

Client Handbook

For clients of Clearstream Banking AG

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Foreword

The descriptions and information provided in this Client Handbook are Technical Rules according to clause I of the General Terms and Conditions of Clearstream Banking AG. The information contained in this Client Handbook applies in conjunction with other CBF publications (CASCADE Online Handbook, CmaX[®] User Manual, Xact Web Portal User Guide and Connectivity Handbook), CBF's announcements and other user manuals on connectivity, which contain further details concerning the use of CBF's services. The applicable version is always the current version published on the Clearstream website www.clearstream.com.

CBF reserves the right to revise and update this Handbook from time to time in order to document the availability of new products and other improved services. Clients who have specific questions about the information contained in this Handbook are asked to contact their Client Services Officer or Relationship Manager.

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Contents

Foreword	i
1. Introduction	
1.1 Organisational structure of the Clearstream Banking Group and the legal status of Clearstream Banking Frankfurt	1-1
1.2 CBF's role in Germany and in international securities markets.....	1-1
1.3 Credit rating.....	1-3
1.4 Types of custody	1-3
1.5 Services for collective safe custody (incl. NCSC-T).....	1-5
1.6 Third-party services for individual safe custody.....	1-14
1.7 Services for non-collective safe custody.....	1-16
1.8 Links to international securities markets.....	1-18
1.9 Legal documentation.....	1-19
1.10 Sources of information	1-19
1.11 Client Services.....	1-22
2. Client accounts	
2.1 Cash and securities accounts per transaction type.....	2-1
2.2 Account types.....	2-3
2.3 Opening accounts	2-8
2.4 Safekeeping	2-9
3. Issuance and Vault Services	
3.1 Issuance.....	3-1
3.2 Electronic securities.....	3-5
3.3 Vaults	3-7
4. Settlement Services	
4.1 Settlement via T2S.....	4-1
4.2 Stock exchange trades (non-CCP stock exchange trades).....	4-3
4.3 OTC transactions	4-10
4.4 CSDR Settlement Discipline Regime	4-28
4.5 Cash regulation	4-48
4.6 Cash settlement through T2S	4-48
4.7 Cash settlement of non-EUR currency	4-50
4.8 Cash settlement through the Swiss National Bank.....	4-52
5. Asset Services	
5.1 Collective safe custody.....	5-1
5.2 Individual safe custody	5-18
5.3 Individual safe custody	5-19
6. Investment Fund Services	
6.1 Vestima	6-1
7. Collateral Management	
7.1 Collateral Management Services (Xemac®)	7-1
8. Special Services	
8.1 Registered shares in CASCADE-RS	8-1
8.2 French registered securities.....	8-7
8.3 Settlement of TEFRA D securities.....	8-7

8.4	T2S Auto-Collateralisation	8-7
8.5	Collateral valuation	8-10
8.6	Interest calculations and reporting.....	8-15
8.7	Third-party services for individual safe custody.....	8-16
8.8	Taxbox (German flat rate withholding tax).....	8-17
8.9	Risk Management Service for settlement agents.....	8-18
8.10	Shareholder identification under Shareholder Rights Directive II (SRD II).....	8-18
8.11	Cash Financing services.....	8-19

9. Information Provision Services

9.1	Collective safe custody	9-1
9.2	Non-collective safe custody	9-7
9.3	Communications contingency	9-7
9.4	Reporting	9-8
9.5	Collective safe custody	9-9
9.6	Non-collective safe custody	9-12
9.7	Year-end statements	9-12
9.8	Domestic Markets Monitoring Report.....	9-12
9.9	Registrar Monitoring Report	9-14
9.10	T2S Dedicated Cash Account Statement (MT940).....	9-15
9.11	Shareholder identification	9-16

10. Annex

10.1	Reference documents	10-1
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Glossary	G-i
-----------------------	------------

Index	I-i
--------------------	------------

1. Introduction

1.1 Organisational structure of the Clearstream Banking Group and the legal status of Clearstream Banking Frankfurt

Clearstream Banking Aktiengesellschaft, Frankfurt (CBF) is a stock corporation (Aktiengesellschaft) under German law (registered in the commercial register under number HRB 7500). Its Legal Entity Identifier (LEI) is 549300298FD7AS4PPU70.

Further details on the group's structure with respect to CBF are illustrated on the Clearstream website under [Shareholding structure](#).

CBF is authorised under Article 16 of CSDR (core and non-banking-type ancillary services). Furthermore, CBF is authorised and regulated as a credit institution under the German Banking Act (Kreditwesengesetz). Accordingly, it is subject to the supervision of the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin), which operates in close cooperation with the Deutsche Bundesbank.

In addition, CBF is designated as an operator of securities settlement systems (SSS) by the Deutsche Bundesbank in accordance with section 24b (1) of the German Banking Act, transposing article 10 (1) of the Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems (SFD), amended by Directive 2009/44/EC of the European Parliament and of the Council of 6 May 2009 and by Directive 2010/78/EU of the European Parliament and of the Council of 24 November 2010. A complete list of the notified systems is available on the [ESMA website](#).

The existing authorisations for its activities are described in the [database of companies](#) of the Federal Financial Supervisory Authority (BaFin).

CBF has outsourced some areas of technical and organisational importance for its custody, administration and settlement services. The nature and the scope of the outsourced areas and services that are relevant for CBF clients are described in greater detail in the following chapters of this Handbook.

1.2 CBF's role in Germany and in international securities markets

CBF offers a broad range of services in domestic and foreign securities. On the one hand, it is the central securities depository in Germany for securities eligible for collective safe custody in accordance with Section 5 of the German Securities Deposit Act. On the other, it provides settlement, custody and administration of foreign securities via different channels.

Germany

CBF carries out the role of a central securities depository in Germany. CBF is a custodian for securities accepted in Germany and issued by German and international issuers in the form of collective or individual certificates, or registration rights. CBF settles transactions in the above-mentioned securities against payment or FoP for all German securities and financial futures markets as well as various global trading platforms. CBF offers the settlement of both stock exchange trades and OTC

transactions for the securities it keeps in collective safe custody. Stock exchange trades held in collective safe custody are for the most part settled in collaboration with one central counterparty - Eurex Clearing AG - which eliminates the counterparty risk and ensures delivery positions can be offset.

CBF uses the TARGET2-Securities (T2S) platform of the Eurosystem to settle securities instructions in central bank money.

In order to participate in securities settlement via CBF, market participants need either their own account with CBF or an account with a settlement bank acting as an agent between the client and CBF. They also need access to central bank money.

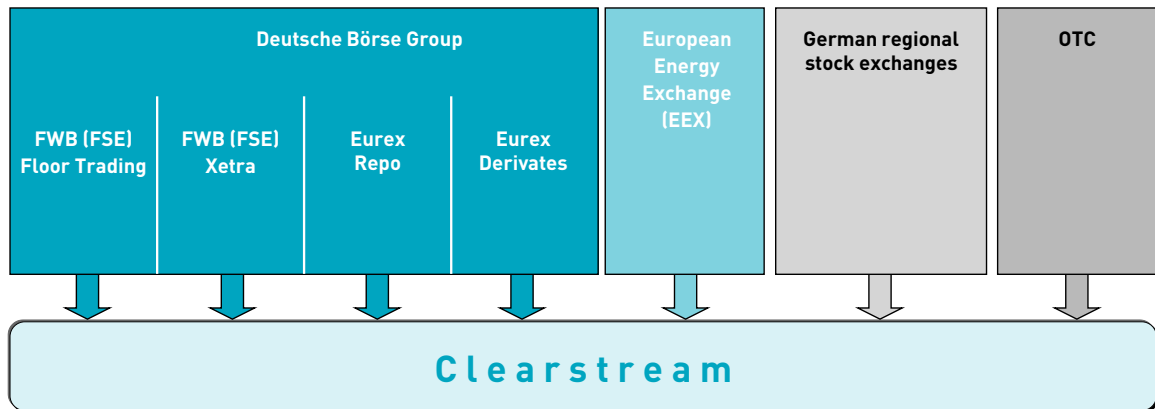


Figure 1.1 CBF's role

International securities markets

In conjunction with its sister company CBL, CBF offers custody, administration, and settlement services and is linked to global financial markets in a variety of ways:

Cross-border services via CSD Links

For foreign securities eligible for collective safe custody pursuant to the German Securities Deposit Act, CBF maintains links into central securities depositories to serve foreign securities markets, so called CSD links. In this context, EUR cash settlement against central bank money takes place via the T2S Dedicated Cash Account (DCA) and foreign currencies via correspondent banks.

CBF will gradually establish CSD links to all markets participating in T2S. Securities settled via these links on T2S are eligible for collective safe custody as well as non-collective safe custody within the meaning of the German Securities Deposit Act. This adaptation takes place after the finalisation of the T2S migration phase in separate launches by market (documentation will be provided separately).

Foreign Securities via intermediaries

Alternatively, CBF offers custody of foreign securities in securities accounts via foreign intermediaries. For securities, kept in custody via an intermediary CBF has through CBL a wide network of foreign custodians outside Germany. Cash settlement takes place via foreign correspondent banks.

1.3 Credit rating

The current credit rating enjoyed by CBF is AA (Long Term, S&P Global Ratings).

S&P Global Ratings' Corp. 2020 Research Update includes the following¹:

CBF operates the German central securities depository (CSD) and is one of Clearstream's two principal operating subsidiaries, which provide global coverage in settlement, custody, and collateral management services.

In S&P Global Ratings' view, CBF plays a central role for its immediate parent Clearstream Holding AG (Clearstream), which has a "aa" group credit profile. CBF is an indirect subsidiary of Deutsche Börse AG (DB1), a leading global financial market infrastructure group that owns Clearstream. CBF holds around 50% of Clearstream's assets under custody and comprises around one-quarter of its revenue. It is an integral part of Clearstream, and its activities are highly intertwined with that of Clearstream's other core subsidiary CBL.

S&P Global Ratings expects that Clearstream will maintain strong capitalisation, a very low risk profile, and good core revenue, and its strong domestic and international market shares as a central securities depository operator.

1.4 Types of custody

German law in relation to securities deposits distinguishes between three different types of custody, which are also reflected in the functional and technical organisation of CBF and the services offered: collective safe custody (CSC), individual safe custody (also referred to as jacket custody), and non-collective safe custody (NCSC, that is, book-entry credits on a fiduciary basis or trustee business)

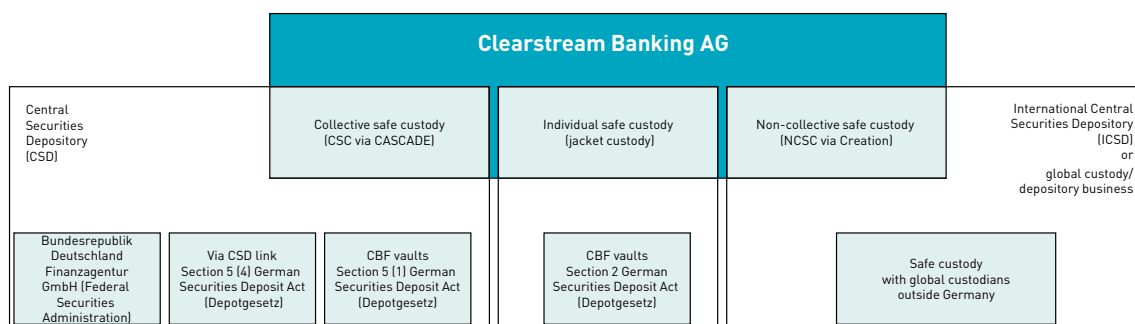


Figure 1.2 Types of custody through CBF

1. On 23 November 2020, S&P Global Ratings assigned its "AA" long-term issuer credit rating to CBF with a stable outlook.

Collective safe custody

Collective safe custody (CSC) is regulated under Section 5 of the German Securities Deposit Act (Depotgesetz). This states that fungible, that is, freely negotiable, securities can be kept in safe custody with or via the CSD - in this case CBF. If securities are issued under German law and evidenced by a global certificate, that is, with the entire issue represented by one certificate, the law stipulates that this must be deposited with a CSD.

As a CSD, CBF creates a collective holding with the deposited securities which are then eligible for securities transfers by book entry. Where CSD links exist (that is, mutual account connections to CSDs outside Germany which are subject to special requirements under Section 5 (4) of the German Securities Deposit Act) the securities deposited with these CSDs also form part of the collective holding. This system enables the transfer of rights inherent to the securities by book entry. This is known as a securities transfers by book entry. The beneficial owner (depositor), who is not known by name on the higher levels of the custody chain, has co-ownership of fractions of this collective holding, according to the nominal value or units of the securities the depositor has delivered into collective safe custody through the depository (and possibly further intermediate custodians). This ownership has legal validity vis-à-vis every third party and its transfer or the acquisition of collateral interests in securities kept in collective safe custody follows general civil law principles, that is, an agreement is needed between the seller and the recipient regarding the transfer of title, in addition to the actual act of transfer. The bona fide purchase of co-ownership fractions is possible. In as far as the securities in safe custody are eligible for delivery the depositor has a claim to the delivery of securities of the same type and quality as the securities class in safekeeping.

Depositories, as CBF clients and (intermediate) custodians as well as CBF as a CSD only provide the depositor (third-party) possession of the securities kept in custody, as required by civil law. As custodians, they are not the owners of these securities, neither in the sense of a trustee nor in the sense of a beneficial owner. When a transfer of co-ownership fractions takes place, constructive possession must move from the depositor who sells them to the depositor who buys them or to his depositories, on all levels of the custody chain.

Under Section 4 (1) of the German Securities Deposit Act, CBF is deemed to have constructive notice of third-party ownership of the securities that a depository, as an intermediate custodian, keeps in custody with CBF. This means that CBF is attributed with the knowledge that the securities that the depository has delivered into safe custody do not in principle belong to the depository. This applies as long as the depository does not give CBF express notice that certain securities are its own positions or third-party positions that it has been authorised to dispose of for its own purposes. The particular consequence of this constructive notice of third-party ownership is that these securities owned by third parties enjoy full protection in the event of debt enforcement measures and similar acts against the depository or CBF. The securities also remain fully protected in the event of insolvency, as the owners have the right for their property to be separated from the debtor's assets under Section 47 of the German Insolvency Code (Insolvenzordnung).

Individual safe custody

In the case of individual safe custody (also referred to as jacket custody), which is regulated under the German Securities Deposit Act, the custodian or, in the case of custody with a third party, CBF, must segregate the securities to be kept in safe custody from other securities holdings it keeps in safe custody, on the depositor's express request. The depositor in question must be identified on the outside. This identification often takes place in the form of a "jacket" marked with the depositor's name. This separation preserves the depositor's sole ownership of the physical securities certificate in question and when the certificate is deposited this ownership is not transformed into fractional co-ownership of the collective holding.

Non-collective safe custody

For securities that are not settled via the T2S platform, CBF keeps the positions in the form of book-entry credits on a fiduciary basis, using the technical infrastructure of its sister company CBL, which uses custodians in various countries for purposes of custody.

Depositories are under an obligation to obtain what is known as a “Three-Point Declaration” from the (first) custodian outside Germany. In this Three-Point Declaration the non-German custodian confirms that the securities positions delivered into safe custody by the depository are kept as client positions of the depository, that these can be separated from the custodian’s assets in the event of its insolvency and that, as a matter of principle, it will not assert any rights of lien or rights of retention in relation to these securities. Furthermore, the custodian promises that it will not outsource the custody of the securities positions underlying the Three-Point Declaration to a third party without the consent of CBF. The German depositories back up these declarations with legal opinions regarding the countries of custody in question.

It is the predominant opinion that in the event of insolvency on the part of CBF or the depository, the intermediate custodian’s or the beneficial owner’s rights to the surrender of these securities are eligible for separation from the debtor’s assets.

CBF has also introduced the special NCSC-T custody type, which enables non-collective safe custody securities to be admitted to T2S.

1.5 Services for collective safe custody (incl. NCSC-T)

The following diagram shows the most important services that CBF offers and the systems involved for collective-safe-custody (CSC) securities¹:

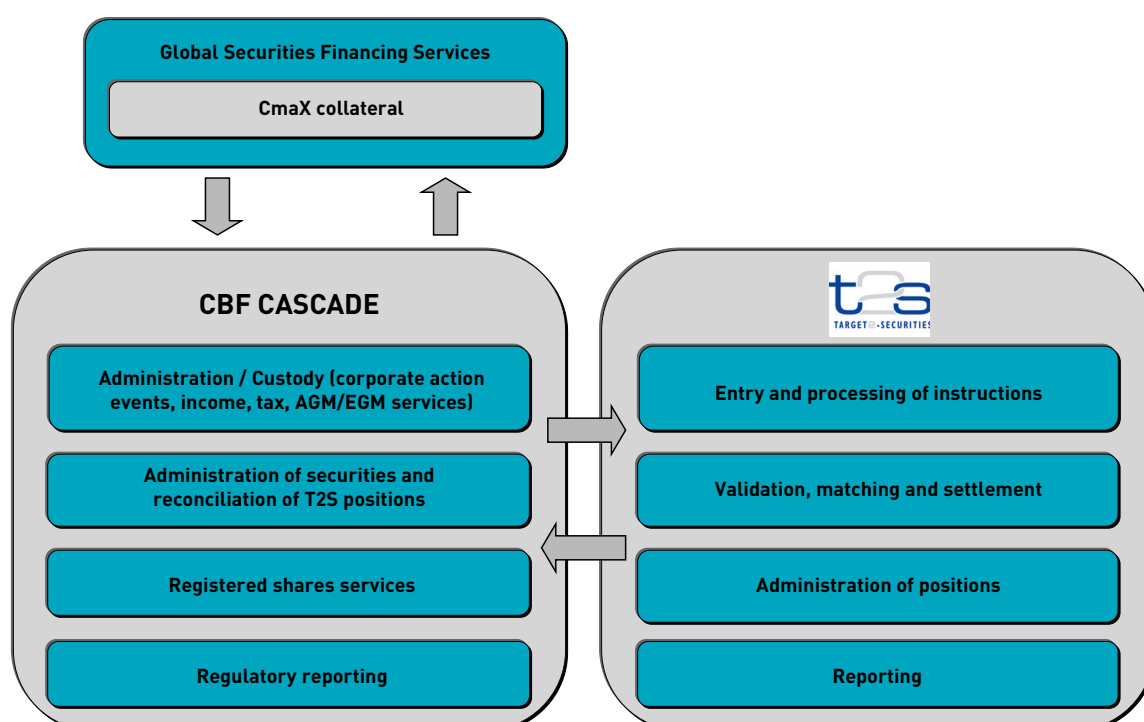


Figure 1.3 CBF's services and systems for collective-safe-custody securities

1. CBF admits both CSC and NCSC-T securities for settlement in CASCADE/T2S for further details please refer to Chapter 5.1.

Settlement

CBF has outsourced the securities settlement in central bank money of transactions in German and international securities to the T2S platform provided by the Eurosystem. The operating framework for securities settlement with T2S is governed by the General Terms and Conditions of CBF.

Any T2S eligible instruction is transferred to T2S and requires an acknowledge of the instruction (Settlement Finality 1 (SF1)) before the instruction can be accepted for securities settlement. Within the securities settlement, T2S takes over the entry and the processing of instructions, the validation, the matching (Settlement Finality 2 (SF2)) and the settlement of the transmitted instructions, the administration of positions as well as the reporting of transactions and of positions for the securities accounts on the T2S platform (SAC – Security Accounts). Thereby, the settlement, that is, the regulation of the security and cash side, takes place directly on the T2S platform. For the cash side there are dedicated cash accounts (DCA) available.

The instructions that are transmitted to T2S for settlement are delivery instructions resulting from OTC and stock exchange trading (Xetra[®], Börse Frankfurt), clearing through Eurex Clearing AG (CCP) for trading at the Frankfurt Stock Exchange (Xetra, Börse Frankfurt) and Eurex Repo[®] as well as the Eurex[®] derivatives market (exercises and assignments, resp. notifications and allocations) as well as from deposit transfers.

The CBF CASCADE system covers the administration of positions in collective safe custody and the related services as for example corporate actions and dividend payments. In addition, a reconciliation of the T2S positions takes place.

This does not apply to securities and events processed under [OneClearstream](#).

Besides LMP markets, corporate actions on CBF-issued securities (“Lagerland 99/Germany“) are processed via OneClearstream Asset Servicing (OneCAS). Information on custody objects for the securities and events listed above is available through Xact via SWIFT (MT564) and [Xact Web Portal](#).

Securities issued in the Swiss and US-Market (“Lagerland 589“ and “679“) are excluded from the processing under OneCAS.

In addition, the following corporate action events are excluded from the processing under OneCAS:

- Class action events;
- Voluntary events with maturity date unknown or after few years;
- ETFs under the CFF model.

Instructions transmitted to T2S are processed in different settlement cycles in T2S. For cash and securities settlement, T2S offers a sequential night-time processing (night-time settlement – NTS) with two cycles and real-time processing (real-time settlement – RTS).

Cash entries which result from securities settlement or from interest and redemption payments, cross-border market and reverse claims for FCSC¹ securities as well as from fees and charges are booked on the DCA.

In the settlement of securities transactions, a distinction must be made between (a) the finality of instructions to transfer securities and/or cash amounts in a clearing and settlement system in the meaning of European Directive 98/26/EC (EC Directive on Settlement Finality) and (b) the lawful settlement of securities and/or cash delivery obligations. For the finality on the T2S platform the rules determined in the General Terms and Conditions of CBF apply.

From a legal point of view, the settlement of instructions takes place when the counterparties to a securities transaction have performed their entire obligations (such as the transfer of rights to a security or effecting a cash payment) so that all reciprocal claims arising from the transaction have been satisfied in full and are consequently extinguished. The instruction is settled with the binding booking in T2S, related with the associated re-registering has taken place in the custody ledger (Section 14 of the German Securities Deposit Act).

1. FCSC – Foreign Collective Safe Custody

Cash settlement for payments made in EUR takes place through the T2S DCA of the participant. Cash settlement for payments made in currencies other than EUR take place through Creation, the custody and settlement platform of CBF's sister company, CBL.

Settlement timing cycle

The settlement timing slots in T2S are according to business days, that is, start of day for a new business day takes place at about 18:45 on the calendar day where the T2S business day ended. Settlement in T2S starts with the Night-time Settlement (NTS) at about 20:00 and ends with the Real-time Settlement at about 18:00¹.

If there is a weekend and/or a T2S holiday between two T2S business days, the following T2S business day already starts on the last calendar day before the weekend and/or before the holiday. Settlement within the NTS also takes place until 03:00 over the change of the calendar day. In this case, the following T2S Maintenance Window lasts until 05:00 on the first calendar day after the weekend and/or after the T2S holiday.

The following time stamps are displayed in CASCADE reporting:

- Turnover – complete display (KVDU):

In the CASCADE Online application KVDU, the settlement date ("T2S Effective Settlement") is shown next to the "Eingeber" field and the system time ("Processing Time / Verarbeitungszeit"), when the settlement took place, is shown next to the "Auftr-Nr" field. The date is the T2S business day of the booking, the time is the real time of the booking in T2S. Due to the difference of T2S business day and calendar day, for bookings after the change of business day in T2S and before midnight, the settlement date and system time displayed in KVDU is not equal to the calendar date and time. For bookings after midnight, the settlement date and system time displayed in KVDU is equal to the calendar date and time.

Examples:

Display in KVDU	Value Date	Calendar day / Time
10.02.2017 / 10:10:45 pm	Friday, 10.02.2017	09.02.2017 22:10:45
10.02.2017 / 00:15:30 am	Friday, 10.02.2017	10.02.2017 00:15:30
10.02.2017 / 01:55:00 pm	Friday, 10.02.2017	10.02.2017 13:55:00
13.02.2017 / 10:35:45 pm	Monday, 13.02.2017	10.02.2017 22:35:45
13.02.2017 / 02:55:00 pm	Monday, 13.02.2017	13.02.2017 14:55:00

1. On the next calendar day that is also a T2S business day.

```

TRAN: KVDU FC: ID SB: 16.10.2017#21.10.2017####I#####L#7930####
UMSATZANZEIGE                DEPOTUMSAETZE - VOLLANZEIGE
Auftr-Art: 01  WP-UEBERTRAG                Umsatzart: Last

Eingeber :      7930      T2S Effective Settlement                21.11.2017
Auftr-Nr : 506234      Processing Time / Verarbeitungszeit um 20:15:00 Uhr

Konto      : 7930 000      TESTBANK AG                / TESTDEFFXXX
Wg Ndl     :
DCA/REF    :
Kontrah    : 6660 000      TESTBANK AG LUXEMBURG      / TESTLULLXXX
Wg Ndl     :
DCA/REF    :
WKN/ISIN   : I DE000A0Z2516 KLOECKNER + CO SE BZR

Nominale   :      1.000-      Einheit : EUR      Verwahrart: GS
Gegenwert  :      113.842.019,92      Waehrung: EUR      Set-Day : 21.11.2017
MITI Ref1  :      MITI Ref2:
-- ID-KZ: 7930090521 -- PW:      ----- B7930D22 -- 20/11/17 -- 20:20:00 --

PF2:Druck  PF3:Ruecksprung  PF4:Abbruch  PF9:Auftrag
    
```

- MT536 (Clearing and Settlement Statement)

If the instruction is settled in NTS processing before midnight, the settlement date is displayed via the ESET field (Effective Settlement Date), although the displayed time refers to the system date, that is the last T2S business day before the settlement date. If the instruction is settled in NTS past midnight or in real-time settlement (RTS), the date always corresponds to the settlement date and the time of settlement in T2S.

- Monthly Account Statement (Monatskontoblatt; MOKO)

In MOKO, the settlement date is shown in the form dd.mm under the heading "BUCH-TAG" and the time of the settlement in T2S in the form hh:mm under the heading "MB-ÜBERG" (seconds are not shown, instead of being rounded). If the instruction is settled in night-time settlement (NTS) before midnight, this results in a combination of the settlement date with the time from the previous T2S business day preceding the settlement date.

Example

An instruction with value date on 10 February 2017 is settled in NTS before midnight. The settlement time in T2S and consequently the "transfer of co-ownership time", is 9 February 2017 at 22:10:45. The following display is shown in the monthly account statement:

```

BUCH-TAG: 10.02
MB-ÜBERG: 22:10
    
```

If the instruction is settled in NTS past midnight or in real-time settlement (RTS), the date/time combination shown corresponds to the system time on the settlement date (T2S business date) of the settlement in T2S.

- MT544 (Receive Free Confirmation), MT545 (Receive Against Payment Confirmation), MT546 (Deliver Free Confirmation), MT547 (Deliver Against Payment Confirmation)

The settlement date without information about the settlement time is always shown via the ESET field.

- Report: Clearing list and daily statement of holdings

The settlement date is displayed in the header of clearing list and the daily statement of holdings. However, a settlement time stamp (hh:mm) as described above is not displayed in these reports.

The following diagram displays the time sequence of the settlement cycles supported by T2S and CASCADE.

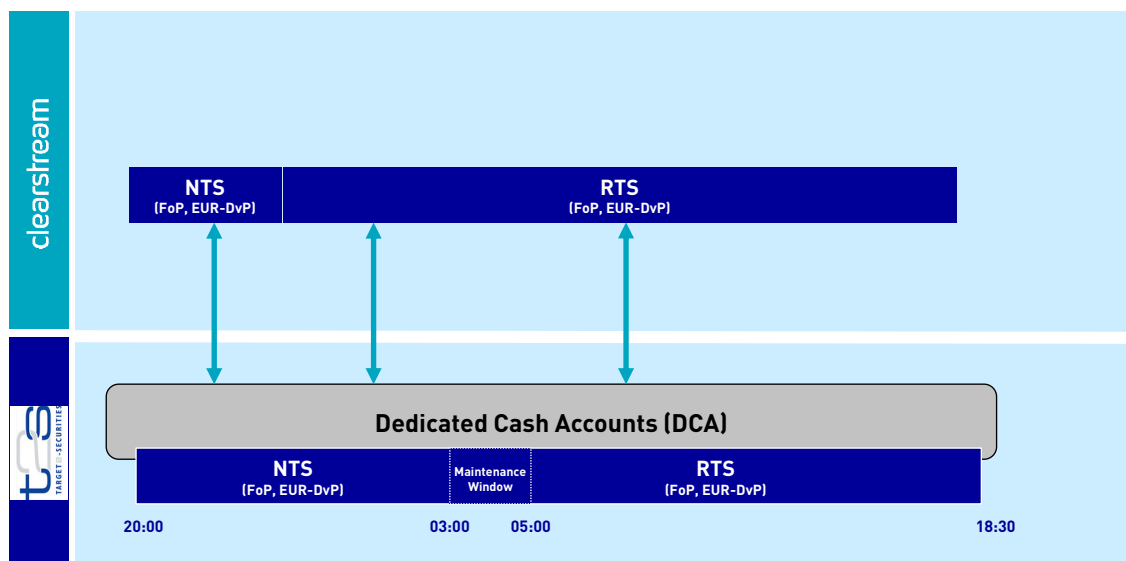


Figure 1.4 CASCADE / T2S – Overview of the settlement and/or cash clearing cycles

The individual settlement windows are explained below.

T2S Night-time Settlement

Settlement window: NTS

Start: approximately 20:00 (S-1)

End: flexible, approximately 03:00 (S)

The T2S night-time settlement (NTS) is divided into two cycles - the first cycle and the last cycle. The first cycle is subdivided into five sequences and the last cycle into four sequences. Within the different sequences, certain transactions or certain instruction types settle. Detailed timing within NTS depends on processed volumes and is currently kept flexible by the Eurosystem apart from estimated timings for start and end of the two cycles. In general, a sequence ends when T2S has processed all settlement instructions, settlement restrictions and liquidity transfers received before the start of this sequence (for the first sequence before 20:00) which are eligible for settlement in this sequence.

First NTS Cycle:

- Sequence 0: Inbound liquidity management instructions
- Sequence 1: Inbound liquidity management instructions, processing of corporate action on stocks
- Sequence 2: Inbound liquidity management instructions, processing of corporate action on stocks, internal FoP instructions for rebalancing
- Sequence 3: Inbound liquidity management instructions, processing of corporate action on stocks, internal FoP instructions for rebalancing, central bank operations
- Sequence 4: Processing of all instruction types

Last NTS Cycle:

- Sequence 4: Processing of all instruction types
- Sequence X: Processing of all instruction types and partial settlement (start approx. 22:20, depending on the previous cycle)
- Sequence Y: Outbound liquidity management instructions
- Sequence Z: Inbound, outbound and internal liquidity management instructions

In NTS, instructions free of payment as well as instructions with payments in EUR can settle. Settlement instructions entered by clients settle only during FNTC, sequence 4 and LTNC, sequence 4 and X. Additionally, partial settlement of eligible instructions takes place in sequence X.

Client instructions for settlement in NTS can be submitted before or after the start of NTS (until the start of sequence X). Matched and unmatched instructions that could not be settled during the NTS will be automatically forwarded to the real-time settlement (RTS).

T2S Real-time Settlement

Settlement window: RTS

Start: flexible, latest 03:00 (S) (depending on completion of last NTS cycle)

End: 18:00 (S)

During Real Time Settlement, Partial Settlement is executed by T2S at predefined times. Detailed information is available on the Clearstream website under [T2S partial settlement windows](#).

End DvP, RvP, DwP, RwP, PFoD (without BATM¹ flag): 16:00 (S)

End DvP, RvP, DwP, RwP, PFoD (with BATM flag): 17:40 (S)

End FoP: 18:00 (S)

The daytime T2S real-time settlement (RTS) starts directly after the NTS. During the RTS, all FoP instruction types can settle, whereas specific deadlines depending on the instruction types apply.

Instructions settle in real time – that is, they settle as soon as they enter the T2S system, without any specific sequencing, and priorities are only considered during optimisation runs and during recycling. In addition, four so-called partial settlement windows exist, during which partial settlement for applicable instructions takes place.

Client instructions for settlement in the daytime RTS can be submitted before or during the daytime RTS (until the respective deadlines). Matched instructions that could not be settled during the daytime RTS will be automatically forwarded to the night-time settlement of the following business day. Unmatched instructions are forwarded as well, as long as they are pending for less than 20 business days.

Maintenance Window

The T2S Daily Schedule includes a maintenance window which is optional between 03:00 and 05:00 and mandatory on Saturdays between 02:30 and 02:30 on Monday.

1. BATM – Bilaterally Agreed Treasury Management

Clients can track the maintenance window or in CASCADE under online transaction "KVAV" and function "ID" ("Aktuelle Dispositions- und Buchungsinformationen") which shows the following codes:

- NOMW No Maintenance Window
- MTNW Maintenance Window
- RTMS Start of Real-Time Settlement for daily settlement and end of the maintenance window.

However, CASCADE closes down for maintenance reasons every day between 03:00 and 05:00.

Holiday schedule

Schedule for cross-border business

The settlement of cross-border instructions depends on the holiday setup of T2S and the other CSD¹. If CBF and/or the T2S Out-CSD has a holiday on a settlement day, it might be that no settlement or only settlement free of payment can take place.

T2S and TARGET2 holidays

The opening days and times of CASCADE are aligned with the ones of T2S. Consequently, CASCADE is also available for clients each year on the public holiday 1 May and on 24 December and 31 December. There is no stock exchange business on these days.

Due to the different opening days of T2S and T2, the liquidity requirements should be checked by the clients for the settlement day after a deviating holiday.

T2 is closed on 1 May, while T2S is open for instructions free of payment and for the settlement of instructions in Danish Kroner (DKK). In line with T2S, CBF is open for settlement of instructions free of payment on 1 May and the related CBF reporting is provided. In addition, the functionality for registration and position transfer of registered shares is available, but it depends on the availability of the Registrars' systems for these instructions.

Neither CASCADE nor T2S allow entering the value date of 1 May as settlement date in instructions against payment with a settlement amount in Euro. Such instructions are rejected. Although T2 is closed on 1 May, instructions against payment may also settle in Euro if partial settlement has been agreed and the required settlement amount is offset by the T2S optimisation procedure.

Custody – Vaults

Fungible securities in the meaning of the German Securities Deposit Act (Depotgesetz) are eligible for collective safe custody if they are physically stored in CBF's vaults (German and international securities as well as co-ownership fractions of German global certificates) or if they are kept in collective safe custody with a non-German CSD to which CBF maintains a link in the form of a mutual account relationship, in accordance with Section 5 (4) of the German Securities Deposit Act, or if they are listed in the central register for electronic securities according to Sec. 12 eWpG and as long as CBF is in a position to effect settlement from a technical point of view. The admission for collective safe custody especially for securities of foreign CSDs is in the obligation of CBF based on the legal opinion for the respective CSD link.

An overview of non-German CSDs with which CBF has account lines can be found in [section 1.8 "Links to international securities markets"](#) on page 1 - 18.

1. For T2S opening days that are TARGET2 holidays there might be different schedules for different T2S In-CSDs. This information can be retrieved from the market information and publications of the respective CSDs.

The following securities are currently and unchanged after migration to T2S admitted to collective safe custody:

- Debt instruments, such as Government bonds (Bunds), mortgage bonds, money market instruments (CP), municipality bonds, corporate bonds, international bonds and convertible bonds;
- Equities, such as bearer shares and registered shares;
- Warrants and certificates;
- Other securities, for example units in collective investment undertakings, and international securities held in collective safe custody, for example German Global Bearer Certificates representing international securities.

CBF will gradually establish account links to all T2S markets. It can be assumed that nearly all T2S eligible securities of the T2S markets will be accepted for collective safe custody. This adaptation takes place in a separate launch.

Custody/Administration

CBF offers its clients custody services for their securities positions in collective safe custody, either kept directly with CBF or through CBF, in accordance with Section 5 of the German Securities Deposit Act, by additionally using the technical and functional services offered by its sister company CBL:

- In the field of income, CBF offers settlement and payment as well as the collection of repayments, redemption amounts, and income payments (interest and dividends).
- In the field of non-income, CBF settles mandatory corporate action events (for example, the allocation of rights and exchange of shares) and voluntary corporate action events (for example, tender offers).
- CBF generally settles transactions where the securities are traded "cum", that is, with a claim (such as a coupon), and delivered "ex", that is, without a claim.
- In the field of taxation, CBF offers services to both clients residing in Germany and clients outside Germany, for a great number of markets.
- CBF clients have access to pre-advice of forthcoming AGMs/EGMs and can benefit from General Meeting Services, such as the exercise of voting rights. Further details on General Meeting Services are available in the [OneClearstream Client Handbook](#) and the [Xact Web Portal documentation](#).

CBF clients who use the Swift MT564 service can benefit from additional services for issuing instructions in the event of voluntary corporate action events or for buying and selling subscription rights through CBF. Details of custody services can be found in [chapter 6. "Investment Fund Services"](#) on page 6 - 1 of this Handbook.

Special services

Registered shares in collective safe custody (CASCADE-RS)

With the functional scope of CASCADE-RS (registered shares) on the CASCADE platform, CBF offers special services for the administration of registered shares. These services allow cost reduction in clients' settlement processes. CASCADE-RS supports the following core processes electronically:

The conversion of bearer shares into registered shares held in collective safe custody.

The settlement of stock exchange trades and OTC transactions in registered shares through transfers of positions and entries or re-registrations in the share ledger of the issuer or the share ledger manager.

A detailed description can be found in [section 8.1 "Registered shares in CASCADE-RS"](#) on page 8 - 1.

Collateral management services

With the Xemac[®] and CmaX[®] systems, collateral management services for the following areas are offered:

- Providing collateral for money market transactions and credit facilities with Deutsche Bundesbank.
- Supporting trading activities through various stock exchange and OTC trading platforms, that is, the derivatives exchange, Eurex Deutschland, through the efficient supply and management of collateral on the basis of the risk-based margining of Eurex Clearing AG as a clearing house and CCP.
- Furthermore, Xemac participants have the option of providing each other with collateral on a bilateral basis for the settlement of OTC transactions.
- Through the link of Xemac to CBL's collateral management system CmaX, Xemac participants can also use the securities they hold in Creation for the provision of collateral.

The services are described in detail in [section 7.1 "Collateral Management Services \(Xemac[®]\)"](#) on page 7 - 1.

Taxbox (German flat-rate withholding tax)

In response to the flat-rate withholding tax introduced in Germany on 1 January 2009, CBF has introduced a Taxbox Service to provide a platform for the electronic transfer of the data needed for a correct tax assessment from the transferring bank to the receiving bank of a securities transfer. A detailed description of the Taxbox Service can be found in the [Connectivity Handbook Taxbox](#).

Communication with CBF

Communication with CBF can take place through several channels:

- Online entry, for example CASCADE-Host, Xact Web Portal;
- The electronic exchange of data via File Transfer;
- The electronic exchange of data via IBM WebSphere MQ middle software (MQ);
- The electronic exchange of data via the Swift network;
- Internet upload (only specific services, for example eMISSION).

Details regarding communication, with an overview of the data carriers and Swift messages, can be found in [chapter 8. "Special Services"](#) on page 8 - 1.

1.6 Third-party services for individual safe custody

The following diagram shows the services that CBF provides for securities kept in individual safe custody (also referred to as jacket custody):

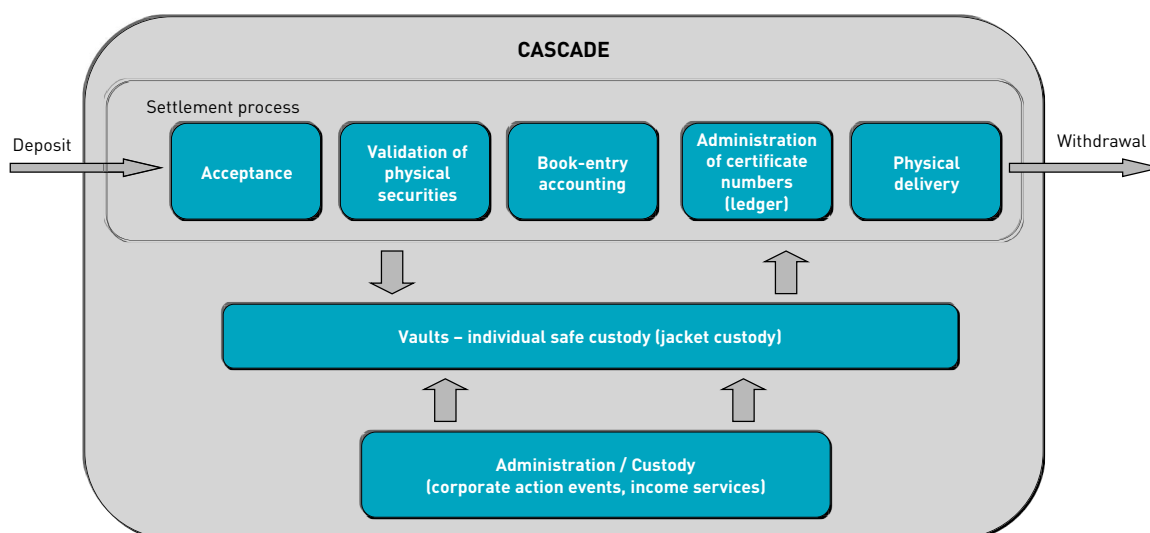


Figure 1.5 CBF's services and systems for individual-safe-custody securities

Settlement process

The highly efficient settlement platform, CASCADE and the relevant vaults platform CARAD, also supports CBF and its clients in the settlement and custody of transactions in securities kept in individual safe custody (that is, physical securities) and offers in particular:

- Deposit and withdrawal of physical securities to and from the holdings in the vaults;
- Recording and administration of certificate numbers (ledger);
- Conducting checks against the list of invalidated or stopped securities;
- Processing defective and replacement certificates.

Custody – Vaults

In the case of individual safe custody the depositor's securities are kept separate from the other securities positions that CBF keeps in safe custody. Through this segregation, the depositor remains the owner of the physical securities certificates. The holdings kept in individual safe custody are identified on the outside and this identification is displayed in CASCADE through the client reference and the certificate number.

By individual arrangement, valuable items may also be kept in individual safe custody, in addition to securities.

Custody/Administration

CBF offers its clients comprehensive custody services for securities kept in individual safe custody (for details please refer to [chapter 5. "Asset Services"](#) on page 5 - 1).

- In the field of income, CBF offers settlement and payment as well as the collection of income (from interest and dividends), repayments or redemption, and commission.
- In the field of non-income, CBF settles voluntary corporate action events (for example, tender offers) and mandatory corporate action events (for example, the allocation of rights and exchange of shares).
- CBF clients can obtain pre-advice of forthcoming AGMs/EGMs and can benefit from General Meeting Services, such as the exercise of voting rights.

Special services

CBF offers its clients individual safe custody (jacket custody) with referencing of certificate numbers up to the level of the underlying client. Thus, clients can outsource their vaults administration.

Further details on these services can be found in [chapter 8 "Special Services"](#) on page 8 - 1.

1.7 Services for non-collective safe custody

The following diagram shows the services that CBF offers in relation to non-collective safe custody (NCSC) securities, that are not T2S eligible and, that are not settled via T2S (excluding NCSC-T securities), and which are kept as book-entry credits on a fiduciary basis (also referred to as trustee business). Here, CBF avails itself of the technical and functional services offered by its sister company, CBL.

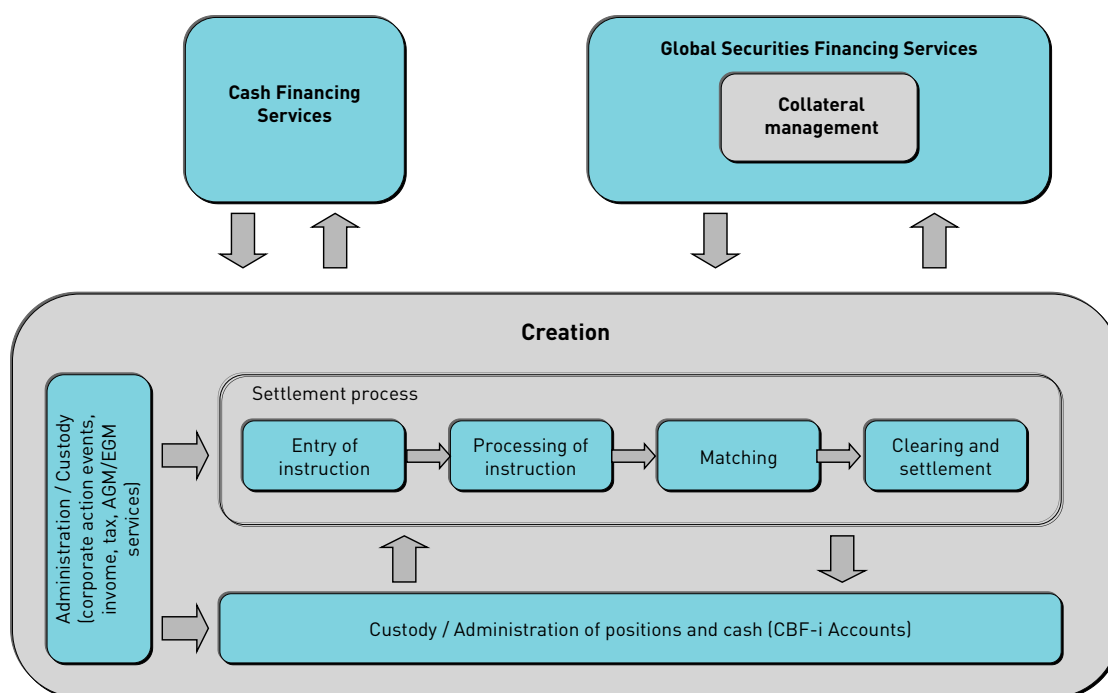


Figure 1.6 CBF's services and systems for non-collective safe custody securities

Settlement process

The settlement of transactions in NCSC securities takes place through the Creation platform. In addition to the accounts kept according to Luxembourg law, CBF has its own series of accounts, which are technically and legally independent (referred to as CBF-i accounts). These are governed by German law (see [section "Non-collective safe custody"](#) on page 2 - 6). These CBF-i accounts are kept via Creation parallel to and in connection with the CBF clients' CASCADE accounts. In order to settle trades with NCSC securities concluded on unofficial regulated markets, that is, open markets, at German stock exchanges (in Germany), the delivery instructions generated for this purpose are directly forwarded to Creation via the SETI interface. Clients enter instructions for the settlement of OTC transactions in NCSC securities directly in Creation (for details see [CBL Client Handbook](#)).

Clients may obtain reports on CBF-i accounts either through direct interfaces to CBL, as the operator of the Creation platform, or through the communication channels of CBF.

Custody – Depository

In the case of NCSC securities, CBF acts as a depository (intermediary) for its clients and manages their third-party holdings and own holdings in NCSC securities, using the technical infrastructure of its sister company, CBL, which uses custodians in more than 50 countries. CBF issues credits in NCSC securities for the clients, indicating the country of custody.

Custody/Administration

CBF offers its clients a broad range of custody services in relation to their holdings in NCSC securities, using the technical and functional services offered by its sister company, CBL:

- In the field of income CBF processes the settlement, payment and collection of repayments/redemption, income (interest and dividend payments) and commission.
- Concerning non-income, CBF settles voluntary capital changes (that is, offers) and obligatory capital changes (that is, booking of rights and share swaps).
- For transactions that are traded "cum", that is, with a claim (such as a coupon), and delivered "ex", that is, without any claim, settlement is carried out according to the rules of CBL (see [CBL Client Handbook](#)).
- In the field of taxation, CBF offers services for both clients residing in Germany and clients outside Germany, for a great number of markets.
- With its General Meeting Service, CBF supports its clients starting from announcement of forthcoming AGMs/EGMs up to the exercise of voting rights. If the necessary contracts have been signed, instructions are also accepted through third-party proxy provider, for example, Broadridge or Institutional Shareholder Services (ISS).

Reference is made to the [CBL Client Handbook](#) for special details of the Custody services offered by CBF using the technical and functional services of CBL and additional services, such as the automatic conversion of a currency other than EUR or the buying and selling of subscription rights.

Special Services

Collateral Services

CBF clients can make use of services for collateral management for the CBF-i accounts that they keep on the Creation platform. Due to different legislation in Germany and Luxembourg, clients are asked to take note of a few special rules (see [section 7.1 "Collateral Management Services \(Xemac®\)"](#) on page 7 - 1).

Investment Funds Services

CBF clients can benefit from the order routing services for investment funds offered by CBF.

[Special Conditions](#) apply to the use of the automated Vestima Service.

Detailed information on the services can be found in [chapter 6 "Investment Fund Services"](#) on page 6 - 1.

Communication with CBL

Communication with the Creation platform is possible online, via File Transfer or via the Swift network (see [section 9.2 "Non-collective safe custody"](#) on page 9 - 7).

Cash Financing services

For the settlement of transactions in NCSC securities, cash settlement takes place via Creation in commercial bank money. In order to settle the payment obligations from securities transactions, CBF clients have access to all cash management services described in [section 8.11 "Cash Financing services"](#) on page 8 - 19 for their CBF-i accounts. For specifics regarding credit and collateral for CBF clients, please refer to [section 8.5 "Collateral valuation"](#) on page 8 - 10.

1.8 Links to international securities markets

To support cross-border transactions for its clients, CBF uses two kinds of links to the most important international securities markets:

- Direct account connections (known as CSD links or as relayed links if the foreign CSD is connected via CBL) with CSDs outside Germany in order to accept international securities classes for collective safe custody in accordance with Section 5 (4) of the German Securities Deposit Act.
- Account connections with global custodians, using the technical infrastructure of our sister company, CBL, for non-collective safe custody securities (trustee business).

Note: Markets that migrated to the OneClearstream service use CBF's direct account connection.

Account links to foreign CSDs have a particular significance. CBF clients have the possibility of access via the local infrastructure to the basic settlement and administration services of other CSDs.

CBF clients can currently use the links with OeKB (Austrian securities), SIX SIS (Swiss securities), VP (Danish securities), ESES (Belgium, France and the Netherlands), BOGS (Greece), Iberclear (Spanish bonds), Interbolsa (Portugal), LuxCSD (Luxembourg), Euronext Securities Milan (Italy), Malta Stock Exchange, Nasdaq CSD (Estonia, Latvia and Lithuania), CDCP (Slovak Republic), NBB (Belgium), DTCC (U.S.A.), Euroclear Finland (via CBL), Euroclear Ireland (via CBL), Erste Group Bank AT&H (Croatia; via CBL) CDCR (Cyprus), KDD (Slovenia) as well as CBL (international markets) for settlement against payment.

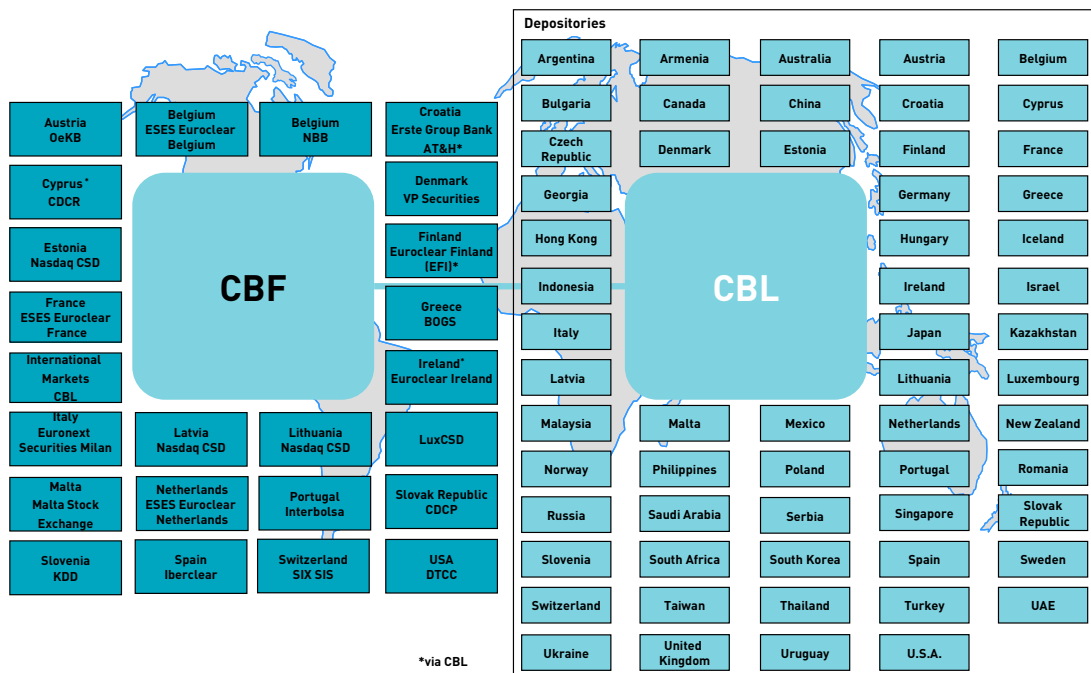


Figure 1.7 CSD links and depositories of CBF

Collective safe custody

CBF maintains links with numerous CSDs outside Germany which allows CBF to include securities kept with these CSDs in its collective-safe-custody service. The settlement of securities transactions

between CBF clients and foreign clients of CSDs with existing links to CBF takes place on the T2S platform.

In addition, International Central Securities Depositories (ICSDs) and commercial banks that act as custodians keep accounts with CBF for the settlement of securities classes kept in collective safe custody at CBF.

A list of the CSD links and a description of the settlement processes can be found in [section "OTC Cross-Border"](#) on page 4 - 21.

Non-collective safe custody

CBF does not have its own custodian network for non-collective safe custody securities, but uses the global custodians of its sister company, CBL. The securities are kept in 6-series securities accounts that are technically managed on CBL's settlement platform, Creation. These are governed by German law and CBF's General Terms and Conditions of Business.

A list of the custodians used by CBF with information on the relevant market practice and settlement processes is available in the Market Link Guide, the Market Profile and Investment Fund Market Guide on the Clearstream website.

1.9 Legal documentation

The business relations between CBF and its clients are subject to certain conditions that are particularly described in the legal documentation listed below. The documents are available on our website www.clearstream.com, or can be ordered from Client Services or the Relationship Management (see [section 1.10 "Sources of information"](#) on page 1 - 19).

- General Terms and Conditions of Clearstream Banking AG, Frankfurt: The General Terms and Conditions apply to the entire business relationship between clients and Clearstream Banking AG, Frankfurt. In opening an account with CBF, clients simultaneously acknowledge and accept these General Terms and Conditions.
- Special Conditions for services that Clearstream Banking AG performs for its clients in relation to reporting and payment obligations arising from the French Financial Transaction Tax;
- Special Conditions for the re-entry of internal instructions on CBF-i accounts;
- Special Conditions of Vestima Service of Clearstream Banking AG, Frankfurt.

1.10 Sources of information

CBF clients can generally approach their contacts from Client Services or from Relationship Management if they have any queries or are seeking information. All information and documentation set out below is also available on our website: www.clearstream.com.

General information

Client Handbooks

Clients can consult the following handbooks for a description of the organisation and business processes at Clearstream Banking:

- CBF Client Handbook of Clearstream Banking Frankfurt (this document);
- [CBL Client Handbook](#) of Clearstream Banking Luxembourg;

- [OneClearstream Client Handbook](#).

Detailed information

Information through Announcements

Regular Announcements provide clients with information on changes in the fields of custody, clearing and settlement, taxation and fees, and markets, new products and services. Announcements are subdivided into two categories:

- “CSD Announcements” are notifications issued by CBF. They appear under three different headings. “Domestic” covers information on collective safe custody securities (CSC). “International” contains information on non-collective safe custody securities (NCSC) and is relevant for clients with CBF-i accounts in Creation. “Registered Shares” provides information on registered shares kept in collective safe custody.
- “ICSD Announcements” are notifications issued by CBL, including information on custodians. The information is relevant for all clients of CBL and CBF who keep accounts via the Creation system.
- “OneClearstream Announcements” are notifications issued collectively by CBL and CBF. The information is, depending on the topic, relevant for all clients of CBF and CBL.

Information on international links

The following documents provide clients with information on CBF's international, direct and indirect links:

- The [Market Link Guide](#) describes the instruction requirements, settlement details and custody services for cross-border securities transactions for the respective market.
- The [T2S Link Guide](#) sets out the instruction requirements, settlement details and custody services for cross-border securities transactions to be settled through T2S for the respective T2S market.
- The [Market Profile](#) informs on the infrastructure, investment regulations, trading in securities, settlement process, administration of securities and taxation for the respective market.
- The [Realignment Guide](#) describes the instruction requirements for the transfer of securities between the CASCADE and the Creation platforms for the respective market.
- The [Multi-Market Securities Guide](#) presents the multi-listed securities that are traded on more than one international stock exchange and which can be deposited and settled with more than one CSD.
- The [Investment Fund Market Guide](#) provides details of the Fund domiciles for which CBF may offer order routing, settlement and custody services.

Information on tax services

CBF offers its clients services for tax exemption and tax refunds. Basic information on this subject can be found in the [Market Taxation Guide](#) for each market with which CBF maintains links.

Depending on the requirements of the investment market and the specificity of documentation for tax relief, clients may request the duplication of certificates already submitted and validated by CBF. Information on this subject is available in the [OneClearstream Client Handbook](#).

For the Taxbox Service (data transfer for the correct calculation of the flat-rate withholding tax of a securities transfer) the [Connectivity Handbook Taxbox](#) provides a functional and technical description for data transfer.

Information on settlement and communication systems

Detailed information on CASCADE-Host, Xemac[®] and the interfaces for File Transfer and Swift communication is available in the form of user handbooks and manuals, and descriptions of data formats.

Information on service fees and core services

The fees applicable to the services and products CBF provides to its clients in relation to collective safe custody and non-collective safe custody are set forth in the [Clearstream Banking Fee Schedule](#). The document explains how the fees are calculated and shows examples; it also contains the pricing policy for core CSD services. Core services of CSDs are listed in Section A of the Annex of CSDR. The core services CBF offers include notary, central maintenance at top tier level and settlement services. CBF allows its clients separate access to the specific services provided.

Information relating to securities admitted to collective-safe-custody processes

CBF clients have access to the following types of information relating to CSC-eligible securities:

- Resolutions, notifications relating to the admission to collective safe custody and follow-up processing (for example, income administration and corporate action event processing) via the “Securities Service System” (WSS);
- List of all foreign securities held in collective safe custody ([“Foreign securities in collective safe custody”](#));
- List of registered shares held in collective safe custody ([“Registered shares in collective safe custody”](#)).

Information relating to securities admitted to non-collective safe custody processes

CBF clients have access to the following types of information relating to NCSC-eligible securities:

- List of all securities eligible for Creation ([“Eligible securities”](#)).

Information relating to securities in NCSC-T

CBF clients have access to the following types of information relating to NCSC-T securities:

- List of all NCSC-T securities available via [Codelist](#).

Email Services

Clients can sign up for automatic notification by email of new information published on the Clearstream website. The following alert services are available:

Real-time Alerts Service

Clients are immediately notified when new publications become available on the Clearstream website. Clients can select to receive the service for individual subjects and categories only, according to their preference, and select the preferred language (German or English).

Daily Alert Service

At the end of the day, clients receive a list of all new publications that have been put up on the Clearstream website during the course of the day. This also takes account of the preferences that clients have selected when signing up for the service.

Weekly Publications Update

Once a week Clearstream Banking sends its clients a list of all the previous week's new publications.

1.11 Client Services

Client Services contact details including Connectivity Support, Global Securities Financing, Investment Fund Services and the Tax Help Desk are available on the Clearstream website under [Contacts & Client Services](#).

Clients must address their query to Client Services by email or telephone call only. It is in the obligation of the CBF client to assess which media is the most appropriate. The responsibility of the client to comply with the requirements for the instruction entry as regulated in the conditions and/or media for communication of CBF remains unchanged. For urgent matters the client has to contact Client Services by telephone first. Only if the client cannot reach Client Services by telephone, the client should additionally contact Client Services by email. A legal obligation of CBF to respond to a request does not exist. CBF cannot be held responsible in case of delay especially in responding to an email.

2. Client accounts

2.1 Cash and securities accounts per transaction type

In its role as CSD for securities eligible for collective safe custody under Section 5 of the German Securities Deposit Act, CBF keeps securities accounts for its clients. These are managed via CASCADE and - in accordance with the T2S framework agreement between CBF and the Eurosystem - via the securities settlement system TARGET2-Securities (T2S), serve to settle transactions (including NCSC-T-securities). CBF does not keep any cash accounts through CASCADE for the cash settlement of these transactions. CBF's clients must therefore keep Dedicated Cash Accounts (DCA) in T2S or possibly with the Swiss National Bank, depending on their business activities.

The settlement of transactions in currency other than EUR and transactions in non-collective safe custody securities is carried out commercial bank money through cash accounts managed via Creation (CBF-i accounts) which CBF keeps according to German law (for example, the rule concerning constructive notice of third-party ownership in relation to the securities account) and in accordance with its own General Terms and Conditions of Business.

The following diagram provides an overview of the client accounts affected by the transactions.

