Stock Exchange Transactions Go OTC ICSD Migration (Phase 1)

Customer Migration Guide

22 November 2021

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Document Number: 7350

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Contacts

For further information about Clearstream Banking's products and services, customers can visit the Clearstream website, contact Clearstream Banking Client Services or their Relationship Officer. Particular questions regarding SET-GO will be routed to the experts of the CBF Settlement Functionality team.

Customers will find the relevant contact details under <u>Contacts & Client Services</u> or can contact the SET-GO Customer Readiness team via email to T2S-Support@clearstream.com.

Foreword

The main objective of the Stock Exchange Transactions GO OTC (SET-GO) project is to use the standard OTC functionality also for non-cleared stock exchange instruction, thereby replacing today's settlement functionality LION (Lieferfreigabe Online for non-cleared stock exchange trades).

This document aims to enable customers to successfully prepare for the SET-GO ICSD Migration (Phase 1) on 22 November 2021.

It provides information concerning the migration activities that are surrounding the deployment of the SET-GO project. This includes a summary of necessary preparations, provides an overview of the migration timeline and describes the related migration activities to be considered by customers.

Please refer to the <u>SET-GO Introduction Note</u> for detailed information on the functional changes related to the SET-GO ICSD Migration (Phase 1) that will be introduced in November 2021.

In the following, "non-cleared stock exchange instructions in non-collective safe custody (NCSC) securities" will be referred to as "SE instructions (NCSC)".

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1 Introduction

1.1 Structure and content of this document

This document focuses on the migration approach and related activities for the SET-GO ICSD Migration (Phase 1). The cornerstones of the implementation on 22 November 2021 are defined as below:

- Instruction and lifecycle management for stock exchange instructions in NCSC securities to be executed and reported via Creation only;
- "OTC-like" processing using automated ClearstreamXact connectivity channels (ISO 15022) and Xact Web Portal (GUI).

The objective of this Customer Migration Guide is to provide customers with an overview regarding the migration timeline as well as the tasks involved in preparing for migration.

The SET-GO ICSD Migration (Phase 1) consists of the below steps:

Description	Timeline	Activity
Pre-migration	Until 17 November 2021	Migration Weekend preparation - Maintenance of static data by customers; - Reduction of outdated pending SE instructions (NCSC); and - Ordering of migration reports on customer demand.
Migration Weekend execution	19 – 21 November 2021	Execution of migration procedures - Cancellation and reinstruction of pending SE instructions (NCSC), referred to as "Restanten"; - Processing of new stock exchange trades, referred to as "Tagesgeschäfte"; and - Creation and transmission of dedicated migration reports.
Production start – first business day	As of 22 November 2021	Begin of day-to-day business via Creation for SE instructions (NCSC) in an "OTC-like" mode.
Post-migration	22 November – 10 December 2021	Customer support after the implementation weekend of SET-GO ICSD Migration (Phase 1) - Transmission of LION pending instruction reporting covering the cancellation of pending SE instructions (NCSC); and - Maintenance of customer testing environments (IMS23 and OCCT).

Table 1 - SET-GO ICSD Migration (Phase 1) timeline

After the introduction chapter on the SET-GO ICSD Migration (Phase 1):

- Chapter 2 summarises the key functional changes to be introduced in November 2021 related to the CBL instruction management.
- Chapter 3 describes the pre-migration phase, allowing customers a verification of static data and connectivity settings for the launch in November 2021.
- Chapter 4 provides an overview of the migration activities surrounding the implementation weekend of SET-GO ICSD Migration (Phase 1). It shows the general information regarding instructions management and settlement reporting. A detailed migration timeline will be provided as attachment to this document in due time.
- Chapter 5 outlines the activities in the post-migration phase.
- Chapter 6 shows aspects on the contingency planning and a potential roll-back scenario if the SET-GO ICSD Migration (Phase 1) cannot be completed as planned. This chapter will be enriched with more information at a later point in time.
- Chapter 7 offers customers a concise overview of the migration activities and the according timelines.

1.2 General information

With the go-live of the SET-GO ICSD Migration (Phase 1) on 22 November 2021, the settlement and related reporting of non-cleared stock exchange instructions in non-collective safe custody securities will be executed and reported via Creation. The new routing system SETI (Stock Exchange Transaction Interface) replaces LION and is used to transmit instructions of NCSC securities "OTC-like" to Creation. The settlement reporting for NCSC securities will be accessible exclusively via the ClearstreamXact functionality.

For CSC and NCSC-T securities, no changes are envisaged in the current flow for stock exchange instructions. That is, the instruction and lifecycle management for stock exchange instructions for CSC and NCSC-T securities will be executed and reported via CASCADE / T2S. As the existing framework will not change, no migration activity is necessary for CSC and NCSC-T securities.

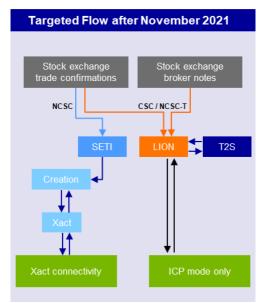


Figure 1: Targeted flow after ICSD Migration (Phase 1)

1.3 Migration timeline at a glance

The timeline below provides customers being a member of a German stock exchange with an overview of the activities that CBF has planned as part of the SET-GO Customer Readiness. CBF kindly asks customers to consider the activities shown in their planning and to complete them on time. Customer requests that arrive after the end of the timeline shown may not be considered by CBF before the go-live in November 2021.

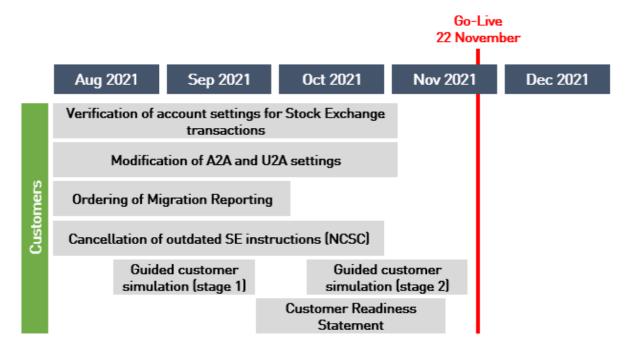


Figure 2: SET-GO ICSD Migration (Phase 1) timeline at a glance

2 Instructions management via Creation

This chapter summarises the key functional changes to be introduced in November 2021 related to the CBL instruction management applicable for SE instructions (NCSC).

2.1 Lifecycle management

With the business day 22 November 2021, SE instructions (NCSC) will follow the OTC instruction lifecycle of CBL internal instructions (41, 51 / 4F, 5F). Hence, the existing OTC functionality offered via Creation will be used also for SE instructions (NCSC). Besides the <u>SET-GO Introduction Note</u>, the <u>CBL Customer Handbook</u> provides customers with detailed information.

As of 22 November 2021, instruction management for SE instructions (NCSC) is no longer handled in LION, but in Creation. This applies for instructions created on the basis of regular trade confirmations (Schlussnoten) coming from the German stock exchanges as well as on the basis of PÜEV records ("Platz-Überschreitender Effektenverkehr") which is offered as a service by BrainTrade. This interface remains active and still allows entering of orders for stock exchange-traded ISINs.

The following selection criteria apply for ISINs that are eligible for the creation of SE instructions (NCSC). If the selection criteria are not fulfilled, no straight-through processing is possible:

- ISIN is active in Wertpapier-Mitteilungen; and
- Wertpapier-Mitteilungen field GD545 "BÖGA-Fähigkeit" has values in {1, 2, 3, 4, 5}.

Based on the existing settlement procedures, SE instructions (NCSC) can still be identified using the instructing party "DAKVDEFFLIO". This BIC11 is used in ClearstreamXact settlement reports and is available in Xact Web Portal as selection criteria. Regarding the description of the standard OTC settlement, please refer to the <u>ClearstreamXact</u> webpage.

Liquidity management

Currently, SE instructions (NCSC) are settled twice a day. Customers may fund the cash account for these two settlement cycles at a specific time. As of 22 November 2021, customers need to consider that real-time processing may require an updated funding procedure providing the necessary liquidity already for the night-time settlement on the relevant CBF-i accounts.

During the implementation weekend of SET-GO ICSD Migration (Phase 1), a settlement cycle is scheduled for Saturday, 20 November 2021. In order to achieve settlement results, customers need to provide the necessary liquidity on Friday, 19 November 2021 for the upcoming settlement date Monday, 22 November 2021.

