clearstream

Corporate Actions Harmonisation -KADI DE Funds Migration to OneCAS **Client Simulation Guideline**

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1. Introduction

1.1 General information

The current Clearstream Asset Services roadmap is about modernisation, harmonisation and standardisation with the aim to enhance the OneClearstream service offering. As part of this initiative, the Corporate Actions Harmonisation (CAH) project and especially the migration of the processing for CBF-issued securities from CBF Legacy system KADI to OneClearstream Asset Servicing (OneCAS) have been established focusing on the following aspects:

- Reduction of the technology debt and modernisation of the infrastructure;
- Functional simplification and harmonisation achieved through the consolidation of the processing environments;
- Reduce complexity of operating dual asset servicing processing on different technical platforms KADI vs. Custody.

The first driver for the change is the Asset Services processing standardisation. It is an enabler for the future busines/regulatory developments. The current dual processing environment for corporate actions creates extra complexity in the context of implementing the new standards resulting from the adherence to Shareholder's Rights Directive 2 (SRD II), the European Collateral Management System (ECMS) and AMI-SeCo Single Collateral Management Rulebook for Europe (SCoRE) and requirements to support the new ISO 20022 standards.

The second driver for the Corporate Actions Harmonisation project is linked to the setup of OneCAS, which started with the continuously expanding OneClearstream Service Offering applied for Investor-CSD links (that is, non CBF issued securities). Migrating the CBF-issued securities to OneCAS is therefore the next step for Clearstream in reaching the goal to fully operate OneCAS, providing a harmonised environment for corporate action processing, in compliance with all the new European standards (as mentioned above).

The expected benefit for clients comes with the harmonisation and standardisation of processing and reporting across OneCAS for all markets. That is, client processes and messaging formats, which are currently deviating for the German market will be aligned, if possible, with international standards such as the CASG standards, SCoRE standards or the Securities Market Practice Group (SMPG) guidelines for reporting.

During the first migration phase in July 2023, the harmonisation took place for all CBF-issued securities (Lagerland 099, as per Wertpapier-Mitteilungen (WM)), such as equities, bonds, warrants and certificates with the exception of investment funds and non-German-taxable DE-ISINs (for example, U.S. taxable DE-ISIN). All corporate action events are affected with the exception of meeting events, TEFRA D, class actions and non-German-taxable corporate actions events.

In Phase 2, the remaining DE market will be migrated, that is, CBF-issued investment funds, identified via the values "5000" (investment funds) or "B003" (interim funds) in WSS/WM-field GD198B; individual certificates, identified via the values "1" (Corpus and coupon sheet detached) in WSS/WM field GD481 and "1000" (equity) in WSS/WM field GD198B, securities not being T2S-eligible but issued by Germany and German ISINs with non-DE taxable country. Further markets that are currently processed by KADI, such as Switzerland and the U.S.A. are not in scope of this migration and are planned for a later date under CAH Phase 3.

All corporate action and income events for these securities, that is, all mandatory as well as voluntary events with the exception of funds instrument eligible in CBF but for which CBF is not the issuer CSD and meeting events will be processed in OneCAS from 1 July 2024. The migration of meeting events is planned for 18 November 2024 (please refer to <u>Announcement D23014</u>).

With the overarching goal of corporate action harmonisation and adherence to global market standards in mind, Clearstream has taken the approach of aligning the corporate action processing for all CBF-issued securities to the existing processing in OneCAS for other markets. For certain corporate action events and processes, a complete harmonisation is not possible at this stage due to deviating market practices and legislation. In those cases, Clearstream will generally enhance the OneCAS platform in order to continue offering corporate actions processing for CBF-issued securities which corresponds to the existing KADI-processes.

In this document, "income events" include interest payments, dividends, capital gains and redemption payments. In addition, once an issuer decides to start an income event, it will have to advise all relevant parties in the market (usually in official documentation or offer prospectus) about all aspects of the event. All other events are April 2024 Clearstream Banking Frankfurt considered "non-income" events and can be classified as either "mandatory", mandatory with choice and "voluntary" events depending on whether all cients are required to participate in the event.

Clearstream will offer a guided client simulation period and test cases dedicated to the enhancements developed by Clearstream for the KADI DE Funds migration to OneCAS. The functional details about the envisaged changes have been published on <u>OneClearstream rollout documentation webpage</u> under the section "Market-specific migration information for Germany".

1.2 Structure and content of this document

This simulation guideline focuses on the necessary scope and general framework for organising, preparing, and executing the client simulation for Clearstream's Corporate Action Harmonisation project. The purpose of this document is to ensure a smooth and efficient transition of Phase 2 in July 2024. It provides a common understanding and commitment of all involved stakeholders for the simulation execution, its required timeframe, the environment setup, and the content.

The guideline describes how Clearstream supports client specific Corporate Action Harmonisation for CBF-issued investment funds, when special data setups are required. Furthermore, this guideline intends to provide clients with the simulation requirements and to provide guidance through continuous simulation. Clearstream will provide test cases that will be executed during the guided simulation period.