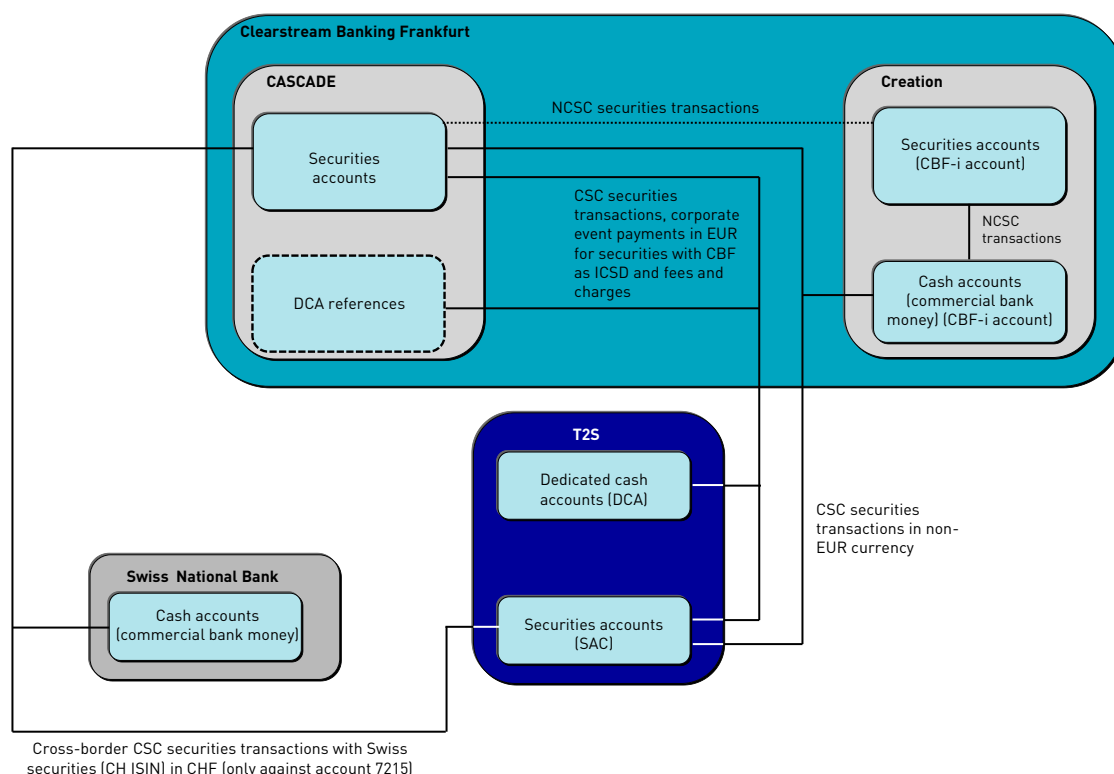


Figure 2.1 Client accounts involved in transactions via Clearstream Banking

Type of transaction: CSC transactions in EUR

Stock exchange trades and OTC transactions of CBF clients, and securities transactions resulting from corporate action events relating to CSC securities are settled through Securities Accounts (SAC) in T2S that are set up by CBF for the clients and are reconciled in real-time on the clients' securities accounts managed via CASCADE. Cash settlement in EUR of securities transactions, of interest and redemption payments, distributions and dividends for securities where CBF acts as Issuer CSD as well as cross-border market and reverse claims for FCSC securities and fees and charges is carried out via T2S. For this purpose, clients of CBF must have a DCA1 in their role as direct or indirect T2S participant on the cash side, or alternatively make use of a cash correspondent who is a direct or indirect T2S participant on the cash side.

Additionally, clients have the possibility to own multiple DCA to fulfil different functionalities. For example, a client acting as paying agent can process their own income payments through a separate DCA.

Type of transaction: CSC transactions with Swiss securities (CH-ISIN) in CHF

Stock exchange trades and OTC transactions of CBF clients and securities transactions with Swiss CSC securities resulting from corporate action events are settled through the clients' securities accounts managed via CASCADE. For cash settlement in CHF in connection with cross-border securities transactions (against account 7215), CBF clients must have an account with the Swiss National Bank or use a correspondent bank. The cash settlement in CHF from domestic security transactions between two CBF participants, compensation payments and corporate actions in CHF take place in commercial bank money via the Creation platform (see below).

Type of transaction: CSC transactions in non-EUR currency

Stock exchange trades and OTC transactions of CBF clients and securities transactions against payment in a currency other than EUR relating to CSC securities and resulting from corporate action events are settled through the SAC in T2S that is set up by CBF for the client, and are reconciled in real-time on the client securities accounts managed via CASCADE. Cash settlement takes place in commercial bank money via the Creation platform. CBF clients must therefore keep corresponding accounts (CBF-i accounts) via Creation.

This is also applicable for domestic security transactions between two CBF participants in CSC Swiss securities with cash settlement in CHF. Transactions against account 7215 and CCP trades form an exception (see also section 4.3 "OTC transactions" on page 4-10).

Type of transaction: NCSC transactions in EUR and non-EUR currency

Stock exchange trades and OTC transactions of CBF clients, and securities transactions resulting from corporate action events relating to NCSC securities are settled through accounts on the Creation platform. Cash settlement from the securities transactions and income administration takes place via Creation, in EUR and in all other currencies admitted for settlement by CBF. In order to settle these transactions, CBF clients have cash and securities accounts, which are managed via Creation (CBF-i accounts). These are governed by German law and are subject to CBF's General Terms and Conditions of Business.

The description of the settlement processes for the above transactions can be found in [Chapter 4. "Settlement Services"](#) on page 4 - 1. [section 4.6 "Cash settlement through T2S"](#) on page 4-48 contains details concerning cash settlement.

2.2 Account types

There follows a description of the account types supported by Clearstream Banking for transactions in securities held in CSC and NCSC custody.

Collective safe custody

To settle transactions in CSC securities, CBF clients need a securities account which is kept via the CASCADE system. The account number is made up of a four-digit main account number and a three-digit sub-account number. The main account as a sub-account always has a zero (for example, 7999 000).

Due to the sub-account structure, it is possible to individually separate holdings. CASCADE reporting covers all actions in the main account and the corresponding sub-accounts. CBF allocates some sub-account numbers for specific purposes. Cash settlement in connection with income administration, fees and charges etc. always relates to the main account.

The following special-purpose sub-accounts are either opened automatically or upon receipt of an internal instruction in the client's name and allocated to the client's main (securities) account. Unless stated otherwise, all main- and sub-accounts used for collective safe custody are also automatically set up in T2S by CBF and all positions on these accounts are reconciled between the securities accounts in CASCADE and the SAC in T2S.

Furthermore, certain position types exist in T2S which are used to segregate or earmark positions within a sub-account via so-called "earmarking". These position types are, depending on the underlying process, either defined by T2S (for T2S Auto-Collateralisation) or by CBF (for the registration status of registered shares). The account types are mainly intended to facilitate safekeeping and service requirements for the client and for CBF.

The account types also serve to give greater transparency to the operational processes.

Sub-accounts	Account type	Purpose/when opened	Description
005, 051, 230 or 991	Partial maturity	Opened for each main account; number of sub-account depends on the stock exchange	This sub-account is for the automatic segregation of debt instruments that have partially matured.
080	Blocking account GM	Opened for each independent account	In this sub-account, Asset Services can segregate blocked positions on the settlement of corporate action events, for example, with respect to general meetings without a record date.
204	Local Market Partnership (LMP)	Opened for Portuguese securities	Sub-account for the segregation of tax-exempt Portuguese securities.
203	French Registered Securities	Opened to hold French Registered Securities	In this sub-account, French Registered Securities positions can be segregated and blocked.
204	Local Market Partnership (LMP)	Opened for Portuguese securities	Sub-account for the segregation of tax-exempt Portuguese securities
205	Tax account - miscellaneous	Opened for Spanish securities	Sub-account for the segregation of tax-exempt Spanish securities
550	Xemac® collateral	Opened for participation in Xemac	Sub-account used by Xemac for the management of collateral
551	Xemac blocking account	Opened for participation in Xemac	Xemac blocking account
670	Client account	Opened for each main account	Sub-account for the TEFRA D securities issuing bank/lead manager

Sub-accounts	Account type	Purpose/when opened	Description
700-710			Sub-accounts for Collateral Management Services processed directly by CmaX.
820-827	Tax account - miscellaneous	Opened to segregate positions for tax reasons	Sub-accounts for the separation of positions due to tax reasons. Details for possible transactions will be published in advance in an announcement and in the relevant Market Taxation Guide .
828-835	Tax reduction - France	Opened to segregate positions for tax reasons	Sub-accounts for partial exemption from French withholding tax, if the client supports the exemption and the relevant securities are not eligible for OneClearstream.
850	Corporate Actions	Opened for each main account	Sub-account for pending transactions in relation to voluntary corporate action events
995	Non-EUR account - CBF domestic	Opened for participation in other currencies	Reservation account to settle non-EUR transactions in CASCADE (CSC securities versus payment in other currencies) as well as for settlement of securities instructions with foreign CSDs who do not participate in T2S. This sub-account is not set up in T2S. Positions on this account reflected in CASCADE remain on the Securities Account (SAC) of the respective main or sub-account in T2S and are technically reserved via a T2S process.

The following sub-accounts for special purposes are only opened on a client's application.

Main/sub-accounts	Account type	Description
222-229	DCA Reference	Address only account to represent the DCA number in CASCADE; not set up in T2S.
250	Client account	Sub-account to segregate positions due to tax-free interest payments on Italian debt instruments.
251-253	Collateral Providing Account	Depending on the client request, this sub-account is set up either with position type EXXX (available for T2S Auto-Collateralisation in all currencies) or EEUR (available for T2S Auto-Collateralisation in Euro), that is, all positions in this account are marked with the respective position type.
410	New issues	Unsold bonds.
500	Eurex Clearing AG margin/collateral	Sub-account for collateral, margin (standard (pledge)) provided in favour of Eurex Clearing AG or ECC AG collateral for the forward market.
501	Eurex Clearing AG margin/collateral	Sub-account for collateral, clearing fund (title transfer) provided in favour of Eurex Clearing AG or ECC AG.
503-509 520-549 553-559	Eurex Clearing AG margin/collateral	Sub-account for the segregation of client collateral of Eurex Clearing AG or ECC AG.
560	Commitment control collateral (replacement risk)	Sub-account for the administration of collateral, as part of Commitment Control - New.
561	Eurex Clearing AG margin/collateral	Sub-account for the segregation of client collateral of Eurex Clearing AG or ECC AG.
580	Eurex Clearing AG margin/collateral	Sub-account for collateral, company capital (title transfer) provided in favour of Eurex Clearing AG.

Main/ sub- accounts	Account type	Description
581-584	Eurex Clearing AG margin/collateral	Sub-account for the segregation of client collateral of Eurex Clearing AG or ECC AG.
600-649	Inter-bank collateral	Sub-account for transactions involving inter-bank collateral. The sub-account is opened under CBF account number of the bank providing the collateral.
650-662	Qualified minority holding	Sub-account for the separation of qualified minority holdings on the distribution of dividends or in connection with corporate action events.

CSC securities trading and settlement are usually carried out through the same securities account held via CASCADE corresponding to the same SAC in T2S. CBF also offers its clients a different procedure, settlement via third-party accounts (Reg-über).

Settlement via third-party accounts (Reg-über)

With this procedure, the client can specify a Reg-über account which is linked to a central account for an exchange order which is not settled via the CCP. The securities transactions are settled in T2S or Creation via the central account. The cash settlement also takes place via the cash account linked to the central CBF account. Only exchange trades can be entered for Reg-über accounts. Reg-über accounts do not show holdings and are therefore not maintained as SAC in T2S.

If clients wish to trade on several stock exchanges in Germany, they must have a separate account for each stock exchange. So that they do not have to carry out a separate cash and securities disposition for each exchange location, clients use the solution via the Reg-über accounts.

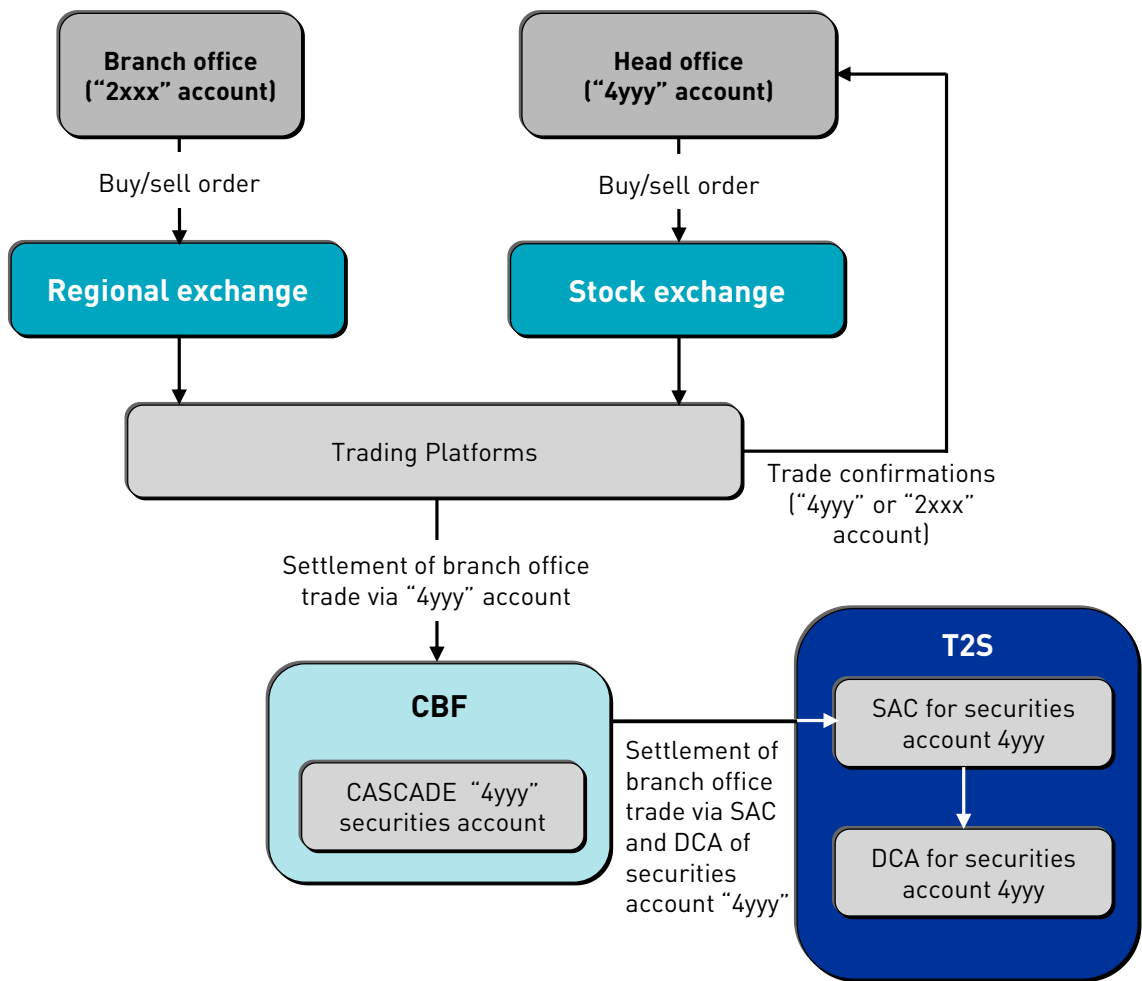


Figure 2.2 Example of settlement via third-party (Reg.-Über) accounts

Non-collective safe custody

Stock exchange trades and OTC transactions¹ in NCSC securities are settled via CBF-i accounts which are opened and managed on the Creation platform for CBF clients. The five-digit account number of the main account on the Creation platform results from the client's account number on the CASCADE platform, with the prefix "6", for example, CASCADE account 7999 000 → Creation account 6 7999. These CBF-i accounts, which are allocated to the CBF client's main CASCADE account, are governed by German law (for example, there is constructive notice of third-party ownership) and are subject to CBF's General Terms and Conditions of Business. In both a technical and a legal sense, they are kept as an independent group of accounts in addition to the other Luxembourg accounts held via Creation. CBF clients can also open and keep additional accounts through Creation, besides the CBF-i accounts. The sub-account function used on the CASCADE platform is represented in Creation by opening additional accounts and the possibility of having a hierarchy of accounts.

The following table provides an overview of the types of account which can be managed on the Creation platform.

1. For the definition of "stock exchange" and "OTC" please refer to the glossary.

2. Client accounts

Account type	Description
Main account	The clients' main settlement accounts for cash and securities relating to all securities and currencies admitted by CBF and CBL. For CBF clients, accounts are opened and managed via Creation for the settlement of NCSC transactions. These accounts correspond to the client's main accounts in CASCADE. The account number consists of the four-digit CBF main account number with the prefix "6".
Additional accounts to separate positions	By opening further accounts, clients can separate their own positions from those of their own (end) clients. Their account number starts with the digits 60, 65 or 69.
Additional accounts for tax purposes, for example Stamp Duty Reserve Tax (SDRT) UK	Creation offers the option to open further accounts which take account of differences in tax liability. Their account number starts with the digits 60, 65 or 69.
Eurex margin/collateral accounts	Creation accounts for the deposit of Eurex collateral in the form of NCSC securities under German law. Their account number starts with the digits 60, 65 or 69.
Fiduciary accounts	Accounts for the administration of collateral on a fiduciary basis (trustee or nominee function). Their account number starts with digits the 60, 65 or 69.

Additional information on accounts kept via Creation can be found in the [CBL Client Handbook](#).

Note: CBF participants are reminded that they shall comply with the article 38 (5) and (6) of the CSDR². Accordingly, they shall be ready to offer their underlying clients at least the choice between omnibus client segregation and individual client segregation and inform them of the costs and risks associated with each option (article 38 (5) of the CSDR). Further, participants shall publicly disclose the levels of protection and the costs associated with the different levels of segregation that they provide (pursuant to the requirements of article 38 (6) of the CSDR) and shall offer those services on reasonable commercial terms (article 38 (6) of the CSDR).

For further details on article 38 of the CSDR, see Clearstream website under [CSDR Article 38 disclosure](#) which includes CBF's information disclosure with regards to Article 38 of CSDR.

2. Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories

2.3 Opening accounts

The documents needed to open a new main account and further (sub-)accounts are available from the Clearstream website www.clearstream.com under [Account Opening Forms](#) or from Relationship Management. When first opening an account, clients need to submit a number of general documents in addition to the account opening forms which clients have to fill in and sign. Clients must submit the latest valid version of these documents, in German or English, or in another language accompanied by an official translation in English or German. These are:

- An up-to-date, certified excerpt from the Commercial Register, the register of Cooperative Societies, memorandum and articles of association (companies governed by public law) or equivalent proof of establishment;
- An up-to-date, certified shareholders' agreement, or memorandum and articles of association or other evidence of incorporation;
- A general, complete and up-to-date list of the applicant company's authorised signatories with specimen signatures;
- Sending of the annual report of the previous financial year (the opening balance sheet is sufficient for new companies or – in the case of a newly established subsidiary – the opening balance sheet and the annual report of the parent company for the previous financial year), provided that these cannot be accessed on the website of the client.

For subsidiaries, an annual report of the parent company for the previous financial year has to be provided.

Depending on the status of the new client, further documents will be required, as listed below:

Applicant domiciled outside of Germany

- Credit institutions and branch offices that do not belong to the EEA: certified copy of a licence to conduct banking operations granted by the Federal Financial Supervisory Authority (BaFin), as required under the German Banking Act (Kreditwesengesetz - KWG), including any notice of duties to be complied with, or equivalent evidence (for companies incorporated prior to the enactment of the KWG);³
- Financial services institutions and branch offices that do not belong to the EEA: certified copy of a licence to provide financial services granted by the Federal Financial Supervisory Authority (BaFin), as required under the German Banking Act, including any notices of duties to be complied with;³
- Branch offices in Germany of non-German credit institutions and providers of financial services that belong to the EEA: certified copy of the licence from the responsible supervisory authority/regulator in the state belonging to the EEA where the company is domiciled, indicating the scope of the licensed activities; certified copy of the notice from the applicant to the responsible supervisory authority/regulator in the state belonging to the EEA where the company is domiciled announcing the applicant's intention to establish a branch office, or certified copy of the notice from the Federal Financial Supervisory Authority (BaFin) regarding the data which has to be provided to the BaFin and to Deutsche Bundesbank for commercial activities of this type and of the conditions that have to be complied with in the public interest.³

3. Only required if the applicant is not already listed in BaFin's online register.

Applicants domiciled in another state of the European Economic Area (EEA) wishing to become clients of CBF for the provision of cross-border services

- Certified copy of the licence from the responsible supervisory authority/regulator in the country of origin belonging to the EEA, indicating the scope of the licensed activities;
- Certified copy of the notice from the applicant to the responsible supervisory authority/regulator in the country of origin belonging to the EEA announcing the applicant's intention to start providing cross-border services, or certified copy of the notice from the Federal Financial Supervisory Authority (BaFin) regarding the data that has to be provided to the BaFin and to Deutsche Bundesbank for commercial activities of this type and of the conditions that have to be complied with in the public interest;
- The name of an agent in Germany who is authorised to accept the service of documents;

Applicants domiciled in another state of the EEA or outside the EEA wishing to become clients of CBF (for their own banking requirements or in order to serve clients in their country of origin)

- Certified copy of the licence from the responsible supervisory authority/regulator in the applicant's country of origin, indicating the scope of the licensed activities;
- The name of an agent in Germany who is authorised to accept the service of documents.

2.4 Safekeeping

Securities account position

The securities in the possession of clients are shown as the securities account position. The balance of the securities transactions which are settled within a settlement cycle is the result of simultaneous settlement of securities and central bank liquidity.

The T2S settlement process considers the following criteria, in the order shown, that may come into effect for example if the securities account positions are insufficient for settlement of the pending transactions:

- Priority;
- Settlement date (oldest first).

During the night-time settlement period, the priorities of all settlement instructions are taken into account before the start of the settlement process. During the daytime settlement (real-time), the priorities are taken into account during the recycling and optimisation process. For the first settlement attempt these priorities are not taken into account, instead instructions are processed on a first come, first served basis.

Depending on the selected transaction settlement cycle and the instruction type, transactions that are rejected from settlement, due to insufficient positions are either brought forward to be processed in the earliest possible settlement cycle, returned to the entered unverified instructions (OTC) or cancelled from the entered instructions pending for settlement (see Chapter 4. "Settlement Services" on page 4 - 1).

Individual safe custody

CBF offers clients the option of lodging their own safe custody positions with CBF. The client's positions are kept in individual safe custody separately from the collective safe custody positions held by CBF in its vaults.

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3. Issuance and Vault Services

3.1 Issuance

CBF provides issuers with an extensive pool of liquidity and a broad network of investors worldwide. Before securities are admitted, they must first pass stringent eligibility checks and comply with numerous market standards and compliance rules. Our comprehensive advisory services ensure that the admission process goes as smoothly as possible.

Clients can benefit from a comprehensive suite of services for code allocation, pre-code allocation and the electronic transfer of documents. In addition, CBF provides full monitoring and reporting of primary market distributions, thereby covering the full issuance cycle from advice to distribution.

Physical securities

The following diagram shows the process for admission of securities to collective safe custody (CSC):

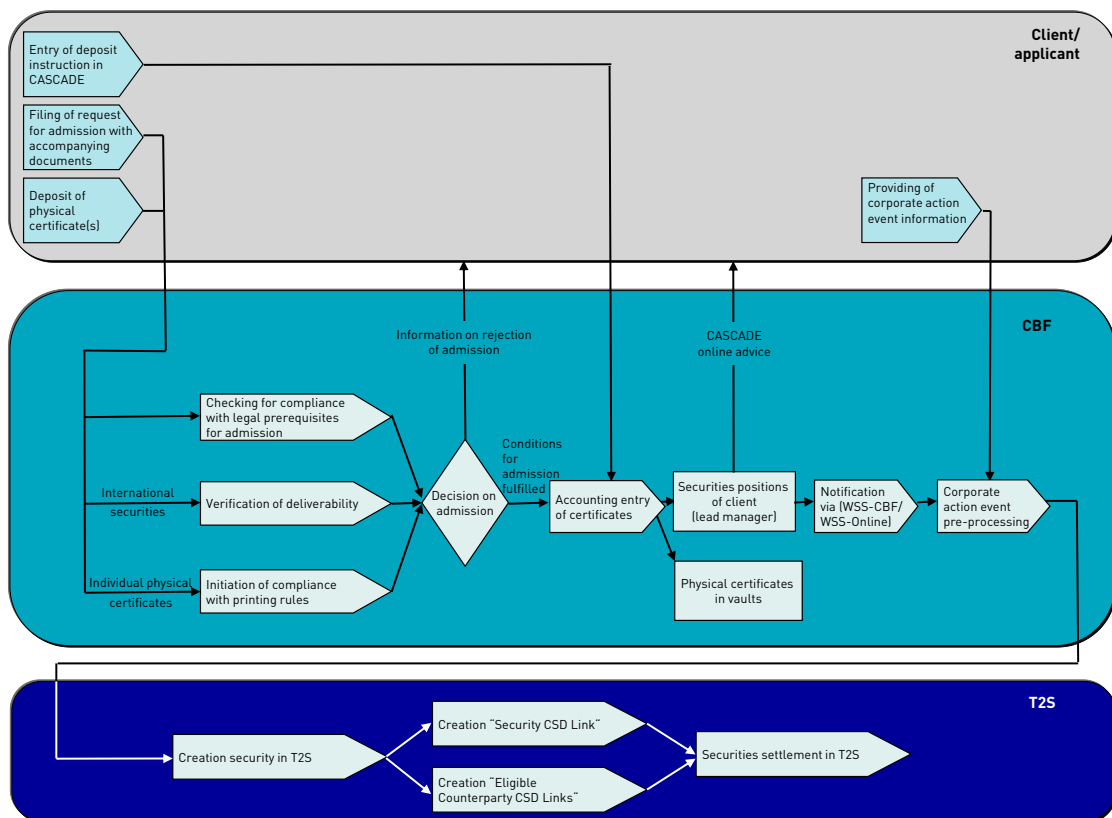


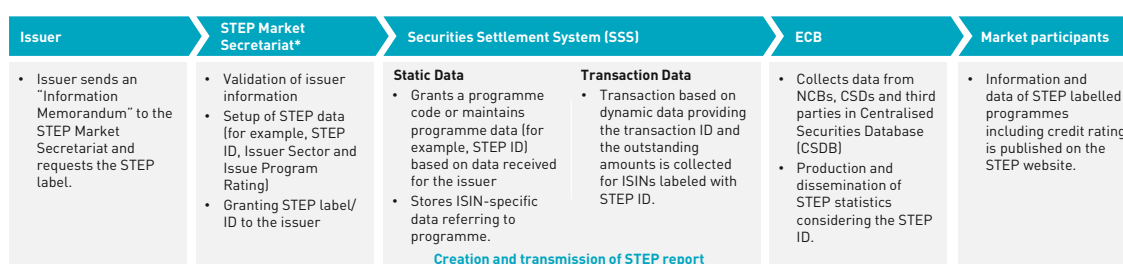
Figure 3.1 Admission process for CSC

Admission

The process for admission of securities to CSC by CBF shall be initiated by the applicant, the issuing bank (lead manager) or also issuer, which submits the request for admission together with the certificate(s) and various accompanying documents to CBF.

New securities with the STEP label can be issued via CBF with the security type “Commercial Papers” as zero bonds. If a Certificate of Deposit (CD) is to be issued, CBF requests the issuing agent to submit the issuance conditions for review in advance.

Before a security can be issued with the STEP label, the Information Memorandum (IM) must be submitted to and reviewed by the STEP Market Secretariat. The corresponding STEP ID is then assigned, which must be deposited with CBF in the next step. If a security with the STEP label is submitted to CBF for an issuer for the first time, the IM including the STEP ID must be submitted prior to admission.



* The STEP Market Secretariat is managed by the [European Money Markets Institute \(EMMI\)](#).

Figure 3.1 STEP Programme process flow

The issuer is responsible to apply for the STEP Programme and to update the documentation requested by the European Central Bank (ECB). The statues of the STEP Market Secretariat define that the Information Memorandum (IM) is valid for three years and 90 days. CBF maintains the STEP Programme details in its inhouse system. The IM and potential updates of the mandatory documents must be shared with CBF. It is important that the latest document versions are provided without delay.

The issuer agent provides the STEP ID (seven characters long, starting with leading zeros [0001234]) during the admission process. Only if the STEP ID is presented, the ISIN can be flagged as STEP eligible. CBF will check if the given STEP ID is stored in the programme data.

On each T2 business day, the STEP report is transmitted by CBF to the ECB. The data is compiled from the CBF security static data as previously provided by the issuer agents. Based on the daily reporting, the ECB creates the statistics and shows the results on the internet at <https://www.stepmarket.org>.

To simplify and shorten the admission process for certificates, warrants and certain types of bearer bonds, CBF offers to its clients the eMISSION Service. Issuers and issuing banks (lead managers) can use an internet portal and/or a direct request to Client Services to submit to CBF the terms and conditions of issue, and the basic data for new issues of securities certificates.

The following text contains a general description of the eMISSION services. If detailed information is required regarding to solicited documents, naming convention and data fields please refer to the document eMISSION Business Content and Format Specification.

All-in

All-in is an electronic admission type for collective safe custody of warrants, certificates, and certain types of fixed income products such as bonds which provides the issuers full admission to CSC in one process. The securities static data is transmitted to T2S and the deposit instructions are booked.

SecurityBox

With CBF's eMISSION SecurityBox service, CBF offers the client an electronic admission type for collective safe custody via a two-stage admission process. It is only available for warrants or certificates.

The client can choose from two options of SecurityBox, either SecurityBox with AutoAdmission or SecurityBox without AutoAdmission. The client uploads pre-admission documents which are reconciled manually by the new issues operator. The settlement instructions are processed only once the security has been traded- either with or without AutoAdmission. Subsequently, CBF generates the global note and deposits it in the vault.

Pre-Admission

Pre-admission is the first step of the SecurityBox process. Before the start of trading, an admission eligibility check is carried out for each securities class offered for trading on the capital market. This step of the process is not the same as admission to collective safe custody, but it guarantees subsequent admission to collective safe custody provided that the securities class has been traded.

CBF will print the terms and conditions in the pre-admission stage and deposit them in the vaults of CBF. However, no global note exists at this stage.

Each security type in pre-admission is immediately forwarded to the T2S settlement system to allow the release of the master data for the securities code (ISIN) concerned.

Approval with Auto-Admission

CBF monitors all the securities classes submitted by the client in "Pre-Admission" and, once trading has taken place, it admits the securities class concerned to collective safe custody. CBF then generates the appropriate global note and deposits it in the vaults along with the terms and conditions.

Approval without Auto-Admission (Forced Admission)

In the event of the SecurityBox service without Auto Admission, the responsibility for and monitoring of all submitted classes of securities lies with the client. If a class of securities has been traded, the client must arrange for inclusion in the collective safe custody account in good time prior to the arrange for it.

Trades Only

Trades Only is an electronic admission type for debt instruments (bonds), warrants and certificates already traded.

After a security has been traded, CBF generates with immediate effect on favour and against the issuer the deposit and the offer per issued security and transmits to the T2S settlement system.

Use of the Trades Only service is restricted to securities classes categorised as debt instruments (bonds), warrants and certificates. No other securities classes are eligible for the Trades Only service.

Data Sprint

Data Sprint service offers fast forwarding and notification of security's static data in the T2S settlement system.

This service is for debt instruments (bonds), warrants and certificates that can be marked as "intended for collective safe custody (CSC)".

The client bears sole responsibility for the data provided to CBF and CBF is only responsible for forwarding the data. CBF does not carry out sanity or plausibility checks.

Lifecycle events

Mark-up / Mark-down

This service is offered for “up to” global notes in collective safe custody. These notes permit the efficient issuance of securities in tranches (mark-ups), or the reduction of the issued amount (mark-downs), as long as the specified maximum nominal amount is not exceeded.

As a result, issuers benefit from greater flexibility, as it is no longer necessary to generate or withdraw global notes each time the issued amount is changed.

Clients can further automate this process with the AutoDispo service.

AutoDispo Service

AutoDispo service allows each market participant in its role as the issuing bank (agent or lead manager) to automatically provide holdings in its securities account for delivery in settlement of securities transactions and to optimise its end-of-day securities account holding in specified categories of securities held in collective safe custody.

This service not only generates the necessary mark-ups but also automatically removes all unsold securities from the client's account at the end of the business day (mark - down).

This means that issuers do not need to constantly monitor their issuance account or manually input mark - up and mark - down instructions. The automation of manual interventions and scalable volumes makes processing more efficient and results in shorter delivery times.

Exchange

With CBF's eMISSION Exchange service, the client is offered an electronic admission type to exchange existing global notes (GN) and/or terms & conditions (T&C) of an already existing and active ISIN in collective safe custody via an automated process.

This service is offered for debt instruments (bonds), warrants and certificates.

Increase

With CBF's eMISSION Increase service, the client is offered an electronic admission type to increase the issuance amount of an already existing and active ISIN in collective safe custody via an automated process.

This service is offered for debt instruments (bonds), warrants and certificates.

The Increase service requires the generation of an additional global note, which must be booked in CASCADE/T2S and printed at the physical Vault.

Redemption

The “Automatic Redemption Process (ARP)” is a special service offered to clients acting as agents. It is a fully automated service for processing all types of redemptions (on final maturities) and partial redemptions covering most agent banks in German domestic market. This service is used for redemptions of certificates, warrants, and bonds. The data transfer is sent to CBF using a pre-defined template in CSV format, enabling immediate publication in CBF's processing systems. The usage of the ARP service is mandatory for agents providing reference data to CBF.

3.2 Electronic securities

The following text contains a general description of the issuance of electronic securities. If detailed information is required, clients should refer to the document D7[®] Client User Manual and Technical Access Documentation (include format specifications).

CBF offers the issuance of electronic securities according to the German Electronic Securities Act (Gesetz über elektronische Wertpapiere – eWpG) via its digital issuance platform, D7, which allows market participants to issue electronic securities by leveraging digital instruments (DI), a digital description of the securities.

D7 provides a fully digital alternative to conventional physical issuance and processing of securities. Clients will be able to digitise their financial products with continuing access to both existing central and distributed infrastructures and markets.

The following diagram shows the current CBF infrastructure for issuance of electronic securities.

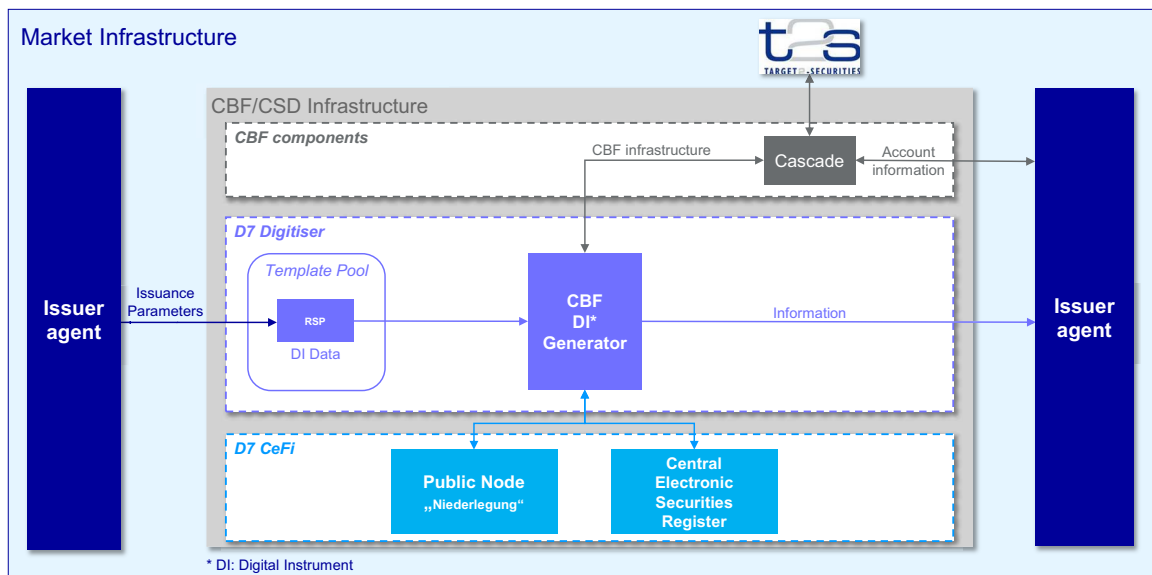


Figure 3.2 Emission of electronic securities

D7 Digitiser

Next to the required Central Register (D7 CeFi) and a Filing Directory, CBF developed the D7 Digitiser platform for financial institutions to issue electronic securities and cater for lifecycle management. It facilitates Digital Instruments (DI) as a digital representation containing the static data of the dematerialised securities in D7 CeFi. D7 Digitiser serves as gateway and arranger of events. D7 CeFi including its Filing Directory (public node) as well as the Clearstream reference data and position management systems (CASCADE) are considered being a part of it, executing the event. The presented infrastructure illustrates the existing CBF infrastructure with “legacy” systems and how the new DI infrastructure is integrated into it and relates with other parties.

The D7 platform functionalities can be clustered into the following categories along the security lifecycle:

Admission of electronic securities

Electronic securities can solely be issued via D7 Digitiser. Initially, for the issuance and admission of an electronic security to CSC, specific templates must be put in place to enable a near “Zero touch”

admission approach that allows for a shorter time to market with reduced manual validation and operational risk.

To issue an electronic security, issuers or their issuing agents are required to submit collectively an XML File and the security's terms and conditions in PDF. Data will be technically validated against the template before CSD eligibility checks are performed. Then a consistency check in terms of content in the document and data takes place.

After successful validation both files are forwarded to D7 CeFi and its Filing Directory. Terms and conditions are stored in the public node and after further validation by D7 CeFi security data become finally effective in its database. The security is issued and further downstream processes (for example, settlement) are instantaneously initialised.

Lifecycle events

Mark-up / mark-down

Mark-up / mark-down instructions on up-to nominal electronic securities are also available like for physical securities. The scope of this service for electronic securities is limited to those securities defined in eWpG, admitted, and issued by D7 Digitiser. There are three alternatives how the instructions can be submitted, online via register in Xact Web Portal, Swift message MT54X directly to CBF or AutoDispo service.

CBF grants seamless integration of electronic securities in its settlement landscape.

AutoDispo service

The AutoDispo service for up-to nominal electronic securities is also available like for physical securities. The scope of this service for electronic securities is limited to those securities defined in eWpG, admitted, issued by D7 Digitiser and, available for the AutoDispo service (instrument type).

Clearstream grants seamless integration of electronic securities in its settlement landscape.

Redemption

Issuers or Issuer Agents require a maintainability of securities along their lifecycle.

They can submit certain lifecycle events either via the Xact portal or Digital Redemption Process (DRP) directly to D7 Digitiser. DRP is the electronic enhancement of the already established ARP file for automatic redemptions. Clearstream will process the request after successful validation.

At the end of the security's lifecycle a redemption is due to be performed, securities data are historised and terminated in D7 CeFi. Such redemption (date) is either predefined in the security's static data or sent by the issuer or issuer agent separately via DRP for early redemption.

Non-collective safe custody (NCSC)

CBF admits NCSC securities using the technical and functional services of its sister company, CBL.

Non-collective safe custody to be settled via T2S (NCSC-T)

CBF admits both CSC and NCSC-T securities for settlement in T2S.

To differentiate NCSC instruments that settle on the client's CBF-i accounts and that are not CBF-T2S eligible from NCSC instruments that settle on the client's CBF accounts being CBF /T2S eligible, the securities type "NCSC-T" has been implemented. From a legal perspective, NCSC-T instruments remain NCSC instruments.

3.3 Vaults

Physical vaults

Custody

Fungible securities in the meaning of the German Securities Deposit Act (Depotgesetz) are eligible for collective safe custody if they are physically stored in CBF's vaults (German and international securities as well as co-ownership fractions of German global certificates) or if they are kept in collective safe custody with a non-German CSD to which CBF maintains a link in the form of a mutual account relationship, in accordance with Section 5 (4) of the German Securities Deposit Act, and as long as CBF is in a position to effect settlement from a technical point of view. The admission for collective safe custody especially for securities of foreign CSDs is in the obligation of CBF based on the legal opinion for the respective CSD link.

The following securities are currently admitted to collective safe custody:

- Debt instruments, such as Government bonds (Bunds), mortgage bonds, money market instruments (CP), municipality bonds, corporate bonds, international bonds and convertible bonds;
- Equities, such as bearer shares and registered shares, warrants and certificates;
- Other securities, for example units in collective investment undertakings, and international securities held in collective safe custody, for example German Global Bearer Certificates representing international securities.

Third-party vaults

CBF offers its clients individual safe custody (jacket custody) with referencing of certificate numbers up to the level of the underlying client. Thus, clients can outsource their vaults administration. This third-party vault service is supplemented by the in-house collective safe custody system, which allows the domestic settlement of securities that are not eligible for collective safe custody.

Gold

Deutsche Börse Commodities GmbH (DBCo) is a joint venture founded among several financial institutions with the aim of making physical gold tradable on the basis of bonds on the securities infrastructure of CBF. To this end, DBCo issues a bond and markets it under the name Xetra-Gold®.

Each bearer note gives the investor the right to delivery of exactly one gram of gold. The Xetra-Gold bond is collateralised by DBCo through the acquisition of a cover pool of gold. This cover holding is predominantly held in the form of physical gold at CBF but is also recorded in a Global Bearer Note as Xetra book gold vis-à-vis Umicore AG, which is the provider for physical gold for DBCo. This total cover holding and the amount of Notes issued must be adjusted each time a note is issued, redeemed or exercised.

Electronic vaults

The central register (D7 CeFi)

To enable the issuance and trading of electronic securities, a central register (D7 CeFi) was developed as a crucial part of the financial infrastructure. In compliance with the German legislation (eWpG), the system was released in November 2021.

One of the main tasks of the central register (D7 CeFi) is to provide legally binding and contractual relevant information about the electronic securities that have been issued in the register. It reflects the

entire lifecycle of the electronic securities, including mark-up / mark-down and maturities as well as further corporate actions.

4. Settlement Services

4.1 Settlement via T2S

CBF has outsourced the settlement of transactions in securities in collective safe custody (CSC) and NCSC-T-securities to the T2S platform. This affects transactions against central bank money, transactions free of payment as well as the securities leg of business in foreign currencies. Within the securities settlement, T2S executes the following for provided instructions:

- Acceptance of the instruction entry (Settlement Finality 1);
- Processing;
- Validation;
- Matching (Settlement Finality 2);
- Settlement of the transmitted instructions;
- Administration of positions;
- Reporting of transactions and of positions.

CBF's technical infrastructure allows the continued use of the existing interfaces for the transfer of ISO 15022 messages (Swift, File Transfer, MQ) as well as CASCADE Online. A real-time interface between T2S and CBF ensures the exchange of settlement information as well as the consistency of the instructions in T2S and CBF, in order to provide reliable reporting for clients.

Clients can opt to communicate with T2S via their CBF connectivity in ICP (Indirectly Connected Participant) mode. In addition, it is possible to communicate with T2S directly in DCP (Directly Connected Participant) mode. Via the direct connectivity, the standard OTC business for domestic is possible, as well as cross-border business, via different CSD links to important securities markets. However, there are limitations with respect to CBF specific transaction processes, for example, stock exchange trades, and other CBF specific transactions which require special treatment by CBF before they are forwarded to T2S. Thus, the DCP connectivity can only be an additional communication option and cannot fully replace the ICP connectivity via CBF.

The following functionalities, that are offered via the platform T2S, can be used via CBF:

- Priority
Possibility to mark an instruction with a priority "3" (High) or "4" (Normal, default). The priorities "1" (Reserved) and "2" (Top) are only available for CSDs, NCBs, CCPs and trading platforms.
- Hold / Release
Possibility to put instructions on hold. In T2S, the following hold types exist:
 - Party Hold, hold set by the client, if the current status of the instruction allows the modification;
 - CSD Hold, hold set by the CSD;
 - CSD Validation Hold, hold that is automatically set by T2S based on rules defined by the CSD;
 - CoSD Hold (Conditional Securities Delivery), hold that is automatically set by T2S based on rules defined by the CSD.

- Partial Settlement

Within fixed Partial Settlement Windows, T2S attempts to partially settle the respectively flagged instruction as long as a complete settlement is not possible due to insufficient securities or insufficient securities and cash.

Possible values of the partial settlement indicators are:

- NPAR (not allowed);
- PART (allowed);
- PARC (allowed beyond a defined cash threshold);
- PARQ (allowed beyond a defined stock threshold).

Instead of flagging each instruction with PART, the Default Partial Settlement parameter in the account static data can be set to always allow partial settlement. The default value of the indicator is NPAR (not allowed). Clients can adapt this parameter at any time.

- Linkage

Possibility to link several instructions in order that they are either settled together (All-or-None) or they are settled in a specific order:

- Via pool reference for the linkage of several instructions;
- Via link types BEFO / AFTE / WITH / INFO¹.

- Already matched

Clients can set up already matched instructions against their own accounts or against accounts for which they have power of attorney by flagging the instruction accordingly (“already matched”, “Ja / Yes”). This flag causes a match instruction to be generated automatically by T2S after validation.

Already matched instructions can be set up for the following instruction types:

- Free of payment (FoP);
- Versus payment (DvP) against settlement currency EUR; and
- Payments free of delivery (PFoD) resulting out of a netting.

CBF makes use of this possibility whenever there is a service for which matching on T2S is mandatory (for example, stock exchange trades, redemptions).

Recycling periods

Instructions in CASCADE Online, which are in status creation and not released, will be deleted system-wise after two bank working days.

Unmatched instructions are forwarded for a maximum of 20 business days and then cancelled on T2S. A warning is sent after five banking days.

Matched but not settled OTC-transactions, including non-CCP stock exchange transactions are cancelled by T2S after a 60-day recycling period at the end of the settlement day (after 18:00). The recycling period starts on the day the instructions are matched, on the ISD (Intended Settlement Date) or on the day of the last status change (Release / Hold / Partial Settlement) depending on which of the events occurred last.

The automatic cancellation process for matched settlement transactions after 60 business days since the ISD or the last status change will not apply to transactions of T2S Out-CSDs qualified as non-compliant to this rule and being the Issuer CSD of the security concerned.

1. The link type INFO is for information only and has not impact on settlement.

CBF settles instructions for three T2S Out-CSDs:

- Clearstream Banking S.A., Luxembourg (CBL), non-compliant (see [Market Link Guide - International \(CBF\)](#));
- Depository Trust and Clearing Corporation (DTCC), U.S. CSD, non-compliant;
- Swiss Infrastructure and Exchange & Swiss Invest Selection (SIX SIS), Swiss CSD. compliant.

4.2 Stock exchange trades (non-CCP stock exchange trades)

The technical outsourcing of the securities settlement to T2S also affects non-CCP stock exchange (SE) trades.

The following diagram shows a rough outline of the settlement of trades concluded at German stock exchanges, in particular:

- Trading on Frankfurter Wertpapierbörse (FWB[®], the Frankfurt Stock Exchange) via Xetra, the fully-computerised trading system;
- Floor trading via XONTR0 order, the order routing system of the German stock exchanges;
- Trading via Xitaro, the trading system of Börse Stuttgart;
- Trading via Tradegate Exchange; and
- Inter-exchange securities transfer (PÜEV) transactions/interbank trading.

Stock exchange instructions are automatically forwarded to T2S for settlement whereas securities in non-collective safe custody (not including NCSC-T) are forwarded to the Creation platform. Any security that is used in a stock exchange instruction has to be recognised by CASCADE and any securities in collective safe custody must also be recognised in T2S. It is also important to note that the security must have already been issued by the time the stock exchange instruction reaches CASCADE.

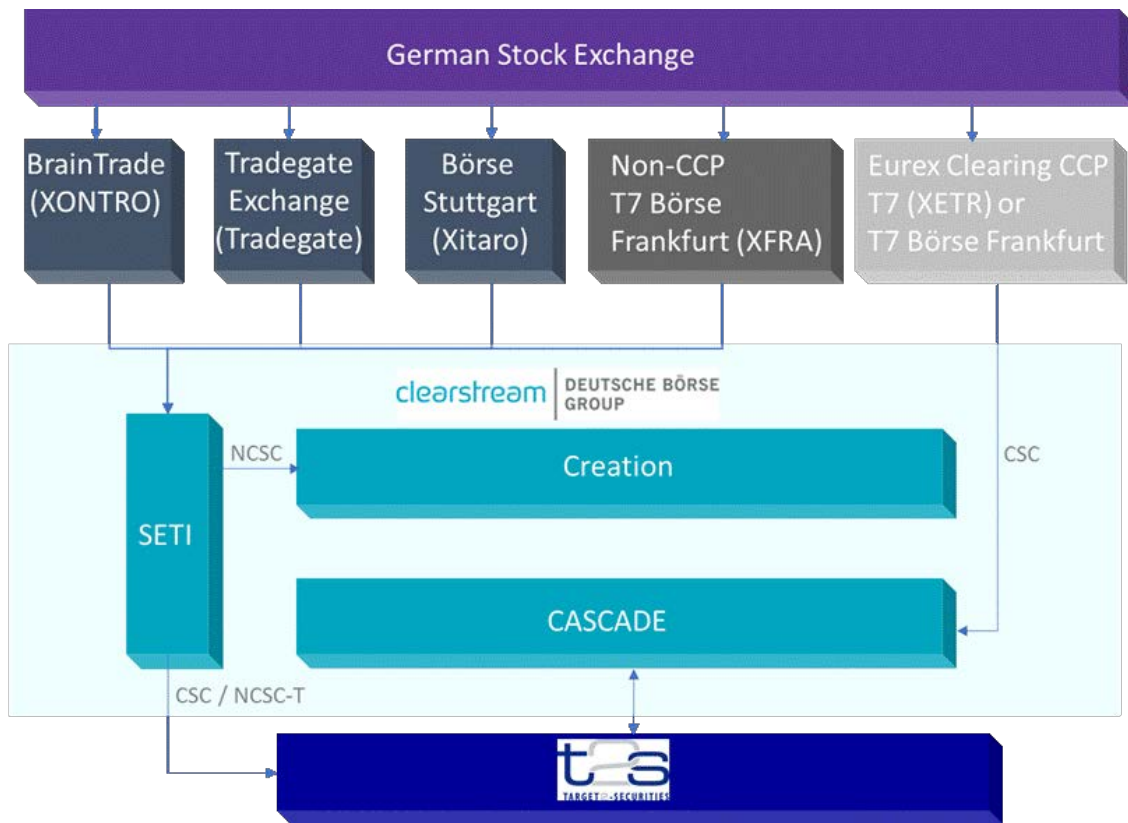


Figure 4.1 Settlement of stock exchange trades - overview

For CBF only, transactions in non-CCP products (non-CCP) are considered as stock exchange trades as, in technical terms, CCP instructions are settled in the same way as OTC transactions through CASCADE. A detailed description of the settlement of non-CCP stock exchange trades can therefore be found in this section ("Stock exchange trades"), whereas the settlement of CCP instructions is explained in Chapter 'Over the Counter (OTC) - Domestic' on page 4 - 10. It is important to note that T2S does not distinguish between OTC transactions and stock exchange transactions.

The decision to route non-CCP and CCP transactions to the appropriate settlement is taken by the stock exchange or the relevant service provider, respectively:

- Delivery instructions for non-CCP transactions are entered for processing in CBF's CASCADE system. During the processing of transactions with securities classes held in collective safe custody (CSC), the settlement of securities and cash settlement in EUR takes place in T2S (forwarded from CASCADE) whereas cash settlement in non-EUR takes place via Creation. For stock exchange trades with NCSC (AKV) securities classes, the delivery instructions are passed on to the Creation platform with settlement of cash and securities taking place via Creation. The following table summarises the responsible systems for the processing of cash and securities, depending on the type of custody and the currency.

Type of custody	Currency	Processing system for securities	Processing system for cash
CSC	EUR	T2S	T2S
CSC	Non-EUR	T2S	Creation
NCSC (AKV) ¹	EUR or non-EUR	Creation	Creation

1. Type of custody AKV (Auslandskassenverein)

- CCP transactions are passed on to the systems of Eurex Clearing for securities clearing and net processing (see 4.3.1.3). Delivery instructions resulting from net processing in CSC and NCSC-T instruments are passed on to CBF for settlement from where they are forwarded to T2S. Delivery instructions.

Clients can maintain non-CCP instructions exclusively in ICP mode either online in CASCADE screens or via ISO 15022 messages. Messages in DCP mode for the maintenance of stock exchange instructions are not supported. Clients can receive copies of the respective instructions as well as the status messages and settlement confirmations in format ISO 20022 directly from T2S.

Collective safe custody

The following diagram shows the process for the settlement of non-CCP stock exchange trades with CSC securities classes.

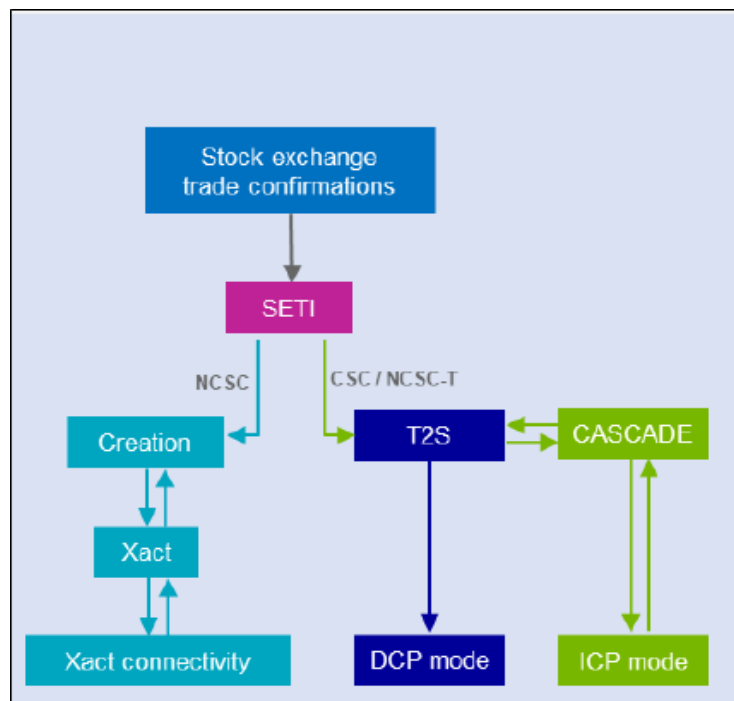


Figure 4.2 Processing of stock exchange trades (non-CCP) with CSC securities

Stock exchange trades in EUR

Entry of instructions

Stock exchange trades in non-CCP securities are transferred to CBF after close of trading. The CBF Stock Exchange Transaction Interface (SETI) accepts the information in real-time mode and creates securities settlement instructions (against EUR, that is, Delivery versus Payment (DvP)) for the corresponding settlement platform (Creation or T2S). For settlement on Creation, a delivery and receipt instruction is created, whereas for settlement on T2S, one delivery instruction is forwarded with the flag “already matched”.

The generation of the settlement instruction is directly depending on the receipt of information from the exchanges or their service providers. This information is expected approximately as of 22:30 and can be forwarded immediately. The service level agreements with the linked partners define the receipt of the information no later than 07:00 on the following business day.

Clients using the automated connectivity channels for instruction management are requested to not initiate further processing until the related status messages (MT548 or MT537) have been received from CBF or CBL. The same applies to clients acting in DCP mode; here it is also mandatory to receive the status advice from T2S.

The settlement period usually takes two days (T+2).

For the further processing of instructions, it is of decisive importance in which release procedure the client participates. Clients have two options here, before instructions are forwarded to T2S:

- In the “Party-Hold” (positive) procedure all sell instructions are initially entered with blocked settlement and must then be released for settlement by the client. A partial delivery of blocked transactions is possible.

The T2S-Partial Release functionality enables the partial release of the quantity specified in a pending securities settlement transaction instruction (settlement transaction instruction, sese.023). The Partial Release functionality is offered for delivery instructions (delivery versus payment (DvP), delivery free of payment (DFoP) and delivery with payment (DwP)). The Partial Release request can be initiated with the “Hold / Release functionality” by specifying the quantity to be released.

The delivering party can initiate the Partial Release request if:

- The underlying instruction has been accepted by T2S;
- The Intended Settlement Date (ISD) is reached;
- The instruction is flagged for Partial Settlement;
- The quantity of the release instruction is lower than the quantity of the underlying instruction; and
- The criteria of the static data for minimum settlement unit (MSU) and settlement unit multiple (SUM) of the ISIN are fulfilled.

Only when all these requirements are met, T2S will accept the Partial Release request and will submit the instruction for settlement processing.

The settlement will be executed during the upcoming Partial Settlement window if:

- The transaction is still pending and matching was performed;
- The Counterparty allows Partial settlement and the cash threshold is sufficient for the released quantity. However, the counterparty does not have to agree on the Partial Release request) as such; and
- The cut-off time for the Partial Request has not yet been reached.

Clients acting in ICP mode need to consider the usual lead time for the instruction management with T2S. A Partial Release request can be provided during the entire settlement day and should be transmitted at least 15 minutes prior to the upcoming T2S Partial Settlement window.

- In the “Release” (negative) procedure all sell instructions are immediately released for settlement, but can be blocked by the client until the start of the next settlement cycle (see also section “Settlement date and settlement cycles” on page 4 - 8).

Processing instructions

In T2S, CBF clients are still offered numerous services for the settlement of stock exchange trades via CASCADE.

Modification of delivery instructions:

- Releasing and blocking a stock exchange trade for settlement in the corresponding settlement cycle, depending on which release procedure the client has selected.
- Modification of stock exchange trades, for example, modification of the processing priority;

- T2S partial settlement functionality that allows the partial settlement of the instruction according to the pre-requisites in T2S.

The seller can only make modifications to sell/delivery instructions as long as the settlement of the instruction has not started yet.

Cancellation of delivery instructions:

- In order to cancel a stock exchange trade, both counterparties must mark the transaction for cancellation before the start of the selected settlement cycle. If one of the two counterparties sets a cancellation mark, this prevents the transaction from being settled in the next settlement cycles.

Matching

Instructions from stock exchange trades are forwarded by CBF to T2S as DvP instructions with the status "Already matched".

Clearing and settlement

The clearing and settlement of stock exchange trades with payment in EUR will take place after the delivery position has been released, if the seller has sufficient securities positions and the buyer has sufficient liquidity or a sufficient cash balance in T2S. The securities are transferred from the seller's T2S Securities Account (SAC) to the T2S SAC of the buyer. The cash settlement takes place from the Dedicated Cash Account (DCA) of the buyer to the DCA of the seller. More detail on cash settlement is described in [section "Cash settlement"](#) on page 5 - 7.

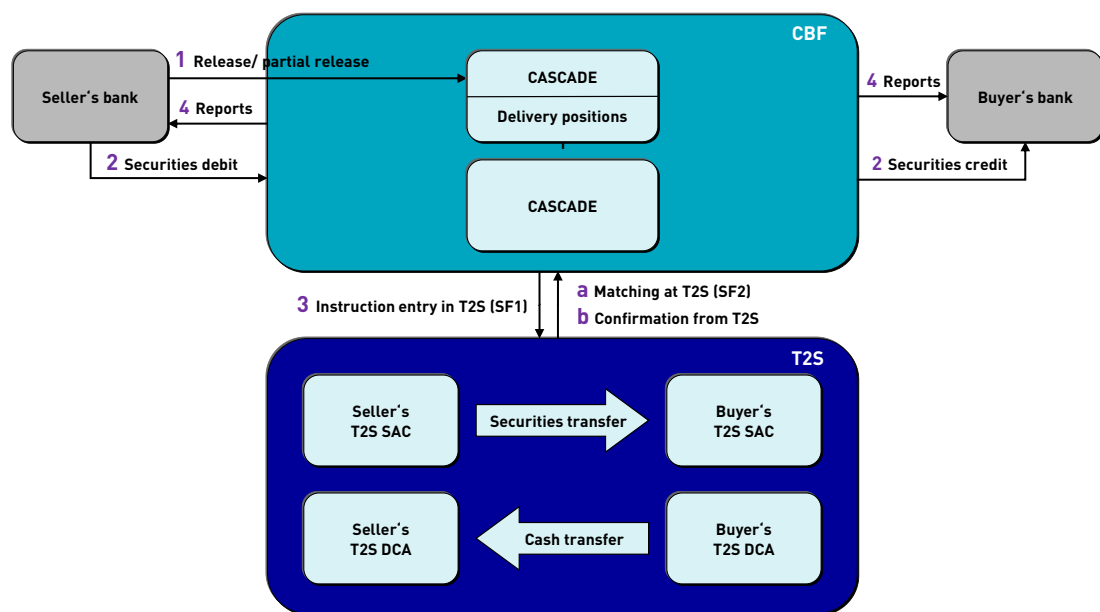


Figure 4.3 Clearing and settlement of stock exchange trades (non-CCP) with CSC securities in EUR

A special feature of securities clearing and settlement is the settlement procedure via third-party accounts (Reg-über). A branch office can conclude stock exchange trades through its own CBF account and settle them via the CBF securities account of the head office (see [section 2.2 "Account types"](#) on page 2 - 3). This procedure is only offered for stock exchange trades, regardless of the type of custody under which the traded security is being kept.

The settlement procedure via third-party accounts (Reg-über) remains also with T2S. However, third-party branch accounts will not be reflected in T2S. Stock exchange transactions traded on a third-party branch account are forwarded to T2S for settlement on the third-party central account. The third-party

branch account is not forwarded to T2S, therefore, any DCP mode reporting does not show the third-party branch account.

