBF.

7. Connectivity

7. Connectivity

CBF supports various connectivity channels as a gateway to the pan-European settlement platform T2S and to the CSD and ICSD services offered by Clearstream Banking.

The automated connectivity channels as well as the CASCADE Online functionality provide a seamless connection to a wide variety of services. These channels are regularly updated to provide access to the latest T2S functionality. Maintenance procedures allow the continuous enhancement for dedicated services offered solely and exclusively by Clearstream Banking.

7.1 Validation for release requests

Based on the definition by SWIFT, all messages transmitted to CBF must have a reference that is assigned by the customer to allow the identification of the instruction. Customers using CBF's automated connectivity channels (SWIFT, MQ or File Transfer) provide their reference via the field "20C: Reference: Sender's Message Reference".

In line with the standards and the services provided by CBF, a hold / release mechanism has been established. This mechanism enables customers to temporarily hold back a settlement instruction from settlement or to release it only when settlement is desired.

The instruction hold release can be initiated using MT54x "PREA" messages and the settlement instruction can be released using MT54x "NEWM" or a modification request via MT530.

In future, a validation will be introduced that for the release of an instruction an additional reference field must be provided.

Description of the changes

Currently, CBF allows the usage of an identical instruction reference to release the instruction if the initial instruction was provided using MT54x "PREA". Following the SWIFT standards and T2S rules for the validation of a reference, the number shall be unique.

In future, CBF will change the release request validation so that instructions (MT54x) transmitted without a "PREV", "RELA" or "PREA" reference, but with a reference containing an already used / known or pending "SEME" will be rejected. The rejection message "Settlement Status and Processing Advice // Business Validation Feedback" (MT548) will contain the error code "KV1308F Instruction already stored". Therefore, for the release of an instruction, the MT54x "NEWM" must contain the reference of the previously provided message ("PREV", "RELA" or "PREA").

Potential customer impact

Customers acting in ICP mode and using an automated connectivity channel (SWIFT, MQ or File Transfer) are requested to verify in their system whether a change is necessary.

The updated reference validation will become active after the transition phase of the CBF November Release. Starting Monday, 19 November 2018, 01:30 the new rule will be enabled.

7.2 CASCADE-PC update

For the introduction of the CBF Release November 2018, rollout activities for the CASCADE-PC version 9.5 need to be taken into account. A mandatory software update has been scheduled, that is, all earlier versions of CASCADE-PC cannot be used after a successful deployment of the CBF Release in November 2018. Starting 19 November 2018, customers who will log on with CASCADE-PC version 9.4 will receive the following error message:

• E00060: your currently installed program version is 9.4, but you need version: 9.5. Terminate this application.

According to the latest CBF Customer readiness plan, the CASCADE-PC version will be available for download from the Clearstream website on 5 November 2018.

The new CASCADE-PC version will include smaller functional enhancements. Please refer to the chapters "<u>CBF Instruction Management (CASCADE)</u>" and "<u>CBF registered shares service</u>" for more information. In addition, the intended future layout of updated screens is presented in the Appendix.

8. Custody

8. Custody

While CBF executes all securities settlement activities on T2S, the processing of Asset Services is managed by Clearstream Banking. CBF processes custody events in its own environments and only transmits the related security instructions out of corporate action events to T2S for settlement. In addition, CBF supports customers with various tax services. In order to allow an efficient end-to-end processing, Clearstream Banking publishes Market Taxation Guides describing the eligibility criteria as well as the associated tax procedures.

8.1 Requirements related to the German withholding tax

In Announcement <u>D17075</u> regarding the changes due to the German Investment Tax Act Reform, CBF outlined the impact on tax instructions, requirements for tax reclaim processing and the German tax voucher application process. The new German Investment Tax Act entered into effect on 1 January 2018.

Following the updated processing of tax reductions for funds, Clearstream Banking will update its account master data to allow a segregation of holdings of investment funds in compliance with §1 InvStG. When using the new settings a tax service will apply. A reduced tax on distributions of securities subject to German withholding tax is automatically calculated on the basis of the account settings.

Description of the changes

With the launch of the release in November, CBF can offer customers a standing instruction in form of a segregated account master. This newly defined type of account master will be used for certified fund companies and all original "Fund Status Certificates" that are provided to CBF before the first settlement.

For these segregated accounts income payments that are subject to German withholding tax will be paid automatically with the reduced tax rate of 15% (KESt (Kapitalertragsteuer) standard rate of 14.218% plus SolZ (Solidaritätszuschlag) of 5.5% of the standard rate) to customers. Market claims will be calculated and executed automatically with the reduced tax rate, too. The existing tax adjustment process on market claims defined in CBF's Compensation Handbook remains unchanged.

After the end of the market claim period until one month later customers must provide a break down to disclose the name of the fund company (providing the "Ordnungsnummer") per single income payment and the relevant holdings of the fund company.