SEME Concept

Starting with the migration of pending SE instructions (NCSC), the new SEME Concept defined by SETI will be introduced in production. That is, the settlement instructions presented to Creation will have a different content in the Sender's Message Reference. The new reference (SETI Reference) is based on information, which is derived from the underlying trade confirmation ("Schlussnote"), such as:

- (Input) Date;
- Stock Exchange location;
- Stock Exchange trade number;
- Security Identification Number (WKN); and
- Settlement relevant details added by CBF.

Customers need to consider that for all SE instructions (NCSC), the SETI Reference will replace the existing LION ("LP") reference. In the Xact settlement reporting, the reference created by SETI is transmitted and needs to be used in MT530 Transaction Processing Command.

Management Information Summary (Clearstream MIS reporting)

As of 22 November 2021, SE instructions (NCSC) will be reported as "OTC" in the Clearstream MIS reporting as the settlement occurs in an "OTC-like" mode. Accordingly, there will be an increase of transaction volume on CBL's side for OTC transactions and a decrease in the number of SE transactions (NCSC) in the CBF reporting.

2.1.1 Partial Release Request functionality

Partial Release Request functionality is a new optional service that allows customers to release a required nominal for settlement in a partial settlement window. This CBL service is designed to provide a functionality replacing the existing "LION Teilbelieferung".

The Partial Release Request functionality is planned to be introduced on 22 November 2021, at the same time as the go-live of SET-GO ICSD Migration (Phase 1). For detailed information, please refer to the document Partial release: Clearstream Banking Functional Specifications.

2.1.2 Xact Web Portal Multi Hold and Release Functionality

The optional Multi Hold and Release functionality will be introduced for CBL internal instructions (41, 51 / 4F, 5F) and SE instructions (NCSC). With the launch in November 2021, customers can modify the Party Hold flag of pending instructions one by one or for multiple instructions if the option "All" is used.

Instructions can be modified by the owner of the CBF-i settlement account via Xact Web Portal. Customers have to arrange the necessary Xact Web Portal access rights within their organisation if they intend to use this service.

For the functional design, please refer to the <u>SET-GO Introduction Note</u>. More details about the service offering will be published in a dedicated announcement scheduled for September 2021.

2.2 Corporate actions

With the business day 22 November 2021, SE instructions (NCSC) will be processed in an "OTC-like" mode on Creation. In addition, pending "LION" stock exchange instructions will be migrated and will be available as OTC instructions for further processing via Creation. Today's procedure for the corporate action management on stock in Creation will not be impacted.

The SET-GO ICSD Migration (Phase 1) will enable a corporate action processing on flow for pending SE instructions (NCSC). The corporate action procedure related to pending CBL internal instructions (41, 51 / 4F, 5F) will be applicable. Hence, the CBL service offering will apply for:

- Pending LION instructions successfully migrated to Creation during the implementation weekend of SET-GO ICSD Migration (Phase 1);
- Trade confirmations provided by the stock exchanges on Friday, 19 November 2021 at around 22:00; and
- all incoming trade confirmations in custody type NCSC provided as of Monday, 22 November 2021.

Between 22 October and 15 November 2021, Clearstream will check on a regular basis for corporate actions announced shortly before, on or immediately after the implementation weekend of SET-GO ICSD Migration (Phase 1). If necessary, CBF will inform customers in advance allowing a seamless transition.

Migrated SE instructions (NCSC) will retain the trade and settlement date as originally set up. Hence, if there is a corporate action in progress, that is the claims and transformation detection period is ongoing, the Custody system will recognise these instructions and will execute the necessary procedures by creating the respective instructions (e. g. market claims).

Currently, no corporate action procedure is executed for LION instructions in custody type NCSC. As this will change after the SET-GO ICSD Migration (Phase 1), customers are requested to check their internal processing and operational procedures.

Please refer to the $\underline{\sf SET-GO\ Introduction\ Note}$ for additional information regarding the handling of Corporate Actions.

3 Pre-migration

This chapter describes the necessary preparations during the pre-migration phase for customers in order to ensure the readiness for the SET-GO ICSD Migration (Phase 1). Among other Clearstream internal pre-migration activities, priority is set on the availability of ISINs where pending SE instructions in custody type NCSC and WPR ("Wertpapierrechnung") exist. In addition, the main objective is the support of customers. Besides the Relationship Manager and the regular Clearstream Client Service teams, the SET-GO Customer Readiness team can be contacted.

Customers being a member of a German Stock Exchange are requested to check which of the following outlined pre-migration activities are applicable for their institution. In addition, customers are invited to participate in the SET-GO Guided Customer Simulation, split in two phases called Stage 1 and Stage 2. During Stage 2, migration activities will be executed as defined below:

Migration scenario	Test execution timeline	Snapshot data
Run 1	11 October 2021 to 15 October 2021	30 July 2021
Run 2	5 November 2021 to 10 November 2021	24 September 2021

Table 2 - SET-GO Customer Simulation ICSD Migration Stage 2

For more information on the test execution, please refer to the SET-GO Customer Simulation Guideline.

3.1 Maintenance of static data

With SET-GO ICSD Migration (Phase 1) in November 2021, CBF will only consider the CBF-i accounts stored in CBF account master system (KUSTA). This account data will be used to determine the settlement account for the processing of SE instructions (NCSC) at Creation.

Customers who did not open a CBF-i account so far were requested to contact their Relationship Manager in order to agree on the future CBF-i settlement account for SE instructions (NCSC) latest by 30 July 2021. Subsequently, account and connectivity settings need to be arranged.

This is also valid for customers using a settlement account which is deviating from the CBF-i account stored in the KUSTA.

In general, SE instructions (NCSC) are set up using the account details of their own settlement account or defined by the Head Office, if third-party management applies. Account settings defined for a branch account will be not considered. The initial SE instruction (NCSC) will be created with the default Party Hold status ("Positiv/Negativ-Verfahren") stored in the account details of the own CBF-i settlement account or of the Head Office.

If changes in the account settings valid for both CBF and CBF-i accounts are required by customers or their settlement agents, they are advised to present these modification requests by Friday, 5 November 2021. After this deadline, a frozen zone has been defined for the SET-GO ICSD Migration (Phase 1). The modification of static data related to stock exchange business will be offered again after the SET-GO ICSD Migration (Phase 1), starting on 26 November 2021.

3.2 Modification of connectivity settings

The following interfaces are applicable for the SET-GO ICSD Migration (Phase 1). Customers are asked to ensure their connectivity settings.

Interface	Connectivity requirements
ClearstreamXact (A2A)	After the SET-GO ICSD Migration (Phase 1), the entire settlement reporting regarding SE instructions (NCSC) will be available only via the ClearstreamXact functionality. Therefore, customers are requested to set up their report definition via Xact Web Portal. Allowing a straight-through processing (STP) via ClearstreamXact for SE instructions (NCSC), customers are asked to verify their
	connectivity settings and check if the technical sender / receiver BIC "CEDELULLXXX" is established in their environment.
	As SE instructions (NCSC) will be processed in an "OTC-like" mode, the existing connectivity settings might not be sufficient for the real-time settlement procedures related to the CBL internal instruction types (41, 51 / 4F, 5F). CBF recommends that customers check their current LION report setup and consider the future Creation settlement procedures for the definition of the future ClearstreamXact reporting.
	ClearstreamXact offers multiple report definitions for SE instructions, including a segregation of over-the-counter (OTC) and German non-cleared stock exchange instructions. Customers may change the reporting type within Xact Web Portal, if needed. For more details, please refer to Announcement C20053. Xact does not support a recopy functionality of the settings between testing and production environment. That is, the settings for simulation cannot be transferred to production. Instead, a manual set-up is required.
	Branches are not configured as a settlement participant. Therefore, no report definitions can be defined for SE instructions (NCSC). If a settlement reporting is required, branches have to arrange this with their respective appointed Head Offices.
Xact Web Portal (U2A)	The usage of the Xact Web Portal is mandatory for the creation and maintenance of ClearstreamXact settlement reporting. Xact Web Portal administrators are asked to verify their current settings, allowing a seamless reporting and instructions management for SE instructions (NCSC). In addition, it is proposed to check the existing user access for the maintenance of CBL internal instructions as SE instructions (NCSC) will be created with the CBL internal instruction types (41, 51 / 4F, 5F). This verification will ensure that the operational units have the necessary user rights.
CBF Fileservice	During the implementation weekend of SET-GO ICSD Migration (Phase 1), CBF will offer three dedicated reports informing customers about the migration of pending instructions ("Restanten"). As the transmission of the migration reports is only possible via CBF Fileservice, customers intending to receive the migrations reports are asked to verify their connectivity settings.