2. Scope of the KADI DE Migration client simulation

In general, the scope of the client simulation for the KADI DE Funds Migration to OneCAS is designed by Clearstream to support clients where specific changes to the current processing for CBF-issued securities are implemented. Thus the scope of this client simulation covers the following asset servicing business process and related reporting:

- Event announcement and entitlement forecast;
- Event instruction via MT565;
- Payments and the corresponding reporting management;
- Reversal/repayment management;
- Transaction management, including market claims, transformations;

As a result of the foreseen changes the following corporate action events are in scope for testing:

- Dividend payment on a German ISIN (DVCA);
- Dividend payment on a German ISIN paid in USD (DVCA (paid in USD));
- Split Forward (SPLF);
- Merger event (MRGR);
- Merger event resulting in fractions (MRGR (fractional handling));
- Tender Offer with interim line (TEND);
- Exchange Offer (EXOF).

Note: Tax vouchers are considered out of scope for this Client simulation.

Please note that this document does not describe each (sub)process in detail. The document describes only as much details as required to explain the functional logic and sequence of the processes. Please refer to the respective handbooks for detailed process descriptions.

The Client simulation of the KADI DE Funds Migration to OneCAS follows a one stage test approach. In total, the client simulation runs over a period of three weeks, where first two weeks focus is on executing the planned test cases and third week is for scheduled for contingency testing for failed test cases.

Test cycle starts on **21 May 2024** and ends on **7 June 2024** with the plan to execute all test cases in the first two weeks and third week is reserved to test failed test cases. This test period will focus on testing seven corporate action events that are selected to cover the functional changes foreseen in corporate action event processing in OneCAS. This test period also supports an end-to-end test with T7 trading platform. The test will be conducted in IMS23/OCCT and is complemented with activities on T7 and UTEST.

The third test week is reserved for contingency purposes only. That is, specific failed events in the planned test period may be re-tested, if deemed necessary by Clearstream. Clients are required to adequately prepare to test all eight events within the scope of the client simulation.

Please refer to the figure below for an indicative timeframe of the environment availability and planned test activities with regards to the KADI DE Funds Migration to OneCAS client simulation. More detailed information can be found in chapter 5 "Client simulation calendar".

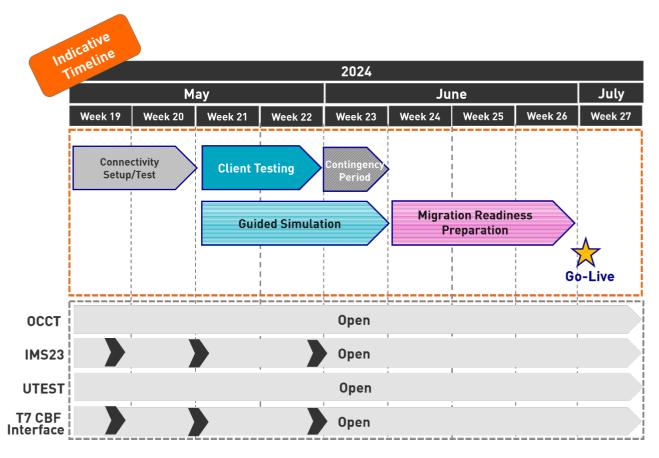


Figure 1: CAH KADI DE Funds Migration to OneCAS client simulation timeline overview

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3. Preparation testing environments

3.1 Getting ready for the client simulation

During the simulation period for the KADI DE Funds Migration to OneCAS, clients will be able to receive corporate action announcements via the different testing environments (via IMS23/OCCT, the environments are linked). Additionally, clients will receive settlement messages indicating the booking of proceeds for both corporate actions on positions as well as on flow.

For a successful participation in the client simulation, account and connectivity settings must be in place. Please contact the Clearstream Connectivity Support team (<u>connect@clearstream.com</u>), if:

- The account and connectivity settings in IMS23/OCCT need to be verified;
- The client requires a setup in IMS23/OCCT;
- There are particular setup requirements related to KADI DE Funds Migration to OneCAS Client Simulation required.

Clients who would like to participate in the simulation are asked to register using <u>CAH Client simulation</u> <u>registration form (clearstream.com)</u> link by latest **10 May 2024**. The related registration form is available on the <u>OneClearstream web page</u> or alternatively using the register link above.

3.2 CBF account settings in testing environments

For successful participation in the client simulation, account settings must be available in the T2S Pre-Production environment (UTEST) and the CBF Client simulation environment (IMS23/OCCT). In general, the settings used in the testing environment shall not deviate from production. If clients decide differently, they are requested to reconfirm the settings in the testing environment and are requested to consider the risk that is imposed by executing test cases with deviating static data. The default language of the reports transmitted via OneCAS in the testing environment is English. Clients cannot change these settings in IMS23/OCCT.

The related account settings will be reused from the previous simulation periods stored in IMS23/OCCT. If the account settings in IMS23/OCCT need to be updated, please contact the Clearstream Connectivity Support team (<u>connect@clearstream.com</u>) by **10 May 2024**.