Settlement date and cycles

Non-CCP stock exchange trades with cash clearing in EUR are settled in the following T2S settlement cycles (for details please refer to section "Settlement" on page 1 - 6):

- T2S Night-time Settlement;
- T2S Real-time Settlement.

The change of business day takes place at about 18:45 on the calendar day on which the T2S business day ended. Therefore, the T2S Night-time Settlement (NTS) is the first T2S settlement cycle for all transactions where final settlement and delivery takes place on this business day. All valid entered instructions that become due on this day or that were due at an even earlier point in time, but could not be successfully processed, are entered for processing via the NTS cycle.

Settlement failure

Instructions that could not be settled in a T2S settlement cycle are automatically forwarded to the next cycle. The entry of new instructions or the releasing of positions for delivery can then trigger settlement. An instruction is passed on to the next settlement cycle until either clearing and settlement takes place, or the relevant instruction is cancelled by both parties involved. T2S cancels pending instructions after a 60 days recycling period.

Stock exchange trades in non-EUR

Entering instructions

Stock exchange trades in non-CCP securities classes with cash clearing in currencies other than EUR (non-EUR) are sent to CBF at the close of trading, in the same way as trades in EUR. They are entered as delivery instructions in CASCADE. Instructions with cash clearing in non-EUR currencies are represented in T2S as Free of Payment (FoP) instructions. The cash clearing in non-EUR currencies is settled on the Creation platform.

Processing instructions

Clients who wish to process instructions from stock exchange trades in other currencies than EUR have access to the same functionalities as when they enter their instructions in EUR.

Matching

Delivery instructions from stock exchange trades are always entered as matched in CASCADE, regardless of the currency. The instructions are forwarded to T2S with the status "Already matched".

Clearing and settlement

The clearing and settlement of stock exchange trades in currencies other than EUR takes place in the reservation and cash clearing process for OTC transactions (domestic) against non-EUR currencies.

After the release of the delivery position and if the client has sufficient securities positions, the FoP instruction is set on CoSD Hold in T2S and for CASCADE the securities are reserved in the seller's reservation account /995. The book entry instruction for cash settlement is sent from CASCADE to CBL's settlement platform, Creation. If the buyer has sufficient liquidity in commercial bank money, the cash is reserved on an interim account in Creation. After confirmation of cash settlement, the release of the CoSD Hold is sent to T2S, so that the settlement of the securities can take place in T2S. In CASCADE a debit entry to the seller's reservation sub-account is made as well as a credit entry to the buyer's account. After that, the cash amount is transferred in Creation from the interim account to the account of the seller — a CBF-i account.

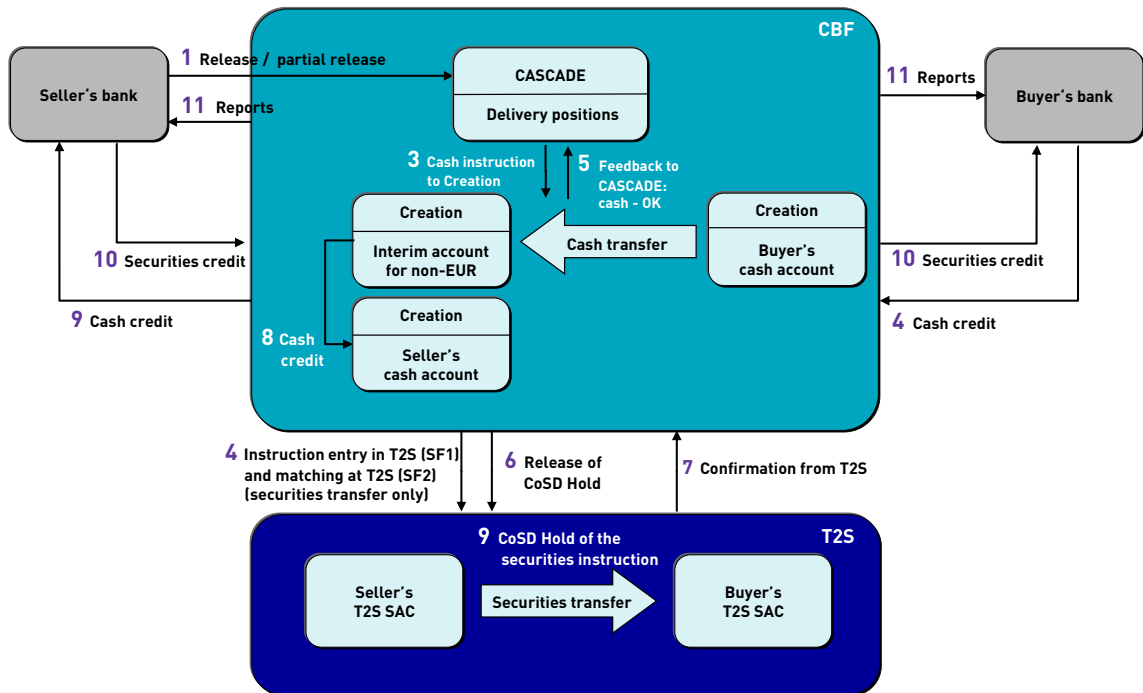


Figure 4.4 Clearing and settlement of stock exchange trades (non-CCP) with CSC securities in non-EUR currency

The buyer must ensure that the countervalue in the corresponding currency is promptly made available in its currency account in Creation. The relevant processing cycles for the currencies must be taken into account in order to obtain the corresponding amounts, so that a transaction can be carried out on the same day in CASCADE (see [CBL Client Handbook](#)).

Settlement date and settlement cycles

As with transactions in EUR, non-CCP stock exchange trades with cash clearing in other currencies are cleared in the following T2S settlement cycles (for details please refer to section "Settlement" on page 1 - 6):

- T2S Night-time Settlement;
- T2S Real-time Settlement.

The T2S Night-time Settlement is the first settlement cycle for all transactions released for settlement on the business day that has started before the NTS.

If the currency has not been processed or not properly processed, the stock exchange trades are carried forward to the next T2S settlement window until T2S cancels them after the end of the 60-day recycling period.

4.3 OTC transactions

Collective safe custody

The settlement of OTC transactions with CSC securities is handled by the platform T2S. To explain the different settlement processes, the following distinctions are made:

- Over the counter (OTC) – domestic for OTC transactions in Germany;
- Over the counter (OTC) – cross-border for transactions that are processed through the various CSD links to the most important securities markets;
- CCP settlement-processing of CCP OTC instructions relating of Eurex Clearing AG.

Over the Counter (OTC) - Domestic

The following types of OTC domestic transactions can be processed via T2S:

- Securities transfers free of payment - Free of Payment (FoP) instructions;
- Securities transfers against payment in EUR - Delivery versus Payment (DvP) / Receive versus Payment (RvP) instructions;
- Securities transfers with payment in EUR - Delivery with Payment (DwP) / Receive with Payment (RwP) instructions;
- Securities transfers free of payment with information related to payment in non-EUR currency;
- Payment of EUR without securities transfers - Payment Free of Delivery (PFoD) instructions.

The following diagram shows the settlement processes for OTC domestic instructions via the platform T2S.

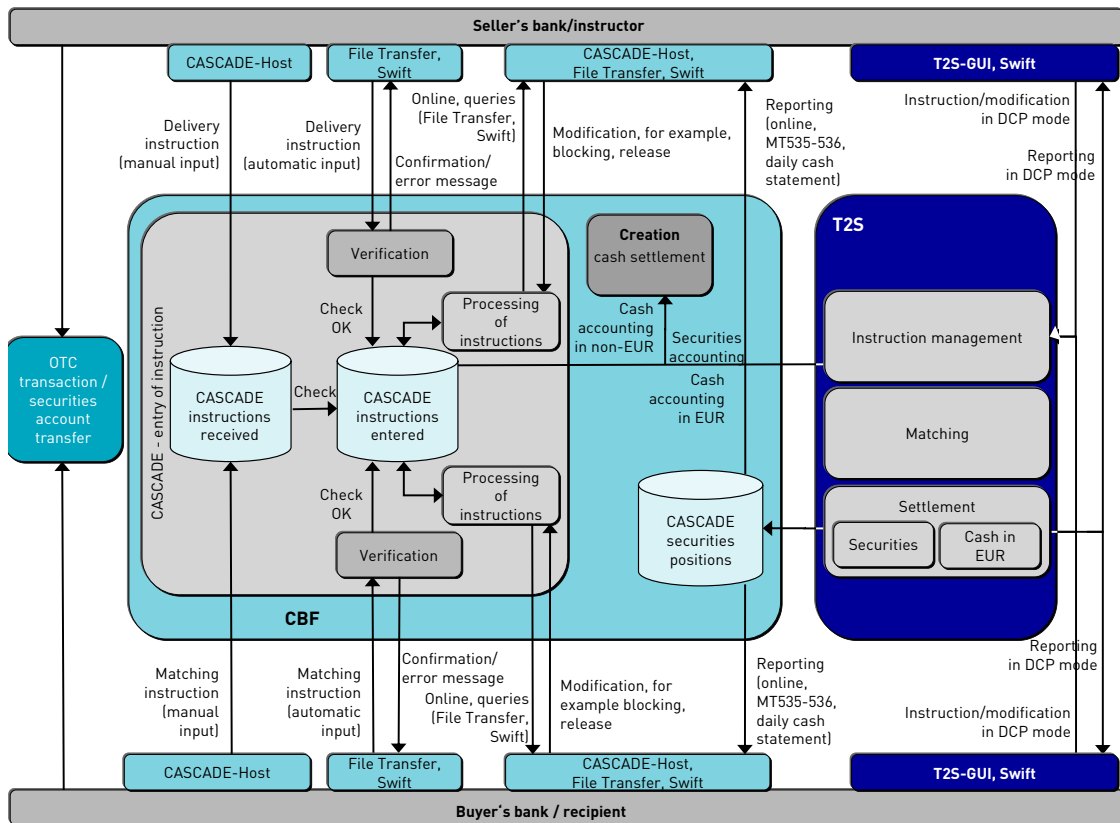


Figure 4.5 Settlement of OTC domestic transactions with CSC securities

Securities transfers FoP

Entry of instructions

In order to process instructions for delivery FoP in respect of CSC securities, both the delivery instruction of the instructing party or seller and the matching instruction of the receiving party or buyer are needed, if the buyer's account is set up for active matching in the master data system. If the buyer's account is set up for passive matching, the corresponding, required matching instruction based on the instruction details provided by the seller is generated by CBF and forwarded to T2S.

Both instructions can be entered manually via CASCADE-Host or they are transmitted by automatic input through File Transfer or via the Swift network. Characters used in text fields must correspond to Character Set X.

An instruction entered by manual input is first kept as received in CASCADE. After being verified and released by the instructing party according to the cross-checking principle, the instruction is forwarded for settlement to T2S. Instructions transmitted by automatic input will be directly forwarded to T2S for settlement after their format and contents have been verified. In T2S, an instruction without payment is an FoP instruction.

On entry of the instruction, the client already has the option of blocking it from settlement. This means that the instruction will be excluded from the settlement process on the intended settlement date until blocking has been cancelled.

Processing instructions

The instructing party and the receiving party have a number of options for the subsequent processing of instructions they have entered via CBF. An instruction can only be processed by the bank that entered it.

Amending instructions:

- By blocking an instruction from settlement both the instructing and the receiving party can exclude it from the settlement process, and release it for settlement by cancelling the blocking. Unilateral blocking of an instruction by either party causes the entire instruction to be blocked. Setting and reversing a settlement block can be carried out regardless of the matching status of the instruction (see below the description of matching).
- Clients can modify instruction data for the following attributes as long as the settlement process of the instruction has not yet started:
 - Priority level;
 - Hold / Release / Partial Release;
 - Partial settlement indicator;
 - Linkage (not for linking via Pool);

For further modifications it is required to cancel the old instruction and to enter a new one.

Cancelling instructions:

- A delivery instruction or a matching instruction for CSC securities can be cancelled by the bank that entered it, as long as no matching has taken place. A matched instruction for CSC securities can only be cancelled bilaterally up to the start of processing/settlement, that is, both instruction parties must instruct the cancellation. If one side of a matched instruction is cancelled by one party only (delivery instruction or matching instruction), the transaction can still settle

The processing services for instructions are available online, and via electronic/computer interfaces for both the instructing and receiving parties in the transaction. Online processing is subject to a 4-eyes-principle.

Matching

OTC instructions FoP for CSC securities can only be settled after successful matching.

Matching takes place in T2S on the basis of the mandatory matching criteria, additional matching criteria and optional matching criteria.

Mandatory matching criteria:

- Bank debit entry (transferring bank);
- Bank credit entry (receiving bank);
- Securities identification numbering;
- Nominal value/units;
- Settlement date;
- Payment type (FREE);
- Securities movement type;
- Party 1 in Settlement Party - Receiver only for cross-border trades CSD/(I)CSD on the credit side;
- Party 1 in Settlement Party - Deliverer only for cross-border trades CSD/(I)CSD on the debit side;
- Closing date (trading date).

Additional matching criteria:

- Opt-Out indicator;
- Ex Coupon / Cum Coupon indicator;
- Cash countervalue¹;
- Currency¹;
- Credit / Debit indicator¹.

Optional matching criteria:

- Reference number
- Party 2 in Settlement Party - Receiver (only BIC, DSS or BLZ (bank code number))²;
- Party 2 in Settlement Party - Deliverer (only BIC, DSS or BLZ (bank code number))²;
- T2S SAC in Party 1 in Settlement Party - Receiver;
- T2S SAC in Party 1 in Settlement Party - Deliverer.

Mandatory matching criteria must be filled in both the delivery and the receipt instruction and the values need to correspond. The values either need to be identical or opposite (for example, for securities movement type DELI/RECE) in order to match.

Additional matching criteria are not mandatory fields and therefore do not have to be filled. However, their values have to match as soon as one of the counterparties fills the corresponding field in their instruction. A filled additional matching criterion cannot match with a blank field.

Optional matching criteria can match with a field with no value. As soon as both parties provide a value, the values have to match.

T2S distinguishes between capital letters and lower-case letters.

Clearing and settlement

Once the settlement date has been reached and the instructing party has not blocked settlement, a settlement attempt for the instruction takes place. The book-entry positions are settled and the securities are posted in the accounts through book entry. If the client does not have sufficient positions,

1. If cash information is provided in a FoP instruction, the attributes become additional match criteria. This is for example relevant for instructions against payment in non-EUR currencies, in order to prevent cross-matching.
2. Detailed matching rules are described in the CASCADE Handbook.

the instruction is held back and brought forward for processing in the earliest possible settlement cycle.

A partial release of blocked deliveries is possible ("partial release request"). If the delivering and the receiving party allow partial settlement in their instruction and the deliverer disposes of sufficient positions, the partially released position is settled in the next possible partial settlement window. Otherwise, the partial settlement request is cancelled at the end of day. Partial settlement is not possible for linked instructions or those in recycling status.

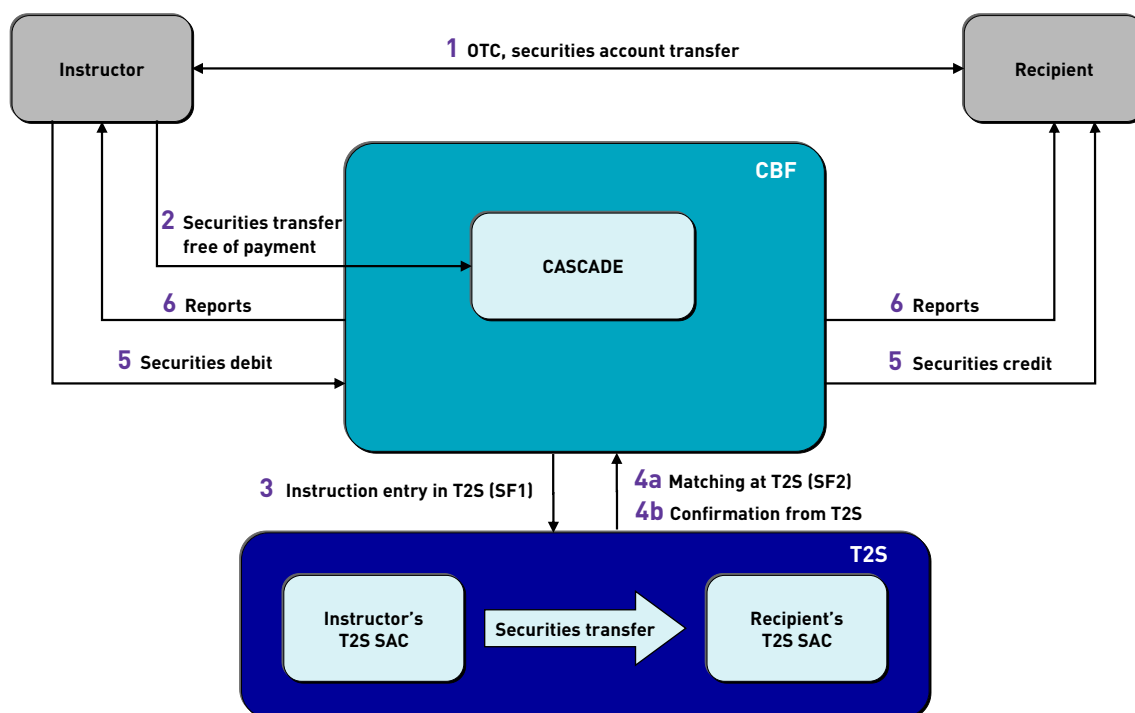


Figure 4.6 Settlement and processing of securities transfers FoP

Settlement date and settlement cycles

Settlement can take place in both NTS and RTS (for details see [section 1.5 "Services for collective safe custody \(incl. NCSC-T\)"](#) on page 1 - 5). The instructions enter the earliest possible cycle that is T2S Night-time Settlement (NTS) is the first processing cycle with settlement on the following business day. All valid instructions that are due on the following day or were due at an even earlier point in time, but which could not be successfully processed, enter the NTS cycle.

Settlement failure

Free-of-payment OTC instructions not settled on the agreed settlement date because of insufficient securities positions are brought forward for the next settlement cycle in T2S. In T2S, instructions in status "matched" are forwarded until the instruction is either settled or cancelled by both counterparties or by T2S after the end of the 60 days recycling period.

Securities transfers against payment in EUR

Entry of instruction

In order to process instructions for delivery against payment in EUR in respect of CSC securities, the delivery instruction of the instructing party/seller and the matching instruction of the receiving party/buyer are needed.

Both instructions can be entered by manual input via CASCADE-Host, or transmitted by automatic input through File Transfer or via the Swift network. Characters used in text fields must correspond to Character Set X.

An instruction entered by manual input is stored as "instruction received" in CASCADE and, after being verified and released by the instructing party/receiving party according to a cross-checking principle, it is forwarded for settlement to T2S. Instructions entered by automatic input are directly forwarded for settlement to T2S, after their format and contents have been verified. In T2S, a delivery instruction against payment in EUR placed by the instructing party represents a DvP instruction; the corresponding receiving party's instruction against payment in EUR represents the RvP instruction.

On entering the instruction, both the instructing party and the receiving party have the option of blocking the instruction from settlement. This means that the instruction will be excluded from the settlement process on the intended settlement date until blocking is cancelled.

Processing instructions

The instructing party and the receiving party in respect of the securities have various options for the subsequent processing of instructions they have entered via CBF. An instruction can only be processed by the bank that has entered it.

Modifying instructions:

- By blocking settlement, the instructing party and the receiving party can exclude the instruction from the settlement process, and release it for processing by cancellation of settlement blocking. Unilateral blocking of an instruction by the instructing party or the receiving party causes the entire instruction to be blocked. The blocking of settlement and its cancellation can be carried out independently of the instruction's matching status (please refer to the details on matching).

The option of blocking and releasing an instruction for settlement offers the instructing party and the receiving party two different ways of processing an instruction:

- Blocking instructions on entry, followed by the release of the instructions to be processed;
 - Entering instructions with no settlement blocking, followed by blocking of the instructions that are not to be processed.
- Instruction data can be modified for the following attributes by the bank that has entered them as long as the instruction's settlement process has not yet started:
 - Priority level;
 - Hold / Release;
 - Partial settlement indicator;
 - Linkage (not for linking via Pool).

For further modifications of the instruction it is required to cancel the instruction and re-instruct a new instruction with new instruction number.

OTC recycling

Valid OTC instructions that are submitted by clients acting in ICP mode and afterwards rejected by T2S due to missing securities static data (reason codes MVCV205, MVIC305, MVIC315, MVIC316, MVCV298 or MVCV299) are accepted for the recycling process and remain in CASCADE. Once the initially missing securities static data are set up on T2S, the instructions are re-instructed for further processing with the next re-instruction cycle (at 10:20, 12:50, 15:00 or 17:40). This recycling process is executed until the fourth T2S Operational Day following the Intended Settlement Day (ISD+4) specified in the instruction.

The OTC recycling process is applied to instructions that are not linked to another instruction and sent via:

- Swift, MQ or File Transfer and show the flag TRAD in field 22F (Type of Settlement Transaction Indicator, :22F::SETR//TRAD); or
- Xact Web Portal with "Securities Transaction Type" TRAD; or
- CASCADE-Host with TRAD or without ISO transaction code; or
- D7 and show the flag ISSU in field 22F (Type of Settlement Transaction Indicator, :22F::SETR//ISSU).

Cancelling instructions

- A delivery instruction or a matching instruction for CSC securities can be cancelled by the bank that has entered it as long as no matching took place. A matched instruction for CSC securities can only be cancelled bilaterally before settlement is started, that is, both instructing parties have to instruct the cancellation. If only one side of a matched instruction is cancelled (delivery instruction or matching instruction), the transaction still can still settle.

The processing services for instructions are available online, and via electronic interfaces or other means of communication for both parties to a transaction, that is, instructing party and receiving party. Online processing is subject to a cross-checking principle.

Matching

OTC instructions against payment in respect of CSC securities can only be settled after successful matching.

Matching takes place in T2S on the basis of the mandatory matching criteria, additional matching criteria and optional matching criteria.

Mandatory matching criteria:

- Bank debit entry (transferring bank);
- Bank credit entry (receiving bank);
- Securities code;
- Nominal value/units;
- Cash countervalue;
- Currency;
- Credit / Debit indicator;
- Settlement date;
- Payment type (APMT);
- Securities movement type;
- Party 1 in Settlement Party – Receiver only for cross-border trades CSD/(I)CSD on the credit side;
- Party 1 in Settlement Party – Deliverer only for cross-border trades CSD/(I)CSD on the debit side;
- Closing date (trading date).

Additional matching criteria:

- Opt-Out indicator;
- Ex Coupon / Cum Coupon indicator.

Optional matching criteria:

- Reference number
- Party 2 in Settlement Party – Receiver (only BIC, DSS or BLZ (bank code number))¹;
- Party 2 in Settlement Party – Deliverer (only BIC, DSS or BLZ (bank code number))¹;
- T2S SAC in Party 1 in Settlement Party - Receiver;
- T2S SAC in Party 1 in Settlement Party - Deliverer.

Mandatory matching criteria must be populated in both the delivery and the receipt instruction and the values need to correspond. The values either need to be identical or opposite (for example, for securities movement type DELI/RECE) in order to match.

Additional matching criteria are not mandatory fields and therefore do not have to be filled. However, their values have to match as soon as one of the counterparties fills the field in their instruction. A filled additional matching criterion cannot match with a blank field.

Optional matching criteria can match with a blank field. As soon as both parties provide a value, the values have to match.

T2S distinguishes between capital letters and lowercase letters.

For comparison of the cash countervalue as a matching criterion, there is a tolerance limit of EUR 25² (see Clearstream website under [Foreign currency matching tolerance amounts](#)). If the two countervalues diverge without overstepping the permissible tolerance limit, the countervalue of the delivery instruction of the instructing party (seller) is used in all settlement cycles for cash settlement.

Clearing and settlement

If the settlement date has been reached and both sides of the instruction (delivery instruction and matching instruction) have been matched and released for settlement, a settlement attempt for the instruction takes place. Settlement is carried out on the book-entry positions. The book entries are then made for the securities and the cash. For payments in EUR, cash settlement is carried out via the DCA in T2S.

If the seller does not have sufficient securities positions or the receiving party does not have sufficient liquidity, the instruction is brought forward for the next processing or the earliest possible settlement cycle.

A partial release of blocked deliveries is possible ("partial release request"). If the delivering and the receiving party allow partial settlement in their instruction and the deliverer disposes of sufficient positions, the partially released position is settled in the next possible partial settlement window. Otherwise the Partial Settlement request is cancelled at the end of day. Partial settlement is not possible for linked instructions or those in recycling status. Details concerning cash settlement can be found in [section "Cash settlement"](#) on page 5 - 7.

1. Detailed matching rules are described in the CASCADE Handbook.

2. The tolerance shown both here and on the Clearstream website refers to when the countervalue of both instructions is higher than EUR 100.000. If at least one transaction has a countervalue less than or equal EUR 100.000 a tolerance of EUR 2 is applicable.

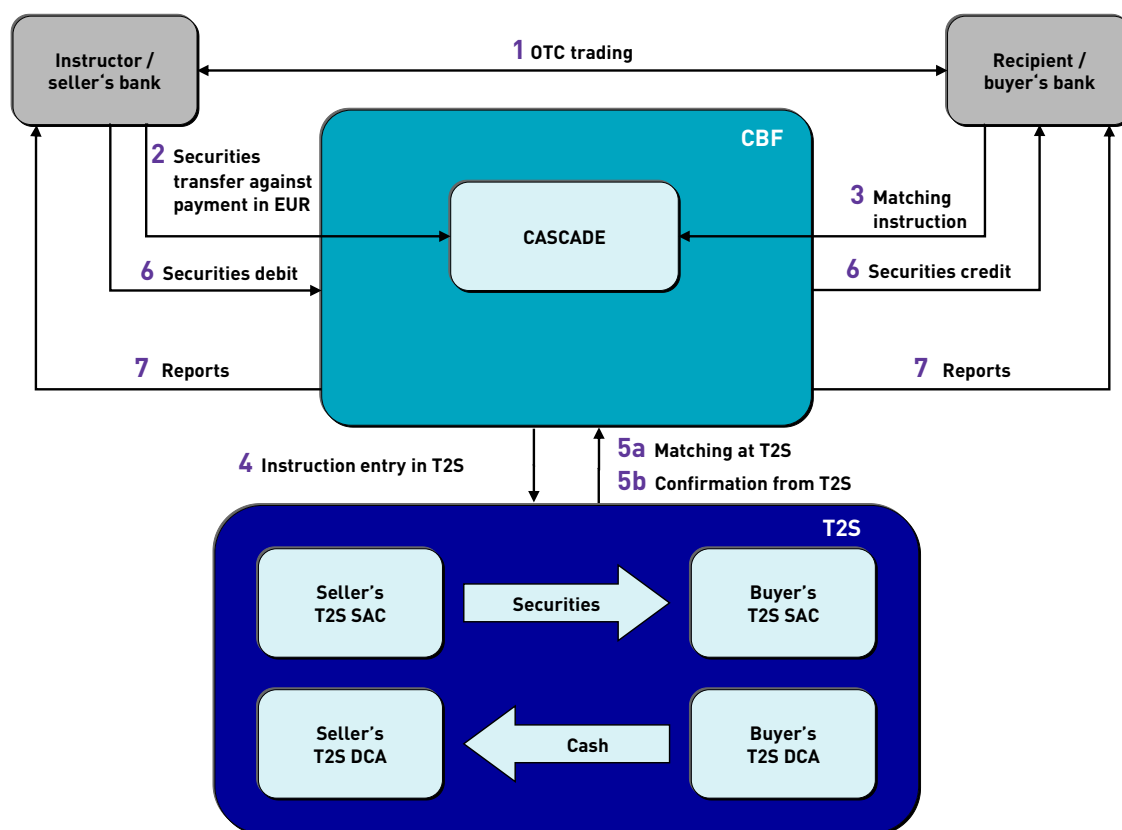


Figure 4.7 Clearing and settlement of a securities transfer against payment in EUR

Settlement date and settlement cycles

Settlement can take place in both NTS and RTS (for details see [section 1.5 "Services for collective safe custody \(incl. NCSC-T\)"](#) on page 1 - 5). The instructions enter the earliest possible cycle that is T2S Night-time Settlement (NTS) is the first settlement cycle with final settlement on the next business day. All valid instructions that are due on the next day or that were already due at an even earlier point in time but could not be successfully processed, are included in NTS processing.

Settlement failure

OTC orders against payment in EUR which have not been settled are brought forward for the next settlement cycle in T2S. In T2S, instructions in status "matched" are forwarded until the instruction is either settled or cancelled by both counterparties or by T2S after the end of the 60 days recycling period.

Securities transfers with payment in EUR

The settlement process for OTC instructions with payment in EUR is identical to the one against payment in EUR. The only difference is that the countervalue has to be entered with a negative sign, whereupon a DwP or RwP instruction is generated instead of a DvP or RvP instruction.

Securities transfers against payment in non-EUR currency

Currently CBF settles through T2S only securities transfers against payment in EUR. Except for DKK, T2S rejects all securities transfers against payment in any non-EUR currency. Therefore, CBF generates a securities transfer free of payment with the cash and currency information from a securities transfer against payment in a non-EUR currency and forwards the FoP instruction for settlement to T2S. The cash settlement takes place through the Creation platform.

The currently eligible currencies are available on the Clearstream website under [Foreign currency matching tolerance amounts](#). In addition, it is possible to settle OTC transactions against non-EUR currencies with all CBL participants (6-series-accounts and other CBL accounts) via CBF account 7201 for CBL in their role as CSD and via CBF account 4496 for CBL in their role as T2S Out-CSD.

Entry of instructions

To process instructions for delivery against payment in other currencies, the delivery instruction from the instructing party or the seller and the matching instructions from the receiving party or the buyer are needed.

Both instructions can be entered by manual input in CASCADE-Host or via automatic input through File Transfer or via the Swift network. Characters used in text fields must correspond to Character Set X.

An instruction entered by manual input is first stored under the "instructions received" status in CASCADE and, after being verified and released by the instructing party and the receiving party according to a cross-checking principle, it is forwarded for settlement to T2S. Instructions transmitted via automatic input are directly forwarded for settlement to T2S, after their format and contents have been verified. In T2S, an instruction entered for delivery against payment in non-EUR currency represents a FoP instruction with cash information. Clients instructing in DCP mode, have to directly instruct as FoP instruction with cash information.

When the instruction is entered, the instructing party and the receiving party have the option of blocking their instruction from settlement. This means that the instruction will be excluded from settlement processing until the blocking is cancelled.

Processing instructions

The instructing party and the receiving party in respect of the securities have various options for the subsequent processing of their instructions entered via CBF. An instruction can only be processed by the bank that has entered it.

Modifying instructions:

- By blocking settlement, the instructing party and the receiving party can exclude the instruction from settlement processing, and release it again for settlement by cancelling the blocking. Unilateral blocking of an instruction by the instructing party or the receiving party means that the entire instruction is blocked for settlement. The settlement blocking or its release can be instructed independently of the match status of the instruction (see also the following descriptions regarding matching).
- Instruction data can be modified for the following attributes by the bank that has entered the instruction, as long as the instruction's settlement process has not yet started:
 - Priority level;
 - Hold / Release;
 - Partial settlement indicator;
 - Linkage (not for linking via Pool).
- For any other types of modification, it is necessary to cancel the old instruction and to enter a new one.

Cancelling instructions:

- A delivery instruction or a matching instruction can still be cancelled by the entering bank as long as no matching took place. A matched instruction can only be cancelled bilaterally before settlement is started, that is, both instructing parties have to instruct the cancellation. If only one side of a matched instruction is cancelled (delivery instruction or matching instruction), the transaction still can settle.

The processing services for instructions are available online, via electronic interfaces or other means of communication, for both the instructing party and the receiving party. Online processing is subject to a four-eyes principle.

Matching

OTC instructions for delivery against payment can only be settled after successful matching.

Matching takes place in T2S on the basis of mandatory matching criteria, additional matching criteria and optional matching criteria.

Mandatory matching criteria:

- Bank debit entry (transferring bank);
- Bank credit entry (receiving bank);
- Securities code;
- Nominal value/units;
- Settlement date;
- Payment type (FREE);
- Securities movement type;
- Party 1 in Settlement Party - Receiver only for cross-border trades CSD/(I)CSD on the credit side;
- Party 1 in Settlement Party - Deliverer only for cross-border trades CSD/(I)CSD on the debit side;
- Closing date (trading date).

Additional matching criteria:

- Opt-Out indicator;
- Ex Coupon / Cum Coupon indicator;
- Cash countervalue;
- Currency;
- Credit / Debit indicator.

Optional matching criteria:

- Reference number
- Party 2 in Settlement Party - Receiver (only BIC, DSS or BLZ (bank code number))¹;
- Party 2 in Settlement Party - Deliverer (only BIC, DSS or BLZ (bank code number))¹;
- T2S SAC in Party 1 in Settlement Party - Receiver;
- T2S SAC in Party 1 in Settlement Party - Deliverer.

Mandatory matching criteria must be filled in both the delivery and the receipt instruction and the values need to correspond. The values either need to be identical or opposite (for example, for securities movement type DELI/RECE) in order to match.

Additional matching criteria are not mandatory fields and therefore do not have to be filled. However, their values have to match as soon as one of the counterparties fills the field in their instruction. A filled additional matching criterion cannot match with a blank field.

Optional matching criteria can match with a blank field. As soon as both parties provide a value, the values have to match.

T2S distinguishes between capital letters and lowercase letters.

1. Detailed matching rules are described in the CASCADE Handbook.

Tolerance limits exist for the comparison of the cash countervalue as a matching criterion. These depend on the currency (see Clearstream website under [Foreign currency matching tolerance amounts](#)). If the two cash countervales diverge without overstepping the permissible tolerance limit, the countervalue from the matching instruction of the receiving party (buyer) is used for cash clearing and settlement.

Clearing and settlement

When the settlement date is reached, the position is reserved in T2S by setting a CoSD hold. In CBF, the CSC securities are blocked in the instructing party's blocking sub-account /995. CASCADE sends the payment instruction to the Creation platform where a cash entry is made in the cash settlement accounts of Creation. For this purpose, both counterparties must have currency accounts in Creation. If the buyer has sufficient liquidity in Commercial Bank Money, cash is reserved on an interim account in Creation. The interim account is a CBF fiduciary account. After positive feedback from Creation to CASCADE, a release for the CosD hold is sent to T2S. As soon as the instruction has settled in T2S and CBF has received a confirmation, the position is transferred from the instructing party's blocking sub-account /995 to its main account and from the main account to the receiving party's securities account. Afterwards the interim account is debited, and the cash account of the seller is credited in Creation.

Partial settlement is not applied in processes where a CoSD hold is used.

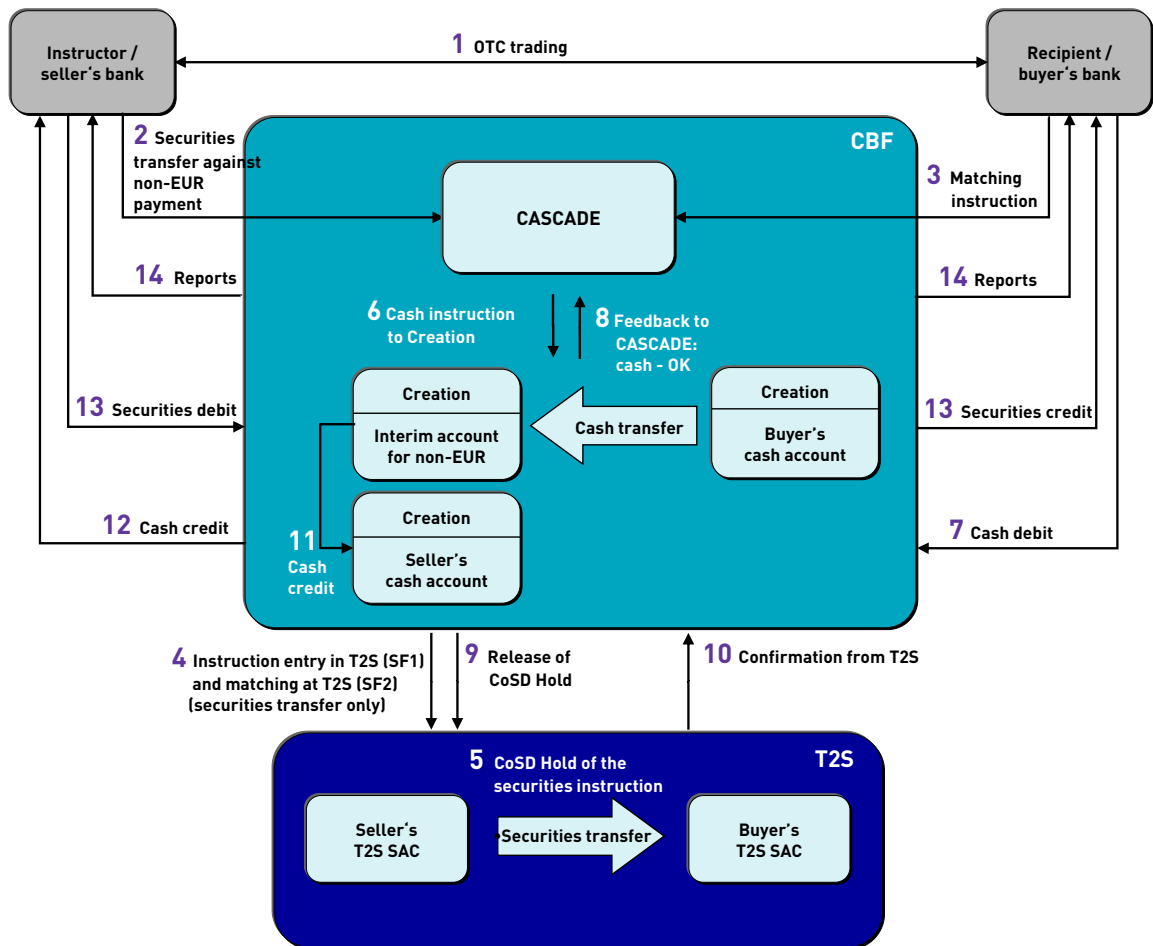


Figure 4.8 Clearing and settlement of OTC domestic transactions with CSC securities against payment in non-EUR currency

Cross-border instructions in respect of Swiss securities classes with a countervalue in CHF, where cash settlement takes place via the Swiss National Bank (SNB), are treated somewhat differently. Here

the participants must also have a cash settlement account with the SNB (see also [section 4.8 "Cash settlement through the Swiss National Bank"](#) on page 4 - 52).

Settlement date and settlement cycles

Settlement can take place in both NTS and RTS (see also [section "Settlement"](#) on page 1 - 6). The instructions enter the earliest possible cycle that is T2S Night-time Settlement (NTS) is the first settlement cycle with final settlement on the next business day. All valid instructions that are due on the next day or that were already due at an even earlier point in time but could not be successfully processed, are included in NTS processing. Instructions that could not be settled during the NTS are automatically considered in the following T2S Real-time Settlement (RTS). The instructing party (seller) and the receiving party (buyer) must have a cash settlement account with CBF on the Creation platform. Details regarding cash settlement are available in the [CBL Client Handbook](#).

Settlement failure

If an instruction that was entered in time and for a foreign currency cannot be settled on settlement day during T2S Real-time Settlement (RTS) due to a lack of cash, the cash instruction will be revoked in Creation at 17:40. As a result, same day settlement is no longer possible once the revocation has been confirmed by Creation.

Failed settlements are brought forward in T2S and in CASCADE to the next settlement day until their final settlement or until the instruction is cancelled. For this purpose, the cash settlement instruction is re-entered in Creation at the beginning of the following business day.

Payment of EUR without securities transfer

The settlement process for payment of EUR without securities transfer is identical with the one against payment in EUR with the difference that for the nominal 0 has to be provided.

OTC Cross-Border

Settlement in T2S of cross-border OTC transactions with CSC securities (FCSC - Foreign Collective Safe Custody Business) is possible via CBF. For this purpose, CBF has links to CSDs in the most important securities markets in order to include international securities classes in the collective-safe-custody system.

A CSD takes different roles in the cross-border settlement process in T2S:

- If the securities are deposited with the CSD, the CSD is the so-called Issuer CSD.
- As Technical Issuer CSD a CSD can also provide securities for settlement that are deposited with another CSD.
- If a CSD allows its clients to hold securities of another issuer CSD in its books, the CSD acts as a so-called Investor CSD.

For the settlement of OTC cross-border instructions in T2S, a differentiation is made between CSDs that participate in T2S (T2S In-CSDs) and CSDs that do not participate in T2S (T2S Out-CSDs).

Static data of T2S eligible securities are provided by CBF in T2S if they are deposited by a T2S Out-CSD that is linked to CBF. Static data of T2S eligible securities are provided by the CSD itself in T2S if they are deposited by a T2S In-CSD.

CSD-Links with T2S In-CSDs

The links with T2S In-CSDs are set up for delivery free of payment (FoP) und against payment in EUR (DvP / RvP, DwP / RvP and PFoD). Delivery against currencies other than EUR is only possible for domestic instructions, that is, between CBF clients, and not for cross-border instructions.

Cross-border settlement is possible in the T2S settlement cycles as described in the [section "Settlement"](#) on page 1 - 6. In general, T2S supports the settlement functionality for all T2S markets and does not differentiate between domestic and cross-border settlement instructions. However, for

settlement instructions flagged for the already matched functionality, some conditions have to be taken into account:

- The counterparty account's T2S In-CSD needs to be linked to CBF and must offer this service as well.

In the T2S rights management, powers of attorney for the initiator and the receiver of the already matched instructions must have been deposited by the responsible T2S In-CSD. Therefore, the initiator and the receiver must inform the relevant CSD of their intention to send or receive already matched instructions.

CBF provides forms for this purpose on the Clearstream homepage, which initiators or receivers must complete and submit to CBF duly signed before the setup of instructions.

- The already matched instructions are subject to the T2S validation rules of both T2S In-CSDs concerned.

For example, CBF requires an entry in the Party Level 1 field.

If the validation fails on T2S, the instruction is subject to a CSD Party Hold (CVAL) and can no longer be settled, only deleted.

The following table lists the T2S In-CSD links currently maintained by CBF and shows with the following information:

- Securities classes deliverable via the CSD link;
- The T2S CSD BIC, that must be used in cross-border instructions in the settlement party information, in order to identify the CSD, as well as (for information purposes only) to identify the related Counterparty CSD Account. The Counterparty CSD Account is shown as a placeholder next to the Counterparty CSD BIC until the account is defined by T2S that is relevant for the booking.

The Counterparty CSD Account exists exclusively in CBF and is not set up in T2S;

- CSD account with CBF for booking of German and international securities classes.

CSD	Counterparty CSD BIC	Counterparty CSD account	Account	ISIN ¹
Austria (OeKB)	OCSDATWWXXX	4705	7220	Austrian securities
			7217	German securities
Belgium (ESES Euroclear Belgium)	CIKBEBBXXX	4704	4498	Belgian securities ²
Belgium (NBB)	NBBEBEBB216	4714	4507	Belgian securities ³
Denmark (VP)	VPDKDKKXXX	4706	4490	Danish securities
Estonia (Nasdaq CSD Baltics)	LCDELV22XXX	4713	4510	Estonian securities
France (Euroclear France)	SICVFRPPXXX	4702	4500	French securities
			7225	German securities
Greece (BOGS)	BNGRGRAASS	4712	7760	Greek securities (bonds)
Italy (Euronext Securities Milan)	MOTIITMMXXX	4701	4851	Italian securities (equities and bonds)
			7581	German securities
Latvia (Nasdaq CSD Baltics)	LCDELV22XXX	4713	4510	Latvian securities
Lithuania (Nasdaq CSD Baltics)	LCDELV22XXX	4713	4510	Lithuanian securities
LuxCSD	LUXCLULLXXX	4707	4497	Luxembourgish securities
			7454	German securities
Malta (Malta Stock Exchange)	XMALMTMTXXX	4709	4501	Maltese securities
Netherlands (Euroclear Netherlands)	NECINL2AXXX	4703	4499	Dutch securities ^b
Portugal (Interbolsa)	IBLSPTPPXXX	4722	4604	German securities
Spain (Iberclear)	IBRCESMMXXX	4710	4504	Spanish securities (bonds)
			4609	German securities
Slovak Republic (CDCP)	CSDSSKBAXXX	4719	4516	Slovak securities

1. Apart from German securities, omnibus accounts can also contain securities from any third CSD that are provided via CBF as technical issuer CSD. More details regarding eligible securities for a link are described in the respective Market Link Guide.
2. Settlement of German securities takes place via Euroclear France.
3. Government bonds (classical and linear bonds), treasury certificates, treasury bills, certificates of deposit, commercial papers.

Entry of instructions

The entry of instructions is harmonised for all T2S In-CSDs according to T2S standards. When instructing, it is not necessary to provide information on the realignment process. Only the beneficiary or the instructing counterparty CSD and the counterparty participant have to be provided. The counterparty CSD as well as the counterparty participant are identified via their BIC. In addition, the T2S SAC can be provided for the counterparty participant.

Delivery against payment (DvP) is possible with all T2S In-CSDs, if the CSD offers DvP settlement.

Detailed information about remaining specific requirements of CSDs is available in the respective Market Link Guide.

Processing instructions

The process for modification and cancellation of instructions that have already been entered and validated is identical to the process for modification and cancellation of instructions of OTC domestic instructions.

Matching

Cross-border instructions can only be settled after successful matching. Matching takes place in T2S on the basis of mandatory matching criteria, additional matching criteria and optional matching criteria, in the same way as previously described for OTC domestic instructions.

Clearing and settlement

Clearing and settlement of cross-border instructions with T2S In-CSDs takes place in the same way as clearing and settlement for domestic instructions. The links that are configured by CSDs upfront guarantee that a book entry is made for the securities in the relevant settlement system of the instructing party and the receiving party, with the effect of final settlement.

In case of delivery or receipt against payment the cash settlement also takes place in the same way as for domestic instructions via the DCAs of the deliverer and receiver.

Settlement date and cycles

Cross-border instructions are cleared in the following T2S settlement cycles (for details please refer to section "Settlement" on page 1 - 6):

- T2S Night-time Settlement;
- T2S Real-time Settlement.

CSD links with T2S Out-CSDs and CBF relayed links with T2S In-CSDs via CBL

CBF is also linked to T2S Out-CSDs and, via CBL, to T2S In-CSDs (CBF relayed links). Information on cross-border settlement with T2S Out-CSDs and T2S In-CSDs, respectively, for the relayed links via CBL, is available in detail in the corresponding Market Link Guides on the [Clearstream website](#).

The following table lists the links currently maintained by CBF:

CSD	Account	ISIN ¹	FoP	DvP
Clearstream Banking S.A., Luxembourg (CBL)	4496	Selected securities, for example, Finnish CSC securities, Eurobonds (NCSC-T) eligible for settlement in T2S and LU-ISIN ETFs ²	Available	EUR via DCA and non-EUR currencies via 6-series accounts in Creation
Swiss (SIX SIS)	7215	Swiss securities ³	Available	RTS: CHF via SNB
U.S.A. (DTCC)	7911	U.S. securities	Available	
	7211	German securities	Available	

1. Apart from German securities, omnibus accounts can also contain securities from third CSDs that are provided via CBF as technical issuer CSD. More details regarding eligible securities for a link are described in the respective Market Link Guide on the [Clearstream website](#).
2. For information on the settlement links and conditions of NCSC-T eligible Eurobonds, please refer to the corresponding Market Link Guide. Eligible Eurobonds can be extracted using Codelist.
3. The settlement of German securities and those eligible for Eurex takes place through SIX SIS, CBF account 7121.

Entry of instructions

Deliveries free of payment (FoP): For FoP deliveries from CBF to the T2S Out-CSD, the instructing party must enter a delivery instruction in CASCADE. CBF checks the details for “receiving depository” in the relevant party level against the list of participants deposited by the T2S Out-CSD in question. Deliveries from the T2S Out-CSD to CBF are effected by the instructing party entering instructions to the T2S Out-CSD.

Deliveries against payment (DvP): In the case of instructions against payment both counterparties enter their instructions in the settlement system of their CSD, that is the T2S Out-CSD or CBF. For matching, it is essential to indicate the receiving and/or instructing depository in the instruction. The link between both platforms then synchronises the necessary processing steps on the two platforms until the final book entry is made for cash and securities.

Processing instructions

The process for modification and cancellation of instructions that have already been entered and validated is identical to the process for modification and cancellation of OTC domestic instructions. In the case of cross-border transactions, CASCADE also verifies the “receiving depository” indicated in the delivery instruction against the list of participants deposited by the T2S Out-CSD.

As soon as the instruction has a CoSD hold, modification of the instruction is limited. If, for example, the instruction is blocked by the client via a Party Hold, the client can release this blocking, but an already released instruction cannot be blocked.

Matching

Cross-border instructions can only be settled after successful matching. Depending on the matching process of the T2S Out-CSD CBF applies different process for matching in T2S. Details can be found in the respective Market Link Guides.

Matching takes place in T2S in the same way as previously described for OTC domestic instructions.

For transactions between CBF and Euroclear Bank, CBF will only perform matching on the second layer if it is provided by both parties. The risk of cross-matching can be minimised, if both parties provide the second layer information. If the information is present in both client instructions but does not match, the instructions are unmatched and cannot be released for settlement. If the information on the second party layer is missing from one party, CBF can perform matching of the instructions based only on the first layer information.

Clearing and settlement

Clearing and settlement of cross-border instructions with T2S Out-CSDs is conducted in T2S based on the T2S "Conditional Securities Delivery (CoSD)" logic. The settlement must be finalised on the external settlement platform to be reflected in T2S. As of the intended settlement date, the T2S conditional settlement process starts for all matched instructions. For RVPs, T2S will block the cash on the CBF client's DCA account. For DVPs, T2S will block the securities on the CBF client's SAC account. After successful blocking, the instruction is released to the T2S Out-CSD for settlement. Upon receipt of the settlement confirmation from the T2S Out-CSD, CBF will release the CoSD hold process in T2S and settlement will take place in T2S. If the RVP is pending at T2S cut-off, a standard T2S process will release the CoSD blocked cash at 16:00 and the instruction will be put on hold by CBF with the T2S Out-CSD on behalf of the CBF client. Similarly, if the DVP is pending at T2S cut-off, a standard T2S process will release the CoSD blocked securities at 16:00 and the instruction will be put on hold by CBF with the T2S Out-CSD on behalf of the CBF client. A new CoSD blocking instruction will be re-generated for the following business day.

Partial settlement is not applied in processes where a CoSD hold is used.

Further details are described in the respective Market Link Guides.

In the case of deliveries or receipt against payment in CHF with SIX SIS cash settlement takes place via the SNB.

Settlement date and settlement cycles

Cross-border instructions are cleared in the following T2S settlement cycles (for details please refer to section Settlement on page 1 - 7):

- T2S Night-time Settlement;
- T2S Real-time Settlement.

For the settlement of cross-border instructions via Creation (CBF-i accounts) the settlement cycles apply as described in the [CBL Client Handbook](#) and the [Market Link Guides](#).

ICSDs as clients

In addition, the following international depositories hold accounts in CBF for the delivery of securities in CSC in CBF:

- Clearstream Banking Luxembourg, CBF account 7201;
- Euroclear Bank, CBF account 4312.

These two accounts are set up as client accounts. Instructions for these accounts are settled in the same way as domestic instructions.

Over the Counter (OTC) - CCP

CBF receives delivery instructions from the Eurex Clearing AG as central counterparty (CCP). These are processed as an OTC transaction via CASCADE in T2S.

Settlement for CBF OTC domestic business takes place when the buyer and the seller settle the transaction via CBF accounts. All other cases are cross-border transactions that are settled via the platforms of the affected CSDs.

Entry of instructions

At the point of settlement of a transaction from a connected trading platform, Eurex Clearing AG as the CCP becomes the counterparty for both buyer and seller. The transaction data is forwarded from the trading platform to the CCP and then entered into the delivery management systems of the CCP. There the client can choose between different netting services (for details on supported netting models and delivery management, please refer to the user manuals of the CCP systems). For FWB trades and

Eurex transactions, netting takes place on trade date (end-of-day). For the securities CCP system, the netting takes place end of day on S-1. To settle instructions resulting out of netting the CCP, acting on behalf of the seller and/or the buyer, forwards delivery instructions against payment or FoP to CBF or to the affected CSDs in the case of cross-border instructions. The CCP transfers domestic delivery instructions to CBF in the status "already matched". Cross-border delivery instructions against payment are always forwarded to the CSD unmatched, that is, without a matching instruction.

Processing instructions

The instructions (FWB trades and Eurex transactions) are processed in the C7 SCS-system of the CCP until netting takes place on trade date (end-of-day). For details on C7 SCS and trade date netting, please refer to the [user manuals for C7 SCS](#) of the CCP.

Matching

The domestic delivery instructions forwarded by the CCP to CBF have the status "already matched". Cross-border delivery instructions against payment are always forwarded unmatched to the respective CSD, that is, without a matching instruction.

Clearing and settlement

The settlement of instructions for non-Swiss securities is carried out via the T2S platform. For instructions against payment in EUR, cash settlement takes place also in T2S. For instructions against other currencies than EUR cash settlement takes place in Creation. For Eurex physical deliveries, instructions for Swiss securities are settled via SECOM with cash settlement in CHF taking place through the Swiss National Bank. The instructions are also reflected in T2S via the Out-CSD link with SIX SIS. An exception are instructions in respect of Swiss securities involving CBF clients. In this case, settlement can also be carried out in EUR via CBF via T2S.CBF and the affected CSDs in case of cross-border business advises the CCP of the settlement result. CCP forwards this information within the CCP reporting to the clients.

Settlement date and cycles

For the settlement of delivery instructions via CBF, the T2S settlement day with the night-time processing and the T2S Real-time settlement apply. The timings of the CCP are aligned to the T2S settlement day.

Non-collective safe custody

For the placement and settlement of OTC instructions with the custody type AKV, CBF offers services using the technical and operational services of its sister company CBL. This is based on CBL's Creation platform. These services are described in the [CBL Client Handbook](#).

4.4 CSDR Settlement Discipline Regime

Introduction

In relation to Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories (CSDR) and the specific requirements prescribing a “Settlement Discipline Regime” (SDR), CBF herewith describes its services relevant for CBF clients.

The information mainly covers:

- The calculation, application and reporting of daily settlement fails cash penalties and their subsequent monthly payment through CBF, including penalties calculated and reported by the T2S penalty mechanism to CBF;
- The relevant clients’ reporting obligations towards CBF in the case of the execution of CSDR mandatory buy-ins, if applicable;
- Aspects of the settlement fails monitoring and measures agreed with relevant CBF clients to improve their settlement efficiency.

Note: CBF clients are required to use Xact Web Portal to subscribe to receive Swift MT537 penalty messages or query penalties information online. Access to the Xact Web Portal is required to address penalties “appeals” to CBF (exceptionally, CBF may accept appeal requests raised via MT599). Further information can be found in the Xact Web Portal User Manual. For opening new CBF (sub-)accounts, prior to the new (sub-)account usage, clients must actively arrange for the subscription to the MT537 PENA or Xact penalties reporting to ensure the relevant daily/monthly CBF penalties reporting will be provided by CBF.

Disclaimer: As described in detail in this chapter, various reference data used for the penalties calculation is based on data published and maintained in ESMA databases for which CBF is not responsible for. Hence, CBF cannot provide any representation or warranty that the relevant data used by CBF is complete, accurate or up to date. As a result, CBF will not accept any client appeals nor claims for damages in this regard.

Settlement fails cash penalties

The following chapters provide detailed information about the daily and monthly processing of SDR cash penalties for settlement fails on the T2S settlement platform. The T2S change request T2S CR654 available on the ECB website further describes the T2S penalty mechanism functionality.

Note: For external settlements outside T2S, CBF processes cash penalties as reported to CBF from the penalties Calculating CSD or agent/depository. In such cross-CSD settlement fails scenario, involving multiple CSDs, only the CSD where settlement actually takes place is responsible for calculating and applying the cash penalties. This CSD is referred to as the “Calculating CSD”. CBF, acting as an Investor-CSD, applies the daily amounts reported by the Calculating CSD and reports them afterwards to its own clients for processing. The local CSD’s penalties system rules and schedules apply. Further information can be found in the Market Link Guides on the Clearstream website.

Penalties lifecycle and business days calendar

The following scenarios apply:

- Daily events:
 - Calculation and application of cash penalties;
 - Daily reporting.
- Monthly events:
 - Appeal period;
 - Monthly reporting of “global net amounts” (GNA) to be paid or received;
 - Actual collection and distribution of “global net amounts”.

The illustration below summarises the lifecycle of the cash penalties:

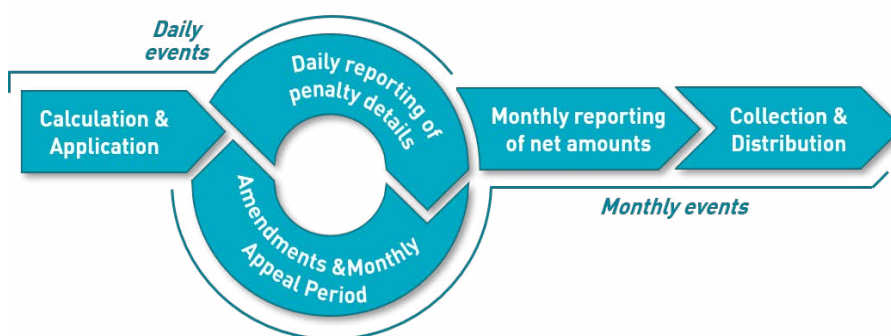


Figure 4.12 Daily and monthly events

Daily and monthly events apply for the business days defined below.

Business days (BDs) calendar

Business days are those days on which an instruction can settle that depends on:

- The T2S settlement system calendar.
- The payment calendar of the relevant currency (only relevant for against payment settlement instructions).

BDs are only relevant for the application of daily events defined below.

CBF, as T2S-In CSD, follows the T2S calendar¹. Business days for the T2S platform are all days where at least one currency is eligible² for cash settlement, except:

- Saturdays and Sundays;
- Other specific days such as 25 and 26 December and 1 January, for all types of settlement, as they are common closing days for the T2S-eligible currencies (currently EUR and DKK).

Based on the above, a penalty does not apply:

- For “free of payment” instructions: For the days when T2S is closed.
- For “against payment” instructions: For the days when T2S and/or the payment system of the relevant T2S currency is closed (if the cash leg is to be settled in the payment system of the relevant currency).

1. See “Holiday schedule” on page 11.

2. See section 1.4.1 T2S Calendar in the T2S User Detailed Functional Specifications (UDFS).

Common Penalties Business Days (PBDs) calendar

In the ECSDA “Penalties Framework”, ECSDA Member CSDs agreed on common principles for a harmonised process in the definition and counting of “business days” for the CSDR penalties management. Such specific “business days” are called “Penalties Business Days” (PBDs).

PBDs are all days, except:

- Saturdays and Sundays;
- 25 December; and
- 1 January.

PBDs are only relevant for the application of monthly events defined below.

Penalties lifecycle

Daily events

- Calculation and application:
Cash penalties are calculated and applied by T2S on each T2S business day.
- Daily reporting:
Cash penalties, including details on the calculation and related transaction, are reported by T2S on each business day. The daily report sent on a given business day includes cash penalties calculated and applied for the previous business day.

Monthly events

- Monthly appeal period:
The appeal period of cash penalties starts on the day the cash penalty is calculated and applied. Such appeal period ends latest on the 10th PBD of the next calendar month¹.
Note: If T2S is closed on this day, the appeal period already ends on the previous PBD.
- Monthly reporting of global net amounts (GNA):
CBF sends monthly reports for month M usually on the 14th PBD on month M+1 (following month) but as soon as the information is provided to CBF and successfully reconciled. See section “Monthly reports” for details.

Collection and distribution:

- Upon calculation of the GNA, CBF generates PFoD (Payment Free of Delivery) settlement instructions usually on the 15th PBD of M+1 to settle (that is collect/distribute) the GNA on the 18th PBD of M+1.
If CBF is closed on the 18th PBD then the collection and distribution process will take place on the next business day.
For more details, please refer to [section](#) “Late or missing cash funding from CBF clients” on page 4-42.

Cash penalties mechanism

As per Article 7(2) of CSDR, CBF established a penalty mechanism for each securities settlement system it operates.

CBF applies the T2S penalty mechanism for settlement fails occurring in T2S, hence, applies the daily amounts as reported by T2S and reports them as such to its clients.

1. If the CBF client is identified as an “Investor-CSD” in CBF the appeal period ends one day later.

For external settlements on CBF-i accounts and outside T2S, CBF processes cash penalties as reported to CBF from the penalties Calculating CSD or agent/depository:

Clearstream Banking AG (CBF)	
Intra-CSD (CBF-CBF) Settlement instructions with a counterparty in CBF	All cash penalties are calculated and applied by the T2S penalty mechanism.
Cross-CSD (CBF-Other T2S-In CSD) Settlement instructions with a counterparty in another T2S In-CSD (for example Euroclear France)	All cash penalties are calculated and applied by the T2S penalty mechanism.
External-CSD settlement (CBF - CBL or CBF-EB) Settlement instructions with CBL counterparties on foreign and/ or international securities held in CBL	CBF-CBL: All cash penalties are calculated and applied by the CBL penalty mechanism. CBF-EB: Cash penalties on deliveries are calculated and applied by the CBL penalty mechanism. Cash penalties on receipts are calculated by EB.