Potential customer impact

The opening of the new CBF account master with the enhanced settings is an optional service offering. Besides the additional setting related to the tax processing all previous services of a CBF main account can be offered. Before an account can be opened, it will be necessary that the declaration showing the "Ordnungsnummer" is available. The fund company needs to provide the declaration, which can be requested at the Bundeszentralamt für Steuern (BZSt; Federal Central Tax Office). Clearstream Banking's Relationship Officers will be available to support the account opening process.

Customers should note that the usage of the service is subject to the acceptance by the local German tax authorities. CBF is in close contact with the authority and will open the respective accounts after the confirmation has been obtained.

8.2 Requirements related to the European Central Securities Depositories Regulation (CSDR)

The Central Securities Depositories Regulation (CSDR) is one of the key regulations adopted in the aftermath of the financial crisis.

The CSDR is significant to all financial market participants in Europe as it introduces measures that not only impact European CSDs, but also the wider financial market infrastructures and global trading parties dealing in securities that settle in an European CSD or in one of the two international CSDs (ICSDs).

After the successful implementation of measures to comply with the rules defined in the CSDR in May 2018, CBF will introduce further modifications in November 2018. The additional functionality will help to increase the safety and efficiency in the functional area of corporate actions.

Description of the changes

With the introduction of CSDR, CBF customers will only be credited with cash and security proceeds once CBF has received the credit confirmation from its agent or the Issuer CSD as from payment date. For this process, the term "payment authorisation" is used.

For the following event scenarios a definite payment authorisation will be applied:

- Income cash proceeds:
 - Securities admitted by CBF (as Issuer CSD) paying in a non-EUR currency;
 - Securities admitted by another CSD (CBF Investor CSD) paying in a EUR currency and a non-EUR currency.
- Non-income securities proceeds:
 - Securities admitted by CBF (as Issuer CSD) crediting in securities admitted by another CSD (CBF Investor CSD) proceeds;
 - Securities admitted by another CSD (CBF Investor CSD) crediting in security proceeds independent from the admitting CSD;
 - Securities admitted by CBF (as Issuer CSD) crediting security proceeds admitted by CBF (if the event is set up without depository booking).

The above-mentioned scenarios cover all types of mandatory cash (for example interest, dividend, redemption) and mandatory security events (for example, rights distribution, bonus shares, split, merger). A list of all mandatory CBF events is available in the <u>CBF Connectivity Handbook Part 3</u>. Securities admitted by CBF and paid in EUR are not subject to this change, as CBF actively debits the paying agent's cash account prior to the distribution of proceeds to customers.

The activation of the CSDR functionality for cash events took place on 28 May 2018. On 19 November 2d018 security events will follow, which includes also the withdrawal part of redemptions. For ISINs migrated to OneClearstream the payment authorisation, based on payment confirmation from the local partner / Issuer CSD is already applied since the migration of Italian and ESES instruments to the OneClearstream model.

Impacted functional areas

Pre-notification of events, subject to payment authorisation

The Corporate Action Notification (MT564) including the position-based REPE for cash and mandatory security events will contain an URF information using the field ":70E::ADTX//PAYMENT UPON RECEIPT OF FUNDS". Additionally, the value date will be shown as unknown for cash events. These details are provided in "Repetitive Optional Subsequence E2 Cash Movements" using the field ":98B::VALU//UKWN". The original payment date of the event will be shown as today.

Usage of settlement restrictions for reorganisation events

For reorganisation events for securities admitted by another CSD, which leads to a withdrawal of securities, CBF will transmit settlement restriction to T2S at entitlement date, end of day. Thus no customer instructions will settle during the life cycle of this restriction, except for corporate action instructions (CORP or CLAI4). Nevertheless customers acting in ICP and / or DCP mode can continue to transmit new settlement instructions. The CBF transformation process will ensure, that pending matched instructions are transformed after payment authorisation.

Settlement of Corporate Action instructions and confirmation

After payment authorisation, usually on payment date, the related Corporate Action instruction in cash and / or securities will be transmitted to the respective settlement system intraday. In the event of confirmation delays from the agent / Issuer CSD the credit bookings for CBF accounts could be delayed to the following business days.

The corporate action settlement timings are as follows:

- Cash in EUR in TARGET2: Three times a day (DD1, DD2, DD3);
- Cash in non-EUR currency in Creation: Five times a day (09:20, 13:00, 15:00, 19:30, 23:40);
- CSC securities in T2S: Real time:
- NCSC securities in Creation: Real time.

After successful booking of the Corporate Action cash and / or securities instructions, a Corporate Action Confirmation (MT566) is transmitted to customers according to their messages subscription. The current transmission timelines are defined in the CBF Connectivity Handbook Part 3.

The cash settlement of a redemption is independent of the booking of the securities. This means that the withdrawal of securities can be executed in a CBF account prior to or after the cash management.

In the rare case, where for non-income reorganisation events the credit of the new securities is authorised prior to or after the debit of old securities, based on the agent / Issuer CSD confirmation, two separate MT566 (one for debit and one for credit) will be sent instead of one MT566.