3.3 CBF Client simulation environment (IMS23): Connectivity channels

For the KADI DE Funds Migration to OneCAS client simulation, clients may need a connectivity set up to IMS23/OCCT and UTEST. The connectivity setup from the previous simulation period stored in the different testing environments will be reused. This is valid for the settlement reporting. The custody reporting will be provided based on a default setup proposed by Clearstream. Existing connectivity settings for custody reporting will be replaced. A Client requiring a change in the custody reporting setup needs to indicate the future reporting in advance allowing the modification in due time. Sufficient lead time allowing the preparation of the technical setup (for example, RMA Exchange and connectivity test if required) ,must be considered. Illustrated below is the custody reporting default value setup proposed by Clearstream.

Category	Default value
Report types	MT564 NOTIF
	MT564 CRA (CLAIM AND REVERSAL ADVICE)
	MT564 Income Pre-Advice Report (IPAR)
	MT566 CONFIRMATIONS ENTITL. + CLAIMS
	 MT565 CLIENTS INSTRUCTIONS+ MT567 FEEDBACKS TO CLIENTS (VOLU+ CHOS).
Subscription Name	"Account number" + "_" + "Report type"
Subscription start date	21 May 2024
Frequency	Realtime
Delivery channel	SWIFT
Sending address	Varies due to the service subscription
Event types	All
Mandatory/voluntary	All
Forecast in days	5
Currencies	EUR

Table 1: List of Clearstream (CBF and CBL) connectivity channels and custody reporting settings

Clients that have not registered for previous client simulations or require their connectivity settings to be verified are requested to contact the CBF Client Readiness team. Changes in the connectivity setup must be communicated to <u>OneClearstream@clearstream.com</u> by **10 May 2024**.

For the message exchange via the SWIFT network, SWIFT requires the use of Test BICs as technical sender and receiver address within its testing environment. The Test BIC must be registered with the SWIFT network. If clients wish to participate via a Test BIC for the first time, they should allow some time for the preparation of the technical setup by SWIFT, RMA key exchange and connectivity tests.

Technically, CBF clients can send instructions to the CBF client simulation environment (IMS23) by using the production BIC DAKVDEFFXXX in the header or the CBF Test BIC ZYDGDEF0DOM when they instruct via File Transfer or MQ. Via SWIFT, BIC ZYDGDEF0DOM must always be used. If a client wants to send an instruction to a test system via File Transfer, the message must be identified as not being for production. This is done by a TNG trailer at the end of the instruction: $\ddot{a}5$: $\ddot{a}TNG$: $\ddot{u}\ddot{u}$

The CBF cient SWIFT addresses used in their messages to CBF is applied by CBF to create the T2S actor reference for DCP eligible instruction types. If the SWIFT address is a Test BIC and linked to an account with T2S Party BIC, this BIC is used when forwarding the messages to the T2S platform.

In order to set up the required connectivity channels, it is required as in production to request the settings in advance. The required order forms are available via the <u>Clearstream website</u>. Please contact the Connectivity Support team (<u>connect@clearstream.com</u>) if connectivity settings in IMS23 must be verified.

3.4 CBL account settings in testing environments

Clients are requested to verify the existing ClearstreamXact connectivity setting and check if all users maintaining corporate action events via Xact Web Portal can access the functionality and that sufficient rights are granted. The Xact Web Portal as the graphical user interface for the instruction management is used to configure the report definitions for the automated message flow (A2A connectivity). The default language of

the reports transmitted via the testing environment is English. Clients cannot change these settings in OCCT test environment.

Please contact the Connectivity Support team (<u>connect@clearstream.com</u>) if changes to the Xact Web Portal access are necessary.

3.5 CBL test environment (OCCT): Connectivity channels

For the message exchange via the SWIFT network, SWIFT requires the use of Test BICs as technical sender and receiver address within the testing environment. Test BICs used in IMS23 might be different to the Test BICs used in OCCT. The Test BIC must be registered with the SWIFT network. If clients wish to participate via a Test BIC for the first time, they should allow some time for the preparation of the technical setup by SWIFT, RMA Exchange and necessary connectivity tests.

Technically, CBF clients can send instructions to the CBL test environment (OCCT) using the CBL Test BIC ZYAILUL0XXX in the header via A2A connectivity (Swift, File Transfer) or U2A connectivity (Xact Web Portal). BICs used in production are different to the ones provided in the test environment. For CBF-i accounts, Test BICs needs to be provided by clients and they need to be linked to the BIC. Clients are requested to check account connectivity settings.

The Xact A2A connectivity setup from the previous simulation period stored in CBL test environment (OCCT) will be reused.

Ensuring a proper instruction maintenance via Xact Web Portal clients are requested to check if the tester have sufficient access and the necessary user rights. Please contact the Connectivity Support team (<u>connect@clearstream.com</u>) if connectivity settings in OCCT needs to be enriched for the client simulation.

3.6 Message Routing

Clearstream has developed an internal routing mechanism in order to create flexibility for clients to choose the SWIFT BIC.