Figure 4.13 Penalty mechanisms

In the case of failing T2S DVP settlement instructions in a non-T2S eligible currency that is recognised and processed by the T2S settlement system as FOP instructions for which the cash payment is executed on the client's CBF-i Creation account, the T2S penalties system will apply FOP penalties, that is, no "lack of cash" penalties will occur. Also, such cash payments are not subject to any penalties calculated by CBL.

The descriptions in the following chapters refer to the T2S penalty mechanism applicable to the CBF settlement transactions. For external settlement, the local CSD's penalties system rules and schedules apply.

Instructions subject to cash penalties

The T2S penalty mechanism calculates and applies cash penalties for all OTC as well as stock exchange transactions settlement instructions in T2S that are:

- Matched; and
- Failing to settle (in part or in full) on and after their Intended Settlement Date (ISD).

This applies for all T2S instruction types:

- DVP/RVP: Delivery or receipt versus payment;
- DFP/RFP: Delivery or receipt free of payment;
- DPFOD/CPFOD: Payment free of delivery debit or credit;
- DWP/RWP: Delivery or receipt with payment.

The T2S penalty mechanism does not apply cash penalties for:

- T2S settlement restrictions;
- Technical settlement instructions generated by T2S, for example for automatic T2S realignments;
- Settlement instructions populated with the qualifier "CORP" referring to a corporate action related settlement transaction.

For cancellations:

- If a settlement instruction is cancelled prior matching, no cash penalty will be applied.

- If a settlement instruction is matched, cash penalties will be applied until the instruction is bilaterally cancelled.

Note: Penalties applied for transactions bilaterally cancelled after the ISD will not be removed.

Financial instruments subject to cash penalties

A financial instrument is considered by T2S as being eligible for cash penalties if:

- The ISIN is listed in the Financial Instrument Reference Data System (FIRDS) database, published by ESMA;
- And the ISIN is not in the list of exempted shares as per the EU Short Selling Regulation (SSR);
- And the “Securities Maintaining entity” T2S CSD has reported the ISIN as being SDR-eligible to T2S.

Note: The FIRDS database includes non-EU securities traded or admitted to trading on an EU trading venue. Unless exempted, these non-EU securities are eligible for cash penalties when the actual settlement takes place in an EU/EEA CSD.

In line with ESMA Q&As, changes in the ISIN scope as reflected in the ESMA databases apply for penalties that are calculated on ESMA database update publication date + 1 business day.

The FIRDS database may include financial instruments that were already matured. In such a scenario, T2S does only apply cash penalties for settlement fails on financial instruments that are matured up to maturity date - 1 business day.

Types of cash penalties

The T2S penalty mechanism distinguishes two types of cash penalties:

- Late Matching Fail Penalties (LMFP);
- Settlement Fail Penalties (SEFP).

Late Matching Fail Penalties (LMFP)

The T2S penalty mechanism calculates and applies LMFP to settlement fails on instructions eligible for cash penalties if such settlement instruction matches after the relevant settlement cut-off time of its ISD.

Figure 4.14 below illustrates whether LMFP applies or not. If matching occurs during:

- The period in green, then no LMFP applies;
- The period in red, then the T2S penalty mechanism calculates and applies LMFP (provided that the settlement instruction is eligible for cash penalties).

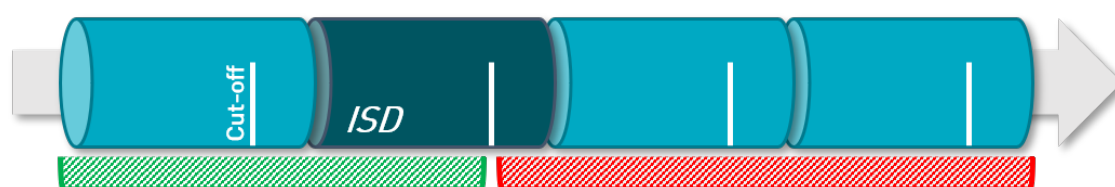


Figure 4.14 Eligibility to LMFP

For a given settlement instruction, the T2S penalty mechanism calculates and applies LMFP only once, that is on the day the settlement instruction matches. Such LMFP applies retroactively to all business days, from the ISD to the matching date. For each past fail date, a daily reference price applicable for

the single fail date is used for the penalties calculation, that is different reference prices may apply in case the matching occurs more than one business day after the ISD.

The T2S penalty mechanism considers each business day where the settlement instruction was due to settle, from the ISD and until the actual matching date:

- Including such matching date if the instruction matched after the end of the relevant settlement cut-off;
- Excluding such matching date if the instruction matched before the end of the relevant settlement cut-off.

Figure 4.15 below illustrates the application of LMFP.



Figure 4.15 Application of LMFP

- If matching occurs on ISD after the cut-off time (M1), then the T2S penalty mechanism calculates one LMFP on ISD+1, applying to one single day, the ISD.
- If matching occurs on ISD+1 before the cut-off time on such ISD+1 (M2), then the T2S penalty mechanism calculates one LMFP on ISD+1, applying to one single day, the ISD.
- If matching occurs on ISD+2 before the cut-off time on such ISD+2, then the T2S penalty mechanism calculates one LMFP on ISD+2, applying to all business days from ISD until matching, excluding such matching day, that is, the ISD and ISD+1.
- If matching occurs on ISD+2 after the cut-off time on such ISD+2, then the T2S penalty mechanism calculates one LMFP on ISD+3, applying to all business days from ISD until matching, including such matching day, the ISD, ISD+1 and ISD+2.

The LMFP is charged to the CBF client that was last to provide its settlement instruction (or modification to its settlement instruction, if applicable) for the period between the ISD and the day of instruction matching. The acknowledgement timestamp of the instruction is used to determine the failing client.

If both clients send their instructions late, after the end of the relevant settlement period of the ISD, only one of the two clients of a transaction is charged with the LMFP, that is the client who was last to enter their settlement instruction. If settlement instructions are entered by CBF on behalf of its client(s), as it is the case for market claims, the same rule applies. In the rare case (including “already matched” instructions) when the timestamps are identical, the securities delivering client will be charged by default.

LMFP applies even if the settlement instructions have been bilaterally cancelled after matching but before the end of the relevant settlement cut-off (in this situation, however, SEFP will not apply, see section “Settlement Fail Penalties (SEFP)”).

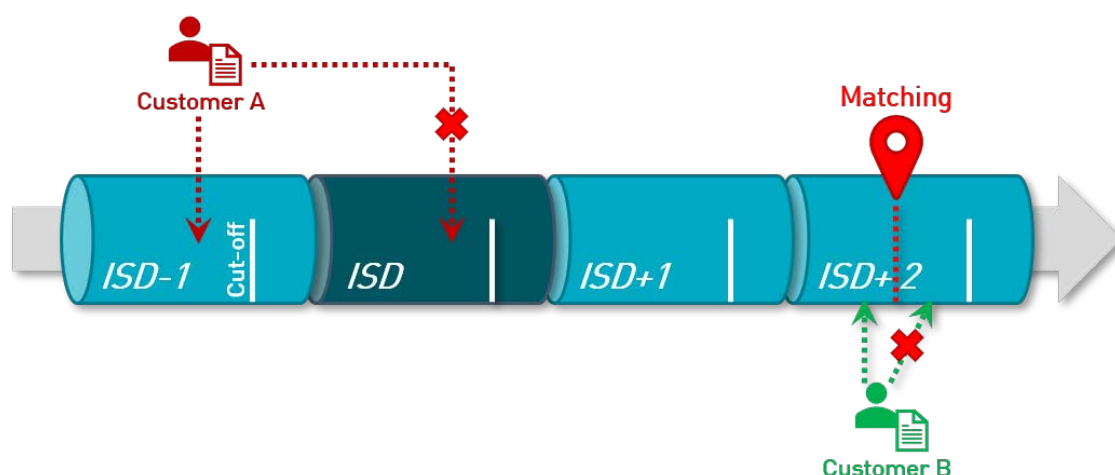


Figure 4.16 Application of LMFP on cancelled settlement instructions

The T2S penalty mechanism may not apply LMFP in case of new settlement instructions resulting from a partially successful buy-in under certain conditions:

As required by CSDR, if only parts of the failing securities delivery quantity were bought in, CBF clients shall:

- Bilaterally cancel their initial failing settlement instruction; and
- Re-instruct for the remaining quantity of securities not bought in.

When the new settlement instruction is re-entered by the client with the original (past) ISD, this settlement instruction would become subject to LMFP.

Only under the condition that both settlement instructions (that is the securities receipt and delivery leg) contain the required “buy-in partially successful” indicator, the T2S penalty mechanism will not apply LMFP for the remaining quantity of securities. Please refer to the “Xact via Swift User Guide” for more information about the applicable “partially successful buy-in” indicator.

Settlement Fail Penalties (SEFP)

The T2S penalty mechanism calculates and applies SEFP to settlement fails if the settlement instruction:

- Is matched before the end of the relevant settlement period of the current business day;
- Has reached its ISD;
- Fails to settle (in part or in full) and remains to settle until the end of the relevant settlement cut-off of that business day (if not bilaterally cancelled).

For a given settlement instruction, multiple SEFPs may be calculated and applied, that is one SEFP per business day when the settlement instruction fails to settle. The T2S penalty mechanism calculates and applies one SEFP at the end of each business day, considering the settlement status and reason at the end of the relevant settlement cut-off, provided that all three criteria mentioned above are fulfilled.

Figure 4.17 illustrates the application of SEFP:

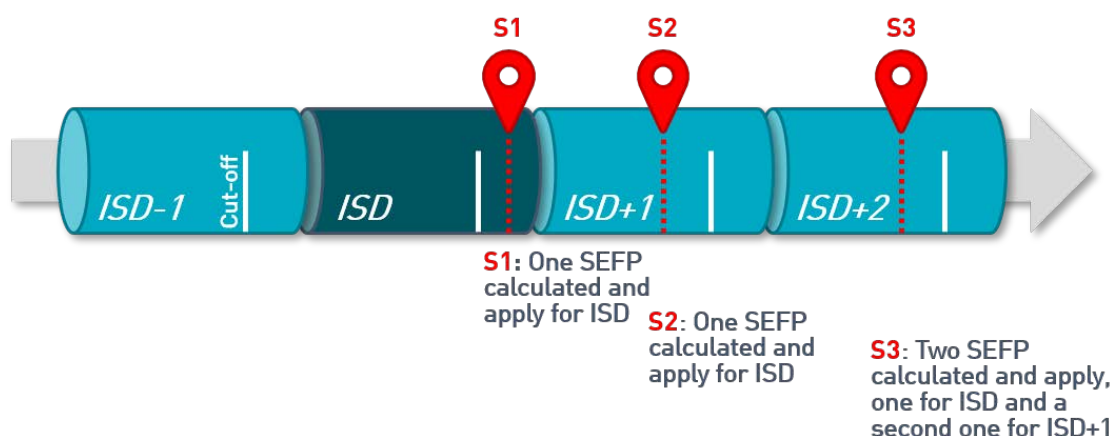


Figure 4.17 Application of SEFP

- If settlement instructions fail to settle before the end of the relevant settlement cut-off on ISD, but settle overnight (S1), then the T2S penalty mechanism calculates and applies a SEFP on ISD.
- If settlement instructions fail to settle on ISD but settle on the next business day before the end of the relevant settlement cut-off, then the T2S penalty mechanism calculates and applies a SEFP on ISD, but not on ISD+1.
- If settlement instructions fail to settle on ISD and ISD+1 but settle on ISD+2 before the end of the relevant settlement cut-off, then the T2S penalty mechanism calculates and applies:
 - One SEFP on ISD for settlement fail on ISD; and
 - One SEFP on ISD+1 for settlement fail on ISD+1 but not on ISD+2.

The SEFP will be charged to the client:

- Having set the settlement instruction "On Hold";
- Being lack of securities, provided that no settlement instruction is "On Hold";
- Being lack of cash, provided that no settlement instruction is "On Hold" or lacks securities.

Note: If both settlement instructions are "On Hold", then both parties to the transaction will be charged with a SEFP to be paid to the counterparty. The different calculation methods described in section "Types of cash penalties" for settlement fails on deliveries and receipts against payment apply.

The table below summarises the party to the transaction that is to be charged with the SEFP, depending on the settlement fail reason:

Buyer/Seller	Has the settlement instruction "On Hold"	Does not have enough cash available	Instruction released and sufficient cash available
Has the settlement instruction "On Hold"	The Buyer is imposed to pay a SEFP to the Seller. The Seller is imposed to pay a SEFP to the Buyer.	The Seller is imposed to pay a SEFP to the Buyer.	The Seller is imposed to pay a SEFP to the Buyer.
Does not have sufficient securities to settle	The Buyer is imposed to pay a SEFP to the Seller.	The Seller is imposed to pay a SEFP to the Buyer.	The Seller is imposed to pay a SEFP to the Buyer.
Instruction released and sufficient securities	The Buyer is imposed to pay a SEFP to the Seller.	The Buyer is imposed to pay a SEFP to the Seller.	No cash penalty applies.

Figure 4.18 Identification of the client to be penalised

Calculation and application of cash penalties

The T2S penalty mechanism applies a calculation method that is depending on the type of settlement instruction of the client causing the settlement fail.

The table below describes the different penalties calculation methods:

Calculation Method	SECU	MIXE	CASH	BOTH
Formula	Security Penalty Rate X Quantity of undelivered securities X Price of the security for the relevant business day	Cash Discount Penalty Rate X Quantity of undelivered securities X Price of the security for the relevant business day	Cash Penalty Rate X Amount of cash failed to be delivered	SECU + CASH
Type of settlement instruction of the failing client	<ul style="list-style-type: none"> • DVP • DFP • RFP 	<ul style="list-style-type: none"> • RVP 	<ul style="list-style-type: none"> • DPFOD • CPFOD 	<ul style="list-style-type: none"> • DWP • RWP

Figure 4.19 Determination of the calculation method

Note: For partial settlement, the cash penalty amounts are calculated based on the remaining quantity of securities to be settled.

CBF auto-repair functionality

In exceptional cases when T2S calculates penalties for T2S transactions involving CBF as the counterparty to the CBF client (that is “technical” transactions that legally are not “transfer orders” as defined by CSDR) as well as for T2S external settlement through CBL where both, T2S and CBL, would calculate penalties but the actual place of settlement is outside T2S, an “auto-repair” process is applied by CBF, for instance, an automated appeal request will be sent to T2S to remove penalties for:

- Conversions;
- Deposits and withdrawals;
- Cancellation bookings (“Storno”);
- T2S external settlement;
- Instructions involving CBF-owned (technical) accounts.

Note that the “auto-repair” functionality also automatically “switches” the penalties owing party for penalties related to CBF T2S against payment instructions in non-T2S foreign currencies.

Security penalty rates

The Security Penalty Rate is the fixed rate applied for settlement fails due to “lack of securities”, depending on:

- The CFI-classification of the relevant financial instrument;
- The liquidity indicator of the relevant financial instrument;
- Whether the underlying securities trade occurred on a SME Growth Market, or not.

Considering the above-mentioned criteria, the Security Discount Penalty Rates as currently published by ESMA are applied by T2S penalty mechanism:

Type of settlement fail	Classification of the security (CFI Code)	CSDR Classification	Liquidity Indicator	Traded on a SME Growth Market	Penalty Rate (in bps)	
Lack of securities	E****	SHRS	True	No	1.00	
			False	No	0.50	
			n.a.	Yes	0.25	
<i>(The applicable Penalty Rate is referred to as "Security Penalty Rate")</i>	DN**** D**T** D**C**	SOVR	n.a.	n.a.	0.10	
				D****, Except DN****, DY****, D**T** and D**C**	No Yes	0.20 0.15
	R****	SECU	n.a.	n.a.	No	0.50
				n.a.	Yes	0.25
	CE****	ETFS	n.a.	n.a.	No	0.50
				n.a.	Yes	0.25
	C**** Except CE****	UCIT	n.a.	n.a.	No	0.50
				n.a.	Yes	0.25
	DY**** Except DY*T** and DY*C**	MMKT	n.a.	n.a.	No	0.20
				n.a.	Yes	0.15
TTN***	EMAL	n.a.	n.a.	No	0.50	
			n.a.	Yes	0.25	
Other	OTHR	n.a.	n.a.	No	0.50	
			n.a.	Yes	0.25	

Cash discount penalty rates

The Cash Discount Penalty Rate is the rate applied by the T2S penalty mechanism for settlement fails due to "lack of cash", depending on the underlying T2S-eligible settlement or payment currency.

The applicable Penalty Rate is referred to as "Cash Discount Penalty Rate", that is, the official interest rate for overnight credit charged by the central bank issuing the settlement currency with a floor of zero.

Note: For EUR, the "marginal lending facility rate" defined by the European Central Bank (ECB) and published on its website, divided by 360, is used.

Liquidity indicator

The liquidity indicator is a binary classification of securities applying only when the financial instrument type of the security derived from its CFI code is "SHRS".

The information on whether the share is considered a liquid or an illiquid share is derived from the ESMA FITRS database and applied by T2S penalty mechanism for an ISIN as reported to T2S by the "Securities Maintaining entity" T2S CSD.

If settlement fail applies to a share and the liquidity indicator for the share is not available or the instrument type category is unknown, it will be considered as "illiquid".

SME Growth Market transactions

The T2S penalty mechanism applies a lower security penalty rate, if the transaction in the financial instrument identified in the settlement fail was actually traded on a SME Growth Market.

Such security penalty rate is applied only if:

- Both instructions show the same "place of trading" four-digit Market Identifier Code (MIC); and
- The trading venue identified in the field is included in the latest available list of SME Growth Market Trading Venues maintained and published by ESMA (that is to be considered by T2S; the SME MIC must be listed in the ESMA database on the day the penalty is calculated).

Daily reference price

The T2S penalty mechanism applies the reference price of the security for the business day when the settlement instruction actually failed to settle:

- For shares and similar instruments, the reference price is the closing price of the "most relevant market in terms of liquidity".
- For other securities, the reference price is the closing price of the trading venue with the highest turnover.

The applicable prices for an ISIN are reported to the T2S penalty mechanism by the responsible "Securities Maintaining entity" T2S CSD.

If the cash penalty is an LMFP applying on multiple days, the T2S penalty mechanism calculates the LMFP, applying the relevant reference price for each applicable day. If the LMFP applies on business days more than three months in the past, then, for those days, the T2S penalty mechanism applies the oldest available reference price, the three-months old price¹.

The T2S penalty mechanism calculates and applies computed cash penalties:

- For settlement instructions against payment, in the currency of the cash leg of the settlement instruction;
- For free of payment settlement instructions:
 - Either in the currency of the underlying security if the Settlement Type is "nominal"; or
 - In the currency of the daily reference price if the Settlement Type of the underlying security is "unit".

If the currency is DKK, T2S checks whether the BIC of at least one of the Counterparty CSDs is in the "List of CSDs with penalty computation in non-Euro settlement currencies for FOPs". If this is the case, then T2S will compute the cash penalty in DKK, otherwise, it will be calculated in EUR. CBF will apply the cash penalties in DKK, as reported by the T2S penalty mechanism, and not process any conversion.

1. Any price used for the penalty calculation must not be older than the effective date of the CSDR Settlement Discipline Regime, that is, 1 January 2022.

The payment process for such DKK penalties using the CBF client's CBF-i account is further described in section "Monthly collection/distribution of cash penalties".

If the currency derived by T2S is not a T2S-eligible currency, the penalty is calculated in EUR.

Update of a cash penalty

A change of the reference data used for the calculation of a cash penalty may be considered by the T2S penalty mechanism maximum until, and including, the 12th PBD of the next month. When reference data needed to calculate a penalty becomes available only after the appeal deadline ended, such new penalty (NEWP) will still be considered by T2S in its daily and monthly penalties reports.

Unless a cash penalty can no longer be modified (that means is inactive or has been removed), the T2S penalty mechanism automatically re-calculates existing and active cash penalties impacted by a change in the reference price of a security for the relevant business day the cash penalty applies. Once re-calculated, the updated cash penalty is reported to the relevant clients via the daily reports described in section "Daily reports".

Daily and monthly reporting of cash penalties

CBF, using T2S reports, provides daily cash penalties reports, including details on the calculation and the related settlement instructions.

In addition, CBF provides monthly reports usually on the 14th PBD (upon receipt from T2S), each month, considering active cash penalties calculated and applied on the previous month. These monthly reports include one monthly "Global Net Amount" (GNA) each, per counterparty-CSD and per currency, as well as the details of the relevant daily cash penalties composing the GNA.

CBF reports details on cash penalties exclusively via ISO 15022 MT537.

If the client, upon receipt of the CBF reporting, identifies during its reconciliation process, for example, inconsistencies, missing reporting, penalties or mismatches, these should be reported to CBF as soon as possible and before the end of the appeal period via the standard communication channels or the Xact "appeals" function. The CBF penalties reporting shall be considered as complete, correct and final at the end of the appeal period; corrections cannot be made after that point in time.

Note: The reports must be actively subscribed for and scheduled by the CBF clients via Xact Web Portal. The same applies for querying penalties information via Xact Web Portal.

For details about the penalties reporting content, please refer to the connectivity guides on the Clearstream website.

For cases where the daily penalties reporting from T2S is delayed, CBF will include these penalties upon receipt and in the next available daily report batch. The monthly reports are provided to clients upon receipt and after successful reconciliation by CBF versus the daily reports' data.

Daily reports

CBF reports newly calculated cash penalties and amendments to already calculated cash penalties in two separate reports (covering new and modified penalties).¹

CBF clients can select the time(s) when to receive their daily reports (even though new and amended cash penalties are reported in two separate messages, the reporting times scheduled apply to both (that is new and modified penalties) reports, that is, it is not possible to receive only one of the two reports. More specifically:

- The report including new cash penalties only contains new cash penalties calculated or received since the last report.

1. In contingency situations, T2S may report new penalties in their "updated penalties" report; such T2S penalties are reported by CBF as "new" penalties.

- The report including amended cash penalties only contains amendments to cash penalties received by CBF from T2S since the last report.

If for a given time scheduled by the CBF client, there is no new or amended cash penalty to be reported, then the client will receive a “no activity” daily report.

Note: CBF clients directly connected to T2S (that is, DCPs) may opt to receive T2S reports from T2S directly, however, are also recommended to subscribe to at least the monthly reports from CBF (described in section “Monthly reports”) as this contains “Global Net Amount” information, not provided by T2S.

If, for a given business day, there is no new or updated cash penalty to be reported, CBF will generate “no activity” daily reports, separately for “new” and “updated” penalties and for each reporting batch that the client has subscribed to.

Monthly reports

CBF provides a monthly penalties report based on the report received from the T2S penalty mechanism.

The table below summarises the usual reporting times.

Clearstream Banking AG (CBF)	SECU
Intra-CSD (CBF-CBF) Settlement instructions with a counterparty in CBF	On the 14th PBD of the month, between 08:30 and 09:30 (after successful reconciliation of the cash penalties calculated by the T2S penalty mechanism).
Cross-CSD (CBF-Other T2S-In CSD) Settlement instructions with a counterparty in another T2S-In CSD (for example EF).	On the 14th PBD of the month, between 08:30 and 09:30 (after successful reconciliation of the cash penalties calculated by the T2S penalty mechanism).
Cross-CSD (CBF-CBL) Settlement instructions with CBL counterparties on foreign and/or international securities held in CBL.	On the 14th PBD of the month, between 08:30 and 09:30 (after successful reconciliation of the cash penalties calculated by the T2S penalty mechanism).

Figure 4.20 Expected times for generation of the monthly reports

If, for a given month, there is no active cash penalty to be reported, CBF will not generate any “no activity” monthly report.

The CBF monthly penalty MT537 PENA report does not include any “removed” penalties while the monthly aggregates in the Xact Web Portal currently include them. On the other hand, the MT537 PENA includes penalties with “computed” flag (“CMPU”) “yes” and “no” while Xact Web Portal only includes penalties with “CMPU” flag “yes”.

Monthly collection/distribution of cash penalties

“Monthly penalties collection/distribution” refers to the actual debit or credit of the monthly “Global Net Amount(s)” (GNA) reported by CBF to its clients (per counterparty-CSD and per penalties currency).

To collect the amounts due from or distribute the amounts entitled to be received by the CBF clients, for the settlement on the 18th PBD of the following calendar month, CBF initiates “against payment instruction with zero quantity of securities” settlement instructions towards its clients. The settlement instructions will be generated by CBF in T2S on behalf of its clients on the relevant SAC (Securities Account) in T2S. The cash amount will be debited/credited on the standard client T2S DCA (Dedicated Cash Account) linked to such SAC.

The penalty amounts to be processed by the CBF clients can be derived from the monthly penalty reports and “against payment instruction with zero quantity of securities” settlement instructions. Penalties are not reported through the standard monthly client invoice.

Global Net Amount (GNA)

The GNA is the net amount of cash penalties to be paid (if negative) or received (if positive).

For each client, CBF will net the amount of cash penalties:

- Per currency;
- Per Counterparty's CSD.

Each GNA reported by CBF to clients will trigger two "against payment instruction with zero quantity of securities" settlement instructions:

- If the GNA is negative, the amount is due to be paid by the client, then CBF generates:
 - One instruction to debit the client's account;
 - One instruction to credit the relevant dedicated account of CBF.
- If the GNA is positive, the entitled amount is to be received by the client, then CBF generates:
 - One instruction to debit the relevant dedicated account of CBF;
 - One instruction to credit the client's account.

Note: To avoid delays in the settlement or penalties payment processing, CBF clients are required to comply with their obligations to timely and sufficiently fund their relevant T2S DCA to ensure the settlement instruction related to penalties can settle during the night-time settlement cycle for value date 18th PBD.

Late or missing cash funding from CBF clients

If CBF clients do not provide the required cash amounts in the currencies as reported by CBF in its monthly penalty report (see sections "Monthly collection/distribution of cash penalties" and "Monthly reports"), CBF may:

- Contact and urge the failing clients for immediate feedback and action as well as written information on the mitigating actions taken to avoid future penalties payments fails due to the lack of cash funding to meet their penalties payments obligations;
- Provide the fails information to their impacted counterparties.

If no T2S DCA or T2 RTGS account is linked to the CBF client account, the related credit penalties payments will be cancelled or reversed immediately and the impacted clients will be informed. If the CBF client account static data settings in KUSTA hinder the creation or execution of "versus payment" instructions (that is, including penalty PFODs), CBF may adapt the static data settings temporarily until the penalty PFOD settled and the client will be required to instruct CBF to change the static data settings permanently to avoid the reoccurrence of such processing issues.

For the payment of the monthly GNA, CBF is redistributing the amounts it actually collected on or after the intended pay date of the GNA. This means, in the case of late or insufficient cash funding of the T2S DCA of to be debited CBF client, CBF does not delay the cash distribution until all penalties to be collected have actually been paid by all to be debited CBF clients. However, CBF neither collects nor distributes partial GNAs: if the cash balance of a client's T2S DCA is insufficient to collect the full amount due, the debiting penalty PFOD instruction will remain pending until the full penalty cash amount was funded on the DCA. The same way, credit penalty PFODs will only be settled in full or remain pending until CBF has collected the required cash amount.

Note: CBF clients should check their Xact Web Portal report subscriptions to ensure a timely and complete payment process of the monthly cash penalties. This is to avoid information gaps due to the set-up of partial "Organisation Unit" (OU) daily and monthly penalties reporting (the OU is a set of resources (for example, accounts or clients) and business services. Based on this OU, user and access management is enabled. A partial OU is when only some accounts are linked to the OU, hence, not all of the CBF sub-accounts will be subscribed for penalties reporting).

In the event of partial OU, clients may not consider all penalties amounts in their cash management and funding process.

Details of penalties settlement instructions

Once CBF has provided clients with their "Global Net Amounts" to be paid or received, it will generate the settlement instructions on behalf of its clients. CBF clients are not required to generate any settlement instruction relating to the collection and distribution process of cash penalties.

The settlement instructions are generated with Trade Date 16th PBD and Intended Settlement Date 18th PBD.

The Settlement Transaction Type is "PAIR".

CBF uses a single common "dummy" ISIN LU2128008567 for all settlement instruction relating to cash penalties.

CBF generates the settlement instructions with the highest possible settlement priority.

The settlement instructions generated by CBF are not eligible for partial settlement.

CBF will report the matching and settlement status for the penalties instructions as per the client's standard reporting (via MT548, if scheduled by the client, and/or Xact Web Portal).

CBF clients must maintain a T2S Dedicated Cash Account (DCA) and a CBF-i Creation account (only if a client is settling with counterparties in the T2S-in CSD Euronext Securities Copenhagen, hence, penalties in DKK may occur) for the collection and distribution of penalties from T2S securities transactions.

CCP-related aspects

Note: This section is only applicable to settlement fails penalties with a calculation date before 2 September 2024. For all others, CBF will consider also CCP-related penalties in the regular payment process described in section "Monthly collection/distribution of cash penalties" on page 4-41.

As per SDR RTS Article 19 where the CSD client is a central counterparty, this client shall collect the cash penalties from its clearing members that caused the settlement fails and distribute the cash penalties to its clearing members that are affected by the settlement fails and report to CBF that the penalties have been processed on a monthly basis.

For T2S, a CCP "account owner" BIC list is maintained by the T2S penalty mechanism, allowing T2S to identify and flag the relevant CCP transactions in their reporting to CSDs and DCP clients. CBF clients that are CCPs must inform CBF in written form via MT599 or letter about their T2S "account owner" BICs used for settlement of their members' cleared transactions and to be entered into the respective T2S list (see T2S CR 748 for details).

When CCPs maintain accounts for CCP members' clearing activities and proprietary activities, the exemption described in SDR RTS Article 19 shall only apply to CCP accounts used for their members' clearing activities, that is, accounts used by CCPs for their proprietary activities as well as accounts of CCPs' settlement agents shall not be subject to Article 19 but the standard cash penalties payments processing through CBF.

Accordingly, for the penalties subject to SDR RTS Article 19 and the conditions described above, CBF:

- Applies cash penalties for settlement fails on CCP cleared transactions reported by T2S to CBF.
- Reports the calculated cash penalties, including details of the calculation and the related transaction.
- Provides the monthly report, including the monthly aggregated amounts of active cash penalties calculated in the previous month.

CBF does not collect nor distribute any penalties for such CCP penalties.

The “Bilateral Net Amount” per counterparty for those CCP transactions penalties is calculated and reported as per standard process, ensuring CCPs have all the necessary details to collect and distribute cash penalties towards their clearing members for settlement fails on instructions submitted by those CCPs.

CCPs shall confirm the actual payment execution towards their clearing members to CBF on a monthly basis via MT599 or email to SettlementCSDR@clearstream.com as follows:

“Subject: CCPXXXXXX confirmation to CSDYYYYYY of penalties collected and distributed:

Following the obligations established in Article 19 of the Commission Delegated Regulation (EU) 2018/1229, and in particular the obligation established in Article 19(d), we kindly confirm that all penalties submitted by CBF to CCPXXXXXX and corresponding to the month of XXXXXX have been duly collected and distributed to the relevant clearing members of CCPXXXXXX.”

The messages received by CBF will be recorded and archived.

Appeals

CBF clients may submit Appeal requests to CBF within a dedicated appeal period that starts once a new penalty has been reported by CBF and ends latest on the 10th PBD¹ of the payment month.

According to the T2S penalty mechanism design, only “debit” penalties can be appealed by CBF clients towards T2S; appeals related to “credit” penalties will be rejected by CBF and not passed on to T2S but should be managed between the counterparties of the penalty.

CBF clients can submit appeals for any cash penalties reported by CBF, regardless of the Calculating-CSD or system. CBF clients shall submit appeal requests to CBF in priority via Xact Web Portal. CBF may, exceptionally, accept appeal requests raised via MT599 to the attention of PSG Settlement Operations.

Like the appeal requests submitted via Xact Web Portal, such MT599 requests shall be sent to CBF within the dedicated appeal period that starts once a new penalty has been reported by CBF and that ends latest on the 10th PBD of the payment month. The MT599 to be sent to CEDELULLXXX titled “ATTN: Settlement CSDR/ PSG – Penalties Appeal request” shall contain:

- Client Account Number;
- Penalty Reference;
- Penalty Calculation Date;
- Penalty Currency;
- Appeal Type (Amendment, Removal, Re-inclusion, Other);
- Appeal Reason.

For appeal acceptance, an updated penalty report will be provided automatically. Rejected appeals will be charged as usual, no further response to the requesting client will be provided.

Appeals need to include the applicable appeal reason or a proper description to be able to assess the validity of the appeal request. Appeals without sufficient (mandatory or optional) appeal reasoning information will be rejected without further processing. A financial instrument suspension from trading will not be considered by CBF as valid appeal reason.

Note: It is neither possible for CBF clients to raise nor for CBF to process appeals after the end of the appeal period. Hence, appeals should be raised as soon as the daily penalty information was made available to the CBF clients and ensure appeals are regularly raised towards CBF latest until the 5th PBD to allow for processing prior the end of the appeal period.

1. If the CBF client is identified as an “Investor-CSD” in CBF the appeal period ends one day later.

Any appeals received and processed by CBF will ultimately either be in status:

- “Accepted”

The appeal request is valid, and the relevant cash penalty has been amended accordingly, based on the information provided by the CBF client; amended penalties will be reported and labelled as such by CBF as “modified penalties”;

or

- “Rejected”

The investigation concluded that the appeal request is not valid, and the relevant cash penalty not amended; rejected appeals will not trigger a dedicated reporting.

Note that rejected appeals will be subject to charges as per the CBF Fee Schedule and/or external fees (if applicable).

“Accepted” appeals will lead either to the penalty:

Removal

- If insolvency proceedings are opened against the failing client.
- If settlement occurred on multiple platforms and one of the platforms was closed on the day the cash penalty has been calculated and applied.
- If the ISIN of the financial instrument is suspended from settlement due to a reconciliation issue.
- If settlement fail is due to a technical impossibility at (I)CSD level (for example failure of the infrastructure components, cyber-attack, network issues).
- Due to another reason (the client’s appeal request is requiring a free-text description).

Re-inclusion

- The client’s appeal request is requiring a free-text description.

Amendment

- The T2S penalty mechanism does not allow CSDs to send “amendment” requests. If CBF clients are in disagreement with, for example, the reference data of a penalty calculated by T2S, the Clearstream Client Services should be requested for investigation.

Reallocation

- This T2S functionality allows to re-allocate a LMFP from the instructing party to the delivering/receiving party to cater for cases when an “already matched” settlement instruction is sent late to T2S and, consequently, a LMFP is computed and assigned to the Instructing Party as both, the failing party and non-failing party. In case CBF is not the Instructing Party¹, T2S cannot identify which settlement party of an already matched instruction is responsible for the LMFP. Therefore, reallocations are performed automatically upon request of the Instructing Party.
- To initiate such process, CBF clients shall use the appeal type “Removal”, code “OTHR”, and provide a free text description stating “T2S reallocation request”.

Switch

- This T2S functionality caters inter alia for cases where a transaction is settled on multiple platforms, that is, where settlement on T2S depends on the fulfilment of a condition outside T2S. For example, when cash settlement takes place outside T2S while the settlement of securities takes place in T2S, conditional securities deliveries (CoSD) may be used by T2S Actors to block the securities in T2S until cash settlement takes place on the relevant platform. Depending on the CoSD configuration and the business scenario, T2S could compute and assign the penalty to the incorrect party (that is, to the delivering instead of to the receiving client or vice versa), for example, because the free-of-payment delivery in T2S is failing, while as it is due to the lack of cash of the counterparty on the external cash settlement platform. Hence, in order to allow the

1. For Eurex CCP transactions, CBF assigns the delivering party as “failing” by default.

CSD to make the required ex-post correction, the CSD shall be able to swap the failing party and the non-failing party of the cash penalty.

- To initiate such process, CBF clients shall use the appeal type “Removal”, code “OTHR”, and provide a free text description stating “T2S switch request”.

Please refer to the Xact Web Portal User Manual for further details about the submission and processing of appeal requests.

Note: If an appeal request cannot be finalised before the monthly report generation, the penalty amount as reported by CBF will be charged.

Buy-ins

If and when applicable, CSDR Article 7a obliges trading parties and CCPs to initiate buy-ins for failing settlements in any financial instrument in scope that cannot be settled within a certain time period. Trading parties shall arrange the buy-in themselves in line with prescribed SDR rules and reporting requirements. For CCP-cleared transactions, the CCP shall initiate the buy-in.

Despite the fact that CBF has no role in the buy-in initiation process, CSDR requires to provide buy-in execution details for CBF T2S settlement instructions failing that were subject to mandatory buy-in initiation according to CSDR.

Once the buy-in process has been actually executed, the execution details shall be provided to CBF the CBF client via a specific MT530 “buy-in” message. MT530 messages must relate to a settlement instruction (reference) that is recognised by CBF, otherwise the message will be rejected.

Please refer to the “Xact via Swift User Guide” for details.

Note: Any buy-in execution notifications are only used for the compliance of CBF and its clients with the relevant CSDR regulatory reporting and record keeping requirements of CSDs. They do not trigger any buy-in initiation, execution, settlement or other “CSDR mandatory buy-in regime” related activities on the side of CBF.

Monitoring Settlement Fails (settlement efficiency)

CSDR requires CBF to measure its clients’ individual settlement efficiency (on CBF client LEI-level) to identify:

- The “Top 10” CBF clients (by settlement transactions value and volume) that are failing to deliver securities/provide cash on ISD, including “late matching” fails, and report them to CBF’s regulator (BaFin);
- “Consistently and systematically failing participants” (that may ultimately be suspended from settlement by CBF) comparing their settlement efficiency versus CBF’s overall settlement performance.

Note: As CBF lacks the view on the CBF clients’ underlying clients settlement data, CBF clients are encouraged to analyse the settlement behaviour as well as fail reasons, patterns and late matching situations at the level of their underlying clients.

CBF is also obliged to publish anonymised transactions’ fails and efficiency data to the public.

Note: Only settlement fails and caused by the client itself and subject to CSDR penalties are considered, that is settlements outside EU/EEA CSDs are excluded from the assessment.

Top 10 failing clients identification

CBF identifies the “Top 10 failing clients” by their settlement fails value and volume on a monthly basis in line with the ESMA fails reporting guidelines.

The following metrics are applied by CBF:

- CBF client efficiency:

The efficiency calculation by number and by value considers (per client legal entity identifier, LEI) all eligible instructions of the previous month with: $100 - (\text{sum of fails} * 100 / \text{sum of eligible instructions})$. Eligible instructions include all matched instructions during the calculation period (that is, matched instructions settled or cancelled on or after ISD; instructions settled after ISD include all failure reasons (lack of securities/cash and beyond)).

- Fails for the client's efficiency are restricted to matched instructions settled after ISD due to the single client lack of cash (when receiving client) or lack of securities (when delivering client). Instructions cancelled or on-hold after ISD are counted in fails and are included in the number and value of eligible instructions.
- Clients whose fails represent at least 0.1% (that is, those clients that, according to the CSDR text, "have the most significant impact on the securities settlement system") of the total settlement instructions fails by volume or by value in CBF and limited to ISINs subject to SDR will be subject to "working arrangements". This means CBF will notify the clients via email requesting them within two weeks to analyse and provide the main reasons for their settlement fails and confirm which CBF services or other measures they intend to apply as concrete means to enhance their settlement efficiency. The client feedback will be passed on to CBF's regulator.

Note: When CBF itself (acting as Investor-CSD in another CSD on behalf of the CBF clients) is identified as a "Top 10" failing client, the underlying CBF clients will be identified and approached by CBF to provide feedback according to the local CSD's requirements.

Consistently and systematically failing clients identification

Annually, CBF identifies "consistently and systematically failing clients" (that is, the CBF client efficiency rate must "at least be 15% lower than the rate of settlement efficiency of the securities settlement system, during at least a relevant number of days over the 12 previous months") to potentially suspend these clients from settlement.

The following metrics are applied by CBF:

1. CBF settlement system efficiency:

The efficiency calculation by number and by value considers all eligible instructions of the previous 12 months with: $100 - (\text{sum of fails} * 100 / \text{sum of eligible instructions})$. Eligible instructions include all matched instructions during the calculation period (that is, matched instructions settled or cancelled on or after ISD). Fails include only matched instructions settled after ISD due to the client's lack of cash or securities or "on-hold".

2. Consistently and systematically failing clients:

The efficiency calculation by number and by value considers (per client LEI) all eligible instructions of the previous 12 months with: $100 - (\text{sum of fails} * 100 / \text{sum of eligible instructions})$. Eligible instructions include all matched instructions during the calculation period (that is, matched instructions settled or cancelled on or after ISD). Fails for the client's efficiency are restricted to matched instructions settled after ISD due to the single client lack of cash or lack of securities. Instructions cancelled or on-hold after ISD are counted in fails and are included in the number and value of eligible instructions. The number of failing days is the number of business days where the client's efficiency "is at least 15% lower than the rate of settlement efficiency of that securities settlement system, during at least a relevant number of days over the 12 previous months" (the "threshold", that is, the CBF settlement system efficiency rate – 15%). The client's efficiency is computed for every business day, so the computation is restricted to clients below the threshold. The "relevant number of days" is 10% of the number of business days between the reception date of the "oldest" instruction (not just fails) and the reception date of "newest" over the last 12 months. For each client (LEI) below the threshold, the "success rate" by number or value will be calculated.

CBF clients whose fails represent at least 3.5% of the total settlement instructions fails by volume or by value in CBF will be contacted to assess the fail reasons and apply actions to avoid

or limit re-occurrence. If the client LEI appears in the CBF-internal "Top 10" failing clients lists of the fourth quarter of the same year as well as in the forthcoming annual "suspension" report, CBF may initiate the actual suspension of the client from settlement after consulting CBF's regulator. The client name as well as the suspension start date will be published in advance. For the CBF clients (including DCPs), CBF will take the necessary measures to ensure that relevant settlement instructions are blocked from settlement or new instructions received on or after the suspension date can no longer be entered by the client for T2S settlement.

4.5 Cash regulation

Payments in relation to securities transactions, income administration, fees and charges settle outside the CASCADE platform. For cash settlement, CBF uses the central banks, correspondent banks (cash agents) and payment and settlement systems where CBF clients keep the corresponding cash accounts.

- All EUR payments resulting from the settlement of transactions with CSC/NCSC-T securities, interest and redemption payments, distributions and dividends for securities as well as cross-border market and reverse claims for FCSC securities and fees and charges are settled via T2S. The settlement takes place real-time during the settlement cycles.
- Cash settlement in non-EUR currency resulting from transactions and income administration in relation to CSC and NCSC securities takes place through the Creation platform of CBF's sister company, CBL. Furthermore, payments in EUR resulting from transactions and income administration in relation to NCSC securities classes are also settled through Creation.
- A special case is the settlement of payments in CHF through the Swiss National Bank. This link is only used for cash settlement of cross-border transactions in relation to Swiss CSC securities against CHF. Payments in CHF that do not result from transactions in Swiss CSC securities classes and security transactions in Swiss CSC securities between two CBF participants are settled as payments in non-EUR currency via the Creation platform.

4.6 Cash settlement through T2S

The diagram below shows the various processing cycles in T2S for the settlement of securities transactions and certain corporate actions, the different options for funding of the Dedicated Cash Account (DCA) as well as the EUR cash settlement via the DCA.

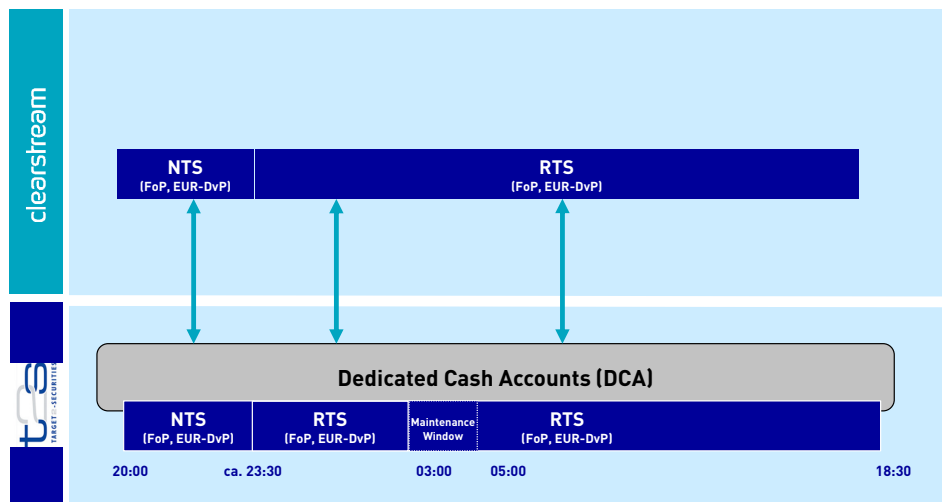


Figure 4.21 Cash settlement in EUR through T2S

Cash settlement

The cash settlement of securities transactions and certain corporate actions generally involves the following instruction types:

- Transfer of securities against payment in EUR: Delivery versus Payment (DvP), Receive versus Payment (RvP)
- Transfer of securities with payment in EUR: Delivery with Payment (DwP), Receive with Payment (RwP)
- Payment in EUR without transfer of securities: Payment Free of Delivery Debit (PFoD-DBIT), Payment Free of Delivery Credit (PFoD-CRDT)

These transactions settle in T2S, the cash is settled directly via a DCA linked to the respective Securities Account (SAC). The DCA can either be stated in the instruction or be set up as a default DCA at CBF.

Clients can either open an own DCA at one of the central banks participating in T2S or make use of a cash correspondent's DCA for which a respective credit line exists. Each connection between a SAC and a DCA which is to be used for cash settlement must be set up as a SAC-Link by CBF and authorised via a Credit Memorandum Balance (CMB) by the responsible central bank or cash correspondent in advance.

If a transaction cannot settle due to lack of cash or credit line, T2S will reconsider it for settlement in regular intervals during the day. That means that an increase of cash or credit line on the DCA is considered in a timely manner.

Liquidity management

Clients settling in T2S against payment (instruction types RvP, DwP or PFoD-DBIT) must ensure that sufficient cash or credit line is available in the T2S DCA linked to their T2S SAC. Liquidity is provided to the T2S DCA through a linked RTGS Dedicated Cash Accounts (RTGS DCA) in the T2 system. The T2S DCAs as well as the RTGS DCAs are set up by and held with the client's central bank. Information on these processes is provided by the central banks.

The account holder of the RTGS DCAs can be the client itself (as a DCP) or an agent as service provider of the CBF client (as an ICP).

The T2 platform offers DCPs the following options for liquidity management:

- Immediate liquidity transfer via T2 Real-Time Gross Settlement (RTGS) GUI:

T2 RTGS GUI can be used to transfer funds from the RTGS DCA to the T2S DCA. For details on how to use this functionality, please refer to the “Liquidity Transfer - New Screen” section of the [Real-Time Gross Settlement - User Handbook](#).

- Immediate liquidity transfer via T2 Central Liquidity Management (CLM) GUI:
T2 CLM GUI can be used to transfer funds from the CLM Main Cash Account (MCA) to the T2S DCA. For details on how to use this functionality, please refer to the “Liquidity Transfer - New Screen” section of the [Central Liquidity Management - User Handbook](#).
- Configure standing orders in Common Reference Data Management (CRDM):
Standing orders for liquidity transfers can be created via the CRDM GUI (U2A). This functionality offers the possibility to create a daily liquidity transfer. Standing orders can be configured to execute at a certain time or for certain events. Please refer to the [Common Reference Data Management - User Handbook](#) for setup and the related field descriptions.
- Liquidity transfer via A2A camt.050 message:
DCPs can use the A2A channel for liquidity transfers from the RTGS DCA or the CLM MCA to the T2S DCA. If this is the case, the participant must provide in the creditor account of the T2S DCA to be funded. Please refer to the [Real-Time Gross Settlement - User Detailed Functional Specifications](#) and the [Central Liquidity Management - User Detailed Functional Specifications](#).

ICPs must agree on instruction processes with their liquidity service provider.

T2S DCAs can hold balances overnight which can be used for settlement the next business days. Otherwise, T2S offers the possibility to clear the balance on the T2S DCA with a simultaneous transfer of cash to the RTGS DCA (“T2S Cash Sweep out”). An automated sweep out can be achieved by setting up a standing order in the T2S static data (CRDM) with event type “execution time” as Optional Cash Sweep2 (OCS2).

T2S Dedicated Cash Account Statement (MT940)

In order to assist T2S DCA holders to better reconcile the cash on their DCA, CBF together with some central banks has defined a solution to allow them to receive the T2S message “camt.053 - Statement of Account” in the form of a Swift MT940 message called “T2S Dedicated Cash Account Statement”.

The T2S Dedicated Cash Account Statement (MT940) reports all the DCA's cash movements (settlement and custody) including the cash leg of securities movements in and out of the T2S SACs which are linked to any of the CSDs.

Please refer to section 9.10 “T2S Dedicated Cash Account Statement (MT940)” on page 9 - 15 for further details.

4.7 Cash settlement of non-EUR currency

Cash clearing in commercial bank money

Via T2S and CASCADE it is possible to settle transactions with CSC securities classes against currencies other than EUR. In T2S, the instructions must be entered as a Free of Payment (FoP) instructions with a countervalue in the respective foreign currency. In CASCADE, the instruction must be entered as a Delivery versus Payment (DvP) instruction with a countervalue in the respective foreign currency; the instruction will then be forwarded to T2S as a FoP instruction as well. Cash clearing takes place via Creation in commercial bank money (CoBM). For this purpose, both CBF clients (the buyer and the seller) must have the corresponding cash accounts on the Creation platform and be admitted to settlement free of payment in T2S and CASCADE.

The buyer must promptly ensure that the countervalue in the corresponding currency is available in its currency account in Creation. Account must be taken of the relevant processing cycles for the currencies in order to obtain the corresponding amounts so that a transaction can be carried out in the same day (see [CBL Client Handbook](#)).

T2S and CASCADE process securities and cash for a single instruction concurrently. After the seller's securities have been successfully reserved in T2S and CASCADE¹, CBF sends the instruction to Creation for cash settlement. There, the debit and credit movements are entered in the Creation cash accounts. After successful cash settlement, CBF releases the reservation in CASCADE and T2S in favour of the buyer, whereby the securities are booked, finalising the settlement. For same-day settlement, instructions of the seller and the buyer must be matched and released for settlement in T2S by 17:30.

The payment of non-EUR income events is booked via four new intra-day (09:20; 13:00; 15:00; 19:00) and one end of day batch to the respective CBF-i account, upon successful reconciliation of funds received from the market.

The settlement of compensation payments in respect of CSC securities in non-EUR also takes place via Creation. For this purpose, CASCADE sends the relevant payment instructions to Creation in the evening of S-1. Cash clearing takes place in night-time processing on the Creation platform through the cash accounts of CBF clients.

The following diagram shows cash settlement via Creation within the settlement process for a securities transaction (the individual processing steps are explained in detail in [section "Over the Counter \(OTC\) - Domestic"](#) on page 4 - 10). The processing of a transaction as shown, as an example, in the below figure is continuously possible from 07:00 until 17:30.

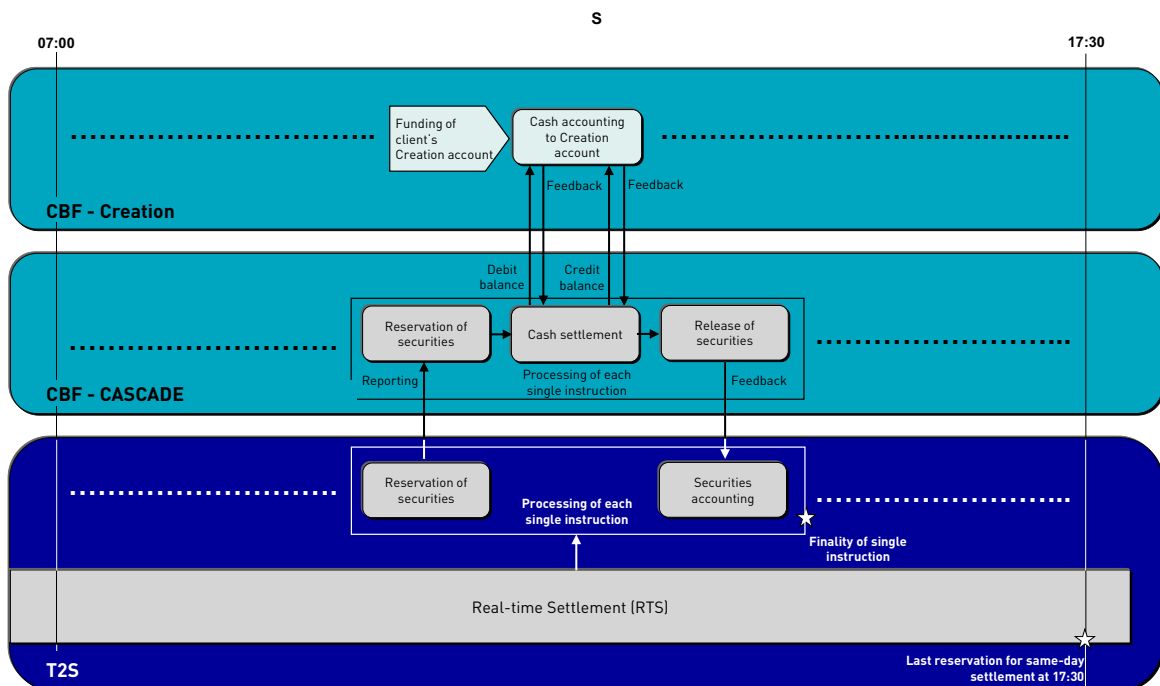


Figure 4.22 Cash clearing in other currency than EUR via Creation

CASCADE recognises the following non-EUR currencies for settlement:

Currency	Country	Currency	Country
AUD	Australia	NOK	Norway

1. In T2S such a reservation is represented as a CoSD-Hold, in CASCADE as a transfer to sub-account 995.

Currency	Country	Currency	Country
CAD	Canada	NZD	New Zealand
CHF	Switzerland	PLN	Poland
CNY	China	RUB	Russia
CZK	Czech Republic	SEK	Sweden
GBP	United Kingdom	SGD	Singapore
HKD	Hong Kong	TRY	Turkey
HUF	Hungary	USD	U.S.A.
JPY	Japan	ZAR	South Africa
MXN	Mexico		

Cash settlement in CHF represents a special case. In the following case, cash settlement takes place through the Swiss National Bank (for details see [section 4.8 "Cash settlement through the Swiss National Bank"](#) on page 4 - 52):

- Settlement of cross-border securities transactions against payment in CHF for Swiss CSC securities classes.

In the following cases cash settlement in CHF involves the cash accounts in Creation:

- Settlement of domestic securities transactions between two CBF participants against payment in CBF for Swiss CSC securities classes with the exception of CCP transactions;
- Compensation of transactions with Swiss CSC securities classes due to income administration in CHF;
- Income administration on holdings in Swiss CSD securities classes.

NCSC transactions in EUR and non-EUR currency

Cash settlement for transactions in NCSC securities classes takes place for CBF clients via the Creation platform. CBF has outsourced custody and administration of securities not eligible for CSC to CBL. CBF clients need a corresponding cash and securities account (as defined by the German Securities Deposit Act) in Creation (CBF-i account). Cash settlement can be carried out in EUR and in all other currencies accepted by Creation. Details concerning cash settlement can be found in the [CBL Client Handbook](#).

Corporate actions in foreign (non-EUR) currency

Cash settlement for corporate actions in foreign currency is carried out for CBF clients in the same way via the corresponding CBF-i accounts on the Creation platform.

Details of cash settlement are described in the [CBL Client Handbook](#).

4.8 Cash settlement through the Swiss National Bank

For settlement of cross-border securities transactions and CCP transactions in Swiss CSC securities there exists a mutual account link (CSD Link) between CBF and the Swiss SIX SIS. Cross-border settlement processes are connected and synchronised on the T2S and SECOM platforms. Cash settlement in CHF is carried out for clients by SIX SIS via the Swiss National Bank (SNB). For this

4. Settlement Services

purpose, both parties in a securities transaction (buyer and seller) must maintain a cash account link with the SNB. The CBF client's SNB cash account is lodged with CBF.

Cash settlement in CHF is only available from 06:00 until 16:00, that is during the T2S real-time settlement (RTS). On settlement date, securities on the seller's side are reserved for each single instruction in T2S and CASCADE¹. At the end of the settlement process in SECOM, with cash settlement taking place via the SNB, the reservation is released in T2S and CASCADE and a final book entry is made for the securities. For same-day settlement, the instructions of the buyer and seller must be entered, matched and released for settlement in T2S by 16:00.

The following diagram displays cash clearing via the SNB within the complete settlement process. It also shows that processing of a transaction is continuously possible from 06:00 until 16:00.

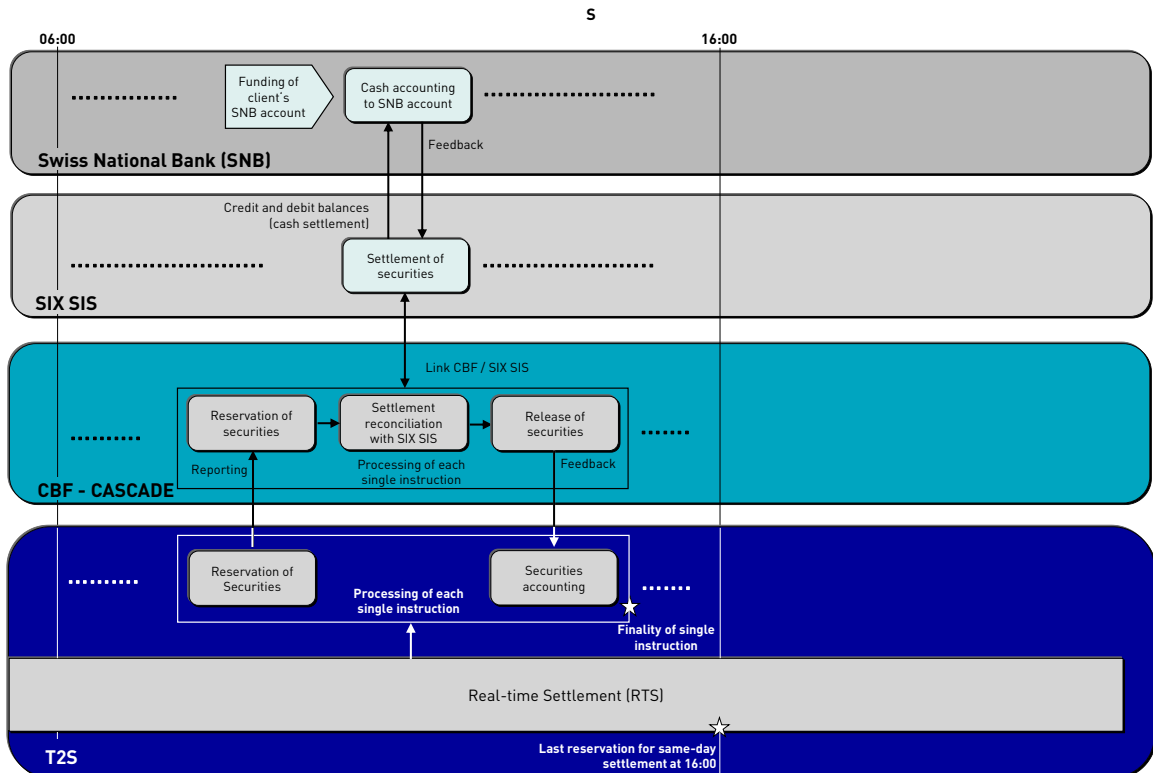


Figure 4.23 Cash settlement in CHF for Swiss CSC securities

1. In T2S such a reservation is represented as a CoSD-Hold, in CASCADE as a transfer to sub-account 995.

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5. Asset Services¹

5.1 Collective safe custody

CBF offers its clients custody services for collective safe custody (CSC) securities in accordance with Section 5 of the German Securities Deposit Act (Depotgesetz). These services cover the settlement of the following events:

- Income and repayments/redemption (income events);
- Corporate actions (non-income events).

In addition, CBF offers market claim services for transactions that are traded “cum”, that is, with entitlement (for example, coupon), and settled “ex”, that is, without entitlement, as well as reverse claim services², tax services and General Meeting Services.

While CBF outsources the settlement of securities in CSC to T2S, the processing of Asset Services remains the responsibility of CBF. Therefore, CBF continues to process custody events and sends securities and payment instructions generated by corporate action events to T2S for settlement. In addition, cross-border market and reverse claims as well as transformations for foreign securities in collective safe custody are done via PFoD to the client's T2S Dedicated Cash Account (DCA). Following the Instruction Owner CSD (IOC) model, CBF only processes the CBF client leg, in the case of cross-border business.

With the settlement of underlying instructions on T2S, the opt-out flag and the ex-coupon flag are used as exclusion indicators that can be set as additional matching criteria [Chapter 4. "Settlement Services"](#) on page 4 - 1).