Transaction Management for market claims, reverse claims and transformations

Market claim, reverse claim and transformation cash instructions for OTC (domestic and crossborder) transactions, stock exchange trades (LION) and Eurex CCP instructions will only be generated after payment authorisation in order to avoid any settlement prior to the proceeds distribution out of customer holdings. The coupling of security instructions out of market claims and transformations with the payment authorisation will be implemented in 2019. However these instructions can usually only settle after the proceed distribution, as positions in the new ISIN are created by the event itself.

Settlement instructions out of market claims and transformations can usually only settle after the proceed distribution, as positions in the new ISIN are created by the event itself. The instructionbased MT564 "REPE CLAI/ACLA/ATXF" will continue to be transmitted at the end of the entitlement date, with an URF information and unknown value date.

Corporate action payments on collateral (Xemac)

Corporate action cash instructions for Xemac collateral, resulting from the above-mentioned event scenarios, are sent to the settlement system, when payment authorisation is available. This affects the distribution on collateral positions (held in sub-account /550), GC Pooling compensations and suspension / termination of collateral pledged to Bundesbank.

⁴ Since the implementation of the T2S Release 2.0, customers can use the ISO transaction code "CLAI". Please note, that this functionality is only applicable for instructions created by CBF.

Impact on Vaults Services

The new CSDR functionality impacts also Vaults Services for the above-mentioned event scenarios for securities admitted by CBF.

In future, as long as the credit confirmation from agents is not received, Vaults has to avoid any changes to the Vaults accounts and CARAD holdings. As from entitlement date (end of day) until the receipt of the credit information no Vaults instructions (that is, instruction type AA16 / AA18) will be accepted by CBF. Manual or automatic updates of CARAD holdings will not be possible during this period.

The Vaults event processing will also be suspended until receipt of the credit information. Vaults coupon statements, destruction protocols and physical withdrawal of worthless certificates might be delayed by one business day or more.

Potential customer impact

Starting in November 2018, the payment authorisation process will be applicable. CBF will credit the customer cash or securities accounts once the credit confirmation was received from the Issuer CSD. This is valid for securities issued by CBF or any other T2S In-CSD, where CBF acts as Investor CSD. Customers should check if the updated procedure for the cash or security proceeds require changes in their functional processes or operational procedures, especially as the settlement timings will be enhanced for cash and security proceeds.

9. Admission procedure

9. Admission procedure

9.1 CBF as Issuer CSD: "OTC Reinstruction Procedure" -Processing of instructions for non-issued securities

In February 2017, CBF implemented an automated reinstruction procedure for non-CCP stock exchange trades (LION instructions). This solution ensures that instructions rejected by the T2S platform due to missing static data of securities will be retransmitted to the platform. All information on this functionality is available in Announcement D17011.

With the CBF Release in November 2018, a reinstruction service for OTC settlement instructions will be established which is based on the solution for LION instructions. The existing functionality has been adapted to meet the OTC settlement requirements and will be available for instructions submitted to CBF in Indirectly Connected Participant (ICP) mode.

The aim of this enhancement is to support the automated and operative procedures of CBF customers that are caused by missing information during the admission process. In February 2018, CBF complemented the admission procedure for new issues with the "EDT Data Sprint5" service which is used by issuers and their agents for the admission of securities in CBF. A new publication status ("CSC intended") was established to deliver securities static data in a timely manner. Further information about this service is available in Announcement <u>D17076</u>.

Description of the changes

The new CBF service combines a recycling process with a reinstruction procedure. It enables customers acting in ICP mode that CBF will resend valid OTC instructions to the T2S platform if the instruction was initially rejected due to missing securities static data at T2S. CBF will start the activity when T2S transmits a rejection message with an error code shown in table below:

T2S Error Code	T2S Error Code description				
MVCV205	The ISIN code indicated in a Settlement Instruction must exist in T2S.				
MVIC305	The ISIN Code of a delivering Settlement Instruction must be eligible for settlement in the delivering CSD on the Intended Settlement Date and additionally on the current Business Day if the Intended Settlement Day is in the past.				
MVIC315	The ISIN Code of the receiving Settlement Instruction must be eligible for settlement in the receiving CSD on the Intended Settlement Date and additionally on the current Business Day if the Intended Settlement Day is in the past.				
MVIC316	The ISIN Code of the already matched Settlement Instruction must be eligible for settlement in the delivering or receiving CSD on the Intended Settlement Date and additionally on the current Business Day if the Intended Settlement Day is in the past.				

Table 5: T2S Error Codes

The following conditions have been defined for the recycling process:

- OTC instructions ("AA01 / AA02" between CBF customers and their counterparties) are taken into consideration as long as the instruction does not contain a linking parameter.
- If the account of the receiving party has been set up for passive matching, then the automated generated match instruction is taken into account;
- If the account of the receiving party has been set up for processing using the "Strict TEFRA D Service", the instruction is not subject to the service:

⁵ The name of the service will change. In the future, the term "eMISSION Data Sprint" will be used.