All message routing options available in the OneClearstream test environment (combining four possible test BICs with asset servicing and settlement messages) are summarised in the following table:

	Asset servicing/settlement					
Production BICs	DAKVDEFFXXX	DAKVDEFFDOM	DAKVDEFFONE	CEDELULLLXXX		
Test BICs	ZYDGDEF <mark>0</mark> XXX	ZYDGDEF <mark>0</mark> DOM	ZYDGDEF <mark>0</mark> ONE	ZYAILUL <mark>0</mark> XXX		
Channels	MQ	SWIFT	SWIFT/MQ	SWIFT		

Table 2: List of message routing options

How to read the table above:

1. Instructions sent to Clearstream

- Asset servicing and settlement instructions along the legacy format, may be sent via SWIFT to the address ZYDGDEF0DOM, and for MQ to ZYDGDEF0XXX.
- OneClearstream settlement instructions via SWIFT may be sent to ZYAILULOXXX or ZYDGDEFOONE, and for MQ the address ZYDGDEFOONE may be used
- OneClearstream asset services instructions via SWIFT may be sent to ZYAILULOXXX, ZYDGDEF0DOM or ZYDGDEF0ONE, while for MQ, OneClearstream asset services instructions may be sent to ZYDGDEF0XXX or ZYDGDEF0ONE.

2. Reports received from Clearstream

• For OneClearstream settlement and asset servicing reports, clients will receive reports from ZYAILULOXXX, ZYDGDEF0DOM or ZYDGDEF0ONE, via SWIFT and from ZYDGDEF0XXX and ZYDGDEF0ONE via MQ. For each report and/or media the emitter BIC address may be chosen in the Xact Web Portal subscription tool. It is important to note that Xact Web Portal will only offer production BICs for the creation of reporting in the test environment. clients may refer to the table above for the correspondence between production BICs and testing BICs.

• For legacy settlement format, ZYDGDEF0XXX is applicable for MQ while ZYDGDEF0DOM is applicable for SWIFT.

4. Preparation test execution

4.1 Client Simulation Registration Form

Clients interested in participating in the KADI DE Migration client simulation are requested to complete the CAH KADI DE Funds Migration to OneCAS Client Simulation Registration Form. CBF will use the "Single Point of Contact (SPOC)" concept. Therefore, clients are requested to define a coordinator and deputy coordinator for the client simulation who will receive all relevant information and updates, if necessary. The "SPOC" is asked to inform their test team responsible for client simulation activities.

Allowing a proper execution of the client simulation, CBF will request dedicated account information in the registration form. Clients must define on account level whether the account used in the client simulation is the settlement account by a member of a German stock exchange. In addition, the T7 member ID information must be indicated in the registration form.

Test cases require client coordination for instruction management and/or the creation of stock exchange trades. For this purpose, CBF offers a "Disclosed Member List" with corresponding SPOC contact details. Interested clients must fill in the details which require a signature from the SPOC in the registration form. The OneClearstream Client Readiness team will send the Disclosed Member List to participating clients via <u>OneClearstream@clearstream.com</u> in due course.

Based on the information provided on the registration form, Clearstream will create the necessary settings in IMS23/ OCCT and UTEST, if a client requires an update of the static data for accounts and/or the related connectivity settings.

4.2 Creation of holdings

Between 2 May and 20 May 2024, CBF will use this time to create holdings in the test environment for the CAH KADI DE Funds Migration to OneCAS and new holdings of predefined securities will be distributed to client accounts from CBF account 4424 to the respective CBF main account (xxxx 000).

Once the holdings are set up, clients acting in ICP mode can verify them via the CASCADE Online functionality (HOST / PC) or MT535 Statement of Holding. In the above-mentioned period, clients must not enter test cases nor transmit instructions via an automated connectivity channel towards IMS23/OCCT or UTEST. In addition, the CASCADE Online functionality (HOST / PC) must not be used. This will allow the OneClearstream Client Readiness team a reconfiguration of IMS23/OCCT and preparation of the focus days in time.

Clients who are connected to UTEST and receive (settlement) reporting might notice instruction flows between CBF and T2S from setup activities.

The static data for the ISINs selected are based on the settings defined in Wertpapier-Service-System (WSS) stored in IMS23/OCCT.

The table below shows the ISINs that will be maintained by the OneClearstream Client Readiness team:

ISIN	Name	Nominal available	Tradeable via T7 XETR
DE000ETFL029	SHS INAV DEKA EURO STOXX 50 UCITS ETF	100,000	Y
DE000ETFL037	SHS INAV DEKA STOXX EUR.STR.GRW.20 UCITS ETF	100,000	Y
DE000ETFL094	SHS INAV DEKA MSCI USA LC UCITS ETF	100,000	Y
DE000ETFL045	SHS INAV DEKA STOXX EUR.STR.VAL.20 UCITS ETF	100,000	Y
DE000ETFL052	SHS INAV DEKA STOXX EUR.ST.SY.C.40 UCITS ETF	100,000	Y
DE000ETFL060	SHS INAV DEKA DAX UCITS ETF	100,000	Y
LU0006277684	SHS UBS (LUX)MONEY MARKET FD-USD-P-ACC	100,000	N
DE000ETFL078	SHS INAV DEKA EURO STOXX SE.DIV.30 UCITS ETF	100,000	Y
DE000ETFL086	SHS INAV DEKA MSCI EUROPE LC UCITS ETF	100,000	Y