Interface	Connectivity requirements
CASCADE / LION	For SE instructions (NCSC), the LION reporting contains information about the system-wise cancellation on Monday, 22 November and Tuesday, 23 November 2021 based on the existing procedures. As of 22 November 2021, SE instruction (NCSC) will no longer be displayed via the CASCADE / LION frontend. This information can only be retrieved via Xact Web Portal. However, a notification is displayed on the LION screen in order to remind customers about this change
	(see Appendix 3). Customers need to consider that when the ISIN is used as selection criteria, the next available ISIN in alphabetical order is displayed. For SE instructions in custody type CSC or NCSC-T, the existing
	functionality in CASCADE / LION remains unchanged.
	After the implementation of the releases in November 2021, only CASCADE-PC version 10.1 is supported by Clearstream. Customers need to ensure that they have the latest available version installed. Regarding modifications of existing screens, please refer to the CBF November Release information to be published in September 2021.
CBF connectivity channels (SWIFT, MQ, File Transfer)	The existing connectivity channels for SE instructions in custody type CSC and NCSC-T remain unchanged.

Table 3 – SET-GO INCS Migration (Phase 1) connectivity settings

If customers would like to adapt their connectivity settings, they are requested to contact the Connectivity Support team (connect@clearstream.com). This team supports the creation and the maintenance of settings in A2A and U2A mode. The individual configuration of settlement reports and access management for users is maintained by a nominated administrator for the respective CBF-i settlement account via Xact Web Portal. The administrators at customer side will receive necessary access rights from Clearstream.

3.3 Management of pending instructions

During the implementation weekend of SET-GO ICSD Migration (Phase 1), Clearstream performs a "hard cut-off" on pending instructions ("Restanten"). Pending LION instructions in custody type NCSC and WPR with an ISD (Intended Settlement Date) more than 400 calendar days in the past will be rejected by Creation during the migration weekend. Furthermore, securities in custody type WPR which cannot be made eligible for settlement in Creation and securities where the maturity has been reached will be rejected by Creation. These instructions will be available as archived information in the LION instruction database for the legal retention period. Within the implementation weekend of SET-GO ICSD Migration (Phase 1), customers and their counterparties will receive system-wise cancellation messages containing according reason codes.

Pending Stock Exchange instruction for ISINs in custody type Streifband (STR) will not be migrated but remain as pending instructions in LION.

For securities in custody type WPR and STR, it is recommended to agree on the necessary standing instructions before the implementation weekend of SET-GO ICSD Migration (Phase 1). Therefore, action on the customer's side may be required, such as the settlement or the cancellation of the instructions. Customers are asked to begin such activities with sufficient lead-time.

In order to ease the migration procedure for ISINs in custody type WPR, which cannot be made eligible for CBL settlement, customers are requested to bilaterally cancel any pending instructions by Friday, 19 November 2021.

3.4 Ordering migration reports

Clearstream will provide three different migration reports for the migration of SE instructions in custody type NCSC and WPR via CBF Fileservice. Customers will receive reporting if related instructions can be retrieved before and after the migration procedure. If no data is available, no reports will be created.

Besides the migration reports for the production launch of SET-GO ICSD Migration (Phase 1), the registration form offers the possibility to order migration reports for the SET-GO CSD Migration in June 2022 (Phase 2) as well as the guided simulation for both SET-GO ICSD and CSD Migration (Phase 1 & 2). The report language will be according to customers' reporting pre-settings in CBF- either English or German. Customers may order multiple reports combined to improve efficiency.

Customers interested in receiving the migration reports are requested to provide the filled out registration form available on the <u>Clearstream website</u>. The form has to be duly signed by authorised signatories and has to be sent to Clearstream via mail at the latest by 8 October 2021.

For details on the reports, please refer to <u>chapter 4.2.2</u> and the following sub sections. In order to receive the migration reports, customers are recommended to test their connectivity (see also <u>chapter 3.2</u>).

3.5 Customer Readiness Statement

Besides the preparation of the SET-GO ICSD Migration (Phase 1), Clearstream will support end-to-end testing with external parties. The SET-GO Guided Customer Simulation has been set up to enable CBF customers being a member of a German stock exchange, maintaining a settlement account or acting as a Head Office, to reach a sufficient level of confidence in their readiness. Customers can execute predefined test cases during the focus days as outlined in the SET-GO Customer Simulation Guideline.

To serve as a basis for the actual launch of the SET-GO ICSD Migration (Phase 1) on 22 November 2021, CBF will present the Customer Readiness Statement on the <u>Clearstream website</u>. Customers are requested to sign the readiness statement by 11 November 2021.

4 Migration

This chapter explains the migration activities surrounding the implementation weekend of SET-GO ICSD Migration (Phase 1) on 20 and 21 November 2021. It provides information regarding management and reporting of SE instructions (NCSC) that are pending ("Restanten") or newly created ("Tagesgeschäfte") during this time. An overview regarding the migration activities which are driven by Clearstream is given.

In November 2021, the SET-GO ICSD Migration (Phase 1) is scheduled on the T2S Release 5.2 deployment weekend. Currently, the dependencies and constraints are elaborated with the T2S workstreams. In general, the T2S Playbook will be available two months prior to the launch date. More detailed information regarding the timeline of the implementation weekend of SET-GO ICSD Migration (Phase 1). More detailed information regarding migration activities and changes to the Operational day are provided in the CBF Deployment Information and in the Indicative Timeline which are published separately on the website in Announcement D21047.

Based on the deployment approach, modification requests (for example, Hold / Release Indicator) of LION instructions in custody type CSC and NCSC-T can still be transmitted to CBF. These requests are stored in a queue. However, for SE instructions (NCSC), customers can only present modification requests (MT530) to Creation once the settlement status and processing advice (MT548) has been provided by Xact A2A Portal. If a modification request is sent before, it will be rejected. Customers need to consider the maintenance window on Creation during the implementation weekend. Therefore, it is recommended to present MT530 on Xact A2A on Monday, 22 November 2021 after the maintenance is completed.

In order to provide additional support during the SET-GO ICSD Migration (Phase 1), the SET-GO Customer Readiness team is available for customer enquiries in addition to the regular CBF Client Services team. The readiness team will support customers during the entire migration via T2S-Support@clearstream.com.

4.1 SE instructions (NCSC) on Friday, 19 November 2021

At present, SE instructions (NCSC) from LION are transmitted to Creation for settlement twice a day. On Friday, 19 November 2021, the last processing run will occur at around 13:30.

All SE instructions in custody type NCSC and WPR that remain unsettled and not cancelled by both parties at that point in time will be part of the SET-GO ICSD Migration procedure. The eligible instructions will then be migrated to Creation for settlement on the next business day, Monday 22 November 2021.

The processing of stock exchange instructions in custody type CSC or NCSC-T remains unchanged. However, customers need to consider that the implementation weekend of SET-GO ICSD Migration (Phase 1) coincides with the T2S Release 5.2 implementation. On 22 October 2021, CBF published an <u>indicative timeline</u> that outlines the changes in the Operational Day for T2S, CBF and CBL.

On Saturday, 20 November 2021, Clearstream will create a data snapshot of pending SE instructions (NCSC) before the beginning of the migration procedure which can be used in case of a roll-back (see chapter 6).

4.2 Migration of pending SE instructions

All pending SE instructions ("Restanten") in custody type NCSC and WPR will be cancelled by CBF and reinstructed via SETI after the necessary software modules have been activated. Customers will receive system-wise cancellation messages containing information about the reason.

Following the SET-GO ICSD Migration (Phase 1), all SE instructions (NCSC) will be processed in an "OTC-like" mode via Creation.

This procedure is to be seen as a "hard cut-off". That is, pending instructions with more than 400 calendar days in the past since the ISD (Intended Settlement Date) will be rejected by Creation and cannot be reinstructed. Furthermore, securities in custody type WPR which cannot be made eligible for settlement in Creation and securities where the maturity has been reached will be rejected by Creation. Therefore, action on customer side may be required, such as the settlement or the cancellation of these instructions (see chapter 3.3).