- o When the Intended Settlement Day (ISD) is already in the past; or
- o After the Intended Settlement Day (ISD) has been completed.

Instructions accepted for the recycling process will remain in the CASCADE instruction database with the details given by customers. The recycling process will be executed until the fourth T2S Operational Day following the Intended Settlement Day (ISD+4) specified in the instruction. Due to the holiday rules, there are processing days on which only free of payment (FoP) instructions but no delivery versus payment (DvP) instructions can be settled. Therefore, the recycling process for FoP / DvP instructions can differ by one day. If the securities master data are not (fully) entered until the end of the recycling period, CBF will reject the instructions. Customers will receive a cancellation message.

CBF will introduce a further CASCADE Dispo Status "015 – CBF Recycling" for the new recycling process. This status serves as the basis for the automated reinstruction procedure of OTC instructions, which will be initiated by CBF on each business day at four points in time. The repeating procedure for an instruction includes the following steps:

- At the times defined below, instructions that are marked for the recycling process will be selected and it will be checked whether the ISIN specified in the instruction has in the meantime been created on T2S in the static data of securities.
- If the result of the ISIN check is positive, CBF assumes from the T2S feedback that the ISIN is established on the platform, the instruction is marked for reinstruction and prepared for forwarding via T2S-I.

If the result of the ISIN check is negative, that is, the ISIN is not (yet) established on the T2S platform, the instruction remains unchanged in the dispo status "015" and is included in the next check run. This check ends as described above after ISD+4.

Reinstruction schedule	Related processing step
10:20	After completion of the "CBF Autoadmission Procedure"
Before the end of the Allegement Delay Period and considering the T2 12:50 Partial Settlement Window 4 (14:00) to allow the modification of the instruction (hold / release), if required	
15:00	Before the end of the T2S DvP cut-off (16:00) considering eventually required liquidity management actions as the instruction may not be available in the T2S Cash Forecast
17:40	Before the end of the T2S FoP cut-off (18:00)

Table 6: CBF schedule for OTC reinstruction procedure

This repetitive recycling process allows a timely management of instructions for all market participants in order to execute further processing steps. This means, that if

- An instruction subject to the recycling process achieves a different settlement status; or
- A different T2S error code than previously is transmitted.

this instruction will be processed according to the current processing rules or rejected. T2S will provide the "Market Infrastructure Transaction ID (MITI)" only when the instruction has been accepted.

CBF will adjust the settlement reporting so that the new recycling process and the reinstruction procedure is transparent to customers. As above mentioned, an additional CASCADE Dispo Status "015 – CBF Recycling" will be introduced. With this, CBF will define two further codes that will be presented instead of one T2S error code as shown in table 5:

- KV6631F Instruction is being recycled. ISIN configuration on T2S incomplete; and
- KV6632F Recycling mode terminated. ISIN configuration on T2S still incomplete.

9. Admission procedure

Both CBF message codes will be added to the directory <u>CBF Message and Error Codes</u> with the transition phase of the release in November 2018.

The above-mentioned key values allow the creation of messages for the automated connectivity channels (SWIFT, MQ and File Transfer). Based on the existing message subscription, status reports can be transmitted to customers as defined below:

- "Settlement Status and Processing Advice (MT548)"
 - The instruction is subject to the recycling process.

Mandatory Repetitive Subsequence A2 Status

:25D::IPRC/DAKV/PPRC

Optional Repetitive Subsequence A2a Reason

:24B::PPRC//NEXT

:70D::REAS//KV6631F Instruction is being recycled.

ISIN configuration on T2S incomplete⁶

o The recycling process of an instruction has been finished by the system

Mandatory Repetitive Subsequence A2 Status

:25D::IPRC//CAND

Optional Repetitive Subsequence A2a Reason

:24B::CAND//CANS

:70D::REAS///ERRC KV6632F/ERRT,

Recycling mode terminated. ISIN configuration on T2S still incomplete⁶

 "OTC Statement of Pending Transactions (MT537)" shows for instructions subject to the recycling process the reference

Optional Repetitive Subsequence C3a Reason

:24B::PEND/DAKV/CVAL

:70D::REAS//.../ERRC KV6631F/ERRT Instruction is being recycled.
ISIN configuration on T2S incomplete PROS 015

CASCADE OTC instructions, which are subject to the recycling process and are therefore eligible for the reinstruction procedure can be modified in ICP mode with the existing procedures⁷. Allowed is a change of the priority, of the Partial Settlement Indicators ("PSI") or the release / hold of an instruction. However, linking of an instruction is not possible. The new functionality does not change the existing cancellation procedure. Customers can provide cancellations at any time and thus interrupt the recycling process, which means a further transmission of the instruction to T2S is avoided.