ISIN	Name	Nominal available	Tradeable via T7 XETR
DE000ETFL219	SHS INAV DEKA DB.EUROGOV GE.10+ UCITS ETF	100,000	Y
BMG294021073	SHS EFG-HERMES MIDDLE EAST+AFRICA LTD- TELECOM	100,000	Ν
DE000ETFL110	SHS INAV DEKA IBOXX EU.LI.S.D 1-10 UCITS ETF	100,000	Y
DE000ETFL136	SHS INAV DEKA IBOXX EU.LI.S.D 3-5 UCITS ETF	100,000	Y
DE000ETFL144	SHS INAV DEKA IBOXX EU.LI.S.D 5-7 UCITS ETF	100,000	Y
DE000ETFL151	SHS INAV DEKA IBOXX EU.LI.S.D 7-10 UCITS ETF	100,000	Y
DE000ETFL169	SHS INAV DEKA IBOXX EU.LI.S.D 10+ UCITS ETF	100,000	Y
DE000ETFL177	SHS INAV DEKA DB.EUROGOV GERMANY UCITS ETF	100,000	Y
LU0011843777	INE HANDELSBANKEN FDS FAR EAST SHARES	100,000	Ν
DE000ETFL185	SHS INAV DEKA DB.EUROGOV GE.1-3 UCITS ETF	100,000	Y
DE000ETFL193	SHS INAV DEKA DB.EUROGOV GE.3-5 UCITS ETF	100,000	Y
DE000ETFL235	SHS INAV DEKA DAXPLUS MAX.DIVIDEND UCITS ETF	100,000	Y
GB00B469J896	SHS FIDELITY INVEST.FDS-STRAT.BD-W NET CAP	100,000	N

Table 3: List of ISINs in custody type CSC and NCSC for the CAH KADI DE Funds Simulation

4.3 Limitation for pending instructions

During the test execution, each client participating in the simulation is requested to consider that high volumes of pending instructions in UTEST impacts the performance of all T2S test environments. Therefore, the client should actively monitor the number of pending instructions and ensure that no more than 500 pending instructions are active in the test system. To determine the number, all instructions must be considered, independent from:

- The status, that is, matched, unmatched, hold or release;
- The business procedure, that is, domestic and cross-border instructions, Stock Exchange trades and instructions resulting from corporate actions;
- The connectivity channel, that is, ICP or DCP mode;
- The test activity conducted with Clearstream (for example, OneClearstream).
- This limitation applies to all accounts (and sub-accounts) of a client that are set up in the CBF Client Simulation environment (IMS23/OCCT) for testing.

T2S aims to reduce the number of pending trades to minimise the capacity and resources needed for the deployment in UTEST. T2S changed the recycling period to one T2S Settlement Day for matched and unmatched instructions. The standard values (five T2S Settlement Days for unmatched instructions and 60 days for matched instructions) will no longer apply.

4.4 Custody services environment settings

For the OneCAS client simulation, events will be announced and the processing of predefined income and nonincome events will be executed via Custody. The events (Focus Days) scheduled are limited to the scope defined in this document. Clearstream asks clients participating in the test to ensure that their internal test system for securities master data will support these ISINs.

The table below lists the event-driven activities and the related processing during the client simulation in Custody.

Event-related activity	General information related to event procedures using OneCAS
Cash proceeds	During the client simulation, all income events distributed in Euro, for securities where CBF
	acts in the role as the Issuer-CSD, will be transferred to the existing Custody Default T2S DCA, if not differently defined in the static data for the main/sub account.
	The cash movements for income events are reported via MT942 "Interim Transaction Report" and MT950 "Statement Message".
Corporate action announcement	Clients will be informed via MT564. The MT564 message subscription will be a default setup as described in chapter 3.
	The MT564 will be send out to the clients in real-time if the event was subject to a change on a record date or to a cancellation/repayment/reversal.
	The notification will be provided as shown in the event details or highlighted in the Client simulation calendar.
Corporate action confirmation	For income events distributed in Euro and for securities where CBF acts in the role of Issuer- CSD, the confirmation will be provided once the T2S settlement confirmation was received.
	Clients will be informed via MT566. The MT566 will be a default setup in OneCAS as described in chapter 3. The corporate action confirmation will be provided on payment date as shown in the event details or in the Client simulation calendar.
Corporate action reporting	Provisioning timings of the corporate action reporting can be found in the IMS23/0CCT daily test schedule.
Creation of market claims	The related free of payment (FoP) instructions or payment free of delivery (PFoD) instructions are generated and forwarded to T2S depending on the successful settlement of the underlying transaction. The hold and release status for FoP market claims is set due to the respective account setup or copy from underlying instruction.
Creation of reverse market	The related free of payment (FoP) instructions as well as payment free of delivery (PFoD) instructions are generated and forwarded to T2S.
claims	The hold and release status for FoP reverse market claims is set due to the respective account setup.
Detection period for market claims	During the Client simulation, the market claims and transformation period is five business days.
and transformations	Client acting in DCP mode have to consider that the Transformation Detection Period (TDP) at T2S is defined as 20 business days. Even if clients can set up instructions during the entire T2S Transformation Detection Period of 20 business days, only instructions set up in the first five business days will be transformed by CBF. The detection period in custody is 20 business days.
Instruction management	Clients can enter settlement instructions on their demand, if they want to test market claims, reverse market claims, or transformations.
	Clients who wish to settle free of payment (FoP) instructions can set up such instructions against the account "CBF W/KUNDENSIMU CRC (PASSIV), account number 1117 000 / BIC11: DAKVDEFFT77", if no other counterparty is available.
Security positions	Please refer to section "4.2. Creation of holdings" for an overview of the holdings provided for each registered account as defined in "Table 1 - List of ISINs in custody type CSC for the Client simulation of CAH KADI DE Funds Migration to OneCAS".
	Clients must ensure that they have sufficient holdings in the respective ISIN on the registered accounts to successfully participate in the Client simulation.
	Table 4: Custody system parameters for corporate actions processing