Different to pending SE instructions in custody type NCSC and WPR, pending SE instructions for ISINs in custody type STR will not be cancelled and remain in LION.

Instructions which are rejected by Creation or that are recycled by SETI will be presented to customers on "Migration Report 3" (see <u>chapter 4.2.2.3</u>).

Broker notes (Makleraufgaben)

As of 22 November 2021, the existing service reporting broker notes (Makleraufgaben) with custody type NCSC, STR and WPR via LION will be discontinued and not offered via SETI. Customers are advised to receive the reporting for broker notes directly from the stock exchange or their service provider.

However, if a broker note results in "Aufgabenschließung", the respective SE instruction (NCSC) will be created. Hence, these instructions will be sent to Creation and processed / reported accordingly.

4.2.1 Instructions details for a migrated SE instruction in custody type NCSC

This section outlines the characteristics of a migrated SE instruction (NCSC). In general, the instruction details will be set up as any future SE instruction (NCSC) after the launch of SET-GO ICSD Migration (Phase 1). However, they are complemented with migration related details derived from the transformation of a pending LION instruction.

The following table shows the fields which will contain deviating or additional information in ClearstreamXact settlement reporting that is transmitted via MT537 or MT548:

SWIFT Field	Description	New created SE instruction in "OTC-like" mode at CBL	Previous LION instruction (NCSC) cancelled by CBF
:20C::COMM/	Common Reference	Existing LP-Reference originally created for LION processing.	Not applicable
:20C::RELA/	Related Reference	New SETI reference concept (see <u>chapter 2.1</u>) applies.	LION reference using the prefix "LP".
:20C::TRRF/	Deal Reference	String composed of: LP + Input Date + Trade ID ("Börsengeschäftsnummer" received from stock exchange).	LP + Bank Number + CBF Instruction Type + "Börsengeschäftsnummer" received from stock exchange + "0".
:22F::RTGS/	Securities Real-Time Gross Settlement Indicator	Instructions will be set up with the flag "YRTG".	Pending instructions have the flag "NRTG".
:22F::STCO/	Settlement Transaction Condition Indicator	All instructions will contain the value "PART" for the Partial Settlement indicator.	Not applicable
:25D::SETT/	Status Code	Generally, the Hold / Release Indicator is copied from the pending instructions. However, if there is a unilateral cancellation request stored in LION, the leg of a transaction that requested the cancellation will be set with the status "hold".	Based on the LION positive / negative concept the parameter is set and may have been changed by customers.

SWIFT Field	Description	New created SE instruction	Previous LION instruction
		in "OTC-like" mode at CBL	(NCSC) cancelled by CBF
:70E::TRDE/ (valid for MT537)	Transaction Details Narrative	Settlement Priority ("PRIR") and Input Day ("IDAY") will be delivered as additional information. In case of a previous successful partial settlement ("Teilbelieferung"), the original quantity and amount are displayed.	Trade specific data (e.g. rate, input day or free text).
:70E::SPRO/ (valid for MT548)	Settlement Instruction Processing Narrative	Settlement Priority ("PRIR") and Input Day ("IDAY") will be delivered as additional information. In case of a previous successful partial settlement ("Teilbelieferung"), the original quantity and amount are displayed.	Not applicable
:70D::REAS	Reason Narrative	Not applicable	LION keys providing dedicated information status on the instructions and / or details on the static data for securities.
:95R::BUYR/ or :95R::SELL/	Party Level 2	The actual seller / buyer will be presented.	Not applicable

Table 4 - SET-GO ICSD Migration (Phase 1) - Migration specific instruction details

Pending SE instructions ("Restanten") may have one of the following status:

Unilaterally cancelled

For eligible SE instructions in custody type NCSC or WPR where one leg of the transaction is reported as cancelled, the cancellation status is not migrated. The new transaction in "OTC-like" mode for this leg will be created with "Party Hold", preventing settlement at Creation.

However, the instructions are listed in the dedicated migration reporting with the latest status prior to migration, that is "flagged as unilaterally cancelled".

Partially settled ("Teilbelieferung durchgeführt")

For eligible SE instructions in custody type NCSC or WPR which have already been partially settled ("Teilbelieferung"), only the remaining nominal and settlement amount are reinstructed. In addition, the original nominal will be reported in the settlement reporting as free text (:70E:), allowing for a reconciliation of pending instructions.

Pending partial settlement request

For SE instructions in custody type NCSC or WPR where a partial settlement request is advised by the customer and has not been executed yet, the partial settlement request is not migrated. Customers may resend a Partial Release Request for the new instruction via MT530 or use the Xact Web Portal functionality. The migrated instruction will be created with a Party Hold to prevent automated settlement.

Party Hold status

SE instructions in custody type NCSC or WPR will be recreated with the Party Hold as set in the pending instruction. As described above, the Party Hold might be set as a result of unilateral cancellation or a pending partial settlement request.

Both, buyer and seller, will be allowed to modify the hold / release status via their respective connectivity channels (Xact Web Portal or Xact connectivity via SWIFT).

SE instructions in custody type NCSC or WPR will be created with the Party Level 1 and Party Level 2 in the same way as new SE instructions after the implementation, that is:

- Party Level 1 is filled with the Settlement Account (if applicable the Head Office); and
- Party Level 2 is filled with the Settlement Account (if applicable the Head Office) or Branch.

4.2.2 Transmission of dedicated migration reporting

Clearstream will provide three different migration reports for the SET-GO ICSD Migration (Phase 1). The distribution of these reports can be ordered (see chapter 3.4) via the following connectivity tools:

- CBF Fileservice;
- Connect:Direct;
- NJE; and
- CA-Spool.

Questions regarding the technical setup for the Migration Reporting can be addressed to the <u>Deutsche Börse Connectivity Team</u>.

#	Job- name	Report purpose	Availability	Header English	Header German	System
1	000	To be migrated SE instructions – reinstruction will be done by CBF	Pre- Migration Reporting	LIST OF TO BE MIGRATED TRADES THE CANCELLATION IS DONE BY CBF	LISTE DER ZU MIGRIERENDEN GESCHAEFTE DIE LOESCHUNG ERFOLGT DURCH CBF	LION
2	J_26M000	Not to be migrated SE instructions – no reinstruction will be done by CBF	Pre- Migration Reporting	LIST OF NOT MIGRATED TRADES DELETED BY BOTH COUNTERPARTIES OR CANCELLED	LISTE DER NICHT MIGRIERTEN GESCHAEFTE STORNIERT ODER VON BEIDEN KONTRAHENTEN GELOESCHT	LION
3	J_26P000	Not successfully migrated SE instructions with error code	Post- Migration Reporting	LIST OF NOT SUCCESSFULLY MIGRATED TRADES FINALLY REJECTED OR IN RECYCLING	LISTE DER NICHT ERFOLGREICH MIGRIERTEN GESCHAEFTE FINAL ABGELEHNT ODER IM RECYCLING	SETI (towards Creation)

Table 5 – SET-GO ICSD Migration (Phase 1) dedicated migration reporting

CBF will provide migration reporting only if applicable data set can be found. As Migration Report 1 and 2 will be delivered in one package (J_26M000), the customer will be informed at the end of the package, if Migration Report 1 and / or 2 has been created. Migration Report 3 will only be generated, if instructions cannot be successfully migrated. That is no data set will be provided if all instructions listed in Migration Report 1 have been successfully migrated.

The CBF dedicated migration reporting is based on the current LION "Lieferliste". This applies for all three reports. The migration reporting sorting criteria are:

-

¹ CASCADE Handbuch Band 2, chapter 7.1: "Listen aus der Abwicklung von Börsengeschäften".

English terms	German terms
Banknummer	Banknummer
Custody type	Verwahrart
Currency	Gegenwertverrechnung
Security Identification Number (WKN / ISIN)	Wertpapierkennung (WKN / ISIN)
Trade date	Schlusstag
Broker	Eingeber
Trade number	Geschäftsnummer
Nominal	Nominale

Table 6 - SET-GO ICSD Migration (Phase 1) sorting migration reporting

The report language will be according to customers' reporting pre-settings in CBF- either English or German.

4.2.2.1 Functional details about the list of to be migrated trades

Migration Report 1, "list of to be migrated trades", will be sent in a combined file with Migration Report 2 and contains pending SE instructions (NCSC) that are selected for the SET-GO ICSD Migration (Phase 1). These instructions are eligible for migration and have been cancelled in LION. The instructions to be migrated will be forwarded via SETI to Creation.