Through the automated connectivity channels, customers will receive a status reporting, if agreed in the message subscription.

- Cancellations are confirmed by CBF with "MT548 Cancellation Information":
 - After the termination of the recycling process as described above in the section about the error code (see KV6632F)
 - During the recycling process, customers can initiate cancellation on their demand. The related status is reported with the following details:
 - Mandatory Repetitive Subsequence A2 Status

:25D::IPRC//CAND

Optional Repetitive Subsequence A2a Reason

:24B::CAND//CANI

November 2018 26

⁶ A line break occurs after the 35th character.

⁷ For instructions with the indicator "already matched" a modification / cancellation is requested for both legs.

- For other modifications successfully instructed by customers, the "Settlement Status and Processing Advice (MT548)" with status :25D::TPRC/DAKV/PACK is transmitted for instructions subject to the recycling process. In addition to the existing information provided via a "TPRC" status message, this "TPRC/DAKV/PACK" will show the required update in "Optional Sequence B Settlement Transaction Details":
 - o Party Hold status:

Using the field "Type of Settlement Transaction Indicator (:22F::SETR//). It indicates if the instruction is on:

- party hold with the value PREA;
- party hold released with the value RELE; or
- party hold status unknown / unchanged with the value TRAD.
- o Partial Settlement Indicator (PSI):

Using the field "Settlement Transaction Condition Indicator (:22F::STCO//). It will show the updated indicator, which is either NPAR, PART, COEX/PARC or COEX/PARQ

o Change of priority (PRIO):

Using the previously removed field "RTGS" will be reused (:22F::RTGS/DAKV/). It will show the updated priority, which is either "0003" (high) or "0004" (normal). After a successful reinstruction and once the instruction has been accepted by T2S, the priority will be reported in field "Reason Narrative" (:70D::REAS//PRIR) in line with the existing specification.

In line with the existing specification for "TPRC//PACK" messages, also for instructions subject to the recycling process the sequence "Optional Repetitive Subsequence A2a Reason" is not available.

Potential customer impact

With this functional enhancement, CBF would like to reduce the additional manual processes of customers. With the new recycling process in combination with the reinstruction procedure, the systems on customer side will receive additional information for the further automated processing. The new service aims to supplement the measures that result from the rejection of an instruction due to missing securities static data at T2S from new issues. Nevertheless, participants, issuers and their agents should continue to look for solutions to provide securities static data in time. Because even with the implementation of the service for OTC instructions, the activities that were originally caused by the late ordered admission procedure remain.

In the following, further information about the processing of OTC instructions from the recycling process is given:

- Depending on the date of admission, the Intended Settlement Day (ISD) may already be reached.
 Instructions created successfully on the T2S platform during or after the ISD will be neither
 reported in the T2S nor the CBF Cash Forecast. Therefore, 15:00 was selected as a point of time
 to allow a liquidity management until 16:00 (T2S DvP cut-off).
- Cross-border instructions are integrated in the reinstruction procedure. If the Investor CSD has not set up the related "Eligible counterpart CSD link" at T2S, the instruction will be rejected during the next revalidation by T2S due to the missing CSD link setup.
- Instructions transmitted in DCP mode cannot be subject to the recycling process of CBF, as
 these instructions are unknown in the CASCADE instruction database. The times at which a
 customer acting in DCP mode transmits instructions to T2S can differ from the times of the
 reinstruction procedure. A possible consequence is that T2S depending on the defined T2S
 Delay Period -- sends allegements to CBF. These allegements will be forwarded to customers
 acting in ICP mode according to their message subscription. Therefore, it is possible that CBF
 sends an allegement for an instruction that is in the recycling process.

⁸ More details are available in <u>CBF Connectivity Handbook Part 2.</u>

9. Admission procedure

Customers, who process allegements automatically, are asked to check the impact on their systems and processes.

 Customers acting in DCP mode can transmit instructions rejected due to one of the previously stated T2S error codes in ICP mode to CBF to participate in the recycling process.

9.2 CBF as Investor CSD: Validation of eligibility criteria

With the migration from CBF to T2S, all existing cross-border links were adapted for processing on the new pan-European settlement platform. According to the definition given by T2S, CBF acts as Issuer CSD when securities are issued via CBF and is also an Investor CSD for securities issued abroad.

Since March 2018, Clearstream Banking is implementing an enhanced <u>Investor CSD solution</u>. This service is for T2S-eligible securities, whether they are held in collective safe custody (CSC) or in non-collective safe custody (NCSC) and will be gradually introduced on the basis of the individual cross-border markets. The OneClearstream service offers integrated access to all securities regardless of whether they are held in accounts with Clearstream Banking S.A., Luxembourg (CBL) or via CBF linked to an Issuer CSD.