4.5 Issue Declaration Form

The <u>Issue Declaration Form</u> is a fillable form for the written submission of any issue encountered during the client simulation period regarding KADI DE Funds Migration to OneCAS. The form is requested to be sent if a test issue raised by a client cannot be resolved. If the test issue relates to a test case as described in chapter 6 "Execution of test cases – guided simulation", please mention it in the description.

The completed declaration form will initiate an investigation of the issue. This procedure aims to avoid misunderstandings and to accelerate the solution process.

Completed Issue Declaration Forms can be sent to <u>OneClearstream@clearstream.com</u>.

5. Client simulation calendar

Clearstream defined a client simulation calendar that gives an overview of the testing for each stage of the client simulation period. The simulation calendar is specified on a daily basis including the dates for:

- Availability of all environments participating in the simulation (IMS23/OCCT, UTEST, T7 Test);
- Availability of the interface between T7 and CBF;
- CCP Simulation business days ("Execution of Batch Days"), trades entered in T7 will be forwarded for settlement processing in Clearstream after the successful execution of the CCP Batch Day;
- Test cases of guided simulation covering the T7 end-to-end test activities and corporate action events.

Since the simulation calendar is subject to change, clients are kindly requested to ensure they always refer to the most up-to-date version which will be published on the Clearstream website.

The overall test schedule shown below indicates the downtimes already communicated for the client simulation environment (IMS23/OCCT), T2S Pre-Production environment (UTEST), and T7 Test environment. Clients must align their processing schedules with the test execution run times. There might be additional downtimes, if one of the environments is not available or the testing is limited because of specific measures ensuring a proper test execution. Clearstream will inform clients about such downtimes in due time by email to their contact nominated (SPOC) based on the information provided in the CAH KADI DE Funds Migration Client Simulation Registration Form.

	Cl	ient simulation	calendar: KAD	I DE Funds Migrat	tion to OneCAS,	21 May - 7 Jun 2024	4
CI1	Test Day	Availability of IMS23	Availability of OCCT	Availability of T2S Pre- production (UTEST)	Availability of T7-CBF Interface	CCP Simulation Execution of Batch Day	Dedicated Test Case / Focus Day
							Start of end-to- end Test Cycle 1
							Announcement Day DVCA
							Announcement Day DVCA (paid in USD)
	Tuesday						Announcement Day SPLF
	Tuesday, 21 May 2024	Open	Open	Open	Open	CCP Batch Day	Announcement Day MRGR
							Announcement Day MRGR (fractional handling)
							Announcement Day TEND
							Announcement Day EXOF
	Wednesday,						Ex-Date DVCA
	22 May 2024	Open	Open	Open	Open	CCP Batch Day	Ex-Date DVCA (paid in USD)
	Thursday,						Record Date DVCA
	23 May 2024	Open	Open	Open	Open	CCP Batch Day	Record Date DVCA (paid in USD)
	Friday, 24						Focus Day DVCA
	May 2024	Open	Open	Open	Open	Not Applicable	Focus Day DVCA (paid in USD)

¹ CI stands for change indicator.