Migration Report 1 does not yet confirm a successful migration of the reported SE instructions in custody type NCSC or WPR. After the transmission of the Migration Report 1, CBF will advise the completion of the migration via Operational News. Therefore, customers may start their migration activities not before the announcement was published via the Clearstream website.

To reflect the processing status of partial settlement requests ("Teilbelieferungen"), the information specified in the table below is given on the report. If there is an existing cancellation request (unilateral cancellation), then the instruction will be created with the status "on hold" on the leg where the cancellation was requested. The dedicated reporting will show the status prior to migration. It also reports the existing LION "Bemerkung", if applicable, as shown in the table below:

Functionality	Business context	Name in German	Name in English	LION "Bemerkung"
Partial	Remaining nominal to be settled	NOMINALE	NOMINAL	Not applicable
Release	Pending nominal of partial release	TEIL-NOM	PART-NOM	"TB" ("Teilbelieferung")
Request	Original nominal of SE trade	URSPR-NOM	ORIG-NOM	Not applicable
Unilateral	Initiated by buyer	Not applicable	Not applicable	"LK" ("Löschung durch Käufer")
cancellation	Initiated by seller	Not applicable	Not applicable	"LV" ("Löschung durch Verkäufer")

Table 7 - SET-GO ICSD Migration (Phase 1) Migration Report details

For an example of the migration report 1, please refer to the Appendix 1.

4.2.2.2 Functional details about the list of not migrated trades

Migration Report 2, "list of not migrated trades", will be sent in a combined file with Migration Report 1 and contains pending SE instructions in custody type NCSC or WPR that have not been selected for the SET-GO ICSD Migration (Phase 1). This covers instructions for which the customer and its counterparty bilaterally agreed on the cancellation on Friday, 19 November 2021. The lifecycle of these instructions ends with the cancellation in LION as they will not be forwarded to Creation.

Regarding the details for partial settlement requests ("Teilbelieferungen") and unilateral cancellation, please refer to table 7. For an example of the Migration Report 2, please refer to the Appendix 1.

4.2.2.3 Functional details about the list of not successfully migrated trades

Migration Report 3, "list of not successfully migrated trades", contains eligible SE instructions in custody type NCSC or WPR from the SET-GO ICSD Migration (Phase 1) that have either been rejected or are being recycled in SETI as part of the migration process. This includes, among others, securities in custody type WPR which cannot be made eligible for settlement in Creation and securities where the maturity has been reached. For the former, Clearstream is constantly working to make the WPR ISINs available on Creation. As of October 2021, all WPR ISINs are available. For any new WPR ISINs in the last days before the ICSD Migration (Phase 1), eligibility in Creation cannot be provided anymore. Instructions in those ISINs will enter recycling mode.

If no data on rejected or recycled instructions is available, no report will be created.

Rejected instructions are flagged with an error code. If the error code ends with:

Letter	Migration process	Potential customer impact
F	The instruction is rejected.	Customer and counterparty have to agree on the further settlement activities.
1	The instruction is being recycled.	The settlement instruction could not be introduced at Creation. Clearstream started to investigate and will set up the pending instruction in due time. If the instruction cannot be successfully migrated, customers will be informed.

Table 8 – SET-GO ICSD Migration (Phase 1) Migration Report rejection error codes

Regarding the details for partial settlement requests ("Teilbelieferungen") and unilateral cancellation, please refer to Table 7.

For an example of the Migration Report 3 as well as more information on the error codes, please refer to Appendix 1 and Appendix 2 respectively.

4.3 Processing of new stock exchange confirmations

In general, stock exchange trades (that is, trade confirmations; Schlussnoten) concluded on the trade date are presented to CBF at around 22:00. During the ICSD Migration (Phase 1), the existing timeline remains.

The processing of trade confirmations will not be performed in LION. All data will be queued and processed in SETI after the implementation of the November Release 2021. Trade confirmations in custody type:

- NCSC will be processed as outlined in the SET-GO Introduction Note.
- WPR will be processed as any other NCSC instruction if the security is available via Creation.
- STR will be rejected by LION. An according information will be sent to the stock exchange location or its responsible service provider.
- CSC / NCSC-T will continue to be processed via LION and transmitted to T2S for settlement.

With the re-opening of the ClearstreamXact connectivity channels, customers will receive the settlement status reporting, if a report definition is set up.

4.4 Implementation weekend of SET-GO ICSD Migration (Phase 1) schedule

This section informs about the activities during the implementation weekend of SET-GO ICSD Migration (Phase 1).

All migration steps and tasks are executed according to CBF's internal schedule which has a dependency on the T2S Release 5.2 and the SWIFT Release. The following overview illustrates the designed migration steps. The timing is indicative and might be subject to change as T2S will deliver the deployment schedule not prior to September 2021.

In principle, the migration steps are reliant on the progress of the overall Release Weekend schedule for November 2021. That is, if tasks are completed earlier or later than expected, the precedent or the following activity might be performed earlier or later, respectively.

Date	Indicative time ²	Migration step	Detailed migration activity
Friday, 19 November 2021	At around 13:30	Standard LION Reporting	MT537 – Statement of Pending SE Transactions will be reported with the reporting interval value (TAG 13A) "201". This file presents the results after the completion of the CBL settlement cycle. Customers are requested to reconcile the settlement results and check pending SE instructions in custody type NCSC or WPR.
	Before 16:00	Management of pending LION instructions	Customers are asked to bilaterally cancel pending SE instructions in custody type WPR that are not eligible at CBL and STR to support the migration activities and smoothen their internal procedures.
	Before 18:45	Transmission of modification requests	Last possibility for customers to send modification requests (for example, Hold / Release Indicator) on pending instructions in custody type AKV and WPR via A2A to CBF.
	At around 22:00	Queuing of new trade confirmations	Trade confirmations ("Tagesgeschäfte") from stock exchange locations arriving on Friday at around 22:00 will be queued in CBF until the various deployment activities are conducted by Clearstream and T2S.
Saturday, 20 November 2021	Before the start of migration procedures	Data storage	CBF will take a back-up of pending LION instructions.
	Before 14:00	Cancellation of pending instructions	Pending SE instructions in custody type NCSC and WPR will be cancelled. The cancellation of transactions with a cancellation indicator in the field reason code (:24B:) will be reported to customers via the LION reporting until the end-of-day reporting on Monday, 22 November 2021.

² Indicative time reflects an approximated time when customers may expect to receive the CBF communication via Clearstream Operational News and does not aim to reflect neither a start time nor an end time of an activity.

Date	Indicative time ²	Migration step	Detailed migration activity
	Before 14:00	Pre-Migration Reporting	Two dedicated migration reports will be provided. LION instructions in custody type NCSC and WPR are split: • Instructions to be migrated. These instructions are eligible for the transformation in an "OTC-like" mode (Migration Report 1). • Instructions not to be migrated. These instructions will be cancelled, no further settlement activities will be conducted by Clearstream (Migration Report 2).
	At around 14:00	Migration of pending SE instructions (NCSC)	Once the milestone for the deployment of the new software is achieved, SETI will prepare SE instructions in custody type NCSC and WPR and will start with the transmission to Creation.
	Between 15:30 – 18:00	Post-Migration reconciliation window	Migration Report 3 informing about not successfully migrated instructions will be available at around 16:30. Clearstream will enable a timeframe allowing the reconciliation of pending instructions. For this purpose, access to Xact Web Portal is given. Customers can use the new selection criterium "SETI" to filter for SE instructions (NCSC). It is available in section "Other" using the field "Input Media Channel".
	Between 17:00 – 18:00	Processing of new SE instructions (NCSC)	Queued trade confirmations ("Tagesgeschäfte") are transmitted to Creation for further processing. ISINs in custody type: NCSC will be processed in an "OTC-like" mode via Creation; and CSC / NCSC-T will follow the existing LION process.