Income

In its role as CSD for CSC securities, CBF allocates income and repayments/redemption on due or maturity dates. A distinction is made between the following events:

- Interest payments;
- Dividend payments;
- Income on investment funds;
- Payments from warrants exercise;
- Payments from squeeze-out procedures;
- Compensation payments or repurchase of shares;
- Income from profit participation rights;
- Other distributions or payments;
- Redemption of bonds at final maturity;
- Repayments of profit participation rights;
- Repayments of certificates;
- Liquidation of investment funds;
- Cash compensation at repayment/redemption;

1. Except for securities and events processed under OneClearstream.

2. In this case, the trade date is on or after the Ex-Date, and the booking date is on or prior to the entitlement date (Record Date).

- Partial redemption with changed nominal value;
- Partial redemption with unchanged nominal value through pool factor.

With T2S, CBF processes these events via the CASCADE platform. The basis for the settlement is the client securities account positions held in collective safe custody. For transactions with CSC securities classes that are traded "cum" and settled "ex", CBF handles market claims in connection with the following events:

- Interest payments (only stock exchange trades that remain pending for longer than the usual two-day settlement period);
- Dividend payments;
- Income on investment funds;
- Tax liability on accumulation funds
- Payments from warrants exercise;
- Income from profit participation rights;
- Other income;
- Partial redemption without changed nominal value;

For securities transactions settled in CSC, where the trade date is on or after the Ex-Date, and the booking date is on or prior to the Record Date, CBF implements reverse claims for the following procedures:

- Dividend payments;
- Distribution of funds;
- Distribution of participation rights;
- Other distributions.

If security transactions in CSC are pending on entitlement date for reorganisation events where the underlying ISIN is booked out and a new ISIN booked, CBF performs transformation in cash. The following events are impacted:

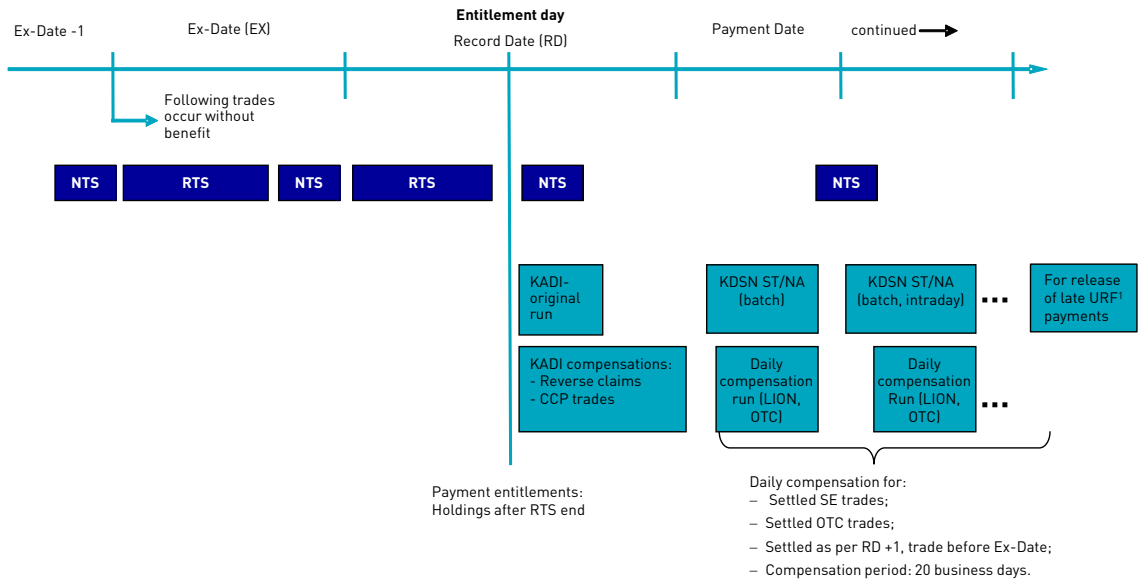
- Dividend payments in the event of dividend options;
- Payments due to automatic warrants exercise;
- Payments from squeeze-out procedures;
- Redemption of bonds at final maturity;
- Repayments of profit participation rights;
- Repayments of certificates;
- Liquidation of investment funds;
- Cash compensation at repayment/redemption;
- Partial redemption with changed nominal value.

Entitlement date

The entitlement date is the date when CBF calculates at the end of the day the positions entitled for the participation of the event. The event processing logic makes no distinction between markets. If a record date is announced by the issuer, entitled balances are identified on this date. According to the rules of the European harmonisation laws and legal requirements this is in general the business day after the Ex-Date (= Record Date). If no record date is announced, the entitled balances are identified on the business day before the Ex-Date. If the entitlement date falls on a weekend or a public holiday, CBF's first business day before this day is taken as the entitlement date.

Example

Cash dividend with “Record Date” processing



1. For an issuer with a credit rating of BBB- or lower, the payments expected may be flagged as payable "Upon Receipt of Funds" (URF). In order to address the issue of timely payment to our customers, continuous reviews until payment date -1 business day take place.

Figure 5.1 Cash dividends with “Record Date” processing

Deadlines for instructions

CBF guarantees the processing of repayments/redemption and income payments on the correct value date if the paying agent or the issuer sends its instructions by 13:00 on the bank working day before the entitlement date. The deadline for amended instructions is 13:00 on the CBF entitlement date.

(Amended) instructions that are received late are processed according to the best-effort principle. This results in higher processing fees.

Automatic Floater Load (AFL)

CBF offers a special process to clients acting as issuers or agent banks.

The Automatic Floater Load (AFL) is a fully automated service for delivering floater fixing rates and processing interest payments in German domestic market. This service for issuers and agents is used for floater bonds. The data transfer is sent to CBF using a pre-defined template in CSV format, enabling immediate publication in CBF's processing systems.

The usage of the AFL service is mandatory for issuers and agents providing event data to CBF.

Data can be delivered in CSV format either:

- Directly to CBF's Internet File Server within the framework of Secure File Transfer Protocol (SFTP). A valid user/password combination is required, a testing and setup period is a prerequisite before each PROD migration.
- Via “Connect: Direct” for Clients who are directly connected to Deutsche Börse mainframe and can provide data using the “connect direct” function.

Issuers and agents are solely responsible for providing the relevant interest information. CBF does not monitor these interest payments.

The pre-defined format of the fields can be requested when subscribing to the AFL service. Further Information can be requested from Asset Services Frankfurt (Income CSD) or your Relationship Manager.

Timing:

Clients can upload their data any time 24/7, while CBF will process the reference data on working days from 09:15 to 17:00. After the event data is published, the event is processed on the value date given in the CSV file.

Data will only be processed, if a correct instruction has been received by the deadline, two business days before payment date at the latest (until 15:00). The delivered information is automatically validated and, if necessary, an error log is sent to the submitter.

Clients who are not yet connected to the AFL service have the option of sending payment data in an AFL-compatible format (CSV file) by email to CBF.

Claims procedure

Market claims

Market claims comprise income events, if a security is traded "cum" (with coupon) but is booked as "ex" (without coupon) after the entitlement date. In this case, a market claim cycle of 20 business days is initiated. This process is applied based upon booked OTC (DvP and FoP), stock exchange transactions and pending matched and settled CCP trades. The result of a market claim is a cash debit for the seller and a cash credit for the buyer.

- In the case of "Ex-Date -1" processing, the claim cycle starts on the Ex-Date.
- In the case of "Record Date" processing, the claim cycle starts on the "Record Date +1".

CCP transactions are compensated on the entitlement date based upon pending gross trades.

CBF calculates market claims for pending CCP trades, including Eurex exercises, in the evening of the entitlement date.

Market claims for collateralised positions (CmaX[®]) will be carried out on the entitlement date (Ex-Date -1 or Record Date) for interest payments (schedule type 110), partial redemption with changed nominal value (schedule type 141) and cash dividends (schedule type 120 and 125).

Market claims will only be executed if the Ex-Date for the relevant event is filled. If the Ex-Date is empty, no market claim process will be applied.

Note: The "Ex" flag is taken into consideration for market claims. This means that for OTC transactions, which are settled after the entitlement date with trade date prior to the relevant Ex-Date, no market claim will be executed, in the case that they have been flagged by both parties as "Ex".

Use of the opt-out flag excludes a transaction from the market claims procedure.

Reverse claims

In the case of the "Record Date" processing reverse claims are performed in order to adjust OTC (DvP and FoP), non-CCP stock exchange instructions and CCP instructions from the buyer to the seller.

Reverse claims comprise income events, provided that the trade date is on or after the Ex-Date and the actual settlement date is on or prior to the entitlement date.

Reverse claims are only executed if the Ex-Date for the relevant event is filled. If the Ex-Date is empty, no market claim process is applied.

The reverse claim procedure runs only once, in the night-time processing on the entitlement date.

Note: The "Ex" flag is taken into consideration for reverse claims. This means that OTC transactions, which are settled between the Ex-Date and the entitlement date with trade date prior to the relevant Ex-Date, are subject to reverse claims, in the case that they have been flagged by both

parties as “Ex”.
The opt-out flag is ignored for reverse claims.

Transformations in cash

Transformations in cash are processed for reorganisation events where the underlying ISIN is booked out and cash booked, for example a redemption, if on entitlement date pending trades exist.

On the entitlement date of the event, pending trades are identified and the redemption price and the transaction price of the underlying transaction are taken into consideration as follows:

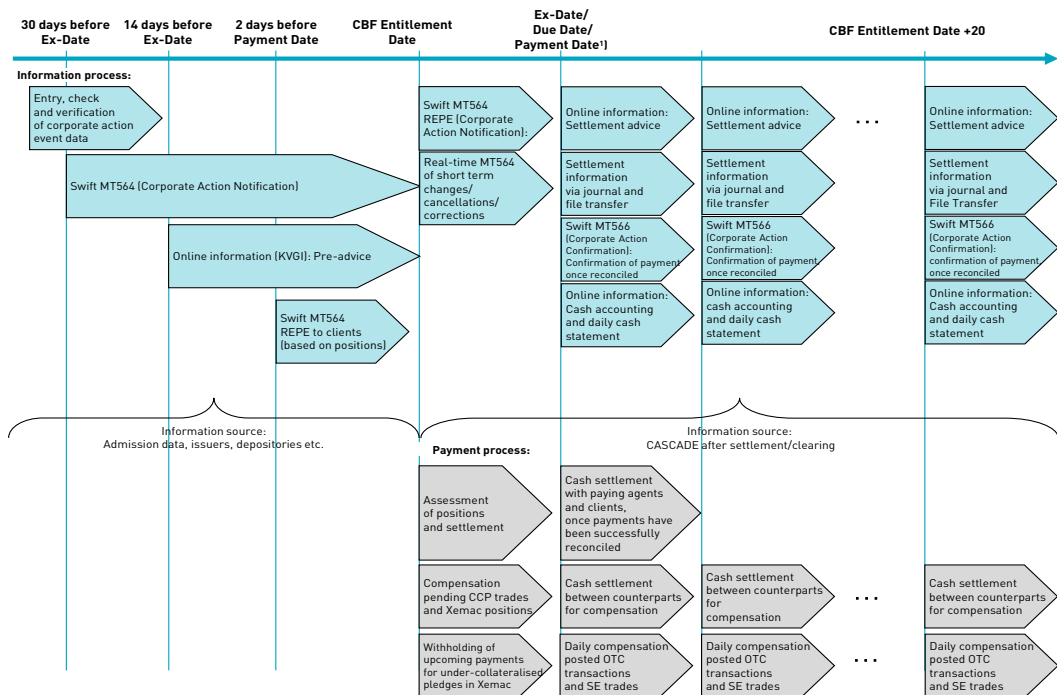
- On the basis of the nominal value of the pending transaction (matched), the redemption price is transferred from the seller to the buyer.
- The transaction price of the pending transaction (against payment) is transferred from the buyer to the seller.
- The underlying transaction (matched) is cancelled due to the transformation.

Note: Use of the opt-out flag excludes instructions from the transformation procedure. In this case, the underlying transaction is cancelled and there is no compensation payment generated.

During the 20-day transformation detection period for transformations T2S accepts instructions of already matured securities. However, settlement can only be achieved for instructions that are entered by a CSD or if a CCP provided a PFoD instruction. At the end of the detection period, all remaining instructions will be rejected by T2S.

A detailed account of the compensation rules with the criteria for the selection of transactions and the event types is given in the [Compensation Handbook](#).

The following diagram shows the complete process for the settlement of income events relating to an Ex-Date event.



German securities classes: As a rule, the Ex-Date/Due Date is the payment date.

Figure 5.2 Overview of the Income process

Data supply

Processing relevant information of income events is already communicated during the admission of Collective Safe Custody (for example, interest payments and final maturity) or has to be communicated to CBF (for example, dividend payments, interest fixings for floaters, early redemptions) by the issuer, paying agent or lead manager. In the case of foreign securities, that are admitted to Collective Safe Custody via a CSD link or through fractional co-ownership of a global certificate, information is required depending on the event from the CSD, from the lead manager, or from the lead broker.

CBF publishes this data via the WSS/CBF online query (for example via WSS Online Plus).

Pre-advice to clients

CBF clients can access information in relation to forthcoming income events and that is relevant for their positions 14 business days prior to the record date through the online information function (KVGI). The pre-advice concerning an event is updated daily until settlement occurs on the entitlement date.

Information from the admission procedure for collective safe custody and subsequent processing is published on WSS CBF and can be found on the respective systems.

In addition, clients have the option of obtaining pre-advice relevant for their positions via the Swift MT564 service. A first Swift MT564 message on an event is sent out as from the 30th business day prior to the record date. Further Swift MT564 messages will follow, up until the entitlement date and on the CBF key/entitlement date itself, if the event data is modified or if the client acquires new positions in the securities class affected. To support their own cash processing, clients can order an Swift MT564 REPE report on the basis of their positions. They receive this one or two business days before the entitlement date, which is in general two or three days before the payment date. The MT564 REPE includes, in addition to the total holdings, the sum of the pending purchases and sales and the balance including the deductions.

The Swift MT564 informs in real time about short term changes of income event data on the entitlement date and about cancellations and corrections after the entitlement date.

The Swift MT564 service is also available to clients acting as a paying agent. In this case the messages include the total CBF position and the collection data.

Details concerning Swift services for income events are to be found in the [CBF Connectivity Handbook](#).

Entitlement determination and relevant information

The determination of entitled positions for an event takes place on the entitlement date (Ex-Date -1 or Record Date) at the end of daytime processing. In addition, market claim payments from the CCP's pending gross transactions and from collateralised positions (CmaX[®]) are also determined. The reverse claim process takes place at the end of the entitlement date.

For pledges via CmaX, cash proceeds (including but not limited to those resulting from interests or dividends) are not subject to the right of lien and remain with the collateral provider. For under-collateralised pledges in CmaX cash proceeds (including but not limited to those resulting from interests or dividends) are excluded. Such cash proceeds are withheld upon instructed to be released by the collateral taker (currently applies to central banks). If there is no release, cash proceeds are paid to the collateral taker.

All event entitlement information can be accessed via the online information function on the next business day, up until 120 business days after the Ex-Date. In addition, clients can be provided with the event entitlement data in journal form and as a file (by File Transfer). Clients who use the Swift MT564 service can obtain the Swift MT564 REPE message (replacement with entitlement) on the entitlement date, after the entitlement determination has been carried out. This message also contains all entitlement information based on the client's positions and the client's pending compensated transactions.

Clients acting as a paying agent can additionally obtain the Swift MT564 REPE message for the collection proceeds.

Cash settlement

Cash settlement takes place via PFoD instructions on the T2S DCA:

- For Bund payments in the night-time settlement (NTS) of T2S on the evening before the payment date; and
- For other payments, around 09:30 on the payment date.

The crediting of funds can only be affected once CBF has received the funds from the Issuer CSD or agent and once they have been fully reconciled. The amount paid out, less tax if applicable, is debited to the paying agent and credited to clients with entitled positions

On payment date, cash settlement for reverse claims and market claims is also carried out between the counterparties to pending CCP gross/C7 SCS transactions. For market claims, the amount of compensation is debited to the seller's account and the buyer receives an equivalent cash credit. For reverse claims, the amount of compensation is debited to buyer's account and the seller receives a cash credit.

The cash entries are processed either in NTS before payment date or on payment date during settlement cycles:

- Income paid in EUR by German paying agents is usually settled via T2S.
- Income paid in currencies other than EUR is settled via the Creation platform.

Payment instructions are placed as settlement instructions (PFoD instructions) in T2S. They are processed as pooled instructions per every event, that is, all payments related to an event are settled all at once, as soon as the paying agent's DCA shows a sufficient cash balance. This ensures that all client payments are processed or in the case of an insufficient cash balance on the DCA of the payment agent, the entire pool of payment instructions on T2S remains pending until liquidity is sufficient or its automatic cancellation at the end of the T2S recycling period is reached.

Market claims and transformations in cash, on the other hand, are not part of the pooling process but are instructed upon settlement of the PFoD pool.

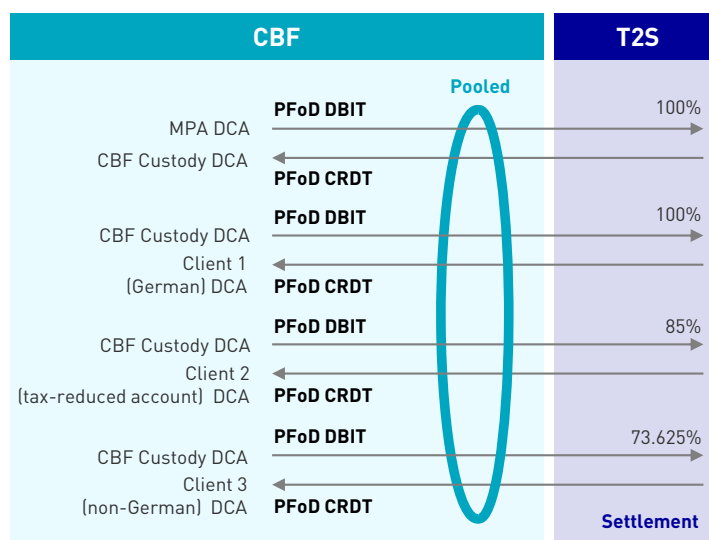


Figure 5.3 Pooling of PFoD instructions

The client or the paying agent is advised of the result of the cash entries through the online information function and in the daily cash statement. Clients can also obtain the Swift MT566 message, confirming the credit entries and market/reverse claim settlements. The dispatch follows each cash clearing cycle. The MT566 confirmations for payments will be sent after the cash settlement during the T2S NTS processing on the previous evening.

Clients acting as a paying agent can obtain the Swift MT566 as a payment confirmation for the collection proceeds. In case of any issues on payment date, clients acting as paying agent have to contact CBF latest before 12:30 to enable a cash processing.

Daily market claim cycle

The results of the daily compensation cycle for booked OTC and stock exchange transactions and the respective cash settlement are reported to clients and business partners using the same methods as on the entitlement date processing.

Reversal and re-processing

If the settlement of an income event is reversed, CASCADE generates offsetting entries in order to restore the original state of affairs before settlement was carried out. This also includes the generation of cancellations for Market/reverse claim payments that have already taken place.

If a new settlement is made with modified data after a reversal, new cash entries are generated in order to distribute the income on the basis of the positions relevant on the entitlement date, as well as based on entitled market and reverse claims, and the daily compensation run is started in relation to transactions that have been entered.

The processing and cash clearing of reversals and re-run can take place during the T2S NTS and also during the day.

Identification of the relevant transactions

The market claim-relevant transactions will be identified during the night-time processing, the reverse claim-relevant transactions before the night-time processing.

Non-income events - mandatory corporate actions

Mandatory corporate actions are measures that alter positions and are processed without the client entering instructions. It mainly includes the following activities:

- Allocation of subscription rights;
- Stock splits;
- Spin-offs;
- Allocation of partial rights;
- Allocation of bonus shares;
- Stock dividends;
- Optional dividends;
- Detachment of warrants;
- Cancellation due to final redemption;
- Cancellation due to partial redemption;
- Cancellation of worthless securities;
- Transfer to a blocked sub-account;
- Redemption in securities (for example, pre-emptive tender rights on shares and debt instruments);
- Exchange of shares;
- Mergers;
- Reverse stock splits;
- Capital reductions;
- Reclassifications;

- Pari passu;
- Redenomination;
- Exercise of warrants (mandatory automatic exercise).

CBF settles the processes above via T2S or Creation if the new shares (for example, subscription rights) are in non-collective safe custody (NCSC). The settlements are based on the holdings of the client in CSC custody. For securities transactions in CSC securities that are traded "cum", that is, with entitlement, and "ex", that is, delivered without entitlement, CBF applies market claims for the following processes:

- Allocation of subscription rights;
- Stock split;
- Spin-off;
- Allocation of partial rights;
- Allocation of bonus shares;
- Stock dividend;
- Optional dividend;
- Change in nominal value/number of units.

CBF processes reverse claims for securities transactions in CSC securities with trade date on or after Ex-Date and settlement date on or before Record Date. This applies to the following processes:

- Allocation of subscription rights;
- Stock split;
- Spin-off;
- Allocation of partial rights;
- Allocation of bonus shares;
- Stock dividend;
- Optional dividend;
- Change in nominal value/number of units.

If security transactions in CSC are pending on entitlement date for reorganisation events where the underlying ISIN is booked out and cash is booked, CBF performs transformations in securities. The following events are impacted:

- Redemption in securities;
- Exchange of shares;
- Mergers;
- Reverse stock splits;
- Capital reductions;
- Reclassifications;
- Pari passu;
- Warrant detachment.

Entitlement date

The entitlement date (Ex-Date -1 or Record Date) is the date when CBF determines the entitled positions. If the entitlement date falls on a weekend or a public holiday, the first business day before the weekend or public holiday will be taken as the entitlement date.

Example

“Ex-Date -1” processing

FoP Claim: A to B, DE000A0S9PJ4, nominal value 50

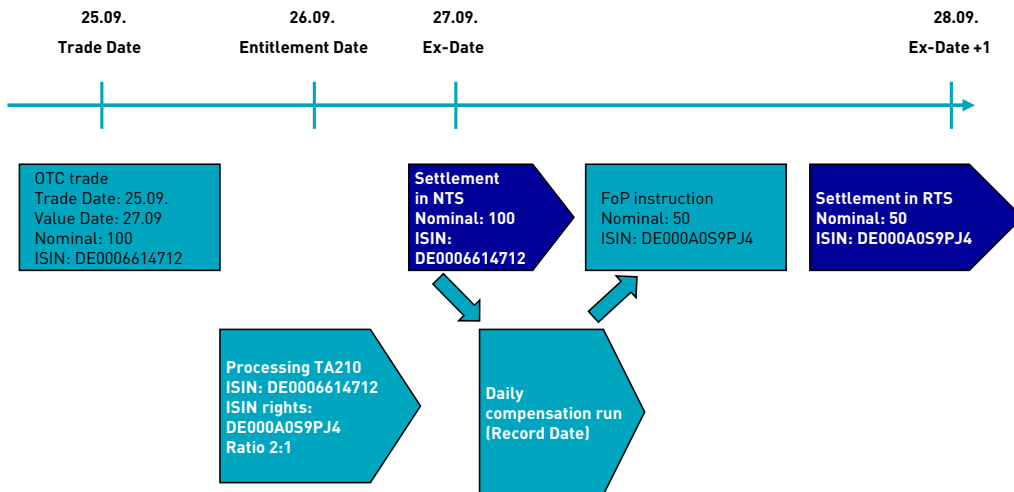


Figure 5.4 Market claim: Processing schedule type 210 (subscription right)

Example

“Record Date” processing

FoP Claim: A to B, DE000A0S9PJ4, nominal value 50

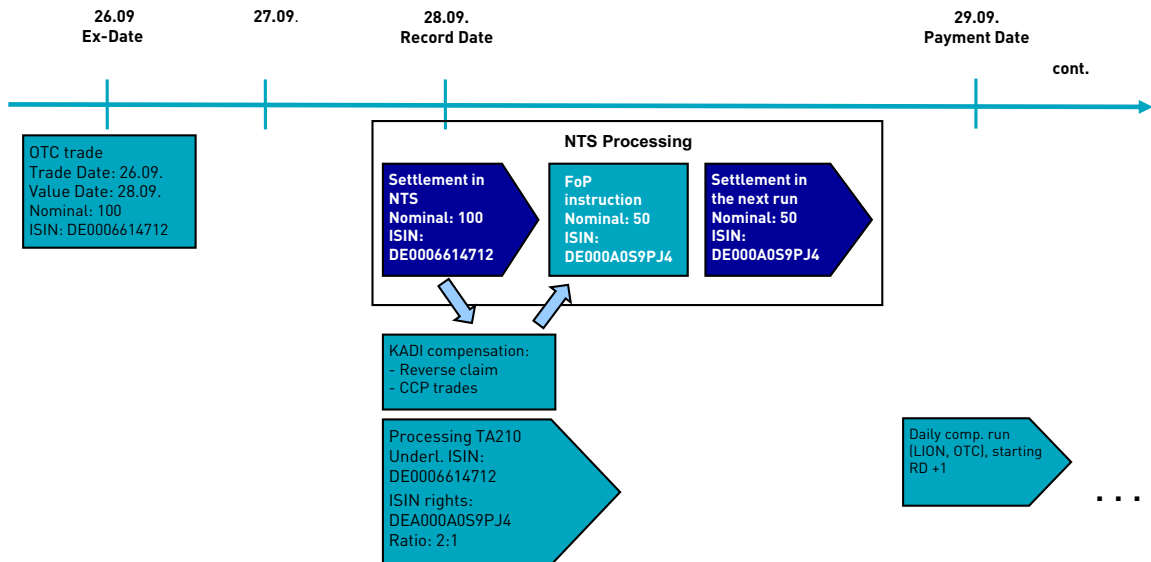


Figure 5.5 Reverse claim: Processing schedule type 210 (subscription right)

Claims procedure

The claim procedure for open positions is decoupled from the settlement of booked positions and is processed even if the event is blocked and no booking takes place.

Market claims

Market claims comprise non-income events, if a security is traded “cum” (with coupon) but is booked as “ex” (without coupon). In this case, a market claim cycle of 20 business days is initiated. This process is applied based upon booked OTC (DvP and FoP), non-CCP stock exchange transactions and pending matched and settled CCP trades. The result of a market claim is a securities debit for the seller and a securities credit for the buyer.

- In the case of “Ex-Date -1” processing, the claim cycle starts on the Ex-Date.
- In the case of “Record Date” processing, the claim cycle starts on the “Record Date +1”.

Note: Use of the opt-out flag excludes a transaction from the market claims procedure.

Reverse claims

For “Record Date” processing, reverse claims are performed in order to adjust OTC (DvP and FoP), non-CCP stock exchange transactions and CCP transactions from the buyer to the seller.

Reverse claims comprise non-income events, provided that the trade date is on or after the Ex-Date and the actual settlement date is on or prior to the entitlement date. Reverse claims are only executed if the Ex-Date for the relevant event is filled.

If the Ex-Date is empty, no market claim process is applied.

The reverse claim procedure runs only once, in the night-time processing on the Record Date.

Note: The “Ex” flag is taken into consideration for reverse claims. This means that OTC transactions, which are settled between the Ex and the entitlement date with trade date prior to the relevant Ex-Date, are subject to reverse claims, in the case that they have been flagged by both parties as “Ex”. The opt-out flag is ignored for reverse claims.

Transformations in securities

Transformations in securities are processed for reorganisation events where the underlying ISIN is booked out and cash booked, for example a merger, if on entitlement date pending trades exist.

There is a modification of the ISIN and/or the nominal of pending trades on entitlement date (matched), whereas the old instruction is cancelled and a new instruction with the new ISIN and where applicable the nominal is entered.

Note: Use of the opt-out flag excludes instructions from the transformation procedure. In this case, the underlying transaction is cancelled and there is no compensation payment generated.

Implementation of automatic claims

- In the case of reorganisation events with change of the ISIN, pending OTC, non-CCP stock exchange transactions or CCP transactions in received or delivered shares are updated via adjustment of the ISIN and, as applicable, the nominal value and/or the ISIN (for example, share split, share exchange).
- In the case of capital increase events, based upon posted OTC and stock exchange or pending matched or settled C7 SCS transactions, a FoP instruction is entered during the day as market claim from CBF, with reference to the transaction upon which it is based. The booking of the market claim is implemented in Real-time Settlement. Afterwards they can be released by the client.

A detailed account of the compensation rules with the criteria for the selection of transactions and the event types is given in the [Compensation Handbook](#).

The following diagram shows the process for settling mandatory corporate actions:

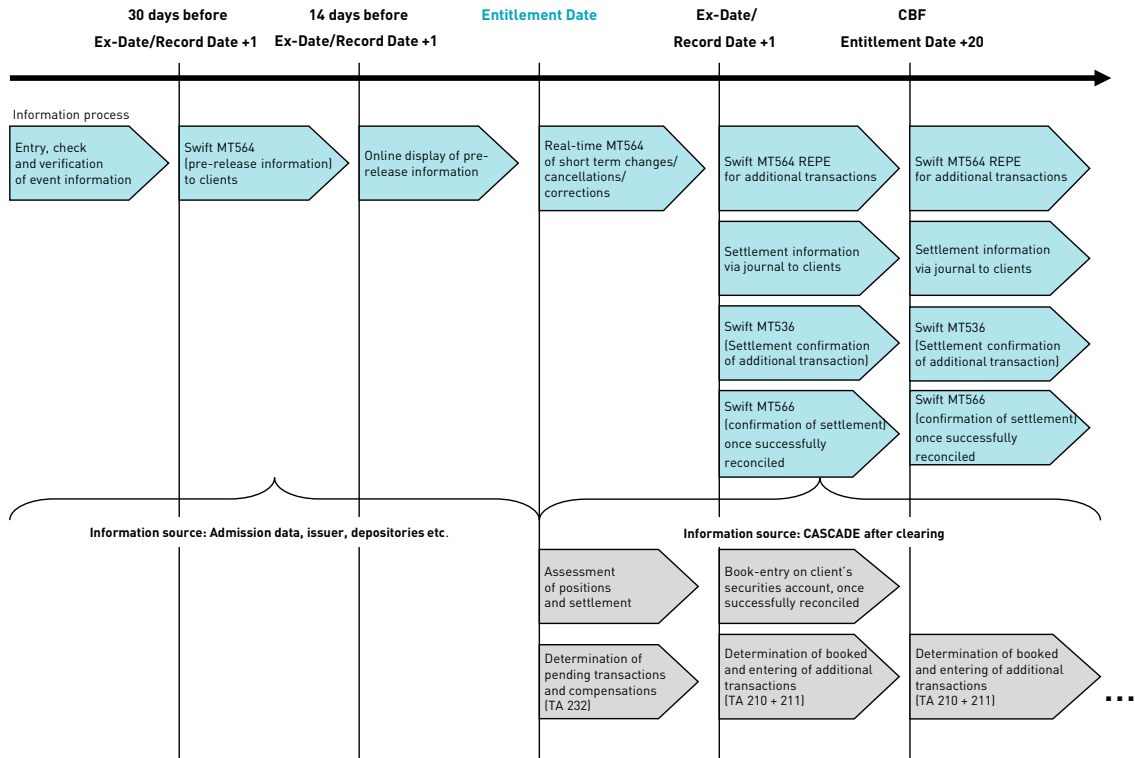


Figure 5.6 Overview of the settlement process for mandatory corporate actions

Data supply

The information necessary for processing of non-income events is usually communicated to CBF by the issuer, the issuing bank or the lead manager. In the case of non-German securities that are admitted to collective safe custody via a CSD link or through fractional co-ownership of a global certificate, information is required from the CSD or from the lead manager, depending on the event.

Corporate action events on existing securities that involve the creation of a new security (new ISIN) cannot be processed without a valid Legal Entity Identifier (LEI). For further information about the creation of new securities, please refer to [section 5.1 "Collective safe custody"](#) on page 5 - 1.

Pre-advice to clients

CBF clients can access information relevant to their positions (only the class) in relation to forthcoming non-income events through the online information function (KVGI) 14 business days prior to the record date or at the beginning of the subscription/exchange period. The pre-advice concerning an event is updated daily until settlement takes place on the entitlement date.

CBF publishes data which has been confirmed by the issuer or the issuing agent in WSS/CBF. This data can be viewed via the respective systems.

In addition, clients have the option of obtaining a pre-advice relevant to their positions via the Swift MT564 service. A first Swift MT564 message on an event is sent out as from the 30th business day prior to the record date, or at the beginning of the subscription/exchange period. Further Swift MT564 messages will follow, up until and including the entitlement date, if the event data is modified or if the client acquires new positions in the securities class affected.

Real-time information via Swift MT564 is provided for short term changes of non-income event data (mandatory events) on the entitlement date and for cancellations and corrections after the CBF entitlement date.

Within the market claim period a Swift MT564 REPE is provided for each market claim that was generated.

In addition to the MT564 REPE on Record Date, an MT564 REPE on Record Date -1 business day (RD -1) and on Record Date -2 business days (RD -2) is provided, containing the total holdings, the sum of the pending purchases and sales and the balance including the deductions

For capital increase events resulting in a credit of subscription rights or interim securities, CBF initiates two Swift MT564 workflows or events in parallel. The first event (mandatory event) is based on the underlying security, the second event (voluntary event) on the subscription rights or the interim securities respectively.

The Swift MT564 service is also available for clients acting as a lead manager for “redemption in securities” events. In this case the messages include the total CBF position and the securities to be delivered.

For details about the Swift services for non-income events please refer to the [CBF Connectivity Handbook](#).

Entitlement determination and relevant information

The determination of entitled positions for an event takes place on the entitlement date (Ex-Date -1 or Record Date) at the end of daytime processing. Settlement is based on the entitled positions and the market claims in relation to pending transactions and reverse claims.

Settlement

Depending on the activity in question, credit entries (for example, allocation of subscription rights), debit entries (for example, cancellation of worthless positions) or debit entries in the old ISIN and credit entries in the new ISIN (for example, mergers) are made in the clients' securities accounts. The entry date of transactions processed based on the entitled securities account positions and on reverse claims is usually the Record Date +1 or Ex-Date, but the entry can only take place once the proceeds have been credited to CBF by the Issuer CSD or agent and once they have been fully reconciled. In order for a new securities class to be entered in clients' accounts it must have been admitted by CBF (see [section 5.1 "Collective safe custody"](#) on page 5 - 1). In the case of foreign securities that are admitted to collective safe custody through a CSD link it is therefore possible that entries will also be made after payment date. Market claims are generated five times a day during the 20-days market claim period and settle within the continuous settlement cycles.

Clients receive reports about the changes made to their positions and compensations. As a further service, the Swift MT566 message can be obtained as confirmation of entries made in securities accounts. After successful settlement, the Swift MT566 message based on the entitled client positions and on reverse claims is generated and sent out in the evening of the entitlement date (Ex-Date -1 or Record Date).

Clients acting as a lead manager for a “redemption in securities” event can receive Swift MT566 confirmations also for debits of the respective securities.

Clients are also advised of the settlement of additional transactions (allocation of rights) in the Clearing & Settlement Statement (Swift MT536), based upon the posted FoP instructions that were generated by CBF as a part of the automatic claim process.

Settlement of capital increases

For the settlement of capital increases the lead manager's technical rules generally have to be observed. Subscription rights are automatically allocated on Ex-Date/Record Date +1 the basis of the entitled client positions determined on the entitlement date. With the booking of securities based upon the determined positions, the delivery is implemented that day via a corresponding MT566. During the subscription period starting with the Ex-Date, clients can issue one or several subscription registrations via Swift until the given instruction deadline:

- Instructions to buy or to sell further subscription rights, if these are offered for trading;
- Instructions to exercise subscription rights in order to acquire newly issued shares;
- Additional subscription of newly issued shares (if included in subscription offer).

The Swift service for income administration via Swift MT565 and MT567 messages takes place as described for in [section "Non-income events - voluntary corporate actions"](#) on page 5 - 14. If subscription rights are exercised, CBF sends the instructions to the lead manager, in observance of the technical rules, and debits the subscription rights to the clients' securities account. At the same time the subscription price is debited to the client's account in favour of the lead manager on payment day (that is, the last day of the subscription period). This is done depending on the market deadline. The lead manager makes the newly issued securities available in an internal CBF account, taking account of the admission procedure (see [section 5.1 "Collective safe custody"](#) on page 5 - 1). The credit entries to the clients' securities accounts are then made from this internal CBF account, according to the instructions that the clients have given.

The manual book or automatically generated entries of securities and cash following a client instruction and its processing will be confirmed to the client via Swift MT566 messages.

If the lead manager is given instructions directly from the client to exercise the subscription rights, the capital increase is settled bilaterally between the CBF client and the lead manager, and includes the settlement of the subscription price.

If no instruction is issued by the instruction deadline, the subscription rights are debited to the client's securities account and made available to the lead manager, generally after a period set by the lead manager. The subscription rights are treated according to the instructions given by the lead manager (destroyed or invalidated) and then cancelled. In the case of foreign securities classes, CBF acts according to the practice of the securities' home market.

Reversal/re-processing can, starting from Ex-Date/Record Date +1, be implemented within a period of 25 business days and be processed in night processing.

Reversal and re-run

In the case of a reversal of a settlement for a non-income event, CASCADE generates offsetting entries in order to restore the original condition of the positions in the securities account before settlement took place. market/reverse claims will also be reversed. Re-run with the corrected data takes place only based on entitled deposits on accounts, as well as entitled market/reverse claims.

Cancellations/re-run can, starting from Ex-Date/Record Date +1, be implemented within a period of 25 business days and be processed in night-time processing.

Non-income events - voluntary corporate actions

Voluntary corporate actions are measures that alter the positions, but for which the clients send their instructions in order to take part. Voluntary corporate actions primarily comprise the following events:

- Subscription right;
- Tender offers;
- Repurchase offers;
- Calling/repayment;

- Lender’s right to request repayment (for example, put bonds);
- Exchange offers;
- Exercise of options and conversion rights;
- Exercise of rights (subscription rights, partial rights);

The settlement of voluntary corporate action events takes place via the T2S platform.

Issuer or issuer agents may request the publication of certain purchase and exchange offers. This service is subject to standard fees as per the [Clearstream Banking Fee Schedule](#). In the event of any questions or requirements, issuers or issuer agents should contact their Relationship Officer.

Deadlines

The technical rules set forth in the publications of the lead manager and the exchange agent for settlement of the corporate action stipulate the start and end date of the offer or exchange period. In accordance with these conditions, CBF fixes the instruction deadline for its clients. In case of a subscription offer, for example, there can also be a trading deadline and an early instruction deadline (applies especially to foreign corporate actions) in addition to the instruction deadline.

The following diagram shows the process for settling voluntary corporate actions.

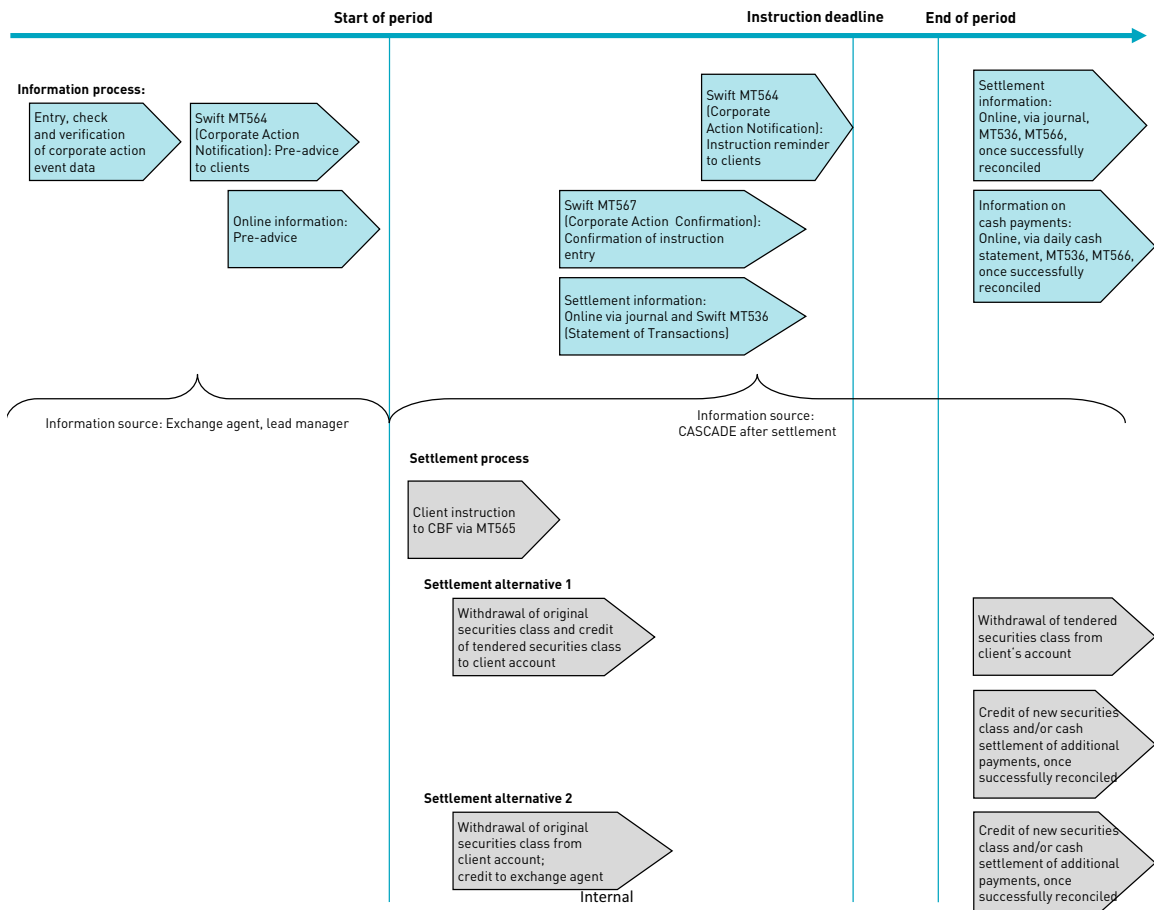


Figure 5.7 Overview of the settlement process for voluntary corporate actions

Data supply

The information required to settle voluntary corporate actions is usually communicated to CBF by the lead manager or the exchange agent in relation to the individual event. In the case of foreign securities that are admitted to collective safe custody via a CSD link or through fractional co-ownership of a global certificate, information is required from the CSD or the lead manager, depending on the event.

Corporate action events on existing securities that involve the creation of a new security (new ISIN) cannot be processed without a valid LEI. For further information about the creation of new securities, please refer to [section 5.1 "Collective safe custody"](#) on page 5 - 1.

Pre-advice to clients

Information on voluntary corporate actions usually becomes available to the market just a few days before the start of the period. On the announcement of such an event, CBF provides its clients with pre-advice. Through the online information function (KVGI) clients can access data on forthcoming corporate action events that is relevant for their positions. This can be done up to 14 business days before the start of the period. This information is updated daily until settlement ends on expiry of the period.

CBF publishes data which has been confirmed by the issuer or the issuing agent in WSS/CBF. This data can be viewed via the respective systems.

In addition, clients have the option of obtaining pre-advice relevant for their positions via the Swift MT564 service. A first Swift MT564 message on an event will not be sent out before the 30th business day prior to the start of the period. Further Swift MT564 messages follow if the event data is modified or if the client acquires new positions in the securities class prior to the deadline or as reminder before instruction deadlines. Details concerning Swift services for non-income events are described in the [CBF Connectivity Handbook](#).

Clients' instructions

Depending on the technical rules for the settlement of voluntary corporate actions determined by the lead manager or the exchange agent, clients issue instructions either to CBF or directly to the lead manager or exchange agent. Clients must observe the instruction deadline fixed by CBF, the lead manager or the exchange agent.

CBF clients who use the Swift service in relation to income administration can generally communicate their instructions to CBF. The Swift MT565 message is available for this purpose. A technical requirement to issue instructions via an MT565 is a BIC-related authorisation of the client account. If no authorisation is in place, a rejection for technical reasons will follow and the client will need to contact CBF. If instructions are issued to CBF, CBF carries out the instruction and all further settlement steps via the CASCADE platform.

If instructions are issued to the lead manager or the exchange agent, CBF does not generally take any action in relation to the clients' positions. Execution of instructions and all further processing steps that are necessary take place bilaterally between the CBF client and the lead manager or the exchange agent via the CASCADE platform (for example, securities transfers by CBF clients in favour of the lead manager or the exchange agent).

Executing instructions and settlement

If instructions are issued to CBF, CBF accepts the clients' instructions as a Swift MT565 message and verifies its form and contents in a number of different checks. If both the form and the contents of an instruction are correct and the positions in the client's account are sufficient, CBF will execute the instruction. The instruction is executed by entering free of payment securities transfers in T2S during the T2S real-time settlement. The settlement procedure depends on the type of transaction and the technical rules set forth by the lead manager or the exchange agent. The two most common procedures are as follows:

- The positions in the original securities class are debited to the client's account according to the nominal value of the instruction, and the tendered securities class is credited to the securities account. At the end of the period, if the corporate action is carried out, the securities class subscribed to and/or a cash amount is credited to the client's securities account on the basis of the client's positions in the interim security. The positions in the interim security are then cancelled.
- In CASCADE, the positions in the original securities class are transferred from the client's account to the account of the lead manager or exchange agent, according to the nominal value of the instruction. At the end of the period, if the corporate action is carried out, the securities class subscribed to and/or a cash amount is credited to the client's securities account by the lead manager or the exchange agent via CBF.

If instructions are given to CBF, clients receive a Swift MT567 and a Swift MT566 message as confirmation that their instructions have been executed, with information concerning the settled securities transfers. The confirmation on the credit of the proceeds will only be sent once they have been credited to CBF and completely reconciled. Furthermore, clients are generally advised of the changes in their positions as a result of the settlement of the corporate action. This is done online, in journal form and via the Swift MT536 message (Clearing & Settlement Statement). Cash entries that CBF entered as a result of the execution of an instruction are confirmed via Swift MT566 after the successful payment.

If the voluntary corporate action is not carried out (for example, because a takeover bid fails), CBF reconciles any entries made in the clients' securities accounts by making offsetting entries.

Within a tender period, CBF, on request, notifies the lead manager or exchange agent of the total nominal value of all instructions it has currently been given. This information forms the basis for mandatory announcements by the Federal Financial Supervisory Authority (BaFin) and other official announcements concerning the status of a tender.

Non-income: "Information only" events

CBF informs clients who participate in the Swift MT564 service about events that do not lead to position changes, for example, change of names, conversion option for funds or the institution of insolvency proceedings of an issuer. These Swift MT564 messages are qualified as "INFO" and are based on the information published by Wertpapier-Mitteilungen (WM).

Tax services

With its tax services CBF assists clients in preparing certificates for tax purposes, and in obtaining tax refunds and exemption from taxation at source in various markets. In detail, this includes the following services:

- Preparing tax vouchers in relation to German securities for submission to the German tax authorities. The tax vouchers are issued in the name of the entitled beneficiaries who hold a securities account outside Germany. The service is available to clients of CBF and CBL who are not resident in Germany. Domestic banks and financial services institutions can also use this service if CBF withheld taxes for these payments and paid them to the tax office.
- Reclaiming of withholding tax for all markets with a double taxation treaty (DTT) exists. CBF collects refunds of withholding tax from foreign tax authorities, custodians or tax agents on behalf of clients who are resident in Germany. For clients who are resident outside Germany, CBF claims the reimbursement of capital gains tax paid from the German tax authorities. Clients who are resident in Germany are therefore refunded for any withholding tax that has been levied, for example by Denmark, Finland, Norway and Sweden. Clients who are resident outside Germany can claim a refund for capital gains tax and solidarity surcharge levied in Germany.

- Preparation of applications for tax refunds for certain markets in the context of our pro-active tax services. CBF monitors distributions to clients in the various markets, prepares the forms for claiming tax refunds, submits them to the tax authority and forwards the amount refunded to the clients.
- Exemption from tax at source for clients resident in Germany and in other countries for markets where complete or partial tax exemption can be obtained. This includes markets whose securities are admitted to CSC through CSD links as well as NCSC securities kept by custodians. For further details, please refer to the respective Market Taxation Guides on the Clearstream website.

For forthcoming income events in the markets concerned, CBF provides its clients with pre-advice based on their positions starting 14 days prior to the distribution date in the form of a list as well as Swift notifications with details concerning taxation and references to announcements containing market-specific tax criteria. As a result, clients can report their entitled positions in good time and submit the necessary documents to CBF.

- CBF offers the Taxbox Service to handle the flat rate withholding tax introduced in Germany on 1 January 2009. This is a platform for the electronic transfer of tax-relevant data in relation to securities transfers.

General Meeting services

On request, CBF clients can benefit from various General Meeting Services for their CSC holdings.

Including, among others:

- Announcement of Annual General Meetings (AGMs)/Extraordinary General Meetings (EGMs)
- Provision of agenda
- General Meeting services for international clients

CBF accepts and processes clients' instructions for meeting events.

- Provision of entrance cards.
- Registration of registered shares.

To enable exercise of voting rights, CBF sends the shareholders' data to the company. CBF uses CASCADE-RS for this service (see [section 8.1 "Registered shares in CASCADE-RS"](#) on page 8 - 1).

These services are not available in all markets. Some local CSDs or custodians do not, or only partly, offer provision of certain services.

Further details on General Meeting Services are available in the [OneClearstream Client Handbook](#) and the [Xact Web Portal documentation](#).

5.2 Individual safe custody

For securities kept in individual safe custody, CBF offers services for the settlement of income and non-income events as well as General Meeting services. The services are virtually identical in scope to those offered in relation to CSC securities (for details see [section 5.1 "Collective safe custody"](#) on page 5 - 1. The Swift MT564 service described there, however, is only available for CSC securities.)

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6. Investment Fund Services

CBF clients can benefit from the order routing services for investment funds offered by CBF.

CBF's Investment Fund Services are described in this chapter. Further relevant information on Investment Fund Services can be found in other chapters of this Client Handbook.

6.1 Vestima

Vestima is CBF's automated order routing service for the Investment Funds industry. It provides an entry and reception point for domestic, international and offshore funds, allowing orders and order confirmations to be submitted, validated and routed to the relevant recipient. Orders can be submitted using authenticated communication channels with a choice of settlement methods.

CBF offers two options for clients, Vestima and VestimaPRIME that are automated order routing services. Vestima provides a highly automated service aimed towards mutual funds, whereas VestimaPRIME targets complex and alternative Investment Funds.

Unless stated otherwise, VestimaPRIME is to be considered an integral part of the Vestima services provided by CBF. Similarly, in this section and unless stated otherwise, the term account also refers to a VestimaPRIME account.

Vestima provides comprehensive services for routing and management of orders in Investment Fund Shares. Orders are received from an Order Issuer (OI - for example, distributor, custodian, asset manager). Order details are validated based on Standing Instructions and preferences, set by the OI, and on the requirements of the relevant fund and of the Order Handling Agent (OHA). Valid orders are then routed to the relevant OHA. The OHA is one of the following:

- Order Handling Agent (OHA) - An agent acting for the fund (for example, TA, Depository bank, centralisation agent). In some circumstances, CBF may forward orders to one of its Depositories or appointed third party to be sent on to the relevant agent.

OIs do not need to be concerned with the individual connectivity or order format of any OHA. Order confirmations and other messages are received from the OHA and the order status can be tracked by the OI through status messages or direct Web Browser Based Interface enquiry. Optionally, settlement instructions can be generated, based on standing instructions.

The Web Browser Based Interface provides facilities for reporting, contingencies and enquiring on previously submitted orders, together with access to the Published Fund List.

Further details can be found on the Clearstream website (for example, Vestima user guides and Published Fund List). The Published Fund List on the Clearstream website specifies CBF order cut-off times, which are typically zero or fifteen minutes prior to the Investment Fund's official cut-off times.

For orders entered into VestimaPRIME or if no CBF order cut-off time is defined in the Published Fund List, the applicable CBF order cut-off time is 90 minutes prior to the order cut-off specified in the fund prospectus. If no CBF cut-off time is defined in the fund list, and the cut-off time specified in the fund prospectus is after the close of business on a particular day, orders should be received at least 30 minutes prior to close of business. In the event that a CBF order cut-off time is after the cash deadline to execute a payment, the client must respect the relevant cash deadline when placing the order. For this purpose, close of business shall be 18:00 on any business day. CBF guarantees that all orders received before the CBF cut-off time will be made available to the OHA before the fund cut-off time defined in Published Fund List. Valid orders are forwarded promptly to the OHA, independently of the CBF cut-off time.

Prior to placing a subscription order or transfer-in Instruction, when there is no current holding on the OI's account of the particular investment fund, the OI must contact CBF to ensure the investment fund's availability to the OI for order routing and custody through CBF.

Prior to the issuance of a new share class (for example, bonus shares, sidepockets) to existing OIs, CBF may have to obtain information from the OI.

In either of these above two cases, if the setup of the investment fund's availability requires that the OI shall provide CBF with pertinent documentation (such as private placement memorandum, subscription agreement or completed questionnaire), CBF shall notify the OI who must respond without undue delay and within any applicable deadline. The OI agrees to hold CBF harmless of the OI's failure to respect any such given deadline.

When new relationship references are required by the transfer agent/OHA, the OI should give sufficient notice to CBF, and await confirmation that the relevant and requested setup is ready, before placing the initial transaction in a particular investment fund. When OI eligibility rules are imposed by the OHA, CBF will request additional information from the OI. Failure by the OI to comply will result in no liability to CBF, should the investment fund impose penalties, forced redemption, exchange of the position or other remedy.

Order routing and order management service conditions

In providing order routing services, CBF acts in the name and on behalf of the OI in forwarding the order and certifications to the OHA, including any addendum, supplement, restatement and/or applicable replacement, on the OI's behalf, informing the OHA that the OI is the responsible party. Order status reports and order confirmations received from an OHA in reply to a forwarded order, are delivered to the OI.

Unless expressly stated otherwise, CBF is only responsible for the order routing services consisting of the transmission details of the transaction for the account of the client, statement or any other information provided, and CBF does not become party to the buying or selling of the investment fund shares detailed in the transaction, statement or any other information provided; the OIs and the OHAs are responsible for the content of the information exchanged between them.

Subject to the conditions described in the previous section, Vestima populates data relating to trading parties as may be required by the relevant OHA. The OI is responsible for contacting CBF for all trading parties reference data maintenance requirements.

CBF shall not be liable for the failure of the OI to provide any certification that may need to be sent directly to the OHA, nor for any consequences of the OI's delay or errors in providing any certification. If appointed by the OI to provide certification to an OHA, CBF will promptly transmit the certification but shall not be responsible either for the consequences or for the accuracy of the certification.

Fund reference data is provided for information purposes only and does not replace the investment fund's governing documentation. CBF does not guarantee the completeness, accuracy, or authenticity of fund reference data.

For primary market orders, CBF may decide to use a third-party order routing platform to route orders to OHAs already connected to those platforms.

Order routing services for some markets require specific documentation. For further information, please contact CBF.

Where French market orders are sent manually directly to a French OHA, CBF will follow the "Charte des Bonnes Pratiques Professionnelles de la Centralisation d'OPCVM" of the Association Française des Professionnels des Titres (AFTI), without prejudice to comply with CBF Governing Documents. For orders that require a telephone call to the OHA, the OI will incur an additional charge in accordance with the existing fee schedule.

CBF is only responsible for the selection of OHAs that also serve as CBF's custodian in the local market at the same time, and only these OHAs are controlled and re-evaluated by CBF. CBF is not responsible for the selection of the OHA and the service level that OHA appointed directly by the Fund.

CBF will select the most appropriate method to send the orders to the OHAs, depending on the operational requirements of each individual OHA. The service that CBF can provide depends on the rules and practices of the relevant market or Investment Fund and on the OHA and, therefore, may vary across all the investment fund shares eligible for CBF order routing and settlement.

For an increased level of automation, CBF can generate settlement instructions on the client's behalf for the settlement of transactions in investment funds. Transactions that have settled using settlement instructions generated by CBF can be reversed or amended by CBF.

CBF reserves the right (but is not obliged) to correct the client's account upon receipt of notification from an OHA of (1) an amendment to a transaction; or (2) an amendment to a position held or still being held by CBF for the account of the client. The client shall at all times receive a notification of the amended transaction stating the reason CBF may operate a Fund Market Account as an intermediary to facilitate the Settlement between the OI and the OHA. The Fund Market Account is only a technical means. For the avoidance of doubt, its use does not imply that CBF is a party to the trade or the transfer of the investment fund shares being settled.

All investment fund orders sent to CBF must be sent via Vestima. Any order received that is not transmitted to CBF via Vestima (for example, via free-format message) is handled at the discretion of the Investment Fund Order Routing Desk and on a "best efforts" basis only. CBF reserves its right to reject any non-Vestima order and may require the OI to transmit the order via Vestima instead.

Electronic certificates are provided by CBF to allow encrypted access to Vestima's Web Browser Based Interface. Participants shall exercise due care in the safeguarding of their electronic certificates and associated authentication credentials. CBF gives no assurance or warranty with regard to the security of any communication performed using electronic certificates.

The investment decision is taken solely by the client and CBF is only in charge of the execution of the client's instructions. Investment risk factors should be evaluated by the clients, who, in case of doubt, are invited to consult their professional advisers. CBF is under no circumstance taking an investment decision nor acting as an investment advisor and shall therefore not bear any liability with respect to the risks inherent to the investment and/or any other transaction in relation to investment funds.

Opening a VestimaPRIME account

A VestimaPRIME account is required when clients wish to use the VestimaPRIME service.

The VestimaPRIME Account Application Form, duly signed (in original form) must be completed and returned by mail to CBF to request the opening of a main VestimaPRIME account.

Additional VestimaPRIME accounts can be opened and linked to a main VestimaPRIME account. Each VestimaPRIME account shall be linked to a main or additional CBF account for cash. Questions relating to the procedures for opening a VestimaPRIME account should be directed to a Relationship Officer.

Additional service conditions

CBF reserves the right at its own discretion to take one or more of the following actions as needed to forward orders and process subsequent Settlement:

- Debit cash from the CBF account of the OI on the requested settlement date of a subscription/buy order as determined by the OHA. For a subscription/buy order that the OHA requires to be prepaid, CBF reserves the right to debit cash from the CBF account of the OI when forwarding the order to the OHA.
- does not undertake to check whether sufficient cash or collateral is available on the CBF account when forwarding a subscription/buy order.

- Check whether sufficient investment fund shares are available on the CBF account of the OI before forwarding a redemption/sell order (provision check). In the event of an insufficiency, CBF can reject the redemption/sell order.
- Block the relevant position of a redemption/sell order by transferring, when the order is processed by CBF, the investment fund shares from the CBF account of the OI to an account of CBF.

In forwarding orders, CBF acts in the name and on behalf of the OI and holds the OI responsible for ensuring timely and correct settlement, including in particular:

- For subscription/buy orders, ensuring that sufficient cash or prearranged credit facilities are available.
 - Many Investment Funds require value date cash payments of subscriptions, and the deadline for provisioning of the CBF cash account is as per the cash deadline of CBF.
 - Subscriptions in some investment funds require intraday cash payments to have reached the collection account of the fund at a specific time of the day. CBF will, in such cases, need to debit the OI's CBF cash account at an earlier time of day. The OI shall ensure sufficient cash is available for such intraday cash subscriptions not later than 08:00.
- For redemption/sell orders, ensuring that settlement proceeds are in line with the fund prospectus or as determined by the OHA. The redeemed investment fund shares shall be available for delivery to the OHA.
- The OI is solely liable for the payment of any accrued performance or incentive fees due on the redeemed investment fund shares.

If the OI fails to meet its settlement obligations, CBF:

- May seek redress from the OI for any loss, claim, liability, damages, or expenses that arise from the credit or debit to the relevant account in the investment fund register subsequent to an order.
- Is authorised, at any time between confirmation of the order and settlement, to purchase from the OHA the investment fund shares required to settle a redemption/sell order and to debit accordingly the CBF account of the OI. CBF will advise the OI as soon as practically possible before such debit occurs.

By sending an Investment Fund Order or Instruction, the OI warrants and accepts that:

- It has full legal capacity to issue orders for investment fund shares.
- It complies with applicable laws and regulations, including but not limited to the laws regarding the prevention and prosecution of money laundering and terrorist financing.
- It complies and shall comply with the terms and conditions of the relevant investment funds.
- It does not, unless otherwise disclosed by the OI to CBF before sending any order, act as an investor within the meaning of the UCITS Directive¹ and the Commission Regulation 583/2010². If CBF is notified by an OI that it is acting as an investor, CBF will then advise the relevant OHA accordingly.
- CBF shall receive orders from the OI by a means of communication agreed upon with the OI and shall forward them to the OHA on behalf and in the name of the OI.
- It appoints CBF as its attorney ("mandataire") with respect to the OHA for order routing purposes and authorises CBF to disclose its name to the OHA as deemed appropriate by CBF.

1. Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to Undertakings for Collective Investment in Transferable Securities (UCITS).

2. Commission Regulation (EU) No 583/2010 of 1 July 2010 implementing Directive 2009/65/EC of the European Parliament and of the Council as regards key investor information and conditions to be met when providing key investor information or the prospectus in a durable medium other than paper or by means of a website.