	Cl	ient simulation	calendar: KAD	I DE Funds Migra	tion to OneCAS,	21 May - 7 Jun 2024	4
CI1	Test Day	Availability of IMS23	Availability of OCCT	Availability of T2S Pre- production (UTEST)	Availability of T7-CBF Interface	CCP Simulation Execution of Batch Day	Dedicated Test Case / Focus Day
							Ex-Date SPLF
	Saturday, 25 May 2024			Weekend			
	Sunday, 26 May 2024			Weekend			
							Record Date SPLF
	Monday, 27						Ex-Date MRGR
	May 2024	Open	Open	Open	Open	CCP Batch Day	Ex-Date MRGR (fractional handling)
							Focus Day SPLF
	Tuesday, 28	Open	Open	Open	Open	CCP Batch Day	Record Date MRGR
	May 2024						Record Date MRGR (fractional handling)
							Focus Day EXOF
	Wednesday,	0	0	0	0	Net Annling bla	Focus Day MRGR
	29 May 2024	Open	Open	Open	Open	Not Applicable	Focus Day MRGR (fractional handling)
	Thursday, 30 May 2024			Holiday			
	Friday, 31						Focus Day TEND
	May 2024	Open	Open	Open	Open	Not Applicable	End of end-to-end Test Cycle 1
	Saturday, 1 June 2024			Weekend			
	Sunday, 2 June 2024			Weekend			
	Monday, 3 June 2024	Open	Open	Open	Open	CCP Batch Day	Start of Contingency Test
	Tuesday, 4 June 2024	Open	Open	Open	Open	CCP Batch Day	
	Wednesday, 5 June 2024	Open	Open	Open	Open	CCP Batch Day	
	Thursday, 6 June 2024	Open	Open	Open	Open	CCP Batch Day	
	Friday, 7	Open	Open	Open	Open	CCP Batch Day	End of Contingency Test
	June 2024	97011	97011	97011	04011	Sof Batch Bay	Clean up the Test environment

Table 5: Client simulation calendar - CAH DE Funds Migration to OneCAS

6. Execution of test cases – Guided simulation

During guided client simulation period, Clearstream offers its clients test cases on focus days for corporate actions. These test cases require special preparation and therefore cannot be offered on a daily basis. As this is a guided simulation, activative participation on the focus days is required.

The corporate action test cases are designed to show the harmonised processing for corporate action events using Custody. Clearstream will prepare non-income and income events for testing related to instructions resulting from corporate actions, market claims, the transmission of Corporate Action Announcement (MT564) and the related Corporate Action Confirmation (MT566), if applicable. New announcements and updates are sent in real time.

Allowing clients a verification of the new and existing Custody functionality and testing of corporate action processing, Clearstream will set up several event types. For a successful test, pending or settled trade instructions in the relevant security need to be entered by the trading member participating in the client simulation. The following event types will be offered once. The detailed timeline of the test events is shown in section 5 "Client simulation calendar".

Corporate action events in scope of testing:

- Dividend payment on a German ISIN (DVCA);
- Dividend payment on a German ISIN paid in USD (DVCA (paid in USD));
- Split Forward (SPLF);
- Merger event (MRGR);
- Merger event resulting in fractions (MRGR (fractional handling));
- Tender Offer with interim line (TEND);
- Exchange Offer (EXOF).

During contingency testing, all the events failed during first test window will be executed again. Decision will be taken based on the test status of first test execution. Details about contingency test will be shared on adhoc basis.

7. Detailed test case description

Α	Dividend payment on a German ISIN
В	Dividend payment on a German ISIN paid in USD
С	Split Forward
D	Merger event
E	Merger event resulting in fractions
F	Tender Offer with interim line
G	Exchange Offer

7.1 Test case A – Dividend payment on a German ISIN

Event type	TA120 – Mandatory event
Test case name	DVCA with (CBF in its role as the Issuer CSD)
SWIFT event ID	DVCA MAND
ISIN	DE000ETFL029
Security description	SHS INAV DEKA EURO STOXX 50 UCITS ETF
Instrument type	Fund
Notification date	21 May 2024
Ex-Date	22 May 2024
Record date	23 May 2024
Value / payment date	24 May 2024
Event-specific details	Dividend payment will be paid.

7.2 Test case B – Dividend payment on a German ISIN paid in USD

Event type	TA120 – Mandatory event
Test case name	Dividend payment on a German Equity paid in USD
SWIFT event ID	DVCA MAND
ISIN	DE000ETFL037
Security description	SHS INAV DEKA STOXX EUR.STR.GRW.20 UCITS ETF
Instrument type	Fund
Notification date	21 May 2024
Ex-Date	22 May 2024
Record date	23 May 2024
Value / payment date	24 May 2024
Event-specific details	Dividend payment will be paid.

7.3 Test case C – Split Forward

Event type	TA211 – Mandatory event
Test case name	Split Forward
SWIFT event ID	SPLF MAND
ISIN	DE000ETFL094
Security description	SHS INAV DEKA MSCI USA LC UCITS ETF
Issuance details	1 as to 1
Instrument type	Fund
Notification date	21 May 2024
Ex-Date	24 May 2024
Record date	27 May 2024
Value / payment date	28 May 2024
Event-specific details	The distribution will be done on the current underlying ISIN, the instruction will be forwarded to T2S on the end of business day. The test case will support a market claim.