Date	Indicative time ²	Migration step	Detailed migration activity
	At around 19:00	Xact Settlement Reporting	The settlement reporting (A2A) for SE instructions (NCSC) resulting from the migration ("Restanten") and from the queued trade confirmations ("Tagesgeschäfte") will be available shortly after the successful implementation of the SWIFT Release. This reporting time needs to be considered as the earliest point in time possible. Due to the implementation of the SWIFT Release and T2S Release 5.2 during the weekend, the availability might be delayed. If there are delays, Clearstream will start with the transmission of the reporting on Sunday, 21 November 2021 after
Sunday, 21 November 2021	At around 08:00 Starting after	LION Reporting	05:00. MT537 – Statement of Pending SE Transactions reported with the reporting interval value (TAG 13A) "200". LION instructions that have been cancelled during the migration weekend will be reported with the cancellation reason code "LC". MT537 – Statement of Pending SE
	10:00	LION Reporting	Transactions reported with the reporting interval value (TAG 13A) "250"
	At around 11:00	CBF Print Report	Lieferliste (list of pending stock exchange trades) will be presented once the T2S settlement results are successfully processed
	After 11:00	System closing	Start of maintenance windows

Table 9 - SET-GO ICSD Migration (Phase 1) implementation weekend schedule

Before and during the implementation weekend of SET-GO ICSD Migration (Phase 1), Operational News will be published on the Clearstream website, to which CBF customers can subscribe to be informed about the progress of the migration. Customers can set up the subscription of "Alerts" for Operational News in the MyClearstream section under Subscriptions / Real-time alerts. More details on the planned customer communication will be published in due time. The customer communication follows a common approach with the T2S 5.2 Release. Customers that have subscribed to "T2S"-alerts do not need to select a new subscription. More detailed information regarding the Operational News and changes to the Operational day are provided in the CBF Deployment Information (Announcement D21047). This Announcement includes the Indicative Timeline for the Implementation Weekend.

5 Post-migration

After the implementation weekend of SET-GO ICSD Migration (Phase 1), customers should consider the Operational Day for the CBL internal instruction types (41, 51 / 4F, 5F) related to SE instructions (NCSC).

LION reports

Existing reporting connectivity channels (SWIFT, MQ and File Transfer (FT)) will remain unchanged. Via the LION reporting, cancellation messages will be distributed to customers until the end-of-day reporting on Monday, 22 November 2021. LION functionalities will still be applicable for CSC / NCSC-T until the CSD Migration (Phase 2) in June 2022.

With the migration of SE instructions in custody type NCSC or WPR on the implementation weekend of SET-GO ICSD Migration (Phase 1), the cancellation of transactions will be reported to customers via MT537 – Statement of Pending SE Transactions on the two following business days as outlined below. The cancellations will contain a cancellation indicator presented in the field :25D: and the related reason code in the field :24B:.

LION Cancellation Code LC – LOESCHUNG DURCH CBF	LION Cancellation Code LG – LOESCHUNG DURCH CBF VOM VORTAG	No further LION reporting as of
Sunday, 21 November 2021, at around 08:00	Monday, 22 November 2021, at around 23:00	T
(Reporting Interval: Value in TAG 13A = 200)	(Reporting Interval: Value in TAG 13A = 200)	Tuesday, 23 November 2021

Table 10 - SET-GO ICSD Migration (Phase 1) LION reporting schedule

Stabilisation period

In the weeks following the SET-GO ICSD Migration (Phase 1), customers may have an increased demand for quality checks and further activities finalising the migration tasks. Therefore, Clearstream provides customers with additional support from 22 November to 10 December 2021. For questions concerning the CBL production environment, customers should contact their regular Clearstream Client Services teams. Particular questions regarding SET-GO will be routed to the experts of the CBF Settlement Functionality team.

Customers may continue to execute further test cases on the simulation environments (OCCT / IMS23). For enquiries in this context, customers should contact the SET-GO Customer Readiness team (T2S-Support@clearstream.com), which will remain the contact for such topics for any T2S simulation and / or migration enquiries.

6 Contingency

Before the start of migration procedures on the implementation weekend of SET-GO ICSD Migration (Phase 1), CBF creates a data backup of production records of pending LION instructions in custody type NCSC, WPR and STR. This enables CBF prior to the "Point of No Return" to re-create the pre-migration status for the event that a roll-back needs to be performed. Based on this data, instructions would then continue to be processed via LION.

7 Customer Readiness Directory

The following time schedule has been created to support the preparation of the SET-GO ICSD Migration (Phase 1) with production date Monday, 22 November 2021. The Customer Readiness Directory provides an overview regarding aspects that customers may want or have to consider in their activities before, during and after the migration. This list does not claim to be complete. It is intended for orientation purposes and does not include activities to be performed by customers for a successful migration.

Closing date	Categorisation	Description
8 October 2021	Preparation migration	Registration form SET-GO migration reporting Customers interested in the migration reporting for production should provide the signed form via mail ³ at the latest six weeks before the implementation weekend of SET-GO ICSD Migration (Phase 1).
29 October 2021	Preparation migration	Clean-up pending SE instructions ('Restanten') Customers are recommended to settle or cancel pending LION instructions in custody type NCSC with an ISD (Intended Settlement Date) more than 400 calendar days in the past by this day.
5 November 2021	Preparation migration	Roles and privileges Customer are requested to set up necessary users and rights in Xact Web Portal for U2A services.
5 November 2021	Preparation migration	Static data of accounts (Frozen Zone) No change to static data concerning SE business can be performed as of this business day regardless if the change is necessary in the CBF or CBL production environment. Clearstream envisages a frozen zone from 6 November until 26 November 2021 with the objective to have a fixed data set for the SET-GO ICSD Migration (Phase 1).
11 November 2021	Preparation migration	Customer Readiness Statement Customers using their main account for the settlement of SE instructions (NCSC) or acting as Head Office are requested to return the signed Customer Readiness Statement.
15 November 2021	Preparation migration	Corporate actions Clearstream operational teams will check on a frequent basis for upcoming corporate actions, which might be shortly before or after the implementation weekend of SET-GO ICSD Migration (Phase 1). If corporate actions for the ISINs in scope of ICSD Migration (Phase 1) are announced, customers will be informed.
21 November 2021	Migration weekend	Implementation weekend of SET-GO ICSD Migration (Phase 1) Roll-out of the related software for SET-GO ICSD Migration (Phase 1), migration of SE instructions (NCSC) and transmission of migration reports.
November 2021	Post- migration	LION reporting The LION cancellation reportings are transmitted to customers based on the existing procedures. After the final reporting of SE instructions in custody type NCSC, WPR or STR, the LION report will inform about CSC and NCSC-T until the SET-GO CSD Migration (Phase 2).
10 December 2021	Post- migration	Stabilisation period Customer support during the stabilisation period (post-migration support), including further provision of simulation environments (OCCT / IMS23).

Table 11 – SET-GO ICSD Migration (Phase 1) Customer Readiness Directory

 $^{^{\}rm 3}$ Form shows the details of Clearstream's postal address

In addition to the above-mentioned activities, Clearstream recommends customers to participate in the guided customer simulation. For more information, please refer to the <u>SET-GO Customer Simulation</u> <u>Guideline</u>.

Glossary

Acronym or abbreviation	Description	
41 / 51	Against payment transfer (receipt) / Against payment transfer (delivery)	
4F / 5F	Free of payment transfer (receipt) / Free of payment transfer (delivery)	
A2A	Application to Application	
AKV	Custody type NCSC	
BIC	Bank Identifier Code	
CA	Corporate Actions	
CBF	Clearstream Banking Frankfurt (CSD)	
CBF-i	CBF International 6-series account	
CBL	Clearstream Banking Luxembourg (ICSD)	
CSC	Collective Safe Custody	
CSD	Central Securities Depository	
DCP	Direct Connected Participant	
EoB	End of Business	
EoD	End of Day	
GUI	Graphical User Interface	
ICP	Indirect Connected Participant	
ICSD	International Central Securities Depository	
IMS23	CBF simulation environment	
ISD	Intended Settlement Date	
ISIN	International Securities Identification Number	
KADI	CBF corporate action application (Kapitaldienste)	
KUSTA	CBF account master system (Kundenstammdatensystem)	
LION	Lieferfreigabe Online	
MIS	Management Information System	
MT	Message Type	
NCSC	Non-Collective Safe Custody in accordance with German Depositary Law	
NCSC-T	Non-Collective Safe Custody ISINs eligible for settlement in T2S	
OCCT	CBL test environment	
OTC	Over the counter	
PSI	Partial Settlement Indicator	
PÜEV	Platz-Überschreitender Effektenverkehr	
SE	Stock Exchange	
SEME	Sender's Message Reference	
SETI	Stock Exchange Transaction Interface	
SET-GO	Stock Exchange Transactions Go OTC	
SMPG	Securities Market Practice Group	
STR	Streifbandverwahrung	
SWIFT	Society for Worldwide Interbank Financial Telecommunication	
T2S	TARGET2-Securities	
U2A	User to Application	
WKN	Wertpapierkennnummer	
WPR	Wertpapierrechnung	