- CBF shall check whether the mandatory information on orders is provided and may reject all incomplete or incorrect orders. In doing so, CBF shall check only the format of the orders.
- Likewise, CBF shall check whether the mandatory information on transfer instructions is provided and may reject all incomplete or incorrect transfer instructions. In doing so, CBF shall check only the format of the transfer Instructions.
- CBF does not guarantee that orders received after the CBF cut-off time shall meet the investment fund's deadline for orders.
- CBF processes cancellation requests on a "best efforts" basis only, and CBF does not guarantee that OHAs will accept cancellation requests regardless of the time such requests are sent.
- For redemption/sell orders, where applicable, if the OI requests a specific lot be redeemed, the original trade date and trade reference must be included in the OI's order. CBF forwards this information to the OHA, and whether the information is specified or not the OI's shares will be redeemed as per the rules of the OHA.
- For redemptions entered in to VestimaPRIME, where partial payments are made, CBF will provide a partial redemption advice to the OI indicating the percentage of redemption proceeds paid and the estimated price.
- OIs using VestimaPRIME who wish to buy or receive investment fund shares that generate US sourced income will be required to identify the relevant US tax treaty pool.

Furthermore, for instructions in securities with staggered payment structures:

- In instructing CBF to purchase or hold investment fund shares with staggered payment structures, the OI agrees to authorise CBF to debit the OI's account for the amount required to be paid in connection with the purchase and/or for any future amount(s) required to be paid in relation to any capital call/commitments, or any other requirements as required by such shares. The OI shall deposit sufficient funds in its account. If the OI does not have sufficient funds in its account to cover any capital calls or other requirements, CBF shall be under no obligation to fund future capital calls or other requirements for the OI's account.
- The investment is made exclusively for and by the OI and CBF shall not have any obligation or responsibility in connection with the investments that are made, including, without limitation, any responsibility to respond to, or provide capital in connection with any capital calls or other requirements as set out in such investment funds offering documents, subscription agreements or limited partnership agreements. CBF will inform the investment fund or its agent that the client is the responsible party and that CBF only acts in a nominee or asset processing capacity.
- The client undertakes to indemnify, defend, reimburse, and hold CBF, their affiliates, officers directors and employees (collectively the "Indemnified Parties") harmless for, from and transfer against any loss, liability, cost, damages, expenses (including legal fees taxes and penalties) or other amounts which may result directly or indirectly from or in connection with (i) any misrepresentation or breach of any warranty, condition, covenant or agreement set forth in the relevant subscription agreement (or equivalent document(s)), or (ii) any other document delivered by CBF to the Investment Fund issuer or its agent in connection with the client's instruction.

Conditions of external transfers

Exceptionally, an external instruction or investment fund order in respect of securities cannot be executed, either because specific denominations of the instructed nominal amount are temporarily unavailable or because the balance held at the depository or investment fund register is insufficient. This can occur, either due to a general insufficiency of the required denominations in the issue, or because the realignment of the position at the depository or investment fund register is outstanding.

Clients are advised to either re-instruct the transaction the following day or contact CBF.

CBF cannot accept any responsibility or liability to pay claims based on delays, failures or rejections in the execution of external instructions or investment fund orders in respect of securities for reasons of denominations or because the realignment of the position at the depository or investment fund register is outstanding.

Further information can be found in the "Creation-CASCADE Realignment Guide".

Conditions of the account operator service

With the account operator service the respective positions in the investment fund register will be held in the name of the client or its nominee.

The positions of securities reported as held under the account operator service reflect only a position maintenance service and mirror the positions in the relative investment fund register. The client specifically agrees that CBF is acting as account operator only, and does not have any custodial role, in this context. For the avoidance of doubt, the positions reported by CBF as account operator do not qualify as securities and are not eligible for settlement and custody in the 's settlement system. Such positions cannot be transferred to another account and can only be updated when confirmed as updated in the investment fund register.

The client shall grant CBF exclusive access to the relevant investment fund register account. Should the client or its nominee act directly on a relevant investment fund register account, the client expressly agrees that (i) CBF shall be indemnified and held harmless by the client from any loss, claim, liability or expense asserted against or imposed upon CBF as a result of such action and (ii) CBF shall be entitled to terminate the provision of the account operator service with immediate effect and without prior notice.

The client thus further agrees and acknowledges that CBF shall be appointed as attorney of the client or the registered nominee(s) for the performance of certain Vestima services as set out in the relevant power of attorney as applicable.

CFF settlement and custody services

The Central Facility for Funds (CFF) is 's post-trade infrastructure for investment funds. The CFF Service is available to investment funds under both collective safe custody (CSC) and non-collective safe custody (NCSC).

Detailed information on the CFF Service can be found in the [CBL Client Handbook](#).

Fund Market Groups (FMG) definitions

Investment funds feature complexities depending on the fund structure. In order to account for these distinct complexities, CBF classifies funds into Fund Market Groups (FMG):

- FMG A: simple mutual funds;
- FMG B: complex mutual funds; and
- FMG C: alternative investment instruments.

FMG A

A fund is classified as A when it is deemed to be an asset that is fully fungible and eligible for an omnibus account. These funds typically offer easy settlement of cash and securities within the Clearstream network and the order routing of transactions is completely automated.

FMG B

In its simplest form a fund is deemed to be B when it is neither in the category of A or C. For example, we will classify a fund as B if:

- The fund requires additional communication media to process a transaction, that is, as well as the standard investment fund order, the fund will also require additional notification by telephone.
- The fund requires manual intervention after order placement - provision of additional documentation for the initial investment.
- The fund offers a daily dividend option requiring additional focus and monitoring.

FMG C

A fund will fall into the C category when it is clear there are key restrictions within the asset. These restrictions can vary toward type of investor acceptance criteria or where an investor, for example, is restricted in its withdrawal capabilities. Similarly, the investment can be subject to differing types of mandatory fund events such as withdrawal fees or a need for a full documentation submission for every investment.

Disclaimer

CBF publishes the FMG for all Creation-eligible investment funds ISINs.

The FMG is determined at the discretion of CBF based on its assessment of the operational and technical efforts required per investment funds ISIN for CBF to provide its services.

When submitting transaction instructions, and/or holding assets, relating to any investment funds ISIN held through CBF, the client acknowledges awareness of the FMG allocated and the applicable pricing.

The FMG is based on information obtained from third party sources. CBF endeavours to ensure that such information is correct and up to date but cannot be held liable in case of any change of which it would not have been aware and will not be liable for retrospective reimbursement of amounts charged. In the event of corrections to the FMG, the relevant pricing will only apply to future transactions, and/or safekeeping services as from the date of correction.

Disclosure requirements for investment funds

CBF applies certain disclosure requirements for investment funds that enables an officially appointed agent of the investment fund to satisfy the regulatory, KYC and AML obligations and /or to perform all the normal functions, such as calculating contingent deferred sales charges (CDSCs), trailer fees and early redemption fees, for investment fund shares held in CBF (see also Disclosure Requirements on the Clearstream website).

Background

Applicable laws of different markets may impose an obligation on CBF to disclose details of the client (or as required in some cases the ultimate beneficial owners) to regulators and authorised agents of the Investment Fund. The disclosure obligation may be periodic or only upon request.

For most types of investment fund, shares are kept in registered form in the shareholder register of an investment fund. Shares are registered in the name of Clearstream Banking S.A. as nominee or of the depository acting as a nominee on behalf of Clearstream Banking S.A. The attribution of investment fund shares to specific shareholders and the ability to track the position and movement of the investment fund shares are often prerequisites for various aspects and activities of an investment fund. The reporting of client name, movement and position information to agents is in fact necessary to enable them to calculate, in accordance with the terms of the investment fund prospectus, components such as the following:

- Contingent deferred sales charge (CDSC) - a "back-end" sales charge paid by the shareholder when selling shares. The rate applied for a CDSC varies with the length of time for which a shareholder holds shares, in accordance with the calculation method indicated in the prospectus.
- Early redemption fee - a redemption charge paid by the shareholder when selling shares. The retention period will determine the rate to apply.

- Trailer fee - sales commission paid to fund distributors according to the number of shares they sell and, in some cases, the length of time for which those shares are held by the individual investors. For fund distributors to be paid trailer fees on the positions that they hold in CBF, the agent must know exactly what those positions are and for how long the distributor has held them.

These and other attributes of investment funds are based on the assumption that the agent can identify the exact position held by a specific distributor or shareholder and the length of time for which the position is held.

7. Collateral Management

7.1 Collateral Management Services (Xemac®)

With the Xemac® system CBF offers its clients services for the administration of collateral for securities. This means that CBF clients are able to pool the securities positions in their CASCADE and Creation accounts in a pool of collateral. Suitable securities from this pool are allocated to the claims that have been entered.

Transactions in the following areas can be secured via Xemac:

- Credit facilities with Deutsche Bundesbank;
- Open market transactions of the European Central Bank;
- Collateralisation of Deutsche Bundesbank trades on ones' own behalf;
- Bilateral provision of collateral between Xemac participants;
- Collateralised instruments that are issued via Clearstream Banking Frankfurt and collateralised in Xemac. CBF acts here as the security trustee.

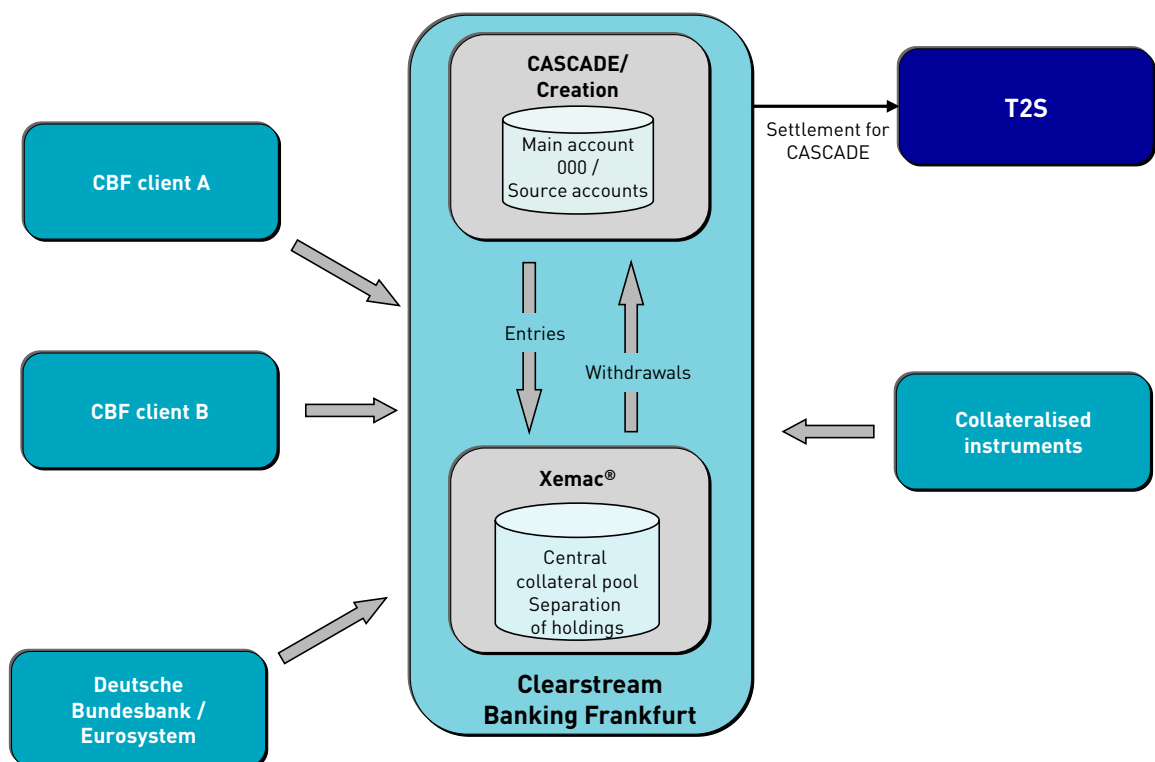


Figure 7.1 Central collateral pool through Xemac®

Clients using Xemac services have to observe CBF's Xemac Special Conditions for Collateral Management (SB Xemac). CBF creates a sub-account /550 for its clients in CASCADE. This is where the securities available to serve as collateral are pooled and then used to secure claims via the Xemac system. The sub-account is also set up as T2S SAC by CBF in T2S, so that settlement of the instruction takes place in T2S.

On CASCADE accounts T2S-migrated securities from Issuer-CSDs can be used when asset servicing is in place. In addition, securities from T2S-In CSDs are eligible on CBF-i accounts in Creation.

Xemac is available to clients online between 07:00 and 17:40 and offers the following:

- Conclusion of contracts: Based on certain contract definitions, contracts between participants (for example, Deutsche Bundesbank and the CBF client) are formed online in Xemac.
- Book entries and withdrawals: Book entries and withdrawals between the CASCADE main account and sub-account /550 are carried out by CBF clients online via Xemac or with electronic input via File Transfer/MQ/Swift. The entries and withdrawals are forwarded from CASCADE to T2S and settled in T2S's real-time processing cycle.

Book entries and withdrawals between the original account and the reservation account in Creation are carried out online via Xemac or via Swift. Settlement takes place in Creation. In addition, book entries and withdrawals in Creation can be automated by means of the auto allocation mechanisms in Xemac (Swift message types or online).

- Exposure requests: Clients can specify amounts of collateral online or, as an alternative, via Swift message types. These are automatically transferred from the original account to the reservation account through the allocation of collateral of the stipulated quality.
- Management of claim amounts: Clients can adjust online via Xemac or alternatively via Swift message types the level of claim amounts.
- Client reference numbers: By creating client reference numbers it is possible, through Xemac, to form a number of pools of collateral and manage them separately.
- Allocation: In the case of allocations that can be carried out manually, but are usually caused by the system, Xemac allocates collateral to claims. At the same time, the system ensures that the eligibility and valuation criteria are observed, in accordance with the definitions underlying the contract in question.
- Substitution: Substitutions are brought about online in Xemac or take place automatically under certain conditions. After release, the corresponding securities are available for re-transfer or for alternative use in Xemac.
- Reports: Xemac provides comprehensive reports on a daily basis. Individual reports can also be generated on demand. The reports can be saved for further processing. The report "Allocated Collateral" can be received in Swift format MT569 via Swift, MQ or File Transfer.
- Income administration: Investment income is automatically credited to the entitled beneficiary. Securities that are no longer eligible (for example, after final maturity) are automatically substituted. For the treatment of corporate actions for under-collateralised pledges see [section "Entitlement determination and relevant information"](#) on page 5 - 13.

8. Special Services

8.1 Registered shares in CASCADE-RS

The settlement of registered shares takes place in T2S. The positions of registered shares in CASCADE will still be reflected in CASCADE-RS (Registered Shares). Also, CASCADE-RS includes expanded settlement processes to take account of the particular requirements regarding the reporting of the shareholders for registration in the share ledger, with electronic interfaces to the issuer and the share ledger manager. In the case of registered shares, the CBF client's securities account positions are classified into the three types of positions described below. In addition to this, the positions are kept on the level of individual shareholders. The depository specifies a client reference number in the positions, which allows a clear allocation of the positions in the bank's CBF account to the shareholders registered in the share ledger. In T2S the positions are flagged via T2S earmarking.

Unregistered positions (Freier Meldebestand – FMB)

The unregistered positions include the positions where the owner and the registered shareholder are not yet or no longer identical. These positions are created by the preparations for settlement of a sell transaction (transfer of positions) or they are built up by depositing registered shares in collective safe custody, in as far as the bank that causes this to be done specifies this when entering the deposit. Positions from securities transfers received or settlements of stock exchange trades are also part of the unregistered positions until they are re-registered (causing the new shareholder to be registered in the share ledger). Only unregistered positions can be used for settlement of stock exchange trades and OTC transactions.

The unregistered positions (FMB) are flagged in T2S with the position type AWAS "AvailableWithNoAdditionalStatus". These positions are available for settlement.

The total unregistered positions of all CBF accounts generally means all shareholders (shareholder numbers, positions, date of entry in the unregistered positions) of a securities class that have been transferred from the registered positions to the unregistered positions. The movements of the unregistered positions follow the FiFo (first in first out) principle. This means that the positions with the earliest date of entry in the unregistered positions are the first to be sent to the share ledger when a re-registration is reported to the share ledger. On receipt of feedback confirming successful processing in the share ledger, they are deleted from the unregistered positions.

Allocated positions (Zugewiesener Meldebestand – ZMB)

Allocated positions is the term used to designate the transitional stage where a re-registration or a first registration (as the result of a capital increase) has already been requested from the issuer or the share ledger manager, but has not yet been confirmed.

The allocated positions (ZMB) are flagged in T2S with the position type RSHB "Earmarking Registered Shares (ZMB / HB)". These positions are not available for settlement.

Registered positions (Hauptbestand – HB)

The registered positions contain the positions where the beneficial owner and the registered shareholder are identical. These positions are formed by CASCADE-RS processing of the confirmation of a re-registration or first registration from the issuer or share ledger manager (feedback) or through the deposit of registered shares in collective safe custody, in as far as the bank that causes this to be done specifies this when depositing the shares.

The registered positions (HB) are also flagged in T2S with the position type RSHB "Earmarking Registered Shares (ZMB / HB)". These positions are not available for settlement.

Holders of registered shares who are not yet registered as shareholders in the share ledger are entitled to benefit from distributions of dividends and corporate actions due to the holdings in their securities accounts, but do not yet have shareholder rights, such as the right to attend the general meeting or the right to exercise voting rights.

The following diagram gives an overview of the special requirements regarding the settlement of securities transactions with registered shares.

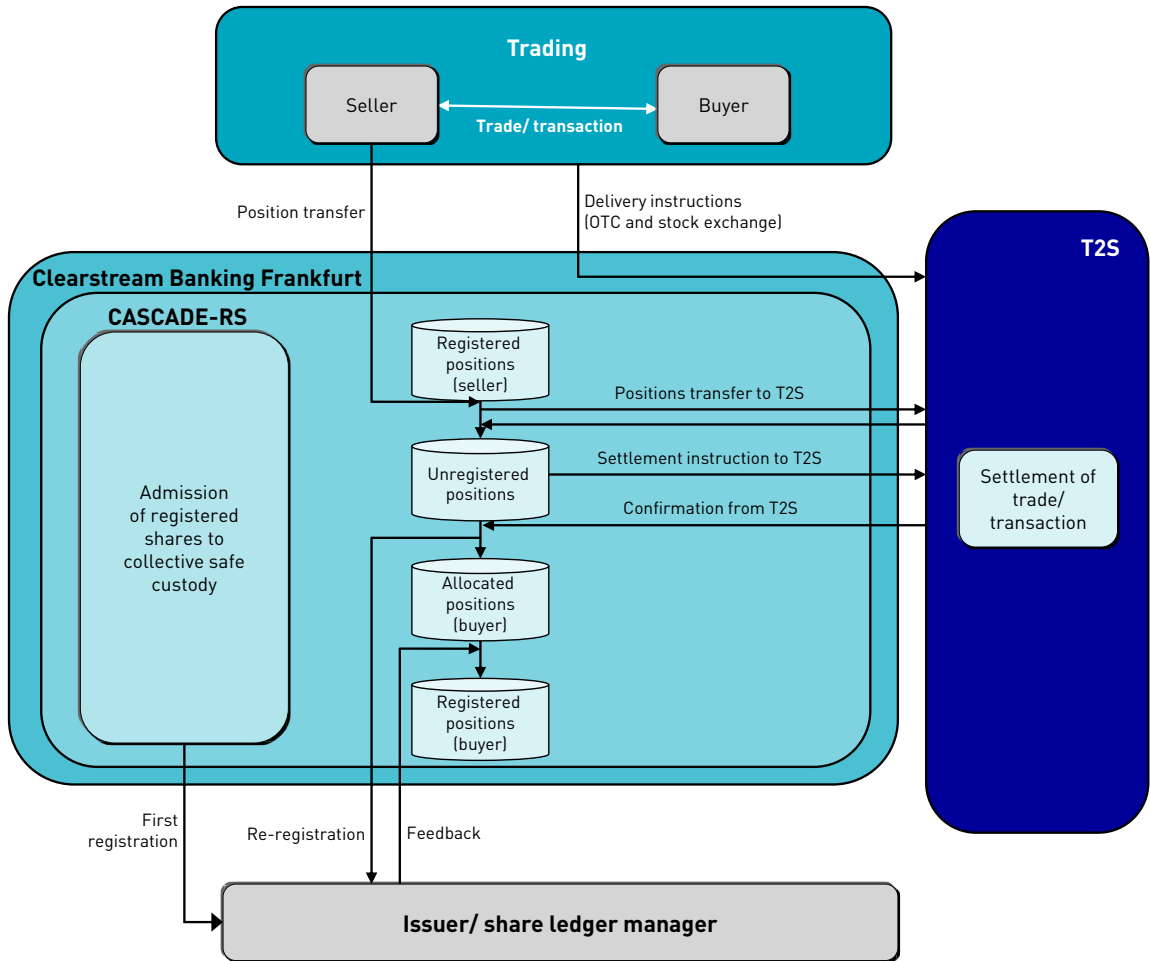


Figure 8.1 Admission of registered shares, trading and settlement

For the admission of registered shares to collective safe custody there is an important distinction to note as compared with bearer shares: the requirement that the issuer or the share ledger manager keeps a share ledger.

The processes for instruction placement and processing in relation to OTC transactions and stock exchange trades in registered shares are no different from those in relation to bearer shares (see [Chapter 4. 'Settlement Services'](#) on page 4 - 1). Additional requirements arise for CBF clients as instructing parties or as sellers due to the different way that positions of registered shares are kept. There are also differences for the receiving parties or buyers due to the statutory duty to report new shareholders to the issuer or share ledger manager (Section 67 1 of the German Stock Corporation Act – Aktiengesetz - AktG).

Admission of registered shares to collective safe custody

There are three ways in which registered shares are admitted to collective safe custody and to CASCADE-RS:

- First deposit: The deposit of physical individual certificates as registered shares from individual safe custody to create CSC positions. If the existing share ledger is used, the first deposit can be made into the registered positions.
- The conversion of bearer shares into registered shares: The conversion of bearer shares into registered shares, followed by the re-registration of the shares in the names of the shareholders. A new ISIN will be allocated to the registered shares.
- The initial public offering of a company (IPO) with the issue of registered shares: After the allocation and transfer of the positions, the shareholders are reported for registration in the share ledger by means of a re-registration process.

Entry/modification of shareholder data

The first registration of shareholders in the share ledger, on admission of registered shares to collective safe custody or in the case of credits in the form of registered shares resulting from Corporate Actions, is carried out via CASCADE-RS. In CASCADE-RS, the respective instructions are generated and forwarded to T2S. The shareholder data to be reported include the name, the date of birth (for legal entities: the date of formation, if known) and the address of the holder as well as the quantity of shares held. CASCADE-RS sends the shareholder data to the share ledger of the issuer or to the share ledger manager and, as a feedback, receives confirmation that registration has taken place.

The unregistered positions resulting from corporate actions (freier Meldebestand aus Kapitalmaßnahmen - FMB-KE) as well as the allocated positions resulting from corporate actions (zugewiesene Meldebestand aus Kapitalmaßnahmen - ZMB-KE) are initially flagged in T2S with the position type RSKE "Earmarking Registered Shares Kapitalmaßnahme (FMB KE / ZMB KE)". With the successful registration the position type of the positions is changed in T2S from RSKE to RSHB.

These positions are not available for settlement.

Modifications to shareholder data, when there is a change of address for example, can also be sent electronically by the CBF client via CASCADE-RS. No modifications may be made to shareholder data if the identity of the shareholder has changed (for example, from an individual shareholder to a community of shareholders, from a testator to a community of heirs etc).

Transfer of positions

The settlement of OTC transactions and stock exchange trades in registered shares takes place only in the unregistered positions. The instructing party in respect of an OTC securities transfer or the seller in a stock exchange trade must therefore transfer sufficient positions from the selling shareholder's registered positions to the unregistered positions in order to settle the transaction. Therefore, CASCADE-RS instructs the transfer from position type RSHB to AWAS. The transfer of positions is a FoP instruction in the same CBF account (debit account = credit account).

The client reference number clearly identifies the shareholder. Processing can take place via all T2S settlement cycles (see [section "Settlement"](#) on page 1 - 6). Ideally, the transfer of positions is carried out immediately after the trade/transaction, but it must be processed by no later than in the settlement cycle in which the securities transaction is settled.

Settlement of the securities transaction triggers the book transfer in the unregistered positions, from the seller's bank to the buyer's bank. The receiving party or buyer thus becomes the beneficial owner and can utilise the securities for further deliveries. However, as the previous shareholder is still registered in the share ledger, without the buyer's bank having sent a new instruction for re-registration, the new shareholder does not yet have any shareholder rights (member's rights) vis-à-vis the company on the basis of the acquired holdings.

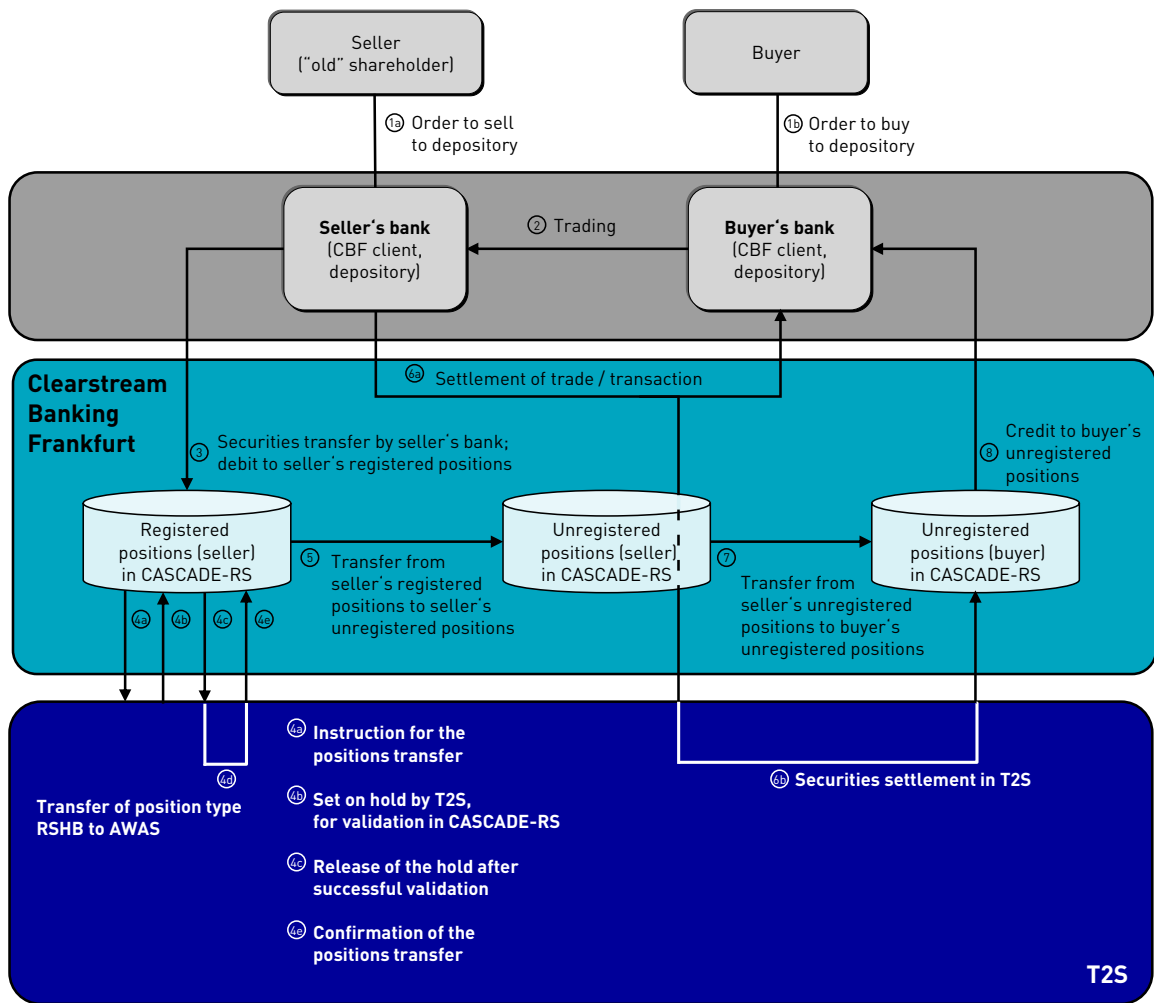


Figure 8.2 Settlement of deliveries in registered shares

In the case of transactions for CBF clients' own account, the beneficial owner is identical with the seller/instructing party or the buyer/receiving party, as shown in the illustration above.

Re-registration

Section 67,4(1) German Stock Corporation Law makes it obligatory for CBF clients, as the banks involved in transferring registered shares or keeping them in custody, to notify the issuer or the share ledger manager of the details needed to keep the share register.

In order to discharge the legal obligations this involves, CBF, in its role as the depository of the holder of the registered shares, enables its clients to have the shareholders re-registered in the share ledger. Responsibility for this is in the hands of the receiving or buyer's bank within a securities transaction that keeps all registered shares in the unregistered positions after they have been acquired.

For this purpose, the receiving or buyer's bank, enters a re-registration instruction via CASCADE-RS with the data of the new shareholder to be entered in the share ledger. When a re-registration instruction is passed on to the share ledger, CASCADE-RS adds the data of the shareholder or shareholders who are to be overwritten by the new shareholder and the value of their positions. The shareholders to be overwritten are always the shareholders who have the oldest unregistered positions in terms of the date of entry (FiFo principle).

The re-registration instructions sent by the banks are allocated twice daily so that a book transfer is made from the receiving party's or buyer's unregistered positions to the allocated positions. All allocated instructions are provided with the data of the old shareholder who is to be removed from the share register, when the instructions are passed on to the issuer or the share ledger manager end of day.

In T2S, the position type of the positions is changed from AWAS to RSHB.

After the positive feedback from the issuer or the share ledger manager has been processed in CASCADE-RS (usually start of next day), CBF effects the transfer from the receiving party's or buyer's allocated positions to its registered positions. When the name of the holder of the registered shares is entered in the share ledger, this new shareholder then has all shareholder rights. Sometimes the feedback concerning re-registration may be negative, as the result of an erroneous re-registration instruction or rejection by the issuer (particularly in the case of registered shares with restricted transferability). In the case of negative feedback from the issuer or share ledger manager, CBF transfers the receiving party's or buyer's allocated positions back to the unregistered positions, that is, the position type of the positions is changed again to AWAS in T2S.

If the holder of registered shares is not entered in the share ledger, Section 67, 4(5) of the German Stock Corporation Law requires that the depository, at the issuer's request, is separately registered in the share ledger in place of the holder of the registered shares.

For positions that have not been re-registered at the end of daytime processing, and therefore remain unregistered positions, CBF offers the issuer two services for automatic re-registration.

- Participation in the service known as automated re-registration in the name of the nominee (ALU) in accordance with Section 67, 4(5) of the German Stock Corporation Law. The depository is entered in the share ledger as nominee.
- Participation in the service known as automated re-registration as interim holding (AU). Here CBF only reports interim positions to the share ledger. The name of the depository is also supplied for purposes of information.

Details concerning the two services are described in the [Product information: Dual Automated Reregistration Service - for banks and issuers of registered shares](#) (only in German).

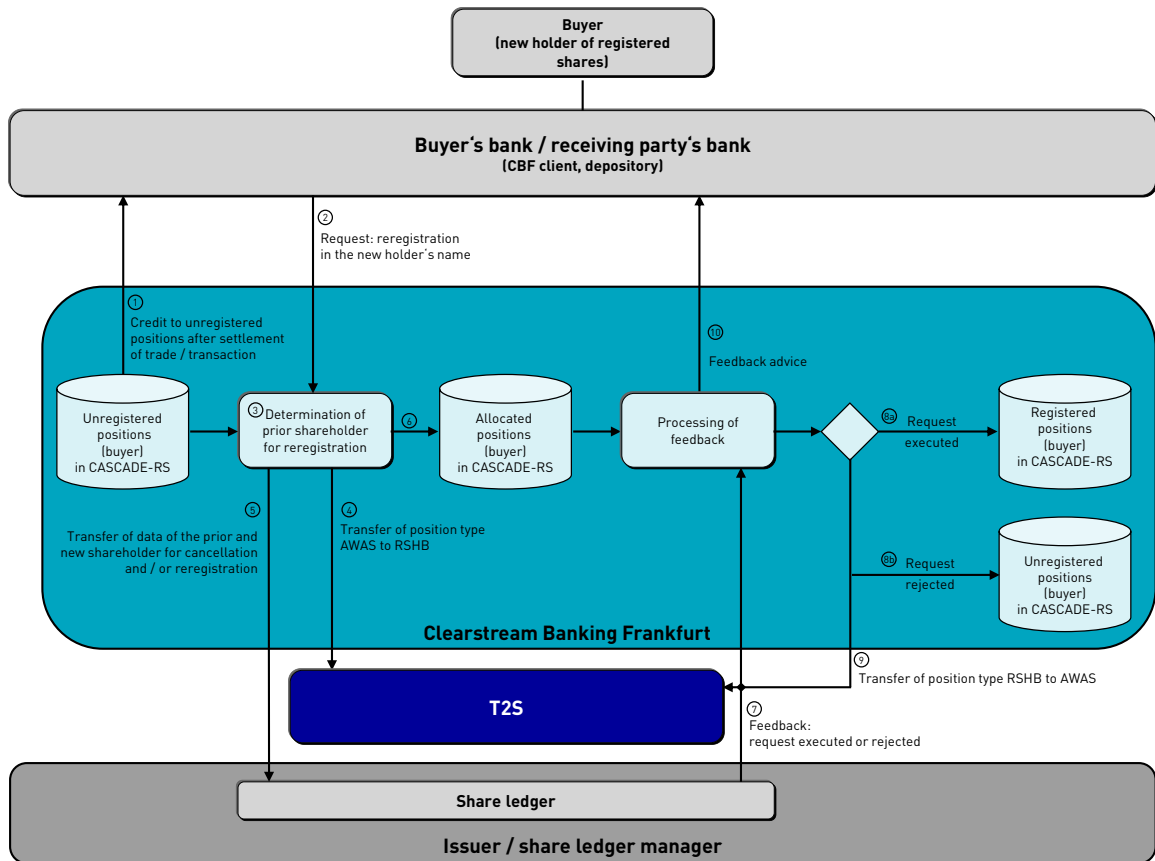


Figure 8.3 Re-registration of a shareholder in the share ledger

Securities account transfers

If a shareholder switches to another depository, this is shown in CASCADE-RS by means of a securities account transfer from the registered positions of the old depository to the registered positions of the new depository, without any change of ownership. A notice is sent to the share ledger with the name of the new depository where the positions are now kept.

In CASCADE-RS, securities account transfers due to a change in the client reference number (for example) take place within the bank's CBF account, without any information being sent to the share ledger. The debit bank and the credit bank are identical here. Nor is there any change in the shareholder's identity.

In order to keep the positions in T2S and in CASCADE-RS in sync, some securities account transfers have to be forwarded to T2S. Securities account transfers within a CBF client account, that only serve to change the client reference number, are not forwarded to T2S. Securities account transfers between CBF accounts without any change of ownership are forwarded to T2S.

As the position type in T2S is not a matching criterion, the instructions are blocked after matching with a CSD validation hold. Afterwards CBF checks whether the position type of the instructions matches or whether there is cross-matching. If the positions types match, CBF releases the CSD validation hold. In the case of cross-matching, the instructions are cancelled and have to be re-instructed.

8.2 French registered securities

For information on the processing of French securities and in particular the conditions for French registered securities, please refer to the [Market Link Guide - France](#). The following section provides a brief summary of the registration process.

Registration process

Registration principles

CBF handles the registration process for VEN (Essentially Registered Securities - “Valeurs Essentiellement Nominatives”), VON (Occasionally Registered Securities - “Valeurs Occasionnellement Nominatives”) and LBS (Loyalty Bonus Shares (LBS) - “Primes de fidélité” (PF)) directly with Euroclear France (issuance of BRN - “Bordereau de Référence Nominative”) on behalf of clients.

CBF forwards the beneficial owner (BO) details for registration via third parties within four business days after settlement was executed on T2S.

If the client provides no registration details for VENs, the securities will be registered in the name of CBF.

If the registration fails with Euroclear France or the issuer, CBF informs clients on how to proceed.

Registration details

Clients provide the registration details (for example the beneficial owner) through settlement instructions or corporate action instructions. For further details, please refer to the [Market Link Guide - France](#).

8.3 Settlement of TEFRA D securities

According to the TEFRA D Rules (which relate to the “Tax Equity and Fiscal Responsibility Act of 1982” for U.S. securities sold abroad), no U.S. citizen or anybody who has been resident in the U.S.A. for longer than 183 days may buy a TEFRA D security in the first 40 calendar days after the date of issue. This must be checked by the depository and reported to CBF. For further details, please refer to the [OneClearstream Client Handbook](#), section 5.1 Exchanges.

8.4 T2S Auto-Collateralisation

Besides the liquidity resulting from transfers from a RTGS main account, allowed credit lines as well as from already settled RvP, RvP or PFoD-CRDT transactions, clients can also use liquidity from the automatic utilisation of intraday credits, respectively credit line increases for the cash settlement in T2S.

T2S auto-collateralisation is a functionality provided by T2S, that allows the automatic generation of additional cash liquidity related to securities transactions, where there is insufficient liquidity for the settlement of the securities transactions, by using eligible securities either from a respectively configured account (on stock) or partially from the transaction itself (on flow) as collateral.

When using T2S Auto-Collateralisation on flow, the total amount of the respective settlement instruction cannot be covered fully on flow due to the haircut that is considered for the calculation of the value of the collateral and / or the difference between the purchase price and the valuation price. In that

case, either liquidity has to be available in the respective DCA or additionally T2S Auto-Collateralisation on stock has to be used.

For the provision of additional liquidity from T2S Auto-Collateralisation, two different forms apply:

- A client uses his own DCA as intraday credit on the DCA by the respective central bank (Central Bank collateralisation).
- A client uses the DCA of payment bank, as increase of the credit line of the DCA by the payment bank (Client collateralisation).

In both cases, it is required that the respective central bank or payment bank offers the service actively and the client is registered there accordingly. With the registration process, it is possible to specify an individual minimum amount. If this value is defined, the minimum amount specified is always provided using the T2S Auto-Collateralisation functionality. This means that even if the liquidity requirement needed to process the instruction is lower, the defined minimum amount is provided on the DCA.

In addition, the client has to request the respective configuration at CBF in order to use such a service.

CBF supports the following collateral management procedures:

- REPO procedure: The used collateral is transferred from a collateral providing account of the client to a collateral receiving account¹ of the respective central bank or payment bank;
- PLEDGE procedure (supported by T2S for Central Bank collateralisation only): The used collateral is transferred from the client's collateral providing account to his collateral receiving account where it is pledged to the respective central bank.

The collateral providing account of a client is either the main account or a sub-account. If a sub-account is used clients have to transfer securities positions to be available as collateral for T2S Auto-Collateralisation to this account by themselves.

For T2S Auto-Collateralisation, the following has to be considered:

- For OTC instructions, the respective securities instructions can be entered for the main account or for a sub-account in order to apply T2S Auto-Collateralisation on flow (see [Figure 8.5](#)). If no collateral providing account is used, T2S Auto-Collateralisation on stock applies (see [Figure 8.7](#)).
- For stock exchange instructions, T2S Auto-Collateralisation on flow the main account can be used. If a sub-account for T2S Auto-Collateralisation is used, it is required to set up an additional instruction in order to receive the securities from the stock exchange instruction on the collateral providing account and to link this instruction with the original instruction with a WITH link (see [Figure 8.6](#)).

When opening an account, the client defines whether T2S Auto-Collateralisation is to be used. The collateral providing account can be a main account or a sub-account in the same or a different account master. The respective account will be flagged with T2S earmarking "EXXX" or "EEUR"¹ that T2S recognises the account as collateral providing account.

1. Clients who want to offer Client Collateralisation as a payment bank themselves; can have the respective configuration of a collateral receiving account by CBF.

Examples:

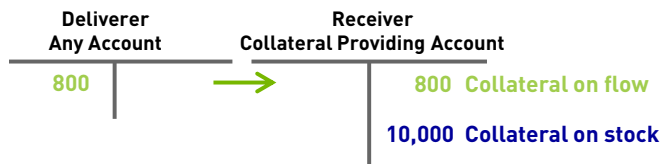


Figure 8.5 T2S Auto-Collateralisation on flow

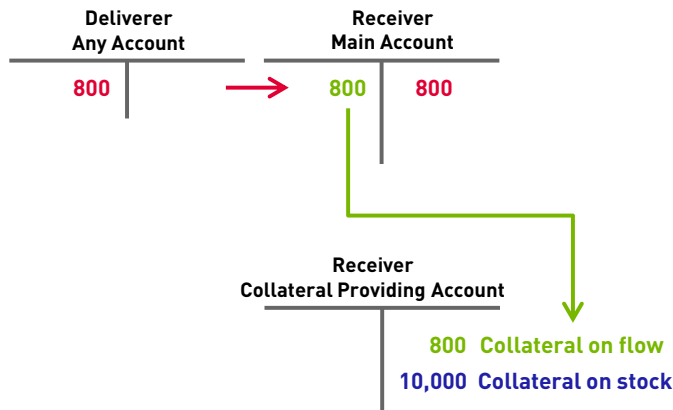


Figure 8.6 T2S Auto-Collateralisation on flow with "WITH-Link"

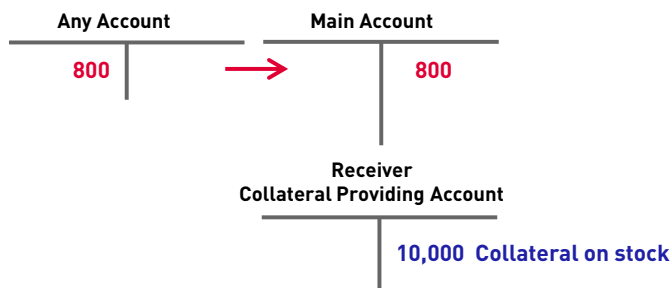


Figure 8.7 T2S Auto-Collateralisation on stock

Generally, an intraday credit has to be reimbursed to the central bank by the end of the business day. Here T2S automatically generates reimbursement instructions that have to be released by the client.

Additionally, reimbursement instructions related to Central Bank Collateralisation, that have not been released so far, are automatically released by T2S at 16:30. In case such an instruction cannot be settled until the end of the day due to insufficient cash on the DCA, the intraday credit is changed into an overnight credit at the same central bank, where the respective interests and if applicable extra fees occur. Details can be found in the general conditions of the respective central bank.

8.5 Collateral valuation

Through the General Terms and Conditions, CBF has a general right of retention and set-off on all assets held on the client's account that secure obligations towards CBF by the client for the services rendered by CBF. All assets held by the client in CBF are pledged in favour of CBF to the extent of any credit facilities granted to the client.

The client is required to notify CBF if there are any assets, held by CBF in any account, that the client is not entitled to use as collateral against its own obligations towards CBF. This may apply, for example, to securities held on behalf of the client's underlying clients.

The calculation of collateral values is illustrated in [Figure 8.8](#) below.

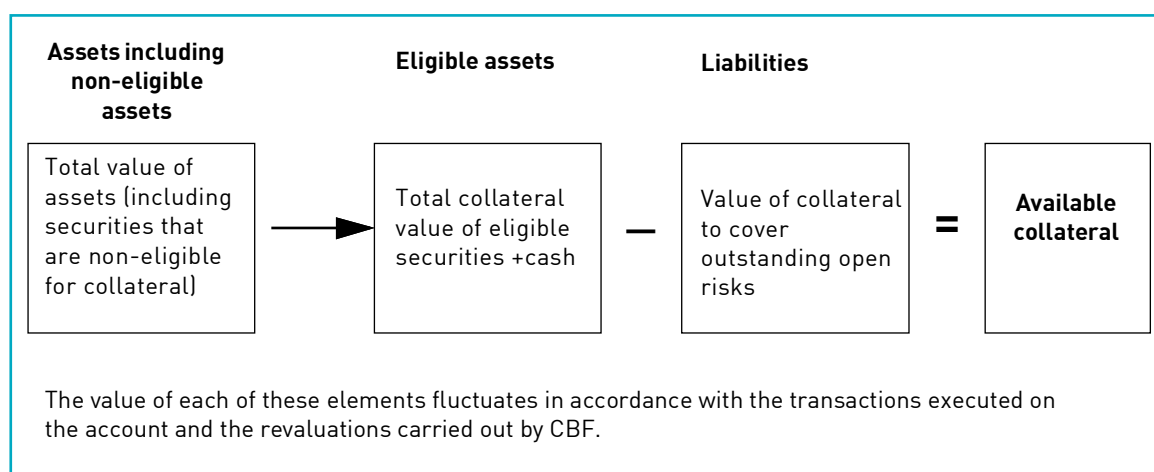


Figure 8.8 Calculation of collateral values

Securities and other holdings of the client's underlying clients that cannot be pledged to secure the obligations of the client itself should be segregated into a separate safe custody account, under notification to CBF that this is a client account. If the client fails to inform CBF that securities and other holdings are not available for pledging, then CBF is entitled to assume that all the securities and other holdings are available to be taken as collateral when conducting business on behalf of the client.

CBF monitors collateral to support:

- Clearing and settlement activity;
- Unconfirmed Funds Facilities.

Securities and other holdings that are pledged against a credit facility provided for securities borrowing are excluded from the calculation of collateral to cover any other credit arrangements.

The collateral value of all securities and other holdings on the client's account must at all times be equal to, or greater than, the total value of all obligations that CBF undertakes on behalf of the client.

The enforcement of any pledge granted in favour of CBF pursuant to its Governing Documents or other client documentation is carried out in accordance with such documentation and (unless otherwise agreed) by Luxembourg law, it being understood that such enforcement methods may be carried out alternatively or cumulatively. Unless expressly agreed otherwise, if such enforcement is carried out by:

- sale, CBF will determine the price by selecting and accepting in good faith offer(s) for any collateral determined by CBF to be liquidated. This sale can be organised by selling such assets in a private sale at normal commercial terms, in an organised sale or in a public sale (whether or not, at CBF's discretion, made by or through a stock exchange).

The value of the pledged collateral will be the price obtained in such sale.

- appropriation, such appropriation will be made at the value determined by CBF at its absolute discretion and acting in good faith, or by any neutral third party appointed by CBF, or any other pricing information services selected by CBF, each time selected by CBF at its sole discretion for the purposes of making or assisting it in making such determination, considering inter alia any listed price (if any), any published net asset value (if any), the respective market spreads, and any liquidation impacts. Such determinations shall be binding on the client absent manifest error.

For the avoidance of doubt, such determination process can be carried out before or after the appropriation. The value of the pledged collateral will be determined as at the date of the appropriation. The value of the pledged collateral will be the one so determined. CBF may elect, in its sole discretion, to appoint another person to which the right to appropriate the pledged collateral shall be transferred in lieu of CBF, it being understood that such appointment shall not affect CBF's rights and obligations against the relevant pledgor.

CBF shall be indemnified by the client on first demand against all legal, administrative or others costs, expenses and fees which CBF may incur in preserving, enforcing or obtaining its rights, or attempting the same, as well as any costs, expenses and fees (including legal fees) relating to the enforcement of any pledge granted in favour of CBF pursuant to its Governing Documents or other client documentation.

Eligibility of securities

Type of instrument

CBF decides whether a security is accepted as collateral. The security rating and the conditions of the security, such as the size of the issue, its currency of denomination, its special characteristics, its liquidity or its volatility may be decisive factors in accepting a security as eligible for collateral. The fact that an issue is not accepted as collateral should not necessarily be taken as an indication that the paper is of poor or doubtful quality.

The eligibility for collateral purposes of specific securities is indicated by the collateral value in the MT535 (Statement of Holdings) and also in the Xact Web Portal reference data query "Financial Instruments" indicated in the "Collateral Percentage" field.

The following instruments are eligible as collateral to support cash Financing facilities:

- Fixed income securities with a minimum S&P, Fitch or Moody's rating of BBB-/Baa3:
 - issued by sovereigns and central banks;
 - issued by local and regional governments;
 - issued by government agencies and supranational institutions;
 - issued by corporate and credit institutions;
 - European covered bonds.
- Selected Equities included in STOXX Europe 50 and STOXX North America 50 indices.

The following instruments are not eligible:

- Investment funds;
- Warrants;
- Structured securities, for example CDO, CLO, CLN, MBS;
- Own paper (excluded).

Collateral margins

Securities that are eligible are subject to "margin" deduction from their market value when the collateral value of a holding is calculated.

CBF's methodology for the collateral value of securities is composed of various elements (risk factors), among which - instrument type, credit risk associated with the financial instrument, issuer type and country of the issuer, the maturity of the asset, asset's price volatility and liquidity, as well as the wrong-way risk linked to the collateral security¹.

In addition to a haircut based on the risk factors, the haircut of the central bank issuing the currency should be the floor to assign a haircut. CBF applies this comparison check for all major central banks: the European Central Bank (ECB), the United States Federal Reserve (FED), the Bank of England (BoE) and the Bank of Japan (BoJ).

The following table provides an overview of the indicative ranges for the haircuts applied:

High-rated government bonds:	4% to 10%	Equities:	30%
Supranational bonds:	4% to 10%	AA rated corporate bonds:	12% to 32%
Other government bonds:	7% to 37%	A rated corporate bonds:	14% to 35%
AAA rated corporate bonds:	11% to 29%	BBB rated corporate bonds:	19% to 40%

These are indicative haircuts, and additional margins are applied for securities issued in other currencies to cover FX risk. CBF reserves the right to make exceptions to eligibility rules and haircuts at its own discretion.

Securities prices are automatically collected, on a daily basis, from several recognised external information providers, such as Bloomberg, IDC (Interactive Data Corporation) and SIX Financial Information. Securities collateral with a price age older than two days will be considered as ineligible.

Price age	Additional margin
0-2 days	0%
Over 2 days	100%

Collateral tier

As required by Article 9 (1), point (b), sub-point (i) to sub-point (iii) of the above-mentioned regulation, CBF has a collateral hierarchy (four separate collateral tiers), which categorises collateral securities based on their quality and liquidity, by having HLC assets for T1a, T1b and T2 and non-HLC assets classified as T3.

Note: CBF uses the term HLC (Highly Liquid Collateral) in place of the term QLR (Qualifying Liquid Resource) used in the regulation.

QLR are constituted of HLC with minimal credit and market risk.

The minimum HLC is currently set by CBF at 0%. CBF reserves the right to change the minimum in the future.

Tier	Collateral	HLC	Description
T1A	Y	Y	Highly liquid collateral (sovereigns, central banks, multilateral development banks and European mechanisms issuances)
T1B	Y	Y	Highly liquid collateral (liquid instruments of good quality issued by reliable issuer with low credit risk)
T2	Y	Y	Highly liquid collateral (transferable instruments that are ECB eligible)

1. The wrong-way risk in the meaning of Article 291 of Regulation (EU) No 575/2013.

Tier	Collateral	HLC	Description
T3	Y	N	High quality collateral (other transferable instruments)
T4	N	N	Not available for collateral

Collateral concentration limits

Concentration levels will be calculated based on end of day and intraday peak exposure collateral positions of clients with secured credit facilities.

Concentration limits are set in accordance with Article 14 of Commission Delegated Regulation (EU) 2017/390 of 11 November 2016 (supplementing Regulation (EU) No 909/2014). Both absolute (amount-based) and relative limits (percentage-based) per concentration criteria are applicable, whereas amount-based limit acts as a minimum enforceable threshold.

The concentration limits will be applied on the following criteria:

Concentration criteria	Concentration limits application	Absolute limits in USD	Relative limits
Issuer	<p>Maximum concentration of securities issued by entities belonging to same group.</p> <p>No concentration limit applies on securities issued or guaranteed by governments, central banks, German states or supranational organisations rated BBB (S&P Global Ratings/Fitch) and above or Baa2 (Moody's) and above.</p>	250,000,000	25%
Country	<p>Maximum concentration on any single country rated BBB- (S&P Global Ratings/Fitch) or Baa3 (Moody's).</p> <p>No concentration limit applies on securities where the country of issuer is rated BBB (S&P Global Ratings/Fitch) and above or Baa2 (Moody's) and above.</p>	250,000,000	15%
Wrong way risk – Issuer type	<p>Maximum concentration on securities issued by financial institutions rated BBB- (S&P Global Ratings/Fitch) or Baa3 (Moody's).</p> <p>No concentration limit on securities issued by financial institutions rated BBB (S&P Global Ratings/Fitch) and above or Baa2 (Moody's) and above.</p>	100,000,000	25%
Wrong way risk – Same country	<p>Maximum concentration on securities issued by entities of the same country as that of the client if country is rated BBB- (S&P Global Ratings/Fitch) or Baa3 (Moody's).</p> <p>No concentration limit applies if the country is rated BBB (S&P Global Ratings/Fitch) and above or Baa2 (Moody's) and above.</p>	250,000,000	15%

Concentration criteria	Concentration limits application	Absolute limits in USD	Relative limits
Instrument type	Maximum concentration on equities, Certificates of Deposit, Commercial Paper and Stripped Bonds.		
	Equities:	200,000,000	20%
	Certificates of Deposit/Commercial Paper:	50,000,000	5%
	Stripped Bonds:	50,000,000	10%
Settlement currency	Maximum concentration on securities issued in non-major currencies.		50%
	No concentration limit on securities issued in the major currencies: EUR, USD and GBP.		
	CAD, CHF, JPY	500,000,000	
	AUD, DKK, NOK, SEK	250,000,000	
	HKD, SGD, MXN, PLN, NZD, CZK, HUF, ZAR CNY	50,000,000 10,000,000	
Credit rating	Maximum concentration on securities rated BBB- (S&P Global Ratings/Fitch) or Baa3 (Moody's).	100,000,000	25%
	No concentration limit on instruments rated BBB (S&P Global Ratings/Fitch) and above or Baa2 (Moody's) and above.		
ECB eligibility	Maximum concentration on securities not eligible at the European Central Bank (ECB).	500,000,000	55%
Liquidity	Maximum concentration on securities with low liquidity score.	50,000,000	10%
Price volatility	Maximum concentration on securities with high volatility score.	250,000,000	15%
	Maximum concentration on securities with very high volatility score.	10,000,000	15%

CBF will monitor cases where a client breaches any of the above-listed concentration limits. CBF will analyse breaches of the concentration limits and inform clients accordingly.

Clients will be granted time to accommodate to the new collateral concentration limits criteria.

Highly liquid collateral

Highly liquid collateral is collateral with minimal credit and market risk. For more details, please refer to Article 34 of the Level 2 text - Regulation (EU) 2017/390 on regulatory technical standards (RTS) on prudential requirements as published in the Official Journal on 10 March 2017, available on the [Clearstream website](#).

Eligibility of account positions

The position within an account balance is also, along with the type of instrument, a critical factor in determining eligibility for collateral calculation. The available balance on the account is included in the

valuation for collateral purposes. Other balances or positions can be included in or excluded from the calculation of collateral as follows:

- The collateral value of drawn securities and positions blocked for redemption is also maintained.
- Pledged positions taken as collateral, normally against securities borrowing positions, are excluded.
- The collateral value of securities debited on Bridge/external deliveries is maintained until confirmation of settlement or, in the case of fails, re-credit of the securities.

Eligibility of cash

CBF applies haircuts on cash positions which are used as collateral. The haircut for cash collateral depends on the FX-volatility of the collateral currency. Currencies in which CBF does not grant credit limits will be assigned a 100% haircut.

Valuation

Prices and exchange rates

CBF obtains price quotation information on a daily basis from major information suppliers. Exchange rates to evaluate all currencies in USD are determined daily by CBF based on market conditions.

Revaluation

Updated information on prices and currency exchange rates is incorporated in the settlement processing and is reflected in the MT535 (Statement of Holdings). Security prices reported in this statement are for information only. During each settlement processing, a revaluation is undertaken of both the value of the eligible securities on the account and the value of the cash borrowing and risks against which collateral is held, based on the updated information on prices and currency exchange rates.

Included in the revaluation are changes that have occurred in the eligibility of securities for collateral purposes. CBF reviews the list of eligible securities on an ongoing basis and may enter changes at any time during the real-time processing. CBF may change the eligibility of any issue for collateral at its sole discretion.

Changes in collateral eligibility of securities, as well as movements in prices and currency exchange rates used in the calculation, may cause the value of collateral to fall below that of the outstanding borrowing against which collateral is held. In such cases, the account may be blocked in the settlement processing and Transactions may remain unsettled.

8.6 Interest calculations and reporting

The calculation of interest for a given month is reported to clients in the Monthly Interest Scale report, Notification of Interest (MT935), which is available in the morning of the tenth calendar day of the following month (or, if that is not a business day, on the next available business day after that).

Debit interest is charged on value dated debit balances and is reported as an MT103, or MT200/202 transaction. However, where the total amount of monthly debit interest in a currency is less than USD 10.00 or equivalent, no charge is made.

The daily interest rate shall be composed of the following:

- the available interbank money market overnight offer rate for the relevant currency; and
- a risk weighted debit margin applied in accordance with CBL's risk assessment on the CBL credit user and the currency group availability.

Client debit margins

Currencies	Rating	Risk weighted debit margin
USD, CHF, GBP, AUD, CAD, DKK, NOK, SEK, JPY; EUR and NZD	AA or A	1.50%
	B	2.00%
	C or D	2.25%
	E, F or G	2.50%
	H, I, J or K	3.75%
		4.50%
HKD		2.50%
ZAR		5.50%
PLN		3.50%
CZK		4.50%
HUF		4.00%
HKD		4.50%
ZAR		7.50%
PLN		5.50%
CZK		6.50%
HUF		6.00%
Other currencies		4.50%

8.7 Third-party services for individual safe custody

CBF offers its clients third-party services for individual safe custody services with complete, system-supported safekeeping and administration for positions in individual safe custody (jacket custody) and special positions.

The safekeeping service includes:

- Individual safe custody (jacket custody) for bank clients;
- All kinds of consignment positions (special deposit (Vorratslager), blank certificates etc.);
- Valuables by individual agreement.

CBF's administration services for its clients include:

- Deposits and withdrawals;
- Transfer of positions into another account reference within one individual custody position or to another individual safe custody client;
- Coupon collection and payment processing;
- Donation register administration;
- Exchange and cancellation of certificates;
- Re-registration of registered shares;
- Delivery of securities in non-collective safe custody;

- Number ledger management;
- Reporting;
- Reconciliation service;
- Destruction of securities and coupons;
- Special services (settlement agent for coupon collection in the case of own issues and third-party issues, provision of renewal coupons, exchange of certificates).

The following diagram shows an example of the process for deposits and withdrawals in the context of third-party services for individual safe custody.

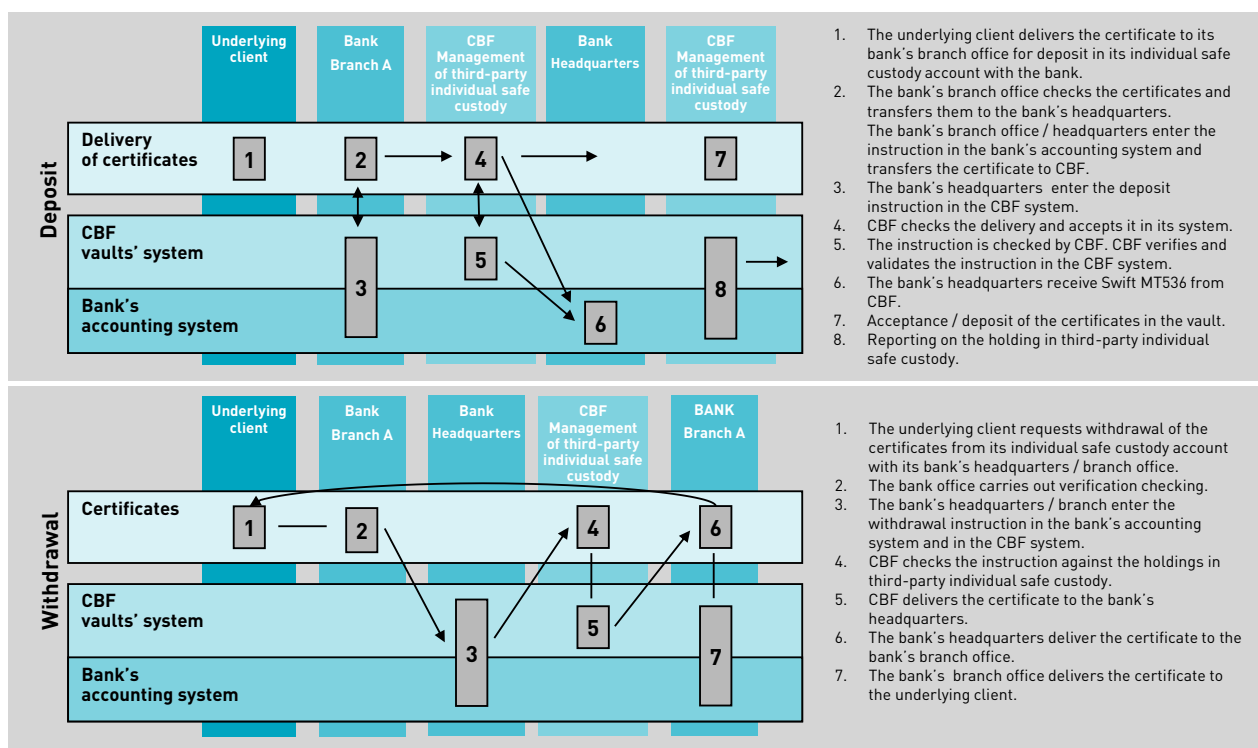


Figure 8.9 Third-party services for individual safe custody - example of deposits and withdrawals

The migration of vault-related services to CBF is agreed individually with the client. In addition to physical migration "in one go" gradual migration is also possible.