Description of the changes

Securities enabled for safekeeping by a CSD in its role as T2S Issuer CSD must be established on the T2S settlement platform. Hereby, the Issuer CSD acts in the role as the Securities Maintaining Entity (SME). In a further step, a T2S Investor CSD has the possibility to include these securities in its service offering. However, the securities static data for the new issue must first be made available by the responsible numbering agency. Appendix E shows the schedule of the necessary steps for the creation of an ISIN for successful securities settlement.

The processing of instructions settled through the OneClearstream service requires that the securities static data have been made available and are captured in CBF's database.

Due to the multiple processes for the security admission and the preparation of master data by the various parties involved, the provision of information for new securities (ISINs) may not be fully completed before settlement instructions are provided by market participants. Against this background, instructions for such ISINs may be rejected in the settlement process of T2S, CBL or CBF due to lack of information.

CBF will adapt its procedure for the collection of securities static data on new issues from cross-border markets. If an ISIN has been created by another SME on T2S and the master data is not yet available from the numbering agency, this information is taken over from T2S by CBF. The following twelve attributes have been defined for processing on T2S.

T2S mandatory attributes for securities:

- ISIN code;
- CFI code:
- Short name;
- Long name;
- Issue date;
- Settlement type;
- Minimum settlement unit;
- Settlement unit multiple;
- Country of issuance;
- Currency.

T2S optional attributes for securities:

- Maturity / Expiry date;
- Deviating settlement units.

With this enhancement, settlement instructions showing new issues from other T2S In-CSD markets can be accepted by CBF, although not all securities static data is available for comprehensive processing in CBF. The number of instructions rejected in ICP mode in the first step by CBF or in DCP mode after a first positive feedback from T2S subsequently rejected by CBF with the existing error code ("KV2055F Wertpapierkennnummer nicht in WP-Stammdaten vorhanden // sec. code not in sec. master data") can be reduced with this new process.

As soon as Wertpapiermitteilungen (WM) has accepted the ISIN into their database, CBF will add the missing securities master data. This process can take up to two business days, since the processing chains at the parties involved require among other things a night-time processing ("batch run").

Potential customer impact

The master data taken over from T2S is sufficient to accept settlement instructions in CBF and to allow securities settlement on T2S. However, information that may be required for dedicated CBF reporting is not present, so details on lists or when retrieving online functionalities are not available. Despite of this, the delivery of the reports or the usage of transactions and functions will not be affected.

Once the additional attributes for a security have been imported, the data will be available in real time. Reports that have already been distributed are not updated; with the next delivery, the details are available for further processing as in the past.

Customers updating their securities static data from the Wertpapiermitteilungen should note that CBF's database might already cover ISINs that are not yet known to the Wertpapiermitteilungen.

10. Customer simulation activities

10. Customer simulation activities

Customers may decide to enter test cases in the CBF Customer Simulation environment (IMS23) in light of the service updates in the CBF functionality.

According to the ECB transition plan, the updated software for T2S Release 2.2 will be implemented on Friday, 28 September 2018 in the T2S Pre-Production Environment (UTEST). Right after the software deployment of T2S, CBF will start to update its software in IMS23 and will close the environment until 26 October 2018. Customers acting in DCP mode who would like to test the resolution of T2S production issues must consider that no end-to-end testing can be achieved. The processing results delivered by T2S might be differ to the expected test results.

The participation in the simulation period for the CBF Release November 2018 is optional. Customers can execute their test cases on their demand. With regard to CBF's functional enhancements for:

- The recycling of OTC settlement instructions for non-issued securities;
- The enhancement of the LEI for shareholder data;
- The changes in the processing of corporate actions due to the German Investment Tax Act Reform and CSDR.

CBF will support customers with predefined test cases, if applicable. Test data for these changes will be set up, if necessary.

In order to set up the necessary test data, a registration for dedicated test cases is required. On 31 August 2018, a dedicated simulation registration form will be made available on the Clearstream website under Clearstream Products and Services / Connectivity / CASCADE/T2S / Testing and Simulation.

A dedicated webpage provides information on the <u>availability</u> of the CBF customer simulation environment (IMS23). During the simulation period, CBF will monitor the availability of the different test environment. If necessary, customers registered for participation in the guided simulation will be informed about additional maintenance windows (downtime) by email. Due to the short-notice interaction of various parties a notification on the website may not be given.

11. CBF Customer readiness plan

Overview of important milestones related to CBF Release November 2018 in the upcoming months:

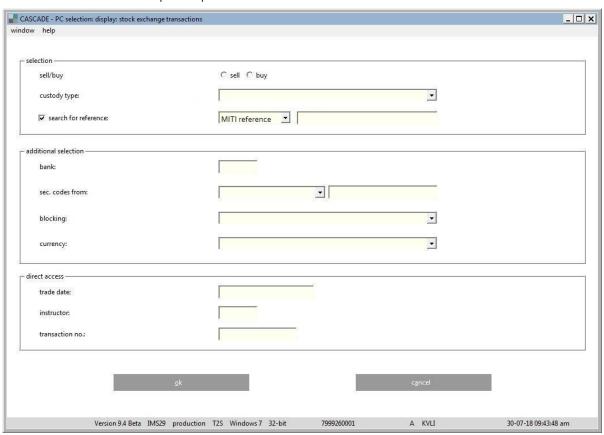
·		•			
August 2018 31 AUG		The <u>registration form</u> for the CBF guided customer simulation will be published on the Clearstream website. An email alert will inform subscribed customers about the publication.			
September 28 SEP		The CBF Customer simulation environment will be closed from 28 September to 26 October 2018. The software updates for the CBF Release November and the SWIFT Release will be installed.			
	5 OCT	Publication of guidelines for CBF's customer simulation starting 29 October 2018			
October 2018	29 OCT	The customer simulation will start for the CBF enhancements to be implemented on 19 November 2018. The customer simulation environment (IMS23) will be			
		operated in "future mode".			
November	5 NOV	CASCADE-PC version 9.5 will be available from the Clearstream website for download (mandatory release).			
2018	17 NOV	Deployment / functional launch of the enhancements			
	19 NOV	Production start of the new CBF Services			

Appendix A - CASCADE-LION screens related to "KVLI"

The screenshot shows the updated presentation using CASCADE Online HOST "KVLI" starting 19 November 2018.

```
SB:
TRAN: KVLI FC:
BOERSENGESCHAEFZ
                          INFORMATION
   IB INFORMATION LIEFERPOSOTIONEN
                                          IR INFORMATION REFERENZ
   IA INFORMATION AUFGABEN
       KENNZEICHEN KAUF/VERKAUF (K/V) : .
                                             REFERENZ : . .....
       VERWAHRART
                                   : ...
       ZUSATZAUSWAHL
       BANKNUMMER
       WKN VON
                                  : I .....
       SETTLEMENT-SPERRE (S,F,A,L) : .
       WAEHRUNG GEGENWERT
        SCHLUSSTAG
        EINGEBER/GESCHAEFTSNUMMER
                                   : .... ......
-- ID-KZ: 7907999999-- PW:
                                ---- B7907000 -- 31/01/18 -- 17:35:00 ----
     HILFE PF3: RÜCKSPRUNG PF4: ABBRUCH
```

The screenshot shows the updated presentation in CASCADE-PC.



Appendix B - CASCADE-RS sample "MT500"

The following lists show the future format for a message type for CASCADE-RS.

The formats will be updated in the <u>CBF Connectivity Handbook Part 2</u> after the transition phase of the release in November 2018.

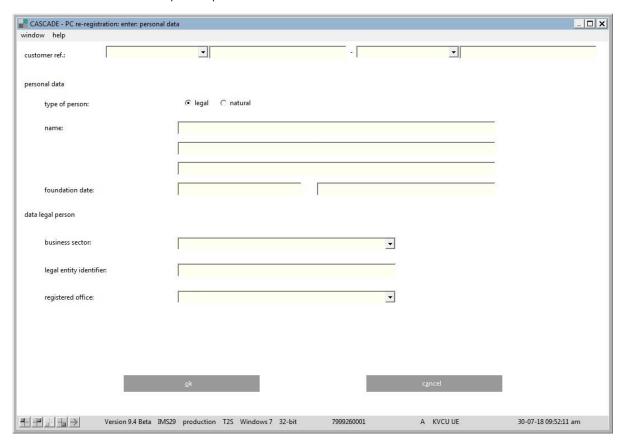
Instruction to Register (MT500) :16R: GENL :20C: :SEME//20180808732425 :23G: NEWM :98A: :PREP//20180808 :22F::INST//RERE :16S: GENL :16R: REGDET :20D: :BREF//MSC-DR13 :22F::0WNT//0WNE :22F::BENT//LEGL :22F::RREA//POSS :35B: ISIN DE0005140008 :16R: FIAC :36B: :QREG//UNIT/9999, :97A: :SAFE//123400000 :16S: FIAC :16S: REGDET :16R: CLTDET :16R: ADDRESS :17B: :PERM//Y :95U: :OWND//MUSTER AG :94G: :ADDR//99, MUSTERRING :94D: :CITY///D-1234 MUSTERSTADT :94C: :DOMI//DE :16S: ADDRESS :16R: PERSDET :94C: :NATO//LU :70C: :ADTX///LEID 999900ABC1DE234FGH99 :16S: PERSDET :16S: CLTDET

Appendix C - CASCADE-RS screenshot "KVCU"

The screenshot shows the updated presentation using CASCADE Online HOST "KVCU" starting 19 November 2018.

```
TRAN: KVCU FC:
CASCADE-DIENSTE FUER RS
                      UMSCHREIBUNG
KONTO: ....
AUFTNR:
               KUNDEN-REF:
        . . . .
ANREDE : 9 JURISTISCHE PERSON
ANGABEN NATUERLICHE PERSON
TITEL
        : ...............
GEBURTSNAME : ....
GEBURTSORT
        NATIONALITAET: ....
BERUFS-KZ : ...
BERUF
ANGABEN JURISTISCHE PERSON
BRANCHEN-KZ : . BRANCHE:
UNTERNEHMENSSITZ: ...
-- ID-KZ: 7907999999-- PW:
                          ----- B7907000 -- 31/01/18 -- 17:35:00 ----
    HILFE PF3: RÜCKSPRUNG PF4: ABBRUCH
```

The screenshot shows the updated presentation in CASCADE-PC.