7.4 Test case D – Merger event

Event type	TA232 – Mandatory event						
Test case name	Merger event (CBF in its role as Issuer CSD)						
SWIFT event ID	MRGR MAND						
ISIN	DE000ETFL045						
Security description	SHS INAV DEKA STOXX EUR.STR.VAL.20						
Issuance details	1 as to 1						
Instrument type	Fund						
Notification date	21 May 2024						
Ex-Date	27 May 2024						
Record date	28 May 2024						
Value / payment date	29 May 2024						
Event-specific details	Transformation to ISIN (DE000ETFL052). The security distribution will be forwarded to the SAC account. The test case will support the transformation procedure.						

7.5 Test case E – Merger event resulting in fractions

Event type	TA232 – Mandatory event						
Test case name	Merger event resulting in fractions						
SWIFT event ID	MRGR MAND						
ISIN	DE000ETFL060						
Security description	SHS INAV DEKA DAX UCITS ETF						
Issuance details	3 as to 1						
Instrument type	Fund						
Notification date	21 May 2024						
Ex-Date	27 May 2024						
Record date	28 May 2024						
Value / payment date	29 May 2024						
Event-specific details	Transformation to ISIN (LU0006277684). The security distribution will be forwarded to the CBL SAC account. The test case will support the transformation procedure.						

7.6 Test case F – Tender Offer with interim line

Event type	TA 280 – Voluntary event					
Test case name	Tender Offer with interim line					
SWIFT event ID	TEND VOLU					
ISIN	DE000ETFL078					
Security description	SHS INAV DEKA EURO STOXX SE.DIV.30					
Event Details	Ratios: 1 interim fund for 1 fund tendered and 1€ for 1 interim fund Interim ISIN DE000ETFL086					
Instruction Period	21 May 2024 – 29 May 2024					
Deadline	29 May 2024 10:00					
Instrument type	Fund					
Notification date	21 May 2024					
Value / payment date	31 May 2024					
Event-specific details	Registered clients will receive a Corporate Action Notification (MT564) the tender offer.					

7.7 Test case G – Exchange Offer

TA280 – CHOS event					
Exchange Offer					
EXOF CHOS					
DE000ETFL219					
SHS INAV DEKA DB.EUROGOV GE.10+ UCITS ETF					
Ratios: 1 interim fund for 1 fund tendered and 1€ for 1 interim fund. Interim ISIN: BMG294021073					
21 May 2024 – 28 May 2024					
28 May 2024 10:00					
Fund					
21 May 2024					
29 May 2024					
Registered clients will receive a Corporate Action Notification (MT564) for the exchange offer to final ISIN (default option) or to sell the interim fund.					

8. Contacts

The following team at Clearstream will answer your questions regarding the Clearstream environment used for the CAH KADI DE Funds Migration to OneCAS test execution and necessary setup requirements. In addition, they will handle any queries regarding the Corporate Action Harmonisation project in general.

All issues encountered by clients with Clearstream or related to the OneCAS functionality during the simulation should be reported to the email below. For this reason, Clearstream asks its clients to use the "Issue Declaration Form" which is published on the Clearstream website under <u>Testing and Simulation</u>. Clearstream collects all raised items, analyses them, and reverts back to clients.

CAH Client Readiness team

Email: <u>oneclearstream@clearstream.com</u>

9. Appendix - Domestic OTC settlement instructions

9.1 CASCADE Instruction Type AA01 and AA02

The following table provides general information for OTC settlement instructions (AA01 / AA02). Clients need to consider that for non-cleared SE instructions the initial creation is done by SETI.

NTS cycles and RTS (OTC DFoP / RFoP, PFoD debit / cr			Reporting type	Report, if ordered by clients for IMS23	Send date / online availability	
Туре	CASCADE-HOST / PC	ISO 15022 (ICP)	ISO 20022 (DCP)	ISO 15022 (ICP)	MT548 (Status reporting)	Real-time
DFoP/ DvP (DwP)	KVEE-WE/ OTC - enter delivery KVEK /	MT542/ MT543	sese.023 DELI with FREE or with APMT and CRDT		MT545 - MT547 (Deliver / Receive Free confirmation - Deliver / Receive against payment confirmation MT578	Real-time Real-time
	OTC – unverified instructions – verify KVEE-MI / OTC –				(Settlement Allegement) MT535 (Statement of Holdings)	End of Day (EoD)
RFoP/ RvP (RwP)	instructions – verify	· ·	sese.023 RECE with FREE or with APMT and DBIT		MT536 (Statement of settled Transactions / Clearing & Settlement Statement (C&S Statement)	End of Day (EoD) complete or at predefined sending times (Delta)
		see DvP / RvP		MT537 (Pending CASCADE OTC instructions)	Daytime: hourly Night-time: At predefined times or events	
		(PFoD DELI / RvP (PFoD RECE)			MT586 (Statement of Allegements)	Daytime: hourly Night-time: at predefined times or events
				CASCADE HOST	KVDU-ID (movements) KVBA-BB (Positions per ISIN) KVAI (Pending verified instructions)	CASCADE Online opening hours
				CASCADE- PC	movements / positions - movements – booked movements - final positions OTC-pending instructions	
				ISO 20022 (DCP)	See Connectivity Handbook	DCP

Table 1 – OTC instruction flow