8.8 Taxbox (German flat rate withholding tax)

Due to the German flat rate withholding tax ("Abgeltungsteuer") that was introduced in Germany on 1 January 2009, banks and investment management companies (Kapitalverwaltungsgesellschaften - KVG) whose clients transfer their securities accounts to other banks or investment management companies are obliged by law to send the tax-relevant data to the new institution.

In consultation with the leading associations in the German financial industry (BdB, DSGVO, BVI, BVR), CBF's "Taxbox" service offers a platform for the electronic transfer of the data needed for the correct calculation of the tax payable, when securities are transferred to another bank. The service comprises the following data transfer features:

- Transfer of purchase data: information on the purchase of investments by a private investor (for example, ISIN, date purchased, price, nominal value, fees and charges).
- Transfer of data regarding amounts to be offset, for example, information from the depository regarding the taxpayer and realised losses that can be offset against the tax and information concerning tax paid at source in other countries.

The data is transmitted according to a fixed standard as far as form and content are concerned. The transmission routes available to the users of the service are File Transfer (LIMA) or the internet (HOBLink) with an upload/download function.

The delivery of the tax-relevant data is separate from the actual settlement process and is therefore also fully available for transfers of securities that have not been processed by the systems of CBF. Furthermore, the platform is also available for use by institutions that are not clients of CBF, but who handle the administration and communication of tax-relevant data for their clients (for example, investment management companies (Kapitalverwaltungsgesellschaften; KVG)).

Detailed information on this service can be found in the [Connectivity Handbook Taxbox](#).

8.9 Risk Management Service for settlement agents

CBF offers a post-trade Risk Management Service for CBF participants processing central counterparty (CCP) instructions in a settlement agent capacity.

This service offers additional protection for CBF participants by validating the hold indicator defined at instruction level on inbound settlement instructions generated by the CCP. For CBF participants, this validation step allows for internal risk and position checks before it is actively released by the participant.

CBF will enable the definition of a validation rule, ensuring that:

- Only instructions put on hold (that is, Party Hold) by an instructing party (DCP) on a CBF participant account are accepted for settlement.
- The CCP is not able to release any instruction itself.
- Any instruction violating such rule will not be accepted by CBF.

The service is subject to bilateral agreements between CCPs and settlement agents.

On a case-by-case basis CBF will perform a feasibility assessment.

8.10 Shareholder identification under Shareholder Rights Directive II (SRD II)

The [Shareholder Rights Directive](#) provides the right to issuers for identification of their shareholders. Issuers (or their nominated third-party provider) can request intermediaries at each level of the custody chain to provide relevant information to facilitate such identification.

In line with Market Standards for Shareholder Identification and the SRD II requirements, CBF will, upon receipt of the shareholder identification request validate (when acting as first intermediary) and transmit this request without delay to the next intermediaries in the custody chain. A response to the shareholder identification request shall be sent by every intermediary in the custody chain without delay directly to the response recipient's address defined in the request. CBF, in its role as intermediary, will also generate a response to the recipient with information regarding the shareholder's identity, limited to CBF books only.

For markets subject to SRD II, please refer to the Disclosure Requirements for the relevant market on the Clearstream website. Clients are strongly recommended to seek legal guidance on the existence and scope of SRD II requirements (for example, threshold, eligible assets) applicable to these clients and related to their holdings.

8.11 Cash Financing services

CBF acts solely as a Securities Settlement System and not as a payment system or a Cash Correspondent Bank. Without prejudice of any further action under the terms of our General Terms and Conditions, CBF reserves the right to block and/or to reject any payment either received for credit to a client account in CBF or processed from such account, that could qualify as a third party payment, or where the final beneficiary is not a corporate institution or a financial institution. Payments made by a CBF client to its settlement counterparty in CBF in relation to bilaterally agreed cash compensations on transactions settled in CBF are not deemed to be a third party payment. Furthermore since only cash transfers are permitted, clients may not instruct via an MT100 series type message and must use the appropriate MT200 series type message unless CBF has specifically agreed otherwise.

CBF provides to clients various services for the management of their cash positions and foreign exchange. The services are addressing CBFi accounts. These services include two alternative Financing arrangements available to clients:

- Unconfirmed Funds Facility.
An intraday Financing facility that is available for settling securities Transactions and cash withdrawal.
- Technical Overdraft Facility (TOF) or Umbrella Credit and Collateral Services Facility (UCCS).
- A short-term Financing facility that is available for settling securities Transactions.

Further details are given in this chapter.

Cash correspondents

For every Settlement currency, at least one Cash Correspondent is appointed to handle the external payment and receipt of funds between the domestic banking system for the currency and CBF. Details of the Cash Correspondent banks are provided for each market link on the Clearstream website.

Cash management and Financing

Each CBF account has a cash as well as a securities component. The cash management services provided by CBF are available for all currencies accepted in CBF (unless specified otherwise).

Cash deposit is a banking type service that shall be directly related to CBF's core or ancillary services and used for operational purposes with CBF only. Clients shall ensure that all payment obligations related to CBF's services are met in due time. Cash holding entails in this respect a credit risk against CBF and/or a default of CBF's cash correspondent bank.

Note: Clients' long balances held with CBF at the end of day may not be subject to remuneration.

CBF reserves the right to apply additional charge against clients' long balances kept overnight with CBF to reflect adverse conditions encountered on the relevant markets, as the case may be.

The subjects covered in this chapter are summarised as follows:

- Currencies accepted in CBF and the network of Cash Correspondent banks, in section "[Settlement currencies and Cash Correspondent banks](#)" on page 8-20;
- Cash instruction deadlines, in section "[Cash instruction processing](#)" on page 8-20;
- Cash instruction Types, including "life cycle" diagrams, in section "[Cash instruction types - Missed cash deadlines](#)" on page 8-24;

- Foreign exchange (FX) services: automatic; case-by-case; service on securities Settlement instructions, in section "[Foreign Exchange services](#)" on page 8-30;
- Collateral valuation, in section "[Interest calculations and reporting](#)" on page 8-45;
- Interest calculation, in section "[Interest calculations and reporting](#)" on page 8-45.

Settlement currencies and Cash Correspondent banks

Almost all the currencies accepted in CBF are Settlement currencies, which can be used to make clean payments and to settle against payment Transactions, irrespective of the currency in which the securities are issued.

Occasionally, CBF may accept securities for Settlement that are denominated in a non-Settlement currency. In such a case, funds movements in the currency of denomination are not possible in CBF, but the securities can be received or delivered against payment in any other CBF Settlement currency. All currencies are identified by their ISO currency code.

A network of correspondent banks administers external cash Transactions for the various Settlement currencies accepted. The operations carried out by the correspondent banks include the receipt and confirmation of acceptance of funds remitted for credit to client accounts at CBF and the execution of payments.

A list of the currencies accepted in CBF and the relevant correspondent banks is given in the Cash Timings Matrix on the Clearstream website. A complete list of eligible Settlement and non-Settlement currencies is available on the Clearstream website.

A complete list of cash instruction input deadlines for all currencies is available in the form of the Cash Timings Matrix on the Clearstream website. All timings in this matrix are given in CET unless otherwise noted. Cash instruction input deadlines are aligned with local times which means that Clearstream takes daylight saving time (DST) changes around the world into account when setting its CET deadlines.

Consolidated lists of eligible currencies and their domestic market holidays (in the form of the Cash and Securities Holidays matrix) is available on the Clearstream website.

In case of severe stress causing a (potential) shortage of a non-relevant currency, the CSD may decide that the provisional settlement services in non-relevant currencies could be executed for their equivalent value in a relevant currency as per Article 36.9 of Delegated Regulation (EU) 2017/390.

In such a case, Clearstream will inform clients and provide information which currencies are affected.

All settlement and cash withdrawal instructions in a non-relevant currency (already in the system or newly received) will be put on hold until the shortage of a non-relevant currency is over.

Clients willing to withdraw cash in the non-relevant currencies can receive the equivalent value in EUR, provided they:

- Cancel their pending cash withdrawal instruction in non-relevant currency; and
- Send free format message instructions (for example, MT599, MT299) asking for a FX for the equivalent value in EUR.

Cash instruction processing

Cash deadlines

Currencies are grouped according to instruction deadline, stated in Central European Time (CET) and standard for all communications media.

Clearstream's CET instruction deadlines take daylight saving time (DST) changes around the world into account. Therefore, the cash instruction input deadline will not change in local time but, when seasonal time changes occur in the local market, the CET deadline will automatically adjust in order to maintain a consistent local market deadline.

For instruction deadlines (published in CET only) please refer to the Cash Timings Matrix and the Settlement Timings Matrix on the Clearstream website.

For a consolidated list of domestic market holidays, please refer to the Cash and Securities Holidays matrix.

Deadlines are published for the entire year and will be updated in October every year. In the interim, any ad-hoc updates to timings will be performed on a case-by-case basis.

Cash repair performed on client cash instruction

There are two types of cash repair service, defined in the following sections:

- Automatic, which is performed for all clients and cannot be unsubscribed from.
- Optional, which is performed for clients whose account is flagged with Cash Repair = Yes.

Notes

1. Optional cash repair is set by default to all CBF client accounts, unless explicitly requested by the client, via Swift free-format message, to unsubscribe from this service. If the optional cash repair service is unsubscribed, repair services will be disabled in the above-mentioned cases.
2. Cash repair will only be performed on an MT103 solely to the extent that the clients are authorised by CBF to use this message type for payments from CBF.
3. Clients are reminded that the requirements of the Funds Transfer Regulation EU 2015/847 must be met at all times and ensure they provide in their instructions, when applicable, the requested information about the payer and the payee. CBF will not provide any repair service should this information be missing or incomplete. Clients not meeting the requirements of EU Regulation 2015/ 847 may experience late processing or rejection of their instruction by the CBF Cash Correspondent banks.

Automatic cash repair

Missing Clearstream account number (Swift only)

Upon receipt of a Swift cash instruction with no instructing account specified, the Clearstream cash processing system will automatically repair the instruction by substituting for the missing account as follows:

- If a principal account has been predefined at the client's request, this principal account will be used.
- If no principal account has been predefined, the cash instruction is rejected and the sender automatically notified via an authenticated message.

Note: Clients can predefine a principal account, from among their existing accounts, by sending an authenticated Swift free-format message, for the attention of PRGconnect indicating that they want to define a specific account as the "Principal account for the BIC ABCDEFGHXXX". This account will then be used in reference to the repair of cash instructions via Swift. For securities instructions, the client should always indicate the relevant account.

Free text mentioned in payment party fields

Upon receipt of a cash withdrawal of funds (all media) where payment parties are used with free text, the Clearstream cash processing system will automatically convert the name and address to its corresponding Swift BIC code, as long as a corresponding entry is present in the Swift BIC book directory. Should the conversion not be applied, the free text will remain in the Swift message that is sent out to Clearstream's Cash Correspondent and potentially delay further the payment of the funds.

Missed cash deadlines (Non-STP EUR withdrawal of funds only¹)

A special handling applies to non-STP [Straight-Through-Processing] EUR withdrawal of funds instructions received after the standard client EUR deadline (16:00).

1. For a description of non-STP EUR withdrawal of funds instructions, see section "[MT103 or MT200/202 instructions - Withdrawal of funds](#)" on page 8-26.

- If instruction is eligible² and received before the client T2 RTGS deadline (16:30), the late non-STP withdrawal instruction (without /RT indication) will be automatically repaired to be processed via T2 RTGS.
- If instruction is not eligible (not T2 RTGS format compliant¹) or if the non-STP EUR withdrawal instruction arrives after the T2 RTGS client deadline, then normal handling is applied (see section "[Cash instruction types - Missed cash deadlines](#)" on page 8-24).

Optional cash repair

Missed cash deadlines

Instructions eligible for the automatic cash repair service, described above, are excluded.

Late pre-advice and withdrawal of funds instructions that are subject to the optional cash repair service will be automatically repaired. Instructions that have missed the client deadline will be accepted for next available processing with next applicable value, the sender is not automatically notified.

If the optional cash repair service flag is set to NO, pre-advice and withdrawal of funds instructions that arrive later than the published deadline for the currency are automatically rejected and the sender is automatically notified via an authenticated message.

Pre-advice without Cash Correspondent details (Swift only)

Swift Pre-advice received with no Cash Correspondent details that are subject to the optional cash repair service will be automatically repaired, as follows:

- Upon receipt of a cash Pre-advice (MT210) where no Cash Correspondent is specified, the cash processing system will, as long as only one Cash Correspondent is appointed for the specific currency, automatically repair the instruction.
- If several Cash Correspondents are available (for example, for EUR), the Clearstream cash processing system will not be able to repair the instruction.

Pre-advice of funds that cannot be repaired and invalid Pre-advice whose optional cash repair service flag is set to NO will, in each case, be automatically rejected and the sender automatically notified via an authenticated message.

Compliance screening of client cash instruction

A withdrawal of cash instruction that contains free text in field :72: will be stopped and checked for compliance purposes.

Cancellations and amendments to instructions

Clients cannot amend a cash instruction already sent to CBF.

Cash instructions can be cancelled and a new instruction sent provided that the cancellation instruction and the new instruction are received before the deadline for the relevant instruction Type (or, in the case of Pre-advice, the earliest deadline for the value date given in the MT210 instruction - Pre-advice of entry of funds) (see section "[Cash instruction types - Missed cash deadlines](#)" on page 8-24 for details). This only applies to cancellations that fulfil the automatic process format. Free format or non-automatic cancellations will be processed on a best efforts basis.

An MT103 or MT200/MT202 instruction - withdrawal of funds cannot be cancelled or amended in the following circumstances:

- If it has been reported as settled; **and**
- If it has been released for payment.

In these circumstances, the MT103 or MT200/MT202 instruction - withdrawal of funds is considered by CBF to be irrevocable.

1. T2 RTGS Swift format is compliant when the first content in the Intermediary and Account With Institution fields is a valid T2 RTGS direct participant and when only BICs are used to specify Ordering, Intermediary, Account With and Beneficiary Institutions.

An MT210 Pre-advice of funds cannot be cancelled or amended when it is already settled. In case a settled MT210 Pre-advice of funds is nonetheless subject to a cancellation request, the latter will be reported by CBF as “rejected” by MT295. A close monitoring is therefore required by the client for any such cancellation/amendment requests. In the event a cancellation request is rejected unexpectedly, the client should immediately contact Client Services.

Cancellation of uncovered Pre-advice

Standard rule

Pre-advice that are not covered just before the currency deadline on the third Business Day following the theoretical¹ value date are automatically cancelled in CBF unless reconfirmed via Swift (MT299) or free format message to Nostro Operation Department.

Exceptions

Currencies affected are:

1. EUR (TGT)

Where funds should have been sent to the CBF account on the T2 RTGS. Pre-advice that are not covered by 18:00 CET on theoretical¹ value date are cancelled in CBF next Business Day (VD+1) at 09:00 CET.

2. Please see the following table:

AED	AMD	ARS	BGN	BHD	BWP	CNY	CZK	GEL	HUF	IDR	ILS	ISK	KRW	KWD	KZT
MYR	MXN	OMR	PEN	PHP	PLN	RON	RUB	SAR	SGD	THB	TRY	UYU	ZAR		

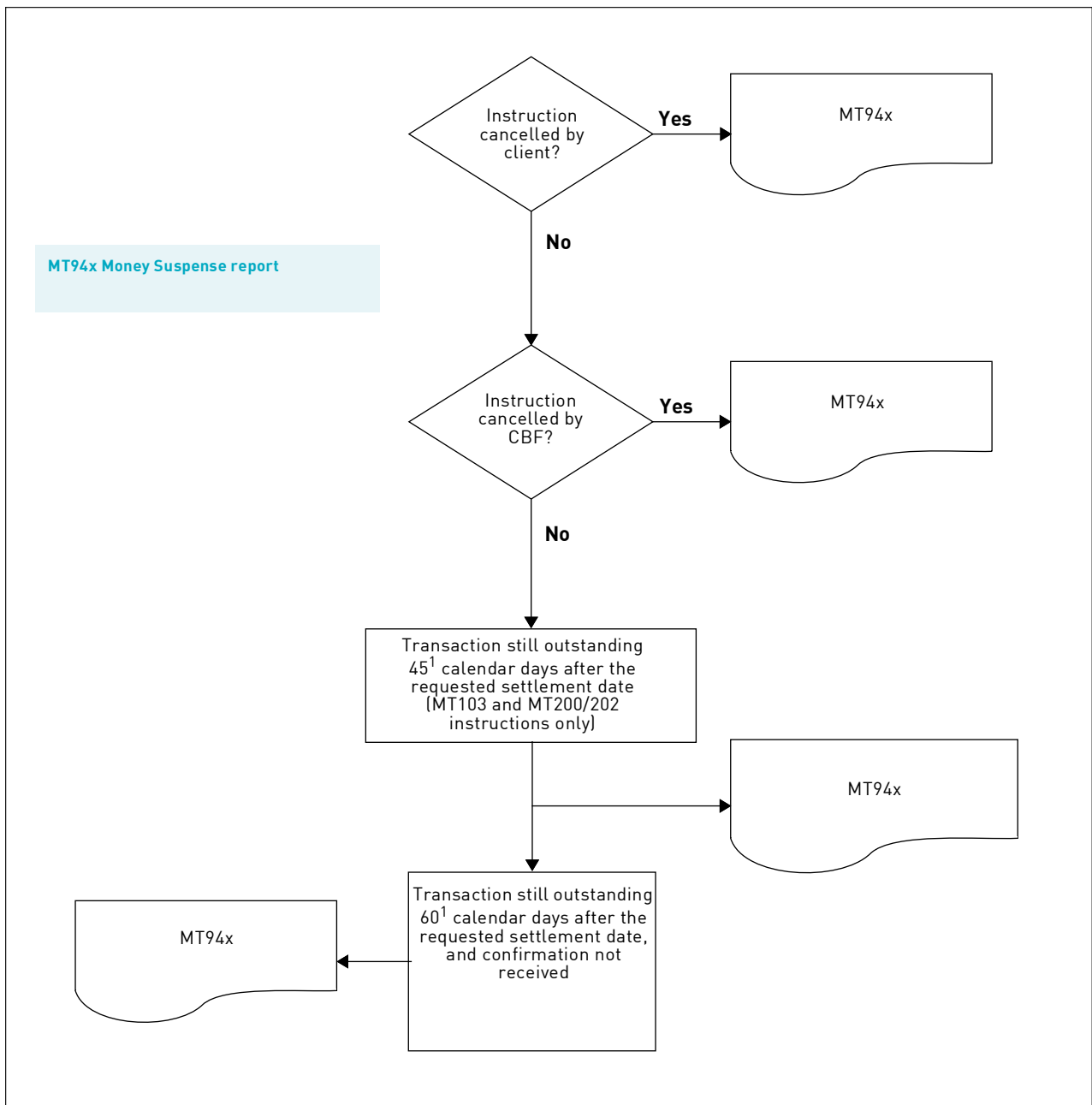
For these above-listed exceptions, pre-advice that are not covered just before the currency deadline on the next Business Day following the theoretical¹ value date are automatically cancelled in CBF.

Charges, as shown in the Clearstream Banking Fee Schedule, are debited to clients should a cancellation of an uncovered Pre-advice be performed by CBF.

Reporting of cancelled cash instructions

Cancelled cash instructions are reported as illustrated in [Figure 8.10](#).

1. Calculated by the CBF system.



1. Only applicable to cash withdrawals and transfers

Figure 8.10 Reporting cancelled cash instructions

Cash instruction types - Missed cash deadlines

MT210 instruction - Pre-advise of entry of funds

An MT210 instruction from a client is a Pre-advise of an entry of funds coming from outside CBF for credit to a client’s CBF account. Funds are remitted through CBF’s Cash Correspondent bank for the relevant currency.

Pre-advices are sent by clients to ensure that funds that they have instructed their correspondent bank to pay to CBF’s Cash Correspondent bank for the relevant currency are considered as Unconfirmed

Funds for Settlement purposes, and they will receive the same value once CBF receives confirmation from its Cash Correspondent bank.

The amount of a Pre-advice must equal the amount transferred. If a client uses a single fund transfer to cover several Pre-advice, the amount transferred will differ from any of the amounts pre-advised and consequently a late covering charge may be incurred.

If a Pre-advice has been received before the applicable deadline, then funds are credited with good value after confirmation of their receipt with good value by the Cash Correspondent. If pre-advised funds are received after the value date for the Pre-advice, then funds are nevertheless credited with the value date of the Pre-advice but a late covering charge will be incurred.

Funds not pre-advised before the applicable deadline will not be credited with good value. If there is no Pre-advice within the deadline, any funds paid to CBF's Cash Correspondent bank will be subsequently identified and applied with the first available value date following that of the missed deadline.

Funds expected by book transfer from another CBF client (MT103 or MT202 instructions) must not be pre-advised. The same applies to credits such as Coupon payments and Redemptions, which are made automatically by CBF.

Transfers of funds can only occur via the Cash Correspondent banks of CBF.

The diagram in [Figure 8.11](#) illustrates the life cycle of an MT210 instruction as described above.

Note: As a general rule, clients are advised to submit Pre-advice on the basis of the net value of Transactions to be settled in each currency for each Settlement Date (rather than on the basis of individual Transactions).

Non-receipt of pre-advised funds

A client who pre-advice funds is responsible for ensuring that the funds are paid as advised. CBF takes all Pre-advice into account in the management of its treasury, thereby enabling clients to be credited with good value.

Non-receipt, however, adversely impacts CBF's actual funds positions with Cash Correspondents and, for this reason, CBF may, at its discretion, levy a penalty debit interest charge on pre-advice funds that have not been received. Clients should therefore ensure that pre-advice funds are actually paid, even if they discover after sending the Pre-advice that sufficient funds are already available on their account.

For cancellations, see section "[Cancellations and amendments to instructions](#)" on page 8-22.

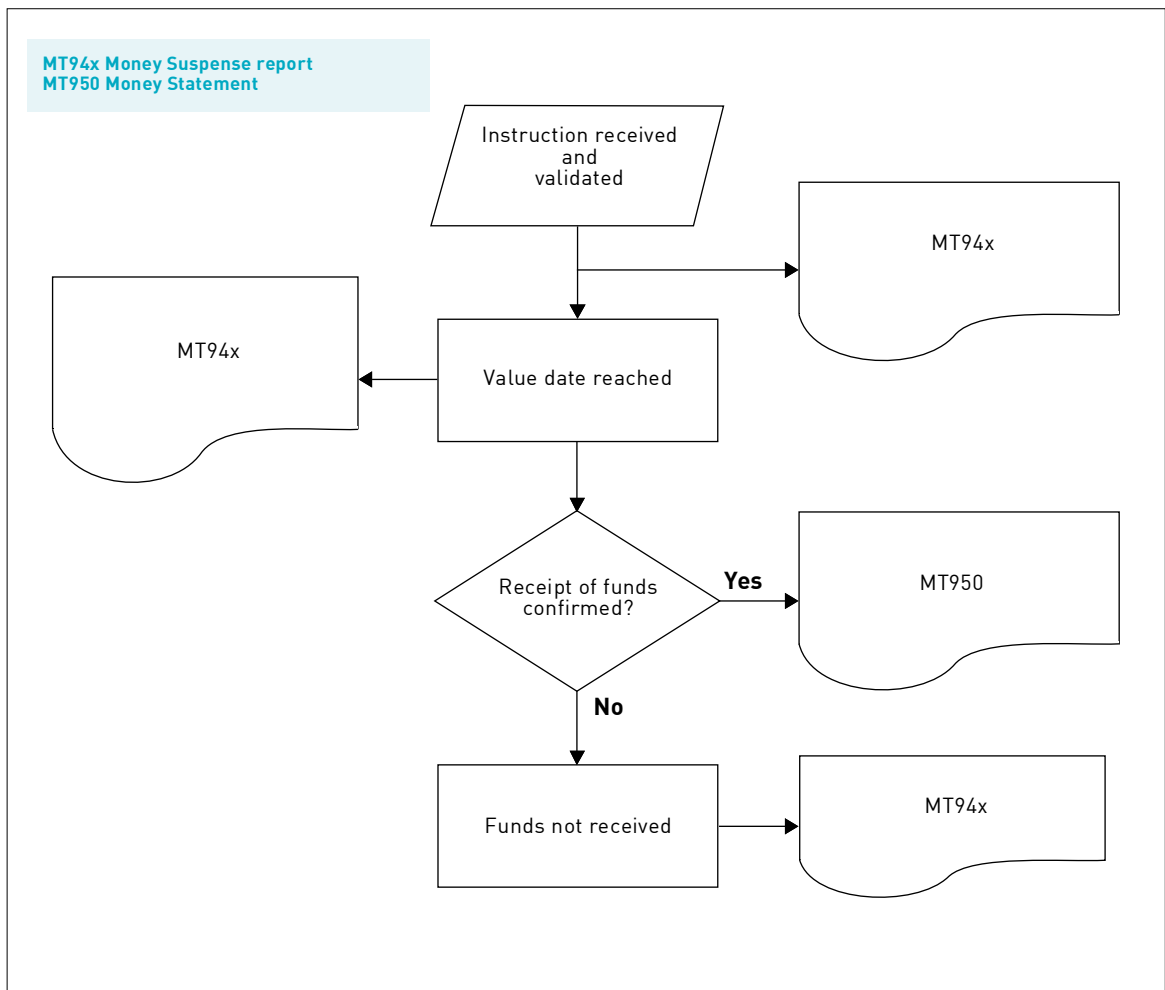


Figure 8.11 Life cycle of an MT210 instruction (Pre-advise of entry of funds)

MT103 or MT200/202 instructions - Withdrawal of funds

An MT103 or MT200/202 instruction is a withdrawal of funds from the client’s CBF account for payment outside CBF. A withdrawal of funds via MT103 is only allowed if the client is authorised by CBF to use this message type for payments from CBF.

Execution of the cash instruction is conditional on a cash Settlement Provision check on the client’s account. According to the Settlement Provision sequence, cash available on the account will be used first to provision securities purchases to maximise Settlement efficiency, provided that the security instruction fulfils the conditions to settle.

MT103 or MT200/202 instructions are processed by the CBF correspondent bank on the Business Day corresponding to the value date in the country of the relevant currency. If the value date requested is a Business Day in CBF, but not in the country of the currency of payment, funds will be paid with the next available value date.

After each Settlement processing, CBF carries out a review of outstanding funds payments. On an exceptional basis, further payments may, at CBF’s discretion, be released **after** the Settlement processing, when the Settlement results are known. Any such payments are reported after the following Settlement processing. The value date applied is that which would have applied in the preceding Settlement processing.

Clients are reminded that CBF will process payments only related to securities Transactions and corporate events. Furthermore, CBF will not process payments when it identifies that the final beneficiary is not a financial institution.

Clients are reminded that the requirements of the Funds Transfer Regulation EU 2015/847 must be met at all times and ensure they provide in their instructions, when applicable, the requested information about the payer and the payee. CBF will not provide any repair service should this information be missing or incomplete. Clients not meeting the requirements of EU Regulation 2015/847 may experience late processing or rejection of their instruction by the CBF Cash Correspondent banks.

To determine whether a BIC (Bank Identifier Code) corresponds to a qualifying financial institution, clients should check the category of participant (please refer to paragraph 9 of the preface to the white pages of the BIC Directory). Some of the categories relate to financial institutions and others to non-financial institutions (please refer to the yellow pages of the BIC Directory). Some categories of non-financial institutions are: TRCO; BEID; MCCO; and TESP.

Other categories have restricted access to Swift services and clients will find the restrictions in the FIN matrix restrictions. A non-connected BIC not belonging to the above listed categories is considered a financial institution. For an exhaustive list of codes, please refer to the latest BIC Directory.

Clients are reminded of the importance of using BICs whenever possible for payment details (fields Pay to, For account of and In favour of). If no BIC exists to identify a party, all possible information (bank's full name and city) should be used to identify it.

For EUR withdrawals of funds, CBF applies a better cash deadline if the EUR withdrawal of funds instructions are STP. To be considered STP, an instruction must follow the format below:

- The Ordering Institution BIC is equal to the Beneficiary Institution BIC.
- Fields that correspond to the payment parties contain a published BIC (no account number should be input in these fields).
- No narrative fields are present.

CBF reserves the right to amend the above mentioned criteria at any given time with notice to its clients.

Any EUR withdrawal of funds instructions that do not follow this format will be considered as non-STP.

The diagram in [Figure 8.12](#) below illustrates the life cycle of an MT103 or MT200/202 instruction as described above.

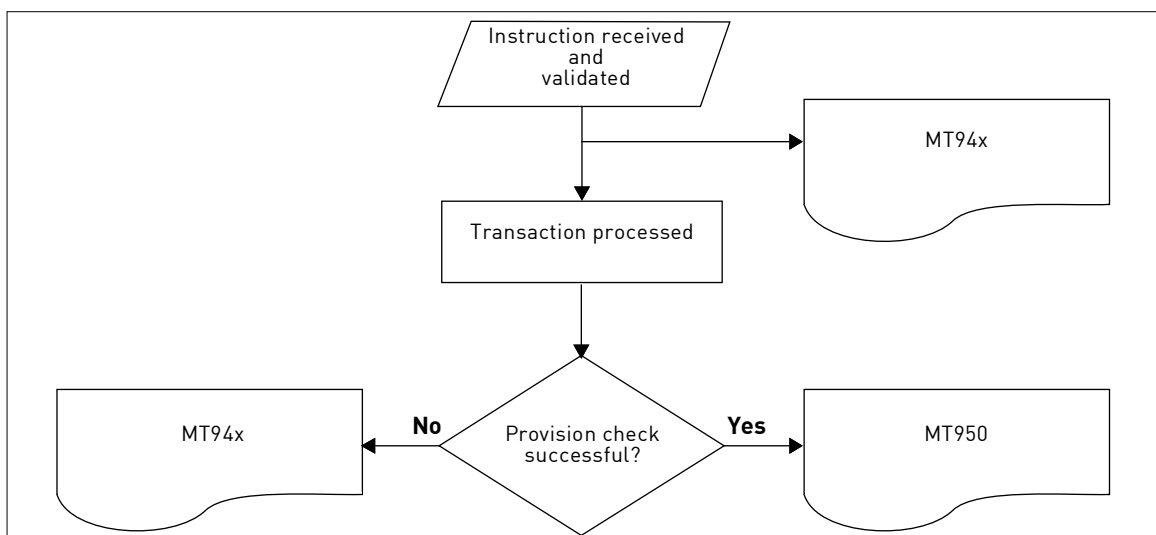


Figure 8.12 Life cycle of an MT103 or MT200/202 instruction

- Withdrawals of funds in currencies **ARS, AMD, BGN, BHD, CAD, CHF, CZK, DKK, EUR, GBP, GEL, HUF, ILS, ISK, KZT, MXN, NOK, OMR, PEN, PLN, RON, RUB, SAR, SEK, TRY, USD, UYU** and **ZAR** are processed from the first available processing for the value date (and continuously thereafter).
- Withdrawals of funds in currencies **AED, AUD, BWP, CNY, HKD, IDR, JPY, KRW, MYR, NZD, PHP** and **SGD** are first processed at the end of day, on the Business Day before the value date and the real-time processing for the value date. Exception: Payment instructions received via MT103 in JPY and NZD will not be processed for same day value in the real-time processing.
- Withdrawals of funds in currencies **KWD, THB** and **XAU** are processed at the end of day, on the Business Day before the value date.

For cancellations, see section "[Cancellations and amendments to instructions](#)" on page 8-22.

MT299 instruction - Foreign Exchange (FX)

An MT299 instruction is provided to request currency conversion in a standardised format.

An MT299 instruction (for the attention of Forex) is used to instruct a FX Transaction on a case-by-case basis (not automatic). The client will define the currency and amount to convert, and indicate both the buy and the sell currencies. The FX request must be for the client's own CBF account.

Example FX instruction:

Account	12345	
Amount/Currency	1,000,000.00	USD
Action buy/sell	buy	
Requested value date	30.10.2015	
Counter currency		EUR

The instruction deadline for this type of service is two Business Days before the requested value date (VD-2), timing depending on the currency. The FX instruction will first undergo a credit and collateral provision check. After the deadline, CBF effects the FX Transaction and debit instructions are generated. Pending instructions are reported in the MT94x (Money Suspense Report). On value date, a credit and debit are posted to the client's account and reported in the MT950 (Money Statement).

An MT299 instruction, once sent, must be considered as irrevocable (unless rejected during the validation process) and cannot be cancelled.

Note: More detailed information about the FX Service is provided in section "[Foreign Exchange services](#)" on page 8-30.

The diagram in [Figure 8.13](#) below illustrates the life cycle of an MT299 instruction as described above and should be viewed in conjunction with [Figure 8.15](#).

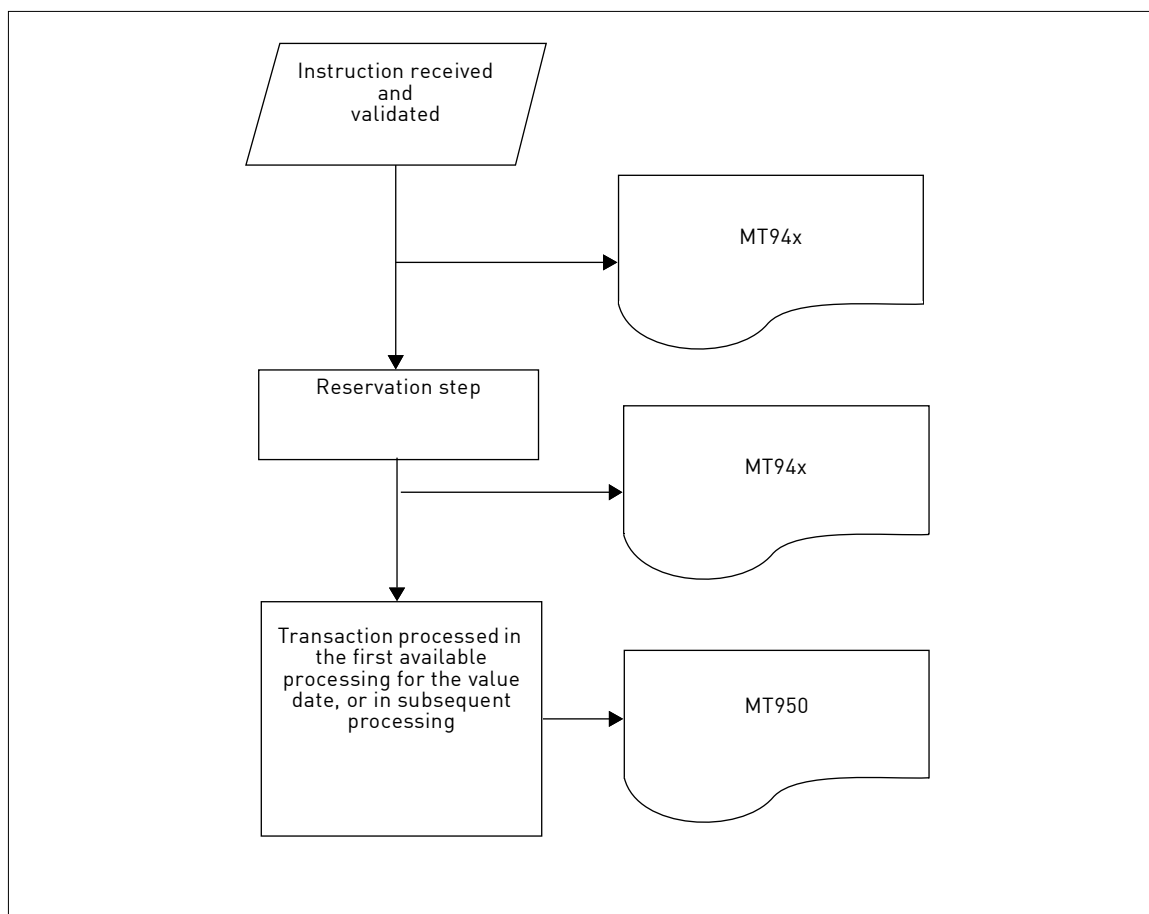


Figure 8.13 Life cycle of a foreign exchange instruction

MT103 or MT202 instruction - Book-entry transfer of funds

Clients must use an MT103 or MT202 instruction to transfer funds from one CBF account to another. These transfers are in Confirmed Funds. A book-entry transfer of funds will create simultaneous entries on both debit and credit accounts. These entries are reported via MT940/MT942, with the related life cycle status, immediately upon receipt of a valid transfer instruction.

Only the client requesting the payment should submit an MT103 or MT202 instruction, by means of which the beneficiary's account will automatically be credited. **The beneficiary must not pre-advise funds to be received by book-entry transfer.** An invalid transfer instruction will be rejected to the instructing party only.

Note: The value date applied to MT103 or MT202 instructions is the Settlement Date of the processing. The MT103 or MT202 instruction is not available for book-entry transfer of funds with back value.

For cancellations, see "[Cancellations and amendments to instructions](#)" on page 8-22.

The diagram in [Figure 8.14](#) below illustrates the life cycle of an MT103 or MT202 instruction as described above and should be viewed in conjunction with [Figure 8.15](#).

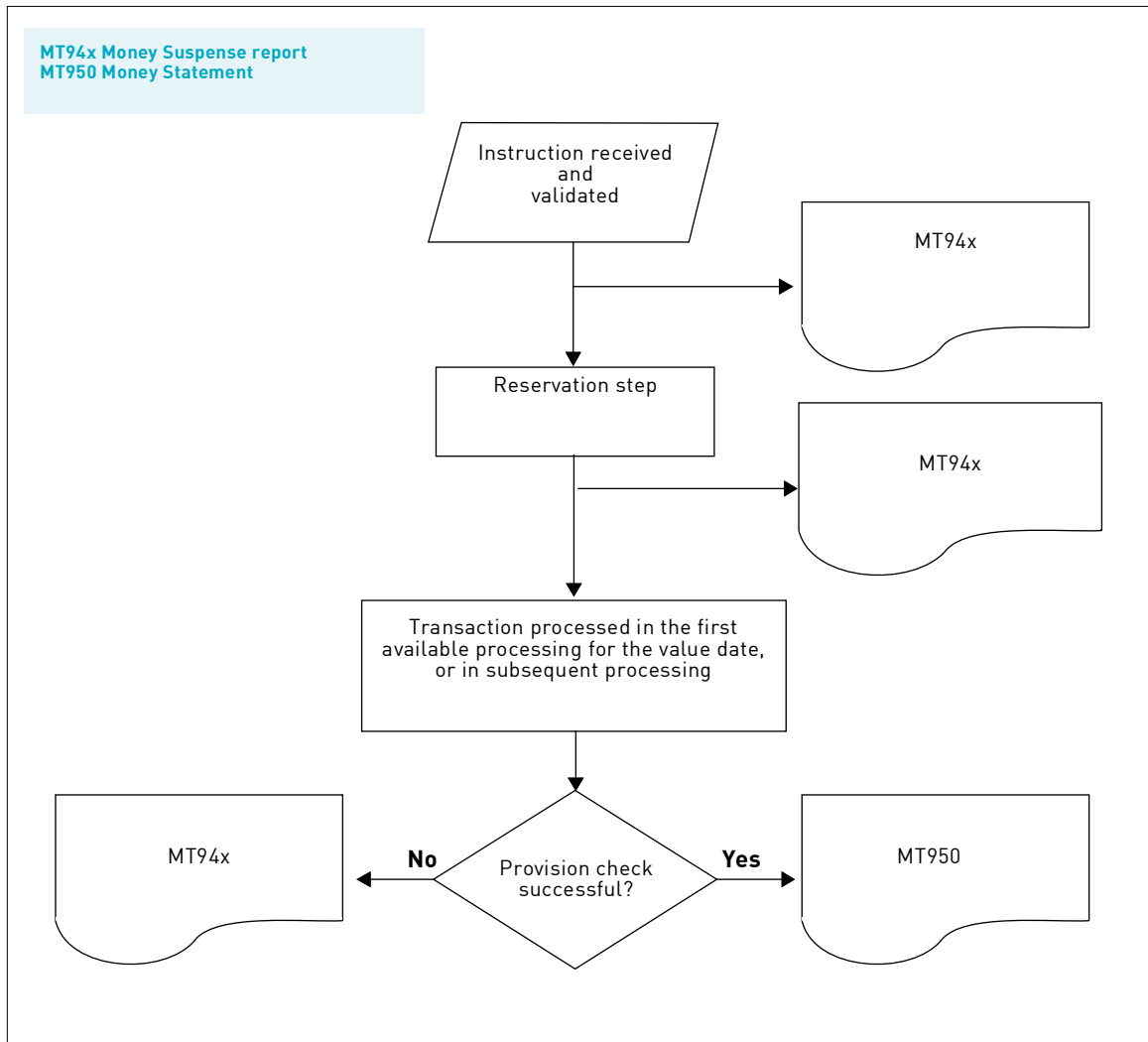


Figure 8.14 Life cycle of an MT103 or MT202 instruction

Foreign Exchange services

CBF offers the following Foreign Exchange (FX) services:

- Automatic FX service for custody proceeds;
- Automatic
- FX service for interest charges;
- Automatic FX service for standard monthly fees;
- FX service for securities Settlement instructions;
- Case-by-case
- FX service.

For CBF to process FX instructions, the client must either have sufficient cash on its account or sufficient credit facility from the Trade Date which is two Business Days before value date (VD-2) by default.

Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1 for selected currencies.

Communications media

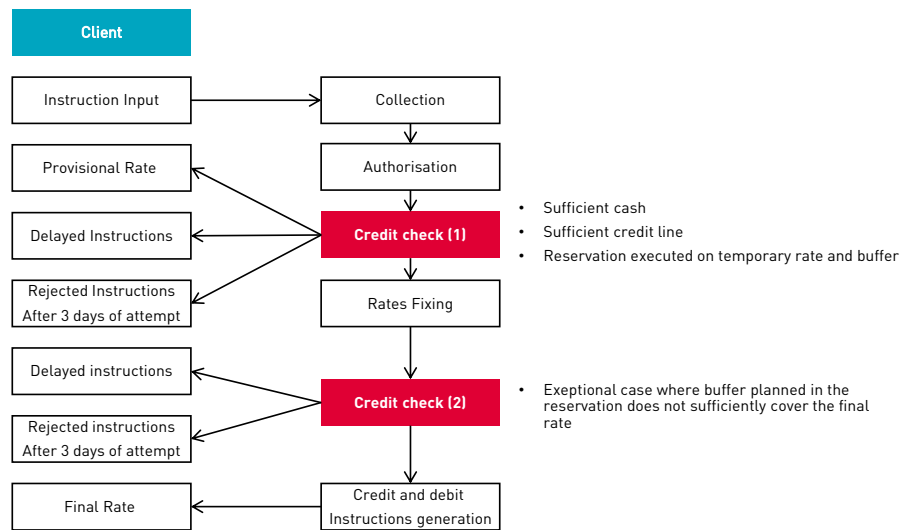
Clients can use the services via the following communications media:

- Automatic FX services
Clients must submit a completed FX service application form.
- Case-by-case
Clients must submit FX instructions using any of the following media, a free format message or 9E instruction via a Swift MT299 or MT599 for the attention of Forex.
- FX service for securities Settlement instructions
For Swift ISO 15022, clients must add the FX request in the field :11A: of against payment securities Settlement instructions.

FX processing life cycle

The following describes the life cycle of an FX instruction:

1. On Trade Date, a valid instruction is input.
2. The instruction is checked against cash and credit availability.
3. The required cash amount is reserved based on a provisional rate. This reservation attempt is made once a day for three (3) consecutive Business Days.
4. If none of the three (3) attempts is successful, the FX instruction will be rejected.
5. If the reservation is successful, the Treasury Department hedges the client’s trade.
6. The client’s FX rate is fixed within the range of the day, and the trade is completed.



3 days is the total number of days for credit check (1) and credit check (2)

Figure 8.15 Life cycle of FX processing

Automatic FX service for custody proceeds

Custody proceeds eligible for this service

The following custody proceeds are eligible for this service:

- Custody proceeds from the following events: INTR, DVCA, CAPG, DECR, SHPR, REDM, PRED, PCAL, MCAL and DRAW;
- Custody proceeds from Collective Safe Custody (CSC) securities in foreign currencies (valid for CBF clients only).

This includes:

- Reversals and value date adjustments of custody proceeds;
- Tax adjustments related to custody proceeds;
- Compensation payments if processed via cash instructions only.

Clients have the ability to have a) only interest and Dividend payments (and related compensations) automatically converted, and/or b) only Redemptions automatically converted.

The conversion applies to both credit and debit custody payments. Custody proceeds are converted on itemised basis.

The automatic FX instruction will only be initiated once the custody proceeds are credited to the account, that is, once the MT566 has been generated and sent to clients, this may delay the processing of the FX by up to one (1) day.

Reversals and value date adjustments

In the case of a reversal on a given custody payment, the original payment and the reversal are performed on two different days. The FX rates used to convert the original income and the reversal amount may vary according to market conditions.

For errors originating from a third party, CBF will apply the FX rate fixed on the date of the processing of the reversal. The results of any fluctuations in exchange rates will be passed on to clients as appropriate. In exceptional cases where CBF is deemed responsible for an error, CBF will apply the FX rate used for the original payment.

Using the Automatic FX service for custody proceeds

The Automatic FX service for custody proceeds enables clients to arrange for interest and Dividend payments and/or Redemption to be automatically exchanged either:

- On payment date, D, into a base currency of their choice with value two days later (D+2); or
- On D+1 with value three days later (D+3). This service is used as described below.

The automatic FX instruction will only be initiated once the MT566 confirmation of proceeds from CBF's depositories and agents has been received and fully reconciled and credited to the account of the client.

Step 1

CBF identifies custody proceeds (debits and credits) eligible for the Automatic FX service:

Credits:

On D/D+1, CBF generates an MT103 or MT200/202 (Withdrawal of funds) instruction in the original currency and an MT210 (Pre-advice of entry of funds) instruction in the converted currency for value D+2/D+3 respectively for each custody proceeds on which an FX Transaction is to be executed.

Debits:

On D/D+1, CBF generates an MT210 (Pre-advice of entry of funds) instruction in the original currency and an MT103 or MT200/202 (withdrawal of funds) instruction in the converted currency for value D+2/D+3 respectively for each custody proceeds on which a FX Transaction is to be executed).

Reporting:

Pending FX instructions are reported in the MT94x (Money Suspense report). Book-entry movements are reported in the MT950 (Money Statement).

FX instructions related to the conversion of custody proceeds are identified by the original custody Instruction Transaction number in the narrative field (position dependent upon other contents of the narrative field). The narrative field also shows the FX rate and the Security Code of the underlying custody proceeds.

Step 2

On D+2/D+3 respectively, the withdrawal of funds instruction and the Pre-advice of entry of funds instruction are posted to the client's account. The same value date is applied to both credit and debit FX instructions.

Reporting:

Pending FX instructions are reported in the MT94x (Money Suspense report). Book-entry movements are reported in the MT950 (Money Statement).

FX instructions related to conversion of custody proceeds are identified by the original custody Instruction Transaction number in the narrative field (position dependent upon other contents of the narrative field). The narrative field also shows the FX rate and the Security Code of the underlying custody proceeds.

Automatic FX service for interest charges

The Automatic FX Service for interest charges allows for a conversion on a monthly basis of all interest charges on clients' cash Balances into a base currency. The converted charges will have the same value date as the original interest charge (except for a currency holiday, in which case the next possible conversion date will be used).

Using the Automatic FX service for interest charges

CBF identifies interest charges eligible for conversion two days before the value date, which is the 15th of the following month (or the next Business Day should the 15th not be a Business Day for CBF and/or the currency is closed). The credit and debit instructions resulting from the conversion will have the same value date as the original interest charge (except for a currency holiday, in which case the next possible conversion date will be used).

Reporting

Pending FX instructions are reported in the MT94x (Money Suspense report). Book-entry movements are reported in the MT950 (Money Statement).

FX instructions related to conversion of interest charges are identified by the unique four-letter code word INTC in the narrative field (position dependent upon other contents of the narrative field). The narrative field also shows the FX rate and the underlying interest charge Transaction number.

Automatic FX Service for monthly standard fees

The Automatic FX Service for monthly standard fees allows for a conversion on a monthly basis of monthly fees into a base currency. The converted fees will have the same value date as the original monthly fee (except for a currency holiday, in which case the next possible conversion date will be used).

Using the Automatic FX service for monthly fees

CBF identifies monthly fees eligible for conversion two days before the value date, which is the 15th of the following month (or the next Business Day should the 15th not be a Business Day for CBF and/or USD is closed). The credit and debit instructions resulting from the conversion will have the same value date as the original monthly fee (except for a currency holiday, in which case the next possible conversion date will be used).

Reporting

Pending FX instructions are reported in the MT94x (Money Suspense report). Book-entry movements are reported in the MT950 (Money Statement).

FX instructions related to conversion of monthly fees are identified by the unique four-letter code word MFEE in the narrative field (position dependent upon other contents of the narrative field). The narrative field also shows the FX rate and the underlying monthly fee Transaction number.

Automatic FX services: optional features

The following additional features are optional and available upon request:

Limitations on currencies

All currencies accepted by CBF for FX service can be converted into a base currency. Clients can choose which currencies should be included in the automatic conversion procedure.

Limitations on amount

Clients can specify minimum and maximum amounts by currency, below and above which FX Transactions will not be carried out by CBF.

Minimum amount

If a minimum amount is specified, the Automatic FX service will only be effected when the currency amount of the single underlying instruction is equal to, or greater than, the minimum amount specified by the client. Amounts below the minimum amount specified by the client will not be converted at any time throughout the service.

Maximum amount

If a maximum amount is specified, the Automatic FX service will only be effected when the currency amount of the single underlying instruction is equal to, or less than, the maximum amount specified by the client. Amounts above the specified maximum amount will not be converted at any time through the service.

Registration for Automatic FX services

Registration

To register for the Automatic FX services, clients must send a completed Automatic FX application form (available on request).

Application forms are available from CBF Client Services Officers or Client Relationship Managers.

Cancellation

Cancellation of the Automatic FX service can only be effected by a written notification signed by authorised signatories, via a Swift MT299 or free format message. The cancellation will be effective two Business Days following the receipt of the cancellation notice.

If a single specific FX instruction presented for the Automatic FX service is requested to be cancelled on an exceptional basis, not a general cancellation of the service, the client is requested to send a Swift MT299 by the FX instruction deadline on the requested Settlement Date at the latest. The FX instruction will be cancelled on a "best efforts" basis, if it has not yet been executed.

Admittance

Admittance to any of the FX services is at the discretion of CBF.

Amendments to the Automatic FX services application form

Amendments to the application form (such as requests to use one of the optional features) should be sent in writing, requested via a written notification by registered letter signed by authorised signatories, or via a Swift MT299 or free format message to the address above.

Any request to change the contents of the application form must be received by CBF at least two Business Days before the date on which the change should take effect and may be accepted at CBF's sole discretion.

FX service for securities Settlement instructions

This service gives clients the ability to synchronise the value date of the FX Transaction with the Requested Settlement Date of the securities instruction.

Clients can request the conversion of the currency of the underlying Settlement Transaction provided that the currency is eligible for FX services in CBF and the base currency of their choice is eligible for FX services without any restrictions. Please see section ["FX services offered, per currency"](#) on page 8-40).

Using the FX service on securities settlement instructions

The FX service for securities instructions allows clients to include a FX request in any against payment securities Settlement instruction for the associated FX instruction to be generated automatically instead of sending a separate FX instruction. Clients need to enter appropriate information in the securities Settlement instruction as shown in the following figure. With this information, the cash Countervalue of a securities Settlement instruction will become eligible for conversion.

The Swift ISO 15022 securities Settlement instruction field designated for FX requests is Currency field :11A: with qualifier FXIB or FXIS.

Please see section ["DVP securities Settlement instructions with an FX request"](#) on page 8-37 and ["For DVP instructions, use the qualifier/code word FXIB followed by the ISO code of the Buy currency."](#) on page 8-37 for detailed information.

Eligibility of all against payment securities instructions

The FX operation will be executed irrespective of the Settlement status of the securities instruction associated with it. The original against payment securities instruction will settle in the original currency and amount specified in the cash Countervalue field. The FX operation will be executed on the same client account as the associated securities instruction.

FX deadline

The instruction deadline is 11:30 CET two Business Days before value date (VD-2) except for the following currencies: AUD, CAD, CHF, EUR, GBP, IDR, JPY, MXN, MYR, THB and USD (see ["Case-by-case FX service"](#) on page 8-38). For these currencies, the instruction deadlines mentioned in all of the following articles must be adjusted accordingly.

For instructions received after the instruction deadline, CBF will execute the FX operation on a "best efforts" basis.

Amendments and cancellation of FX operations

Securities Settlement instructions sent on day D before the 11:30 deadline

A securities instruction with its associated FX instruction that was already sent on day D before the 11:30 deadline can still be amended or cancelled between the time the instruction was sent and the FX deadline 11:30 on day D.

After the 11:30 deadline on day D the FX instruction associated with a securities instruction sent on day D before the 11:30 deadline must (unless either of the instructions is rejected during the validation process) be considered as irrevocable and cannot be cancelled.

In order to cancel an already executed FX operation, an "opposite" FX instruction must be sent. The value date and exchange rate of the "opposite" instruction may be different from those applied at the execution of original FX operation specified in the securities Settlement instruction. The results of any fluctuations in exchange rates will be passed on to clients as appropriate.

Securities Settlement instructions sent on day D after the 11:30 deadline

A securities instruction with its associated FX instruction that was already sent on day D after the deadline 11:30 can still be amended or cancelled between the time the instruction was sent and the next FX deadline 11:30 on day D+1.

After the 11:30 deadline on day D+1 the FX instruction associated with a securities instruction sent on day D after 11:30 deadline must (unless either of the instructions is rejected during the validation process) be considered as irrevocable and cannot be cancelled.

In order to cancel an already executed FX operation, an “opposite” FX instruction must be sent. The value date and exchange rate of the “opposite” instruction may be different from those applied at the execution of original FX operation specified in the securities Settlement instruction. The results of any fluctuations in exchange rates will be passed on to clients as appropriate.

Timeline for securities settlement instructions with FX request

For a trade on day T and Settlement on T+3, if the securities instruction is to be settled and the associated FX operation executed for the same date, the client should submit the securities instruction before the T+1 11:30 CET FX deadline.

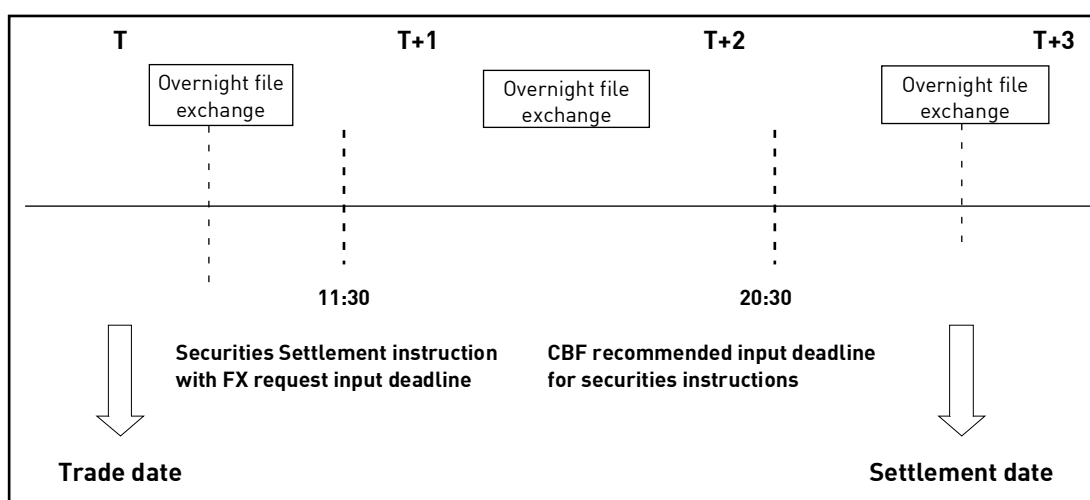


Figure 8.16 Timeline for securities settlement instructions with FX request

FX execution timeline

Securities Settlement instructions sent on day D before the 11:30 deadline

Securities Settlement instructions received at CBF on day D before the 11:30 deadline with a valid FX request will have MT210 and MT103 or MT200/202 instructions¹ resulting from the conversion generated for value date as per the following figure:

Requested settlement date (RSD) of the securities instruction	FX execution	Generation of the FX-related MT210 and MT103 or MT200/MT202 instructions	Value date of the FX-related MT210 and MT103 or MT200/MT202 instructions
RSD = D	RSD	RSD	RSD+2
RSD = D+1	RSD-1	RSD-1	RSD+1
RSD = D+2	RSD-2	RSD-2	RSD
RSD = D+n ^a	RSD-2	RSD-2	RSD

a. “n” is greater than two Business Days.

Securities Settlement instructions sent on day D after the 11:30 deadline

Securities Settlement instructions received at CBF on day D after the 11:30 deadline with a valid FX request will have MT210 and MT103 or MT200/202 instructions¹ resulting from the conversion generated for value date as per the following figure:

1. MT210 instruction: Pre-advise of entry of funds; MT103 or MT200/MT202 instructions: withdrawal of funds.

Requested settlement date (RSD) of the securities instruction	FX execution	Generation of the FX-related MT210 and MT103 or MT200/MT202 instructions	Value date of the FX-related MT210 and MT103 or MT200/MT202 instructions
RSD = D	RSD+1	RSD+1	RSD+3
RSD = D+1	RSD	RSD	RSD+2
RSD = D+2	RSD-1	RSD-1	RSD+1
RSD = D+3	RSD-2	RSD-2	RSD
RSD = D+m ^a	RSD-2	RSD-2	RSD

a. "m" is more than three Business Days.

FX will not be executed:

- If a securities Settlement instruction containing the FX request is both sent and cancelled on day D before the 11:30 deadline; or
- If a securities Settlement instruction containing a FX request is sent on day D after the 11:30 deadline and cancelled prior the next day D+1 11:30 deadline.

FX processing

Note: EUR must always be one of the two currencies in the FX operation.

DVP securities Settlement instructions with an FX request

On a DVP (Delivery Versus Payment) instruction, the currency and amount specified as the cash Countervalue (Sell currency) will be debited from the client's account and the converted amount in the currency specified as the Buy currency will be credited to the client's account.

An MT103 or MT200/202 instruction will be created for the amount and currency given in the cash Countervalue field of the securities Settlement instruction and an MT210 instruction will be created with the equivalent amount in the Buy currency.

For DVP instructions, use the qualifier/code word **FXIB** followed by the ISO code of the Buy currency.

RVP securities Settlement instructions with an FX request

On a RVP (Receipt Against Payment) instruction, the currency and amount specified as the cash Countervalue (Buy currency) will be credited to the client's account and the converted amount in the currency specified as the Sell currency will be debited from the client's account.

An MT210 instruction will be created for the amount and currency given in the cash Countervalue field of the securities Settlement instruction and an MT103 or MT200/202 instruction will be created with the equivalent amount in the Sell currency.

For RVP instructions, use the qualifier/code word **FXIS** followed by the ISO code of the Sell currency.

Validation criteria for ISO 15022 instructions

The cash Countervalue on a securities against payment instruction will be eligible for FX only if the instruction is validated successfully and has a correctly formatted FX request.

Format requirements

Currency field :11A: of the securities against payment instructions will be scanned for the FX request details. If provided in the correct format, this will be a valid FX request.

MT541 messages

The information must be provided in the field :11A: with the qualifier FXIS followed by the ISO currency code of the Sell currency.

Example: :11A::FXIS//USD

MT543 messages

The information must be provided in the field :11A: with qualifier FXIB followed by the ISO currency code of the Buy currency.

Example: :11A::FXIB//EUR

Reporting

Pending FX instructions are reported in the MT94x (Money Suspense report). Book-entry movements are reported in the MT950 (Money Statement).

FX instructions related to the conversion of the cash Countervalue of a securities instruction are identified by the unique four-letter code word SETT in the narrative field (position dependent upon other contents of the narrative field). The narrative field also shows the exchange rate and CBF 7-digit transaction reference of the securities transaction.

Case-by-case FX service

The case-by-case FX (foreign exchange) service allows clients to arrange, for a specific event, the conversion of cash Balances or income proceeds into a currency of their choice.

The case-by-case FX service is available for an FX between two currencies eligible for this service (for the complete list of currencies eligible please see section "[FX services offered, per currency](#)" on page 8-40).

Using the case-by-case FX service

To effect an FX Transaction using the case-by-case FX service, clients must send their FX instruction via one of the following media, a Swift MT299 or MT599 instruction Type (for the attention of Forex) free format message.

The instruction deadline for the case-by-case FX service is 11:30 CET two Business Days before value date (VD-2), except for the following currencies: AUD, CAD, CHF, CNY¹, EUR, GBP, IDR, JPY, MXN, MYR, THB and USD. The client can input instructions at any time up to the 11:30 deadline (VD-2) described above.

The currencies are converted according to spot market procedure for value date two Business Days later (except for a currency holiday, in which case the next possible conversion date will be used).