Appendix 1 - Migration reports examples

Report 1 – List of to be migrated trades

CLEARSTREAM BANK MERGENTHALERALLI					N 06.04.2021 9-69-211-11177 I-69-211-611177
TESTBANK MUSTER F POSTFACH 12 34 56 DE 40005 DUESSELD BANK-NUMMER: 1 2	ORF				as as as
				TAGESDATUM: SEITE:	
LISTE DER ZU MIGRIE DIE LOESCHUNG ERF					
WAEHRUNG : EUR VERWAHRART: AKV	KAUF				
WKN GESNR EING	SCHLTAG VAL/SET-D		URSPR-NOM BEMERKUNG		GKTO
IE0084ZJ4188 244250 6184	31.03.21* 06.04.21	500	500 VZ AS ME	26.600,00 624	19
SUMME	ANZAHL 1	NOMINA 50		SM. BETRAG 26.600,00	

CLEARSTREAM BANKING AG MERGENTHALERALLEE 61			ESCHBORN, 06.04.2021 TELEFON +49-69-211-11177 TELEFAX +49-69-211-611177	
TEST EXAMPLE LIMITED ONE EXAMPLESQUARE GB LONDON E12 34AB BANK-NUMMER: 3 456 BIC: ABCDE12XXX				
06.04.2021				CURR. DATE:
				PAGE: 1
LIST OF TO BE MIGRATED TRADES THE CANCELLATION IS DONE BY CBF				
CURRENCY : EUR CTDY, TYPE: AKV	PURCHASE			
SEC.CD TR.NO BRKR	TR-DATE VAL/SET-D	NOMINAL PART-NOM		CASH AMOUNT CP-A ERROR-NO
KYG875721485 2766737501	14.05.14 16.05.14	240 13	240 LV XE TB	651,95 7086
TOTAL	NUMBER 1	NOMIN.	AL 13	CASH AMOUNT 651,95

Report 2 - List of not to be migrated trades

CLEARSTREAM BAN MERGENTHALERALI					N 06.04.2021 9-69-211-111 77 I-69-211-6111 77
TESTBANK MUSTER POSTFACH 12 34 56 DE 40005 DUESSELI	;				
BANK-NUMMER: 1:	234 BIC:			TAGESDATUM:	06.04.2021
				SEITE:	1
LISTE DER NICHT MI STORNIERT ODER V			GELOESCHT		
WAEHRUNG : EUR VERWAHRART: AKV	KAUF				
WKN Gesnreing	SCHLTAG VAL/SET-D		URSPR-NOM BEMERKUNG	AUSM. BETRAG FEHLER-NR	GКТО
CA0037931064 257466 1031	10.03.21 12.03.21	2.000	2.000 LT V Z	676,00 4043	
US86 7 3288 747 25936 7 1031	10.02.21 12.02.21	6.303	11.549 LT V Z	17.585,37 4043	
SUMME	ANZAHL 2	NOMINA 8.3		USM. BETRAG 18.261,37	

CLEARSTREAM BAN				ESCHBORN, 06.04.2	
MERGENTHALERAL	LEE 61			TELEFON +49-69-2	
				TELEFAX +49-69-2	11-611177
TEST EXAMPLE LIN					
ONE EXAMPLESQU					
GB LONDON E1: BANK-NUMMER: 3					
BANK-NUIVINER: 3	456 BIC: AB	CDE12XXX		CURR. DATE: 06.04	0.004
				CORK. DATE: 06.04	2021
				PAGE: 1	
				FAGE. I	
LIST OF NOT MIGRA	ATED TRADES				
DELETED BY BOTH		S OR CANCELL	FD		
CURRENCY : EUR					
CTDY, TYPE: AKV	PURCHASE				
SEC.CD	TR-DATE	NOMINAL	ORIG-NOM	CASH AMOUNT CP-A	
TR.NO BRKR	VAL/SET-D	PART-NOM	INFO	ERROR-NO	
CA74386V1004	28.03.12	600	600	5.312,042099	
250265 2099	02.04.12		LBVZ		
	NUMBER		MINAL	CASH AMOUNT	
TOTAL	1	61	00	5.312,04	

Report 3 - List of not successfully migrated trades

ESCHBORN, DEN 06.04.2021 TELEFON +49-69-211-11177 TELEFAX +49-69-211-611177 CLEARSTREAM BANKING AG MERGENTHALERALLEE 61 TESTBANK MUSTER KG POSTFACH 12 34 56 DE 40005 DUESSELDORF BANK-NUMMER: 1 234 BIC: ABCDEFGXXX TAGESDATUM: 06.04.2021 SEITE: 1 LISTE DER NICHT ERFOLGREICH MIGRIERTEN GESCHAEFTE FINAL ABGELEHNT ODER IM RECYCLING WAEHRUNG : EUR VERWAHRART: AKV VERKAUF WKN GESNR EING SCHLTAG NOMINALE URSPR-NOM VAL/SET-D TEIL-NOM BEMERKUNG AUSM. BETRAG GKTO FEHLER-NR 23.01.06 25.01.06 US9025495006 10011781170 8.650 2.404,701111 SE1010F ANZAHL 1 NOMINALE AUSM, BETRAG SUMME 2.404,70

ESCHBORN, 06.04.2021 TELEFON +49-69-211-11177 TELEFAX +49-69-211-611177 CLEARSTREAM BANKING AG MERGENTHALERALLEE 61 TEST EXAMPLE LIMITED ONE EXAMPLES QUARE
GB LONDON E12 34AB
BANK-NUMMER: 3 456 BIC: ABCDE12XXX CURR. DATE: 06.04.2021 PAGE: 1 LIST OF NOT SUCCESSFULLY MIGRATED TRADES FINALLY REJECTED OR IN RECYCLING CURRENCY : EUR CTDY, TYPE: AKV PURCHASE TR-DATE NOMINAL ORIG-NOM VAL/SET-D PART-NOM INFO SEC.CD TR.NO BRKR CASH AMOUNT CP-A ERROR-NO 14.05.14 16.05.14 KYG8 75 721485 651.95 7086 2766737501 LVXETB SE1010F NUMBER NOMINAL CASH AMOUNT TOTAL 651,95

Appendix 2 – Error codes for migration reporting

- O - I	
Error Code	Description
SE1001F	Repair not possible any more
SE1002F	Invalid MIC Code format
SE1003F	ISIN must be filled
SE1004F	ISIN must have regex pattern
SE1005F	WKN must be filled
SE1006F	WKN must have a maximum of 6 digits
SE1007F	Buyer must be filled
SE1008F	BUYER must be numeric
SE1010F	Buyer is inactive
SE1011I	Buyer account not found
SE1012I	Buyer KZ_TAX_BE is not filled
SE1013I	Buyer KZ_TAX_PT is not filled
SE1014I	Buyer reg ueber account not found
SE1015I	Buyer reg ueber KZ_TAX_BE is not filled
SE1016I	Buyer reg ueber KZ TAX PT is not filled
SE1018I	GUT does not have a CBFi account
SE1019F	Buyer not eligible for trade entry
SE1020I	Buyer insolvency flag has wrong format
SE1021F	Buyer insolvency flag is missing
SE1026F	Seller must be filled
SE1027F	Seller must be numeric
SE1029F	Seller is inactive
SE1030I	Seller account not found
SE1031I	Seller KZ TAX BE is not filled
SE1032I	Seller KZ TAX PT is not filled
SE1033I	Seller reg ueber account not found
SE1034I	Seller reg ueber KZ_TAX_BE is not filled
SE1035I	Seller reg ueber KZ_TAX_PT is not filled
SE1037I	LAST does not have a CBFi account
SE1038F	Seller not eligible for trade entry
SE1039I	SELLER insolvency flag has wrong format
SE1040F	SELLER insolvency flag is missing
SE1045F	Trade ID must be filled
SE1046F	Trade ID must be 13-digits numeric
SE1047F	First 6 digits of Trade ID cannot be transformed into YYMMDD form
SE1047F	Cancellation flag incorrect
SE1049F	Cancellation flag invalid, for trades value must not be "S"
SE1050F	-
	Cannot derive SETTLEMENT_LOCATION from incorrect CUSTODY_TYPE PriceDiffSell must be numeric
SE1051F	
SE1052F	Aufgabe Flag Buyer must be numeric
SE1053F	Aufgabe Flag Buyer invalid, if present, should be = 2 or 3
SE1054F	Aufgabe Flag Seller must be numeric
SE1055F	Aufgabe Flag Seller invalid, if present, should be = 2 or 3
SE1056F	BoniDiffSell must be numeric
SE1057F	Amount must be numeric, stage field "AUSM_BETR_VERK"
SE1058F	Nominal must be numeric, stage field "NOM_NEU"