Appendix D - CASCADE-RS reporting

The following overview lists CASCADE-RS reports⁹ that are sent to customers displaying the complete set of instruction data and will be extended with the LEI:

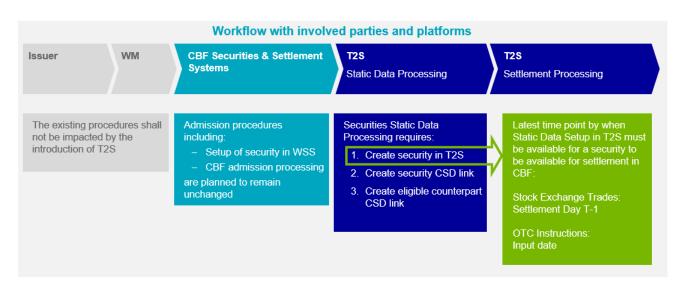
Programm	Frzeuger-	DD-	RMS-Job	RMS-	List	Fich	СМА	Kurzbezeichnung
Programm	Erzeuger- Job	Name	KMS-J00	Listnr.	LIST	FICII	СМА	- Karzbezeichhang
KG123	JR603123	KG9001	KG123001	JQ263000	Bank	./.	CBF	Aus Erfassungsstatus gelöschte Umschreibungsaufträge (persönlich)
KG123	JR603123	KG9101	KG123002	JQ263000	Bank	./.	CBF	Aus Erfassungsstatus gelöschte Eintragungsaufträge (persönlich)
KG124	JR603124	KG9001	KG124001	JQ263000	Bank	./.	CBF	Aus Auftragsstatus gelöschte Umschreibungsaufträge (persönlich)
KG124	JR603124	KG9101	KG124002	JQ263000	Bank	./.	CBF	Aus Auftragsstatus gelöschte Eintragungsaufträge (persönlich)
KG127	JR603127	KG9001	KG127001	JQ263000	Bank	./.	CBF	Vom Emittenten abgelehnte Umschreibungsaufträge (persönlich)
KG127	JR603127	KG9101	KG127002	JQ263000	Bank	./.	CBF	Vom Emittenten abgelehnte Eintragungsaufträge (persönlich)
KG128	JR603128	KG9001	KG128001	JQ263000	Bank	./.	CBF	Vom Eingeber gelöschte Umschreibungsaufträge (persönlich)
KG128	JR603128	KG9101	KG128002	JQ263000	Bank	./.	CBF	Vom Eingeber gelöschte Eintragungsaufträge (persönlich)
KG133	JR603133	KG9101	KG133001	JQ263000	Bank	./.	CBF	Liste aller aus dem Erfassungsstatus automatisch gelöschten Aktionärsdaten- Änderungen (persönlich)
KG134	JR603134	KG9001	KG134001	JQ263000	Bank	./.	CBF	Liste aller vom Eingeber aus dem Auftragsstatus gelöschten Aktionärsdaten-Änderungen (persönlich)
KG135	JR603135	KG9001	KG135001	JQ263000	Bank	./.	CBF	Liste aller vom Emittenten abgelehnten Aktionärsdaten- Änderungen (persönlich)
KG181	JR603181	KG9001	KG181001	JQ263000	Bank	./.	CBF	Wegen KE-Maßnahme gelöschte Umschreibungsaufträge (persönlich)
KG181	JR603181	KG9101	KG181002	JQ263000	Bank	./.	CBF	Wegen KE-Maßnahme gelöschte Eintragungsaufträge (persönlich)
Ende der Aufs	stellung							

⁹ The information displayed is from a CBF application that only supports the German language.

Appendix E – Securities Static Data Concept



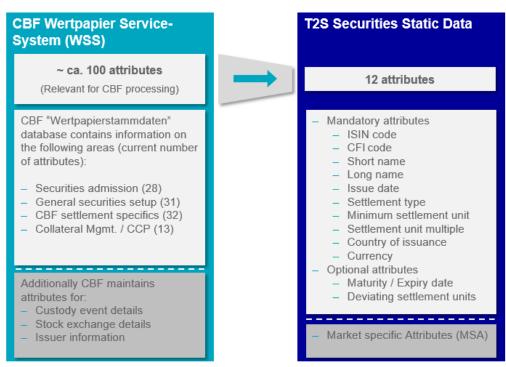
Overview Securities Admission Procedure



Securities Static Data Concept

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T2S platform will request 12 attributes for each security



Appendix E – Securities Static Data Concept

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