SE1059F Negative Cash Amount" SE1060F SE Trade not found SE1061F Duplicate target SE Trade" SE1062F Invalid Lion Corp Id SE1063F Exchange Code must be filled SE1064F Invalid Exchange Code SE1065F Lion Quantity Type must be filled SE1066F Quantity must be filled SE1066F Quantity must be filled SE1067F Quantity must be filled SE1069F currency must be filled SE1069F currency must be filled SE1070F currency invalid SE1071F Trade Date must be filled SE1072F Trade Date format YYYYMMDD, e.g. 20060102 SE1073F Settlement Date must be filled SE1075F Settlement Date must be filled SE1075F Settlement Date format YYYYMMDD SE1076F Lion Ref must be filled SE1077F Invalid Lion Reference SE1078F Lion Hold Status must be filled SE1079F Trade ID must be numeric SE1081F Lion Hold Status must be numeric SE1082F Lion Original Quantity must be numeric SE1083F Lion Original Quantity must be numeric SE1084F Lion Transaction Flag invalid SE1085F Invalid Lion Quantity Type SE2003F TxID lookup failure: underlying instruction not found SE2002F TxID lookup failure: multiple underlying instructions found SE2003F Creation Status error SE2004F Instruction already processed by Creation (BELI) SE4029F VERWAHRART does not exist in table WSS SE4029F TzS_TAX_RELEVANCE does not exist in table WSS SE4029F TzS_TAX_RELEVANCE does not exist in table WSS SE4021F VERWAHRART has an invalid value in table WSS SE4021F SE4103H Settlement Amount Currency Rejection SE51031 Settlement Amount Currency Rejection	Error Code	Description
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SE1071F Trade Date must be filled		•
SE1072F Trade Date format YYYYMMDD, e.g. 20060102		·
SE1073F Settlement Date must be filled		
SE1074F Invalid Settlement Date		· 3
SE1075F Settlement Date format YYYYMMDD SE1076F Lion Ref must be filled SE1077F Invalid Lion Reference SE1078F Lion Hold Status must be filled SE1079F Trade ID must be numeric SE1080F Deal Price must be numeric SE1081F Lion Hold Status must be numeric SE1082F Lion Original Quantity must be numeric SE1083F Lion Original Amount must be numeric SE1084F Lion Transaction Flag invalid SE1085F Invalid Lion Quantity Type SE2001F TxID lookup failure: underlying instruction not found SE2002F TxID lookup failure: multiple underlying instructions found SE2003F Creation Status error SE2004F Instruction already processed by Creation (BELI) SE2005F Instruction already processed by Creation (RECE) SE4019I ISIN does not exist in refdata SE4020F VERWAHRART does not exist in table WSS SE4021F VERWAHRART has an invalid value in table WSS SE4022F T2S_TAX_RELEVANCE does not exist in table WSS SE4023F T2S_TAX_RELEVANCE has an invalid value in table WSS SE40101 Settlement Date Rejection SE6102I Deal Price Rejection SE6103I Settlement Amount Rejection SE6104I Trade Date Rejection SE6105I Settlement Amount Currency Rejection		
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SE6102IDeal Price RejectionSE6103ISettlement Amount RejectionSE6104ITrade Date RejectionSE6105ISettlement Amount Currency Rejection		
SE6103ISettlement Amount RejectionSE6104ITrade Date RejectionSE6105ISettlement Amount Currency Rejection		,
SE6104ITrade Date RejectionSE6105ISettlement Amount Currency Rejection		
SE6105I Settlement Amount Currency Rejection		
T tace of Trade Rejection	SE6106I	Place of Trade Rejection
SE6107I Reference Rejection		
SE6108I Settlement Transaction Rejection		
SE6109I no code word found (requires further investigation at CBF)		
SE6702I Security Rejection		
SE7101I Quantity Rejection		

Error Code	Description
SE7103I	Minimum Settlement Quantity
SE7104I	Multiple Settlement Quantity
SE8101I	Agent Rejection
SE8102I	Buyer or Seller Rejection
SE8103I	Safekeeping Account Rejection

Appendix 3 - Updated LION screen for NCSC ISIN

The below screenshots indicates the note regarding the type of custody NCSC ("AKV"). Details are subject to change.

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TRAN: KVLS FC: SB:
BOERSENGESCHAEFTE
                         SETTLEMENT-DIENST
    SB SETTLEMENT-DIENST BEARBEITUNG
         KENNZEICHEN KAUF/VERKAUF (K/V) : .
         VERWAHRART
         -> Informationen zu AKV-Wertpapieren finden Sie im Xact Web Portal
                            ZUSATZAUSWAHL
         BANKNUMMER
         WKN VON
                                      : I .......
         SETTLEMENT-SPERRE (S,F,A)
         WAEHRUNG GEGENWERT
         SCHLUSSTAG
         EINGEBER/GESCHAEFTSNUMMER
 -- ID-KZ:
                    -- PW:
                                   ----- B79075MP -- 13/08/21 -- 09:38:28 -
```

```
TRAN: KVLA FC: SB:
                      AENDERUNG / LOESCHUNG
BOERSENGESCHAEFTE
                                      LL LOESCHUNG LIEFERPOSITION
    AL AENDERUNG LIEFERPOSITION
                                       RL RUECKNAHME LOESCHUNG
        KENNZEICHEN KAUF/VERKAUF (K/V) : .
        VERWAHRART
                                     : ...
        -> Informationen zu AKV-Wertpapieren finden Sie im Xact Web Portal
                            ZUSATZAUSWAHL
        BANKNUMMER
                                     : ....
        WKN VON
                                    : I ........
        SETTLEMENT-SPERRE (S,F,A)
        WAEHRUNG GEGENWERT
        SCHLUSSTAG
                                     : ........
         EINGEBER/GESCHAEFTSNUMMER
                                  ----- B79075MP -- 13/08/21 -- 09:41:20 -
                   -- PW:
-- ID-KZ:
```

```
TRAN: KVLI FC: SB:
                      INFORMATION
BOERSENGESCHAEFTE
IB INFORMATION LIEFERPOSITIONEN
                                       IR INFORMATION REFERENZ
IA INFORMATION AUFGABEN
    KENNZEICHEN KAUF/VERKAUF (K/V) : .
                                          REFERENZ : . .....
    -> Informationen zu AKV-Wertpapieren finden Sie im Xact Web Portal
    ZUSATZAUSWAHL
    BANKNUMMER
                               : ....
    WKN VON
                               : I ......
    SETTLEMENT-SPERRE (S,F,A,L)
    WAEHRUNG GEGENWERT
    SCHLUSSTAG
    EINGEBER/GESCHAEFTSNUMMER
-- ID-KZ:
                  -- PW:
                                 ----- B79075MP -- 13/08/21 -- 09:42:35 -
```

```
TRAN: KVAL FC: SB:
AUFTRAGSABWICKLUNG
                     LINK-DIENST
                                                       AUFTRAGSSTATUS
     LC LINKAGE-AENDERUNG CASCADE
            AUFTRAGS-NUMMER
     LL LINKAGE-AENDERUNG LION
            KENNZEICHEN KAUF/VERKAUF (K/V): .
            VERWAHRART
                                       : ...
            BANKNUMMER
            WKN VON
                                      : I .........
             SETTLEMENT-SPERRE (S/F/A)
            WAEHRUNG GEGENWERT
             SCHLUSSTAG
             EINGEBER/GESCHAEFTSNUMMER
          -> Informationen zu AKV-Wertpapieren finden Sie im Xact Web Portal
                                ----- B79075MP -- 13/08/21 -- 09:43:16 --
-- ID-KZ:
                  -- PW:
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Published by

Clearstream Banking Frankfurt

www.clearstream.com

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November 2021