The FX request must be for the client's own account. The client defines the Buy and Sell currency and the amount to be converted up to a maximum of EUR 10,000,000 or the equivalent in another currency:

Buy currency: Currency that will be credited to the client's account. Sell currency: Currency that will be debited from the client's account.

To effect an FX Transaction exceeding the EUR 10,000,000 or its equivalent in another currency clients must either:

- Submit several instructions in the system for lower amounts, or
- Telephone CBF Client Services immediately upon receipt of the rejection message, to confirm the FX request and amount. Clients must then submit as written confirmation, a Swift MT299 Instruction Type (Attn: Treasury Back Office).

Provided the applicable deadlines have been met and based on the usual credit approval the FX instruction will still be executed with good value. In case of receipt of the confirmation after the deadline, the FX instruction will be executed with good value on a best efforts basis, but with a different FX rate from the daily CBF foreign exchange fixing rate.

Once an instruction is sent, it must be considered as irrevocable unless rejected during the validation process and cannot be cancelled. Manual cancellation may be possible on request, on a "best efforts" basis, if the FX instruction has not yet been executed at that stage.

1. CBF may be forced to square the FX positions in the respective domestic markets, therefore, the instruction deadline for the case-by-case FX service in these currencies is 10:00 CET Winter (VD-2) and 11:00 CET Summer time (VD-2). For instructions received after the instruction deadline, CBF will execute the FX operation according to spot market procedures and on a "best efforts" basis.

N.B.: Clients need nevertheless absolutely to recheck with their Client Services Officer the status of the FX instruction (already rejected, suspended, valid but not yet executed or executed) before sending a reverse FX instruction.

Reporting

Pending FX instructions are reported in the MT94x (Money Suspense report). Book-entry movements are reported in the MT950 (Money Statement).

FX instructions related to the case-by-case FX service are identified by a unique four-letter code word FX9E in the narrative field (position dependent upon other contents of the narrative field). The narrative field also shows the FX rate.

Additional information on the FX services

Exchange rates

Provisional rate

On Trade Date when a valid instruction is input, it will be checked against cash and credit availability and the required cash amount is then reserved based on a provisional rate which is derived from the Bloomberg rates feed. This reservation attempt occurs once a day for three (3) consecutive Business Days.

Final rate

The FX rate is assigned on request date and includes a spread, which depends on the liquidity of the currency pair.

The FX rates fixed are as quoted in the foreign exchange market against the EUR.

For FX instructions of currency pairs where the EUR is not part of the pair, the system calculates a cross rate using the fixed rates against the EUR.

The rate fixed is market conform, meaning it reflects the current market conditions and the exchange rates of the currencies being traded.

Further details about currencies offered and any potential restrictions that may apply are outlined in the section "[FX services offered, per currency](#)" on page 8-40.

Clients are able to retrieve FX rates assigned from narrative field of the MT210 and MT103, MT200/202 instructions that accompany the details of the transaction.

All FX rates are published daily via the [Clearstream Codelist application](#) at around 16:00 each Business Day.

The FX rates published on the [Clearstream Codelist application](#) are only informative and shall not be used as an official reference.

Withdrawal of converted funds

Instructions to withdraw funds resulting from a FX Transaction are subject to the normal deadlines for each currency.

Suspension of FX services

CBF may temporarily suspend and/or cancel any outstanding FX service instruction if circumstances do not permit orderly trading and/or trade execution. In this event, CBF will notify clients as soon as possible.

Refusal of an FX instruction

CBF may refuse an FX service instruction if it has been rejected during the validation process.

CBF holidays and currency holidays

Value dates: If the conversion value date is a non-Business Day for CBF or involves a currency on holiday, the next possible value date will be used.

EUR holidays: CBF can now process FX instructions even on EUR holidays. However, clients should note that:

- For EUR pairs, settlement will occur on the next available value date;
- For other currency pairs, instructions will be processed as usual.

Consultation: For specific trading needs, especially around holidays, CBF recommends consulting with its Client Support Team.

For all FX instructions, clients are advised to consult a currency holiday schedule beforehand.

FX services offered, per currency

Eligible currencies for the Automatic FX service, case-by-case and FX services for securities Settlement instructions are shown below. The list of eligible currencies may be modified at any time without prior notification by CBF depending on market conditions.

Currency	FX Service offered?	Restrictions or special handling details?
AED	YES	None.
AMD	YES	None.
AUD	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
BGN	YES	None.
BHD	YES	Yes - with one exception. As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.
CAD	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
CHF	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
CNY	YES	None.
CZK	YES	None.
DKK	YES	None.
EUR	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
GBP	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
GEL	YES	Yes - with one exception. As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.
HKD	YES	None.
HUF	YES	None.

Currency	FX Service offered?	Restrictions or special handling details?
IDR	YES (limited)	Yes. <p>IDR is ineligible for Automatic FX services. For all other FX services, clients must provide a broker securities trade confirmation along with the FX instruction before the IDR FX deadline. Clients must adhere to the following requirements:</p> <ul style="list-style-type: none"> • Include details of underlying trades or corporate action reference (EXRI CORP ID, instructed quantity, and subscription cost value) in the optional wording field of the FX instruction. • The purchased IDR amount cannot exceed the securities trade or corporate action instruction settlement amount but may be less. • A buy IDR FX instruction's value date must be on or before the settlement date of the underlying trade or corporate action instruction. • A sell IDR FX instruction's value date must be on or after the settlement date of the underlying trade or corporate action instruction. • The underlying securities settlement instruction or corporate action must be received before executing the FX transaction. <p>Failure to comply may result in delayed FX request settlements.</p> <p>Please note:</p> <p>Buy IDR FX instructions can cover domestic Securities purchases (61) or charges on CBF accounts, while non-domestic Securities purchases (41) are subject to Indonesian Central Bank restrictions.</p> <p>CBF can execute buy IDR FX instructions unrelated to a domestic Security purchase if the client's counterparty sends a sell IDR FX instruction for the respective non-domestic Security sale (51).</p> <p>Special deadline: 08:00 CET (VD-1) winter time / 09:00 CET (VD-1) summer time, subject to an IDR 50 billion threshold limit. Instructions received after this deadline will be executed on a "best efforts" basis.</p> <p>Clients are responsible for compliance with regulatory requirements. CBF is not liable for losses, claims, or damages resulting from non-compliance, and clients agree to indemnify CBF for any such consequences.</p> <p>Note that:</p> <ul style="list-style-type: none"> • Free format instructions sent via Swift MT299 may benefit from the above instruction deadline if the value date T+1 is clearly requested. For instructions above the threshold limit or received after the instruction deadline, CBF executes the FX operation according to spot market procedures and on a "best efforts" basis. <p>As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.</p>
ILS	YES	None.
ISK	YES	Swift MT299/MT599 instruction; only case-by-case FX service.
JPY	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
KRW	YES (limited)	Special deadline: 06:30 CET (VD-2). <p>KRW is ineligible for Automatic FX services and case-by-case FX.</p>
KZT	YES	None.

Currency	FX Service offered?	Restrictions or special handling details?
MXN	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
MYR	YES (limited)	<p>Yes.</p> <p>Buy and Sell FX instructions are possible under the condition that prior to instructing, the client must send an MT599 to the attention of Treasury Backoffice, stating the following: "Attn: Clearstream Banking Treasury Backoffice. Clearstream Account Number: Clearstream account(s) number(s).</p> <p>We, (entity name), hereby unconditionally represent and warrant that we do not and will not conduct or transact in any offshore MYR non-deliverable forwards and / or offshore MYR foreign exchange derivatives contracts, as well as any future product of financial instruments of similar substance.</p> <p>We, (entity name), agree to indemnify Clearstream Banking and to hold Clearstream Banking harmless for any claims, fines, penalties, damages or losses, whether direct or indirect, resulting from an untrue, incomplete or inaccurate representation." Once the MT599 is recorded with CBF Treasury Backoffice, then the following rules apply to MYR currency for FX instructions:</p> <p>Sell MYR FX instructions are possible if there are sufficient funds on the CBF client account at the FX instruction deadline.</p> <p>If the Balance is not sufficient, sell MYR FX instructions related to securities sales will be suspended until the securities sale has settled. Sell MYR FX instructions exceeding MYR 10,000 directly linked to a securities instruction (FX instruction directly set on the securities instruction) will be suspended until the securities instructions has settled. Depending on the agreement from the agent in Malaysia, the FX will then be executed with good value.</p> <p>N.B.: Same-day FX is only possible where an underlying domestic sell securities trade has settled on that day. Sell FX instructions sent for a value date different from that of the relating securities instruction may be delayed and executed with an other than requested value date.</p> <p>If the client sends buy and sell MYR FX instructions for the same value date, CBF will execute the buy instruction first to unblock the securities purchase and will suspend the sell FX instruction until the Balance on the CBF client account is sufficient to execute the FX. Depending on the agreement from the agent in Malaysia, the FX will then be executed with good value but with a different FX rate than that of the buy FX instruction.</p> <p>FX instructions for amounts less than or equal to MYR 10,000 may nevertheless, if CBF Treasury estimates that the CBF overall liquidity position with the agent in Malaysia allows it to do so, be executed immediately without awaiting the securities Settlement or the available Balance.</p> <p>Special deadline: 10:00 CET (VD-1) winter time / 11:00 CET summer time. (VD-1), subject to a threshold limit of MYR 8 million.</p> <p>Instructions received after this deadline will be executed with the requested value on a "best efforts" basis only.</p> <p>Note that:</p> <ul style="list-style-type: none"> Free format instructions sent via Swift MT299 may benefit from the above instruction deadline if the value date T+1 is clearly requested. For instructions above the threshold limit or received after the instruction deadline, CBF executes the FX operation according to spot market procedures and on a "best efforts" basis. <p>As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.</p>
NOK	YES	None.
NZD	YES	None.
OMR	YES	None.
PEN	YES	Yes - with one exception.

Currency	FX Service offered?	Restrictions or special handling details?
		As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.
PHP	YES (limited)	Yes. Swift MT599 and 9E instructions; only case-by-case FX service. Only restricted sell PHP FX instructions are allowed. Only custody proceeds resulting from securities with a Bangko Sentral Registration Document (BSRD) can be requested for FX. The exact details clearly mentioning the origin of the funds must be set on the FX order. When completing its FX instruction, the client must strictly comply with the procedure as described in the Link Guide - Philippines under "Foreign exchange and repatriation of income proceeds". Clearstream Banking Luxembourg will forward the details with the FX request to the agent in the Philippines. Upon his reply, the FX will be executed with best possible value date. Buy PHP FX instructions may be accepted in very exceptional circumstances (for example, if CBF's own PHP currency FX position would allow CBF to satisfy the client request). Before sending such an instruction, the client must first verify, with his Relationship Officer or with CBF Treasury, that it will be accepted. As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.
PLN	YES	None.
QAR	YES	None.
RON	YES	None.
RSD	YES	None.
		As CBF must square FX positions, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.
RUB	YES	None.
SAR	YES	None.
SEK	YES	None.
SGD	YES	None.
THB	YES (limited)	Yes.

Forced FX:

If the overall CBF Balance at the Cash Correspondent Bank in Thailand exceeds the maximum regulatory amount, CBF will be forced to do a same-day FX at a penalty FX rate in order to reduce the balance. This forced FX will be booked, without prior advice, to the client accounts presenting the largest balances. The FX will consist of a sale of THB against USD value D at a penalty FX rate, fixed by the Bank of Thailand. These operations may be repeated as often as necessary.

Measures to avoid forced FX:

- Clients are advised to be extremely careful to keep their THB Balances at the lowest practicable levels.
- Clients are requested to match value dates of FX instructions and security instructions.

Currency	FX Service offered?	Restrictions or special handling details?
		<ul style="list-style-type: none"> If the client sends buy and sell THB FX instructions for the same value date, CBF will execute the buy instruction first to unblock the securities purchase and will suspend the sell FX instruction until the money is as confirmed balance on the account. Depending on the agreement from the agent in Thailand, the FX will then be executed with good value but with an FX rate other than that on the buy FX instruction. Clients should take care that they send buy THB FX instructions only if they need THB on their account to cover securities purchases or charges on their CBF account. For internal trades (41/51) with related FX instructions from both buyer and seller, CBF will, in order to avoid the overall balance at the CCB exceeding the regulatory maximum amount and a partially forced FX being performed with a penalty FX rate, execute both FX instructions at the same time. <p>Special deadline: 10:00 CET (VD-1) winter time / 11:00 CET (VD-1) summer time, subject to a threshold limit of THB 30 million.</p> <p>Instructions received after this deadline will be executed with the requested value on a “best efforts” basis only.</p> <p>Note that:</p> <ul style="list-style-type: none"> Free format instructions sent via Swift MT299 may benefit from the above instruction deadline if the value date T+1 is clearly requested. For instructions above the threshold limit or received after the instruction deadline, CBF executes the FX operation according to spot market procedures and on a “best efforts” basis. <p>As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.</p>
TRY	YES	None.
UAH	YES	Yes.
		<p>FX is possible for interest income derived from government bonds received after 1 April 2023.</p> <p>Principal redemption derived from government bonds, including the so-called “military bonds” will remain unrepatriable until further notice, as the national bank of Ukraine (NBU) has postponed their decision regarding the repatriation of principal repayments until a significant easing of security and macroeconomic risks occurs.</p>
USD	YES	Clients can send FX linked to securities settlement and case-by-case FX requests with value date T+1.
UYU	YES	Yes - with one exception.
		<p>As CBF must square FX positions with the CCB directly, FX instructions sent on the day the currency is closed (or received after the FX instruction deadline on the preceding Business Day) may be delayed and the requested value date cannot be guaranteed.</p>
ZAR	YES	None.

Contact details

For further information about the FX services, please contact CBF Client Services.

Interest calculations and reporting

The calculation of interest for a given month is reported to clients in the Monthly Interest Scale report, Notification of Interest (MT935), which is available in the morning of the tenth calendar day of the following month (or, if that is not a Business Day, on the next available Business Day after that).

After the interest calculation has been made and reported, subsequent Backvaluations will not be included in the interest scales. Adjustments can only be made by separate book-entry over the account.

Back valuation of funds movements on transactions between CBF counterparties that fail to settle on the requested settlement date is not possible. In each settlement processing, the value date for funds movements on each transaction is determined by the settlement date of the processing, with the exception of Primary Market Transactions, which can be backvalued to closing date. For this reason, clients who want to make compensation adjustments for late settlement should arrange to pay compensation by a separate transfer of funds, rather than request CBF to execute back valuation adjustments.

Debit interest is charged on value dated debit balances and is reported as an MT103, or MT200/202 Transaction. However, where the total amount of monthly debit interest in a currency is less than USD 10.00 or equivalent, no charge is made.

The daily interest rate shall be composed of the following:

- The available interbank money market overnight offer rate for the relevant currency; and
- A risk weighted debit margin applied in accordance with CBF's risk assessment on the CBF credit user and the currency group availability.

Client debit margins

Currencies	TOF	Rating	Risk weighted debit margin
USD, CHF, GBP, AUD, CAD, DKK, NOK, SEK, JPY; EUR and NZD	Yes	AA or A	1.50%
		B	2.00%
		C or D	2.25%
		E, F or G	2.50%
		H, I, J or K	3.75%
	No		4.50%
HKD	Yes		2.50%
ZAR			5.50%
PLN			3.50%
CZK			4.50%
HUF			4.00%
HKD	No		4.50%
ZAR			7.50%
PLN			5.50%
CZK			6.50%
HUF			6.00%
Other currencies			4.50%

Income main transfer account

The income main transfer account (Transfer 1) is a service that allows the automated transfer of income payments and fees from one Clearstream Banking account to another Clearstream Banking account defined as the client's income main transfer account.

Clients can subscribe to the Transfer 1 service by sending a Swift MT599 (for the attention of Account Administration).

The income main transfer account service is a way for clients to streamline their internal reconciliation processes by centralising their custody proceeds (interest, dividend, reimbursement proceeds), invoices, and debit interest in the same account regardless of the number of settlement accounts in CBF.

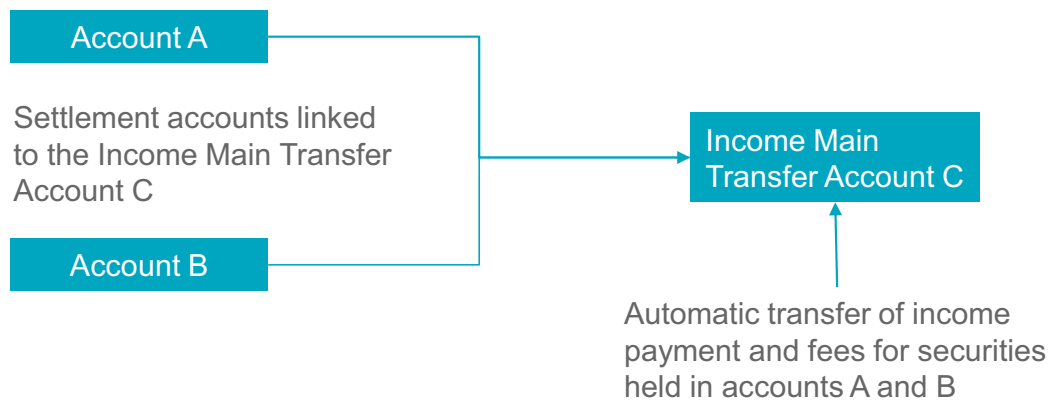


Figure 8.17

Principles

The service covers all ICSD accounts.

Automatic income transfer is possible in all settlement currencies.

Income cash proceeds are credited directly to the income main transfer account while the following fees are charged to that same account:

- Billing fees;
- Out of pocket expenses;
- Monthly interest payments.

9. Information Provision Services

9.1 Collective safe custody

CBF clients have access to various communication channels for sending instructions to CBF or T2S and receiving reports from CBF or T2S depending on the technical connectivity and the legal status of the technical sender (Indirectly Connected Participant - ICP or Directly Connected Participant - DCP).

All CBF clients can use the following communication channels for instructions:

- Online via CASCADE-Host;
- Xact File Transfer for the transmission of ISO 15022 and ISO 20022 messages to CBF;
- Swift ISO 15022 messages to CBF via the Swift FIN network;
- ISO 15022 messages to CBF via MQ;
- Xact Web Portal (based on ISO20022 standards and terminology);
- Xact via Swift Net FINplus (also supports Shareholders Identification Disclosure Requests seev.045 and seev.046 in ISO 20022 format).

CBF clients acting in DCP mode can use the additional options:

- Online via the web-based T2S GUI via Swift or SIA-Colt¹;
- ISO 20022 messages to T2S via Swift or SIA-Colt network².

Furthermore, CBF can pass on the reports to a client's permanently allocated printer via CASCADE's CA spool system. Clients can also access these reports, which are made available in the form of lists, at Deutsche Börse's website (CBF File Service). The Internet also provides clients with upload functions for various services. Our tax service allows depositories for various markets to send CBF beneficiary data when making applications for tax refunds. Issuers of warrants or certificates can transmit the terms and conditions of issue and the basic data of an issue to CBF by electronic means.

CBF clients can also use a combination of various communication channels. Clients can send CBF their instructions in ICP mode by File Transfer, MQ or via Swift FIN network, for example, or receive standardised reports about settlement. Through the online function offered by CASCADE-Host they can block individual instructions from settlement or access real-time information.

For CBF clients with DCP status it is additionally possible to send certain instruction types directly to T2S via ISO 20022 messages, to receive messages and reports from T2S and to use the T2S GUI to query information, release or put on hold own instructions. A combination of ICP and DCP connectivity channels is possible even for the same transactions, as an instruction directly sent to T2S is automatically reflected in CASCADE and vice versa.

1. Further information, especially to the access rights concept under ESMIG please refer to the DCP Connectivity Handbook, sections 3.2.3 and 5.4.
2. This is not available for CBF clients, that are registered at CBF as "GUI only DCP".

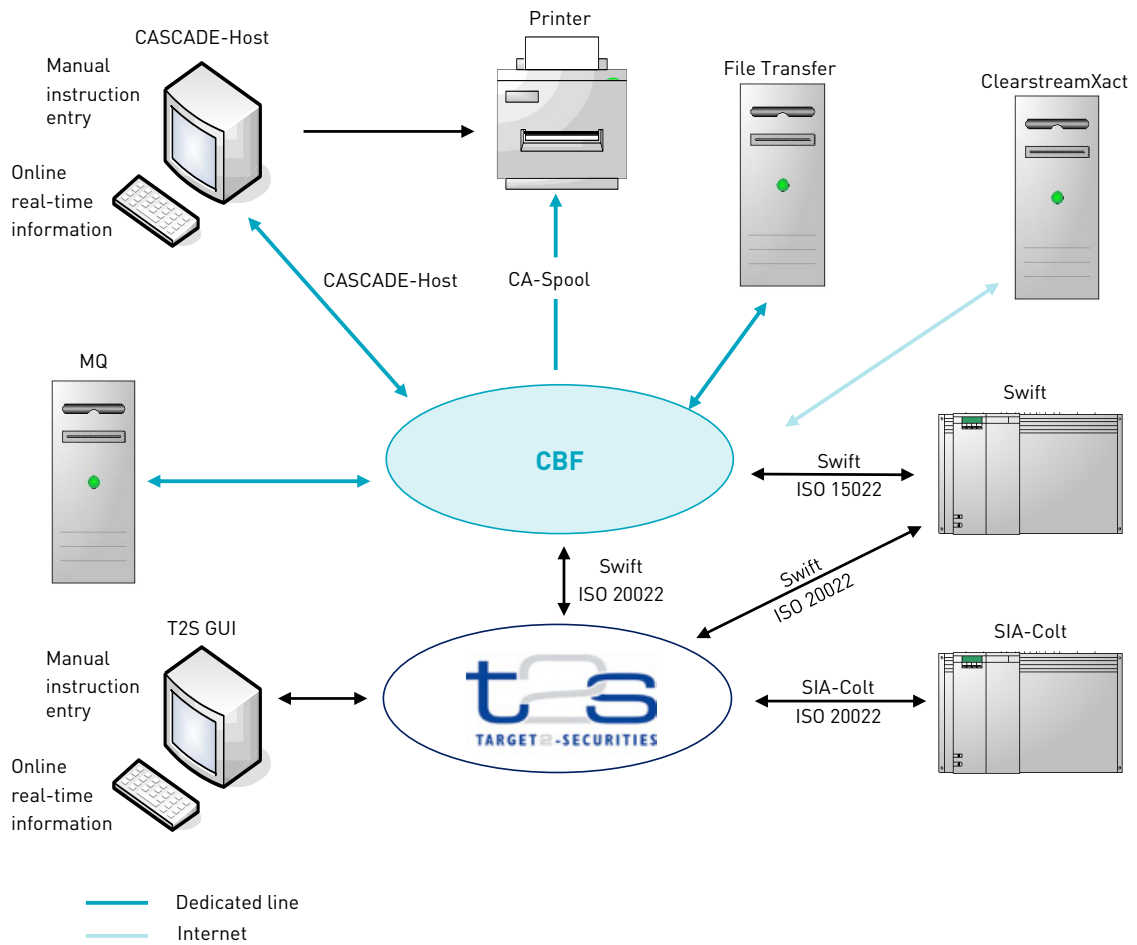


Figure 9.1 Communication channels with CBF and T2S

Online

Via CASCADE-Host, CBF clients can access CASCADE Online between 05:00 and 03:00. Clients can use all functionalities to enter, process and transfer OTC transactions and stock exchange trades via CASCADE to T2S. When instructions for OTC transactions are entered, a cross-checking principle is applied.

For online access to CASCADE, CBF clients select at least two system administrators from among their staff. CBF provides these system administrators with special rights of access. They can then allocate appropriate levels of authorisation to the users at their organisation.

Via the T2S GUI, CBF clients with a DCP status can online access T2S directly online from 05:00 to 03:00.

CBF clients with status "Full DCP" can generally access all functionalities necessary for the instruction, modification and settlement of OTC transactions in T2S, with an exception of certain CBF specific transactions which can only be conducted via the ICP channel. Furthermore, "Full DCP" clients can execute queries, retrieve reports and, to a limited extent perform configurations.

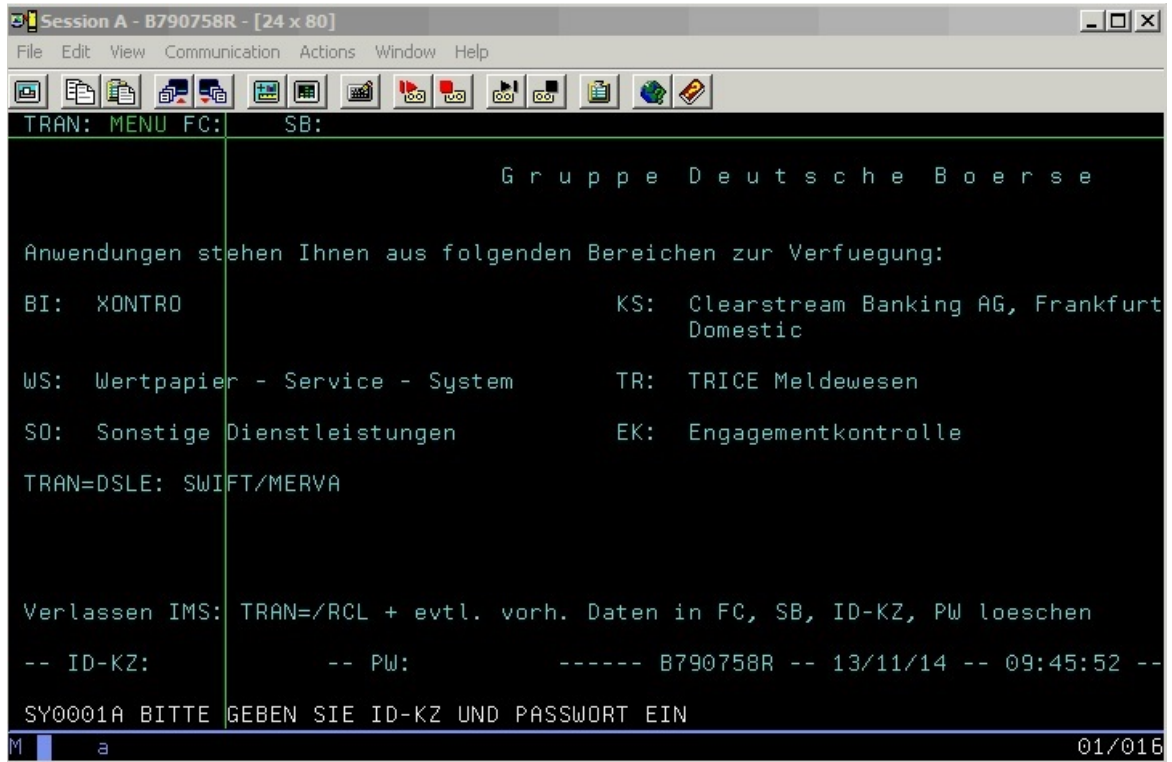
CBF clients with status "GUI DCP" can only execute queries, configure and retrieve reports as well as modify, link and cancel instructions.

For online access to the T2S GUI, CBF clients select at least two system administrators from among their staff. CBF provides these system administrators with special rights of access. They can then allocate appropriate levels of authorisation to the users at their organisation.

CASCADE-Host

Online access via CASCADE-Host is only possible in German. There are two important technical requirements:

- The CBF client must be linked up to the CASCADE platform through a dedicated line (SNA).
- The client needs IBM PC 3270 emulation.



```
Session A - B790758R - [24 x 80]
File Edit View Communication Actions Window Help
TRAN: MENU FC: SB:
Gr u p p e  D e u t s c h e  B o e r s e
Anwendungen stehen Ihnen aus folgenden Bereichen zur Verfuegung:
BI:  XONTRO                KS:  Clearstream Banking AG, Frankfurt
                               Domestic
WS:  Wertpapier - Service - System  TR:  TRICE Meldewesen
SO:  Sonstige Dienstleistungen      EK:  Engagementkontrolle
TRAN=DSLE: SWIFT/MERVA
Verlassen IMS: TRAN=/RCL + evtl. vorh. Daten in FC, SB, ID-KZ, PW loeschen
-- ID-KZ:                -- PW:                ----- B790758R -- 13/11/14 -- 09:45:52 --
SY0001A BITTE GEBEN SIE ID-KZ UND PASSWORT EIN
M a 01/016
```

Figure 9.2 Main menu of CASCADE-Host

T2S GUI

The T2S GUI allows clients with a DCP status to access T2S online via a web-based GUI in English. Details about the technical pre-requisites are available in the T2S documentation of the Eurosystem resp. the Network Service Provider (NSP).

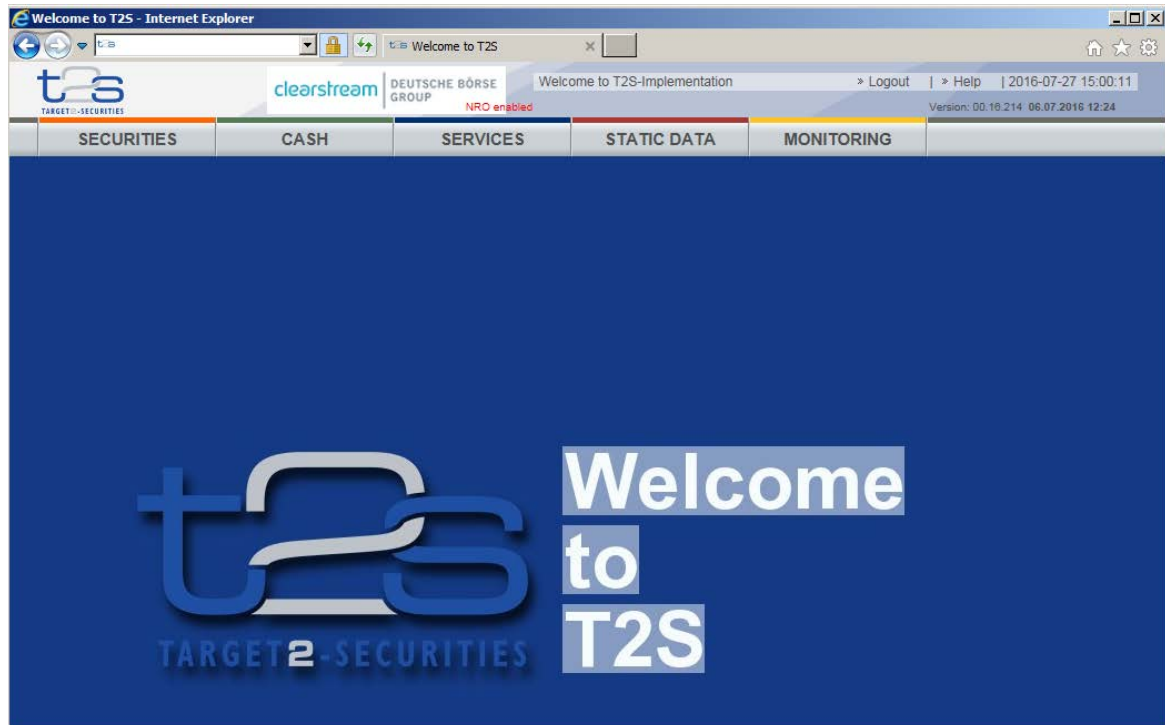


Figure 9.3 Main menu of T2S GUI

ISO 15022 Standard (Swift, File Transfer, MQ)

Through CASCADE's link manager (LIMA) CBF and its clients can exchange files of the ISO 15022 standards. A file comprises one or several message blocks that are each limited by a header record and a trailer record.

The following technical preconditions must be satisfied in order to communicate via File Transfer:

- A dedicated line (SNA) must be set up between CASCADE and the client's in-house system.
- Software must be installed and configured on the client's premises in order to send and receive data in the correct data format.

For placing OTC instructions as well as receipt of reports from settling OTC and exchange transactions, CBF supports communication via the Swift network according to ISO 15022.

- Messages to CASCADE (OTC and non-CCP SE)
 - MT530: Transaction Processing Command
 - MT540 Receive free of payment
 - MT541 Receive against payment
 - MT542 Deliver free of payment
 - MT543 Deliver against payment

- Messages from CASCADE (OTC and non-CCP SE)
 - MT535 Statement of Holdings
 - MT536 Clearing & Settlement Statement
 - MT537 CBF Statement of Pending Transactions
 - MT544-547 Settlement confirmations
 - MT548 Settlement Status and Processing Advice
 - MT578 Settlement Allegement
 - MT586 Statement of Settlement Allegements
- Messages to CASCADE-RS
 - MT500 Instruction to register
 - MT519 Modification of client details.
- Messages from CASCADE-RS
 - MT501 Confirmation of registration or modification
 - MT510 Registration status and processing advice
- Messages to Custody Services¹
 - MT564 Corporate action notification
 - MT565 Corporate action instruction
 - MT566 Corporate action confirmation
 - MT568 Corporate action narrative
- Messages to Cash Services
 - MT942/MT950 Euro Cash Clearing Report

In addition to these standardised formats, CBF uses the following own format for the transmission of reports that cannot be issued according to ISO 15022: KUSTA data carrier containing the master data of CBF clients that are needed in order to enter instructions for OTC transactions.

ISO 20022 Standard (Swift, SIA-Colt)

Details about the technical pre-requisites and the supported message types in ISO 20022 standard are available in the T2S documentation of the Eurosystem and/or Network Service Provider (NSP).

1. All Corporate Actions are processed under OneClearstream Asset Servicing (OneCAS), except for:

- U.S. and Swiss markets;
- Class action events (CLSA);
- Voluntary events with unknown maturity date or a maturity date far in the future;
- ETFs under the CFF model.

Deadlines for entering settlement instructions via the ICP connectivity channels

For the T2S settlement cycles described in the chapter Settlement on page 1-8, the following processing runs apply:

Processing run	CBF	T2S
NTS (Night-time Settlement)		20:00 (Start)
RTS FoP (Free of Payment)		18:00 (End)
RTS with countervalue in EUR		16:00 (End)
RTS BATM (Bilaterally Agreed Treasury Management)		17:40 (End)
RTS with countervalue in foreign currency ^a	17:30 (End)	

a. Determined by the reservation CDLR in T2S.

When entering T2S relevant instructions (OTC) and cancelling settlement blockings (OTC and stock exchange) via CASCADE-Host, it is suggested to send instructions ten minutes prior to a T2S deadline to CBF due to processing and transmission times.

When using the ISO 15022 Standard via File Transfer, Swift and MQ, it is also suggested to ensure that instructions have been submitted to CASCADE 10 minutes prior to a T2S deadline to CBF for the same reasons.

A guarantee for T2S processing will not be given at any time.

Additionally, when entering cross-border instructions, different deadlines might apply depending on the CSD link (see [section "CSD-Links with T2S In-CSDs"](#) on page 4 - 21 and the Market Link Guides at www.clearstream.com).

Note: As part of CBF's internal compliance procedures, all client instructions transmitted via ICP connectivity channels will be automatically scanned before they are forwarded to T2S. Instructions that are internally flagged as requiring further manual investigation are set to status pending, with such status immediately reported to the client via their chosen media channel(s), until either they are manually released for processing or rejected (as these instructions are not presented for settlement, no CSDR "failed settlement penalties" (SEFP) applies, however, late matching penalties (LMFP) may occur). In order to ensure that instructions being investigated do not miss the applicable deadlines, clients are advised to ensure that instructions have been submitted to CASCADE at least 25¹ minutes before the associated deadline.

1. This comprises the maximum expected processing time of the internal compliance procedure (15 minutes) and the maximum expected processing and transmission time of the forwarding of instructions to T2S (10 minutes). A guarantee for processing at T2S will not be given at any time.

9.2 Non-collective safe custody

To use the services offered by CBL on CBF's behalf, for NCSC securities that will not be settled via T2S, CBF clients have the option of several communication channels via the Creation platform:

- Online via Xact Web Portal;
- Electronic exchange of files (File Transfer) via Xact File Transfer;
CBF clients can use their existing CASCADE link (LIMA) for communication with CBL via File Transfer (CreationDirect via LIMA). This allows clients to pass on instruction files to CBL via LIMA and receive CBL's report information.
- Electronic exchange of data via the Swift network via Xact via Swift.

9.3 Communications contingency

CBF offers a suite of communication channels (CASCADE via Host, Swift, File Transfer and MQ). For clients acting in DCP mode, the DCP connectivity channels are additionally available.

In case the regular communications channel should become inaccessible or unavailable, clients are recommended to have at least one backup ICP communications channel in place.

In the event that also none of the alternative channels of communication in ICP mode can be used, and as a last resort contingency means of communication, instructions can temporarily be accepted or information exchanged via facsimile or email, on condition that a duly signed Letter of Indemnity has been established between the client and CBF for such contingency.

To reduce the risk of failure in processing instructions in the event of such contingency and in order to act with the shortest possible delay, clients are recommended to establish a Letter of Indemnity in advance.

Such Letter of Indemnity, signed by CBF and by the client, shall be valid for all open and new accounts in the name of the client within its country of operation.

For example, a Letter of Indemnity established with a branch of a supranational corporation in one country will not be valid for other branches of the same supranational corporation in other countries.

Clients who want to establish a Letter of Indemnity as described above should contact CBF Client Services or their Relationship Officer (see [section 1.11 "Client Services"](#) on page 1 - 22).

Procedure for establishing a Letter of Indemnity

For a contingency situation to be accepted by CBF, the client must agree with the requirements of the following procedure:

1. Inform CBF about a presumed contingency situation by contacting CBF Client Services and/or their Relationship Officer via telephone.
2. Agree with CBF that there is a contingency situation.
3. Inform CBF about the contingency communications medium to be used for the duration of the current contingency situation with the client.

4. Inform CBF of the end of the contingency situation as soon as possible via telephone, to confirm the situation has been resolved.

The above procedure shall be applied by the client every time a contingency situation occurs.

Once the contingency situation is agreed, CBF will verify if a valid Letter of Indemnity is recorded in its books.

If, on contingency date, no valid Letter of Indemnity is available for the client, CBF will insist that it immediately receives a valid Letter of Indemnity duly signed by authorised persons in client's institution.

The Letter of Indemnity shall be sent to the client via the appropriate communications medium (facsimile or email) and the client shall return it duly signed to CBF by the same means. The original of the Letter of Indemnity shall also be delivered promptly to CBF via postal mail.

Based on CBF's internal validation of the client signatures, the process of inputting manual instructions on behalf of clients can begin.

On request and depending on client's needs, CBF Client Services will provide client with different templates for their cash and/or settlement instructions.

Only valid and complete instructions containing the necessary level of information detail will be processed.

The manual setup of client contingency instructions is subject to fees as per the [Clearstream Banking Fee Schedule](#).

9.4 Reporting

In order to enable clients to comply with their obligations of reconciliation of their records on a daily basis under the Article 64(3) and 86(1)(a) of the Commission Delegated Regulation EU No 2017/392 (ESMA RTS), clients are provided daily with necessary following information specified for each client account and each securities issue:

- The aggregate balance of each securities account at the beginning of the respective business day;
- The individual securities transfers in or from a securities account during the respective business day; and
- The aggregate balance of a securities account at the end of the respective business day.

Note: Clients have in accordance with Article 64(3) of the ESMA RTS an obligation to conduct a daily reconciliation of their own records based on the above-mentioned information provided by CBF. Such information shall be considered to have been accepted and approved by the client unless the client notifies CBF without undue delay. The client shall provide CBF with the information that CBF deems necessary to ensure the integrity of the securities issue and in particular to enable it to solve any reconciliation problems in accordance with the chapter IX of the ESMA RTS.

Reporting functionality via ClearstreamXact CBF File Service

Clients can use various reporting options via the ClearstreamXact CBF File Service through Xact Web Portal, including print reporting:

- CASCADE Reporting;
- Kapitaldienste (KADI);
- Taxbox;
- Vaults;
- Xemac®.

For all clients using the print reporting functionality, the ClearstreamXact CBF File Service is mandatory because the balance confirmations for CBF accounts and the year-end statements for CBF and CBF-i accounts are electronically available in Xact Web Portal in addition to the optional reporting mentioned above.

The ClearstreamXact CBF File Service can only be provided if access to Xact Web Portal is granted, the functional role "CBF File Service - Download" has been ordered and the requested files have been selected in the application form for downloads. For detailed information please see the Xact Web Portal User Manual and the CBF Connectivity Handbook Part 1.

A list of all reports available via the ClearstreamXact CBF File Service can be found in the Xact Web Portal User Manual, section 8.

9.5 Collective safe custody

Through CASCADE, CBF offers its clients a broad selection of reports on collective safe custody. These can be obtained through the following communication channels:

- Standardised reports in print format allow clients to manually process all information relevant for transactions. The reports can be sent as a file by remote data transfer (File Transfer) or printed out directly on the client's printer.
- Reports compatible with Swift ISO 15022 allow clients to settle securities and cash, and to automatically make the book entries in their own systems. Reports that cannot be shown in a format compatible with Swift ISO 15022 are available in a CBF format. The electronically processed reports are also transmitted as a file through a dedicated line.
- In addition to File Transfer, CBF offers the transmission of reports via the Swift network in the Swift ISO 15022 format.
- In individual cases and depending on the transaction, email or fax can be used as further means of communication.

The following table gives an overview of the most important reports provided by CBF with the following information:

- Name of the report;
- Time when the report is prepared and transmitted.

Via the connectivity channel File Transfer, messages are not sent in real-time but at pre-defined times.

Process	Product	MT	S																	S+1					
			20:00	21:00	22:00	23:00	00:00	02:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	
Cash	Cash Clearing Report	MT942																							
Cash	Cash Clearing Report	MT950																							
Custody	KADI-Information ^a	MT564				x																	19:30		
Custody	KADI-Information	MT566																							
Custody	KADI-Information	MT568																							
GSF	Business Validation Feedback	MT548																							
GSF	Processing Information	MT548																							
GSF	Detailed Allocated Collateral	MT569																							
GSF	Summary Allocated Collateral	MT569																							
Settlement	Feedback Information Registrar RS	MT501																							
Settlement	Feedback Information Registrar RS	MT510																							
Settlement	Business Validation Feedback RS	MT510																							
Settlement	Statement of Holdings	MT535																							
Settlement	Cleaning & Settlement Statement	MT536																							
Settlement	CBF Statement of pending transactions	MT537																							
Settlement	Settlement Confirmation OTC and SE	MT544																							
Settlement	Business Validation Feedback OTC and SE	MT545																							
Settlement	Business Validation Feedback OTC and SE	MT546																							
Settlement	Business Validation Feedback OTC and SE	MT547																							
Settlement	Business Validation Feedback OTC and SE	MT548																							
Settlement	Matching Information	MT548																							
Settlement	Processing Information	MT548																							
Settlement	Cancellation Information	MT548																							
Settlement	Settlement Allegment	MT578																							
Settlement	Settlement Allegment	MT586																							

a. Corporate actions on CBF-issued securities (Lagerland 99/„Deutschland“) are processed via OneClearstream Asset Servicing (OneCAS). The following securities are excluded from the processing under OneCAS: securities being a fund, securities being individual certificates and securities not being T2S-eligible.

Additional display of monthly movement report/custody account ledger

With additional information in the monthly movement report/custody account ledger, clients are able to research historical data faster, more targeted and with greater ease.

Background

In some markets information about market compensation is often made available more than eight weeks after the corresponding settlement date. For this reason, an additional "monthly movement report/custody account ledger" has been made available, simplifying historical research for securities settlement. The CASCADE online movement display provides users with complete transaction data for eight weeks. Afterwards, all data is archived in the monthly movement report/custody account ledger via the ClearstreamXact CBF File Service. The closing day and the settlement day, which are documented for the account activities from OTC, as well as for non-CCP stock exchange transactions, are included in this. Non-CCP stock exchange instructions (CSC and NCSC-T) using the instruction type AA01 / AA02 will be flagged with the value "S" in the column labelled "EING GART" (business type). Information, such as the closing day, plays an important role, particularly with the use of cross-border compensation rules for income payment.

Benefits for clients

Many benefits result for clients:

- Carrying out faster and more targeted historical research;
- No efforts for change are needed, as the monthly movement report/custody account ledger report is available in text format.

DU123001										7123			
BANK-NUMMER: 7 123					SEITE 791.728								
DEPOTSBUCH PERSOENLICH VOM 01.07. BIS 31.07.2022													
KONTO-NR: 7/123/000					TEST AG								
T2S SAC : DAKV7123000													
ISIN / WKN AN8068571086 / 853390 SCHLUMBERGER DL-,01 0,01 DL													
BUCH-	MB-	SET-DAY	SCHLUSS	LASTKTO	GUTKTO	AUFTR.	EING						
TAG	ÜBERG			LASTKTO NIEDERL	GUTKTO NIEDERL	AA	BS	GES-NR	EIN	NOMINALE WRG	GEGENWERT	GART	BEMERKUNG
ALTER SALDO													
ST 168.846,000000													
07.07	15:25	07.07.22	05.07.22	7321000	7123000	01	6	6518487	ST	35,000000 EUR	1.191,75	S	MI-6502645
08.07	20:29	08.07.22	06.07.22	7123000	7321000	01	6	6503659	ST	750,000000-EUR	23.737,50	S	MI-6525779
08.07	20:29	08.07.22	06.07.22	7123000	1116000	01	6	6503688	ST	1.000,000000-EUR	31.500,00	S	MI-6516219
08.07	20:29	08.07.22	06.07.22	7123000	7321000	01	6	6503642	ST	1.000,000000-EUR	32.500,00	S	MI-6525714
11.07	20:24	11.07.22	07.07.22	7321000	7123000	01	6	6531842	ST	74,000000 EUR	2.508,60	S	MI-6504405
11.07	15:38	11.07.22	11.07.22	7911000	7123000	01	22	1999477	ST	85,000000		P000	MI-9599052
12.07	20:30	12.07.22	08.07.22	7123000	7321000	01	6	6505260	ST	85,000000-EUR	2.851,75	S	MI-6538254
12.07	20:30	12.07.22	08.07.22	7123000	7321000	01	6	6505254	ST	70,000000-EUR	2.373,00	S	MI-6538222
12.07	20:30	12.07.22	08.07.22	7123000	7321000	01	6	6505248	ST	358,000000-EUR	12.010,90	S	MI-6538211
12.07	06:11	12.07.22	08.07.22	7321000	7123000	01	6	6538168	ST	100,000000 EUR	3.365,00	S	MI-6505214
13.07	15:47	13.07.22	13.07.22	7911000	7123000	01	22	2001248	ST	100,000000		P000	MI-9600692
14.07	20:34	14.07.22	12.07.22	7123000	7321000	01	6	6506630	ST	100,000000-EUR	3.220,00	S	MI-6549940

Figure 9.5 Display of the monthly movement report

9.6 Non-collective safe custody

For securities transactions with NCSC securities CBF provides its clients with comprehensive reports via Creation's various communication channels (for details, please refer to the [CBL Client Handbook](#)). CBF clients can choose to have the reports on their 6-series sub-accounts held via Creation sent to them either through direct interfaces to CBL or through the communication channels of CBF (LIMA).

The results of settlement of stock exchange trades with NCSC securities are also shown in the CASCADE reports (see [section "Collective safe custody"](#) on page 4 - 5 and [chapter 9. "Information Provision Services"](#) on page 9 - 1).

9.7 Year-end statements

Clients of Clearstream Banking receive the annual year-end statements in electronic form as part of the annual account reconciliation in accordance with No. 11 (3) of the "Anforderung an die Ordnungsmäßigkeit des Depotgeschäfts und der Erfüllung von Wertpapierlieferungsverpflichtungen" (Requirements for the Compliance of Securities Account Transactions and the Fulfilment of Securities Delivery Obligations).

By providing electronic account statements, CBF informs on the status of securities holdings at the end of the year in a form that enables this information to be reconciled electronically with the in-house information on securities holdings.

Access to these year-end statements as an electronic file is provided as part of the CBF File Service via the Xact Web Portal functionality. As soon as the reporting is available in Xact Web Portal, the statements can be downloaded for a period of 365 calendar days.

9.8 Domestic Markets Monitoring Report

Clients can subscribe to CBF's Domestic Markets Monitoring Report, supplementing existing materials with additional reporting on the domestic market links maintained on the Creation platform (CBL) and those maintained on the CASCADE platform (CBF).

Covering information related to subcustodians, agents and local market infrastructure, the report, which is available to clients on an individual subscription basis and whose content is reviewed and updated at least annually, is designed to help clients to obtain a comprehensive view of the network (and the custody chain) established and maintained by CBL and CBF. This information can support the due diligence obligations and the regulator-related functions that the client may be required to perform, particularly where, for example, it is acting as a "depository bank" under AIFMD¹ or UCITS V².

1. Alternative Investment Fund Managers Directive 2011/61/EU (AIFMD) came into force in 2011 and was to be transposed to the national laws of all 27 EU member states by July 2013. Among other things, AIFMs are required to provide reporting to their upstream regulators and investors that demonstrates their understanding of the custody chain through which securities belonging to an AIF are held.
2. Directive that was adopted by the European Parliament on 15th April 2014 (currently pending European Council approval) amending Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to Undertakings for Collective Investment in Transferable Securities.

9. Information Provision Services

The report, for which an annual fee is charged as stipulated in [Clearstream Banking Fee Schedule](#), contains information related to:

- The domestic markets maintained by CBL and CBF;
- The structure of CBL and CBF direct and indirect custody links and a description of CBL and CBF relationships with key market institutions, including information on the restitution of securities in the event of loss;
- CSD account structures, regulatory supervision, audit provisions, liens on participant accounts and other relevant information;
- CBL and CBF sub-custodian account structures, corporate status, audit details, asset reconciliation and other relevant information (for example, due diligence visits);
- General information on CBL's and CBF's sub-custodian network selection and review procedures.

Note: Due to market or link specificities, the level and quantity of information may differ from one market to another.

The report is prepared for general information purposes only, based on trusted third-party sources or publicly available information. The information contained in the report, which is subject to change without notice, cannot be considered as exhaustive and should not be relied upon in that regard. The CBF client shall keep such information strictly confidential at all times and shall not divulge any part of it to any third parties, except as required by law or the relevant regulatory authorities. CBF makes no guarantees, representations or warranties and accepts no responsibility or liability as to the accuracy or completeness of the information.

9.9 Registrar Monitoring Report

Clients can subscribe to CBF's Registrar Monitoring Report. This service reports on due diligence information collected by CBF relating to the agents appointed by Investment Funds available through Vestima. These agents include but are not limited to the transfer agent, registrar and the processing agent registering ownership. For Investment Funds in markets where holdings are registered at a CSD, please refer to [section 9.8 "Domestic Markets Monitoring Report"](#) on page 9 - 12. The client will receive the due diligence information relevant to the Investment Fund Shares it holds in CBF.

The due diligence information is delivered monthly and refers to:

- General information such as the agent's annual report and number of investment funds serviced;
- Regulatory authorisations;
- Auditor details;
- Internal risk and compliance structure;
- Legal information, such as previous or ongoing legal proceedings and insurance cover;
- Operational information and production environment;
- Record keeping such as audit trails and records longevity;
- Key performance indicators;
- Prospectus cross-check;
- Dedicated financial integrity screening.

CBF collects this due diligence information and applies a systematic scoring methodology, giving a clear structured overview of each agent in the report provided to the client. This due diligence information is prepared for general information purposes only on the basis of information made available to CBF by third parties or publicly available information. The information contained herein cannot be considered as exhaustive and should not be relied upon in that regard. CBF clients shall keep such information strictly confidential at all times and shall not divulge any part of it to any third parties, except as required by law or regulators.

CBF is only responsible for collecting, scoring and transmitting the information and neither makes any guarantees, representations or warranties nor accepts any responsibility or liability as to the accuracy or completeness of the information. The agents remain responsible for the correctness and completeness of the information they provide. This due diligence information is subject to change without notice.

9.10 T2S Dedicated Cash Account Statement (MT940)

When offered by a central bank, holders of a T2S Dedicated Cash Account (DCA) can subscribe to the T2S Dedicated Cash Account Statement (MT940). This statement is the conversion of the T2S message “camt.053 - Statement of Account” into ISO 15022 format. The client acknowledges that this service reports all the DCA's cash movements (settlement and custody) including the cash leg of securities movements in and out of the T2S Securities Accounts (SACs) which are linked to any of the CSDs.

The T2S Dedicated Cash Account Statement (MT940) includes:

- The start-of-day balance;
- The end-of-day balance;
- Information on booked entries;
- Underlying details of transactions; and
- Cash available on the T2S DCA.

It has to be noted that the MT940 T2S Dedicated Cash Accounts Statement does not constitute part of CBF's books but represents the official statement from Central Banks. Therefore, CBF is only responsible or liable for the correct conversion of the report received from central banks into the ISO 15022 format and the transmission to the client, provided the statement is received from Central Banks.

A CBF client that is a T2S DCA holder of a central bank that offers the service and that wishes to receive the T2S Dedicated Cash Account Statement (MT940) must subscribe to the “camt.053 - Statement of Account” (Swift ISO 20022 format) through their central bank which will then apply for this message on behalf of its underlying client in T2S.

Once this is done, the CBF client subscribes to the service in Clearstream Banking by sending a free-format message (Swift MTx99 or Xact message) from a CBF-i account¹ to CEDELULLXXX for the attention of “PRGconnect - for the T2S Dedicated Cash Account Statement (MT940)”, indicating:

- CBF-i account (for billing purposes);
- A BIC address;
- The DCA number; and
- The start date. December 2024

Through this setup, CBF automatically receives the “camt.053 - Statement of Account” on behalf of its client. CBF handles the mapping of the camt.053 message into the MT940, the distribution of the statement to the respective client and the billing of the statement to the CBF-i account.

The T2S Dedicated Cash Account Statement (MT940) will be sent to clients from the BIC address CEDELULLXXX.

1. This CBF-i account can be an existing one, or a new one opened specifically for this purpose.

9.11 Shareholder identification

Reports

Report	Description
Shareholder Identification Disclosure Request (seev.045)	The Shareholder Identification Disclosure Request is driven by the respective issuer and asks all intermediaries in the custody chain to disclose (send to the response recipient defined in the request) its holdings for a specific ISIN.
Shareholder Identification Disclosure Request Cancellation Advice (seev.046)	The Shareholder Identification Disclosure Request Cancellation Advice serves to communicate the cancellation of a Shareholder Identification Disclosure Request to the custody chain.

Availability of reports and online queries

Report	Available	Xact via Swift	Xact Web Portal	Xact File Transfer
Shareholder Identification Disclosure Request (seev.045)	Via Swift: Real-time	ISO	Queries	XML
Shareholder Identification Disclosure Request Cancellation Advice (seev.046)	Via Swift: Real-time	ISO	Queries	XML

10. Annex

10.1 Reference documents

The following table contains an alphabetical list of all documents referred to in this Handbook. They can be found on the Clearstream website www.clearstream.com.

Name of document	Description
Account opening forms	Documents needed to open a new main account and further (sub-)accounts
Market Link Guide	Description of the instruction requirements, settlement details and custody services for the respective Non-T2S market in relation to cross-border securities transactions to be settled via CASCADE
CASCADE Handbook Part 1-3	Handbook on the online application, CASCADE-Host, of the CASCADE settlement platform with system information, functional descriptions and background information
CBF Connectivity Handbook Part 1-3	Description of the communication with CASCADE via Swift and File Transfer according to ISO 15022
CBL Client Handbook	CBL Client Handbook with information on organisation and business processes
Compensation Handbook	Compensation rules with the criteria for selection of transactions and event types affected
Clearstream Banking's TARGET2-Securities Glossary	Glossary of definitions and a short description of the main abbreviations, acronyms and terms related to the pan-European settlement platform T2S
Clearstream Banking Fee Schedule	Overview of fees for services in relation to collective safe custody and non-collective safe custody
DCP Connectivity Handbook: ISO 20022 formats and DCP Setup	Description of the connectivity in ISO 20022 for DCPs
Creation-CASCADE Realignment Guide	Description of the instruction requirements for the respective market in relation to the transfer of securities between the CASCADE and the Creation platforms
Eligible securities	List of all securities accepted by Creation
Foreign securities in collective safe custody	List of all non-German securities kept in collective safe custody
General Terms and Conditions of CBF	CBF's terms and conditions of business governing the entire business relationship between CBF and its clients
Market Link Guide	Description of the instruction requirements, settlement details and custody services for the respective market migrated to OneClearstream or international market in relation to cross-border securities transactions.

Name of document	Description
<u>Market Profiles</u>	Information on the infrastructure, investment rules, securities trading, settlement processes, administration of securities and taxation for the respective market
<u>Market Taxation Guide</u>	Basic information on tax exemption and tax refunds for each market to which CBF is linked
<u>Multi-Market Securities Guide</u>	Settlement of multi-listed securities that can be traded at more than one international stock exchange, and deposited and settled with more than one CSD
<u>OneClearstream Client Handbook</u>	Client Handbook for clients using the OneClearstream service with information on organisation and business processes
<u>Product information: Dual Automated Re-registration Service - for banks and issuers of registered shares</u>	Description of CBF's services for re-registration of registered shares positions (only in German)
<u>Registered shares in collective safe custody</u>	List of registered shares admitted to collective safe custody
<u>Special Conditions for Collateral Management (SC Xemac[®])</u>	Supplement to the conditions for participation in collateral management via Xemac
<u>Special conditions for the French Financial Transaction Tax</u>	Information on the reporting and payment obligations of Clearstream Banking AG and its clients arising from the French Financial Transaction Tax as well as the services provided by Clearstream Banking AG
<u>Taxbox Connectivity Handbook</u>	Description of ways of communicating with CBF within the framework of the service for the transfer of tax-relevant data due to the German flat rate withholding tax
<u>T2S Link Guide</u>	Description of the instruction requirements, settlement details and custody services for the respective T2S market in relation to cross-border securities transactions to be settled via T2S
<u>Xact Web Portal User Manual</u>	User manual to Clearstream Banking's web-based connectivity channel, offering online access to clients
<u>Xemac User Manual</u>	User manual on the collateral management system Xemac [®] with system information, functional descriptions and background information

Glossary

The glossary is intended solely for information purposes. It gives clients a more detailed description of the specific wording used by CBF in this handbook. Some terms used in this handbook may have a different meaning in another context. The descriptions and specifications are not of a legally binding nature with regard to the terms used.

A

Appeal

“Appeals” refer to the exceptional correction or update of previously calculated and reported settlement fails penalties upon client request.

B

BaFin

Acronym standing for “Bundesanstalt für Finanzdienstleistungsaufsicht” (the German Federal Financial Supervisory Authority).

Blank certificates

Original securities that do not yet have a certificate number.

C

Calculating CSD

CSD subject to CSDR where the actual settlement (fail) is taking place.

The Calculating-CSD calculates, reports and collects/distributes penalties to its clients (that may as well be CSDs); also in cross-CSD settlement fails scenarios involving direct links, to avoid duplication of penalties calculation and reconciliation issues between linked CSDs, penalties are exclusively to be calculated by the Calculating-CSD.

CASCADE

Central Application for Settlement, Clearing and Depository Expansion. Central settlement platform for securities transactions with all the necessary functionalities for entering, processing and settling instructions. In addition, CASCADE shows the clients' holdings that are kept in collective safe custody with CBF, and the custody services in relation to these holdings.

CASCADE-Fremdwährung (other currencies)

CASCADE can be used to settle transactions and income administration events in other currencies than EUR. CASCADE other currencies means all non-EUR currencies admitted to CASCADE. Cash settlement in other currencies takes place via the Creation settlement platform (6-series sub-accounts) of CBF's sister company, CBL, or through the Swiss National Bank (when the currency is CHF).

CASCADE-OTC

CASCADE-OTC is the name used to designate the functional scope of the CASCADE platform that is responsible for the settlement of OTC transactions. It must be noted that this also includes the delivery instructions that the central counterparty (CCP) sends to CBF.

CASCADE-RS

CASCADE-RS means the functional scope of the CASCADE platform used to settle securities transactions in registered shares. The functionalities also include interfaces to issuers or share ledger managers for the first registration and re-registration of shareholders in the share ledger.

Cash taker

In a repo transaction this is the party who receives the cash amount and, in return, delivers securities to the counterparty (cash provider).

Cash provider

In a repo transaction this is the party who provides the cash amount for the counterparty (cash taker) and receives securities in return.

CBF

Acronym standing for Clearstream Banking AG, Frankfurt am Main. CBF is a credit institution and a German central securities depository (CSD). It is officially recognised as such under the German Securities Deposit Act (Depotgesetz).

CBL

Acronym standing for Clearstream Banking S.A., Luxembourg. CBL is a sister company of CBF and functions as an international central securities depository (ICSD), particularly for Euro bonds.

CCP

Acronym standing for central counterparty. When a transaction takes place, the CCP acts as the counterparty between buyer and seller and, in addition to affording anonymity throughout the entire securities processing chain, reduces the risk of default. Eurex Clearing AG, a clearing house and a Deutsche Börse Group company, has been gradually introducing the Equity CCP and the Fixed Income CCP (Eurex Repo) since March 2003.

Character Set

Characters used in text fields must correspond to the Swift Character Set X. This is defined by the following characters:

Character	Description
a-z	Lower case letters of the Latin alphabet
A-Z	Capital letters of the Latin alphabet
0-9	Numbers
/	Slash
-	Hyphen
?	Question mark
:	colon
{ }	Opening / closing parenthesis
.	Full stop
,	Comma
+	Plus
CR	Link break
LF	Line feed

CFI

Classification of Financial Instruments Codes (ISO-Norm 10962:2015).

Clearing

Netting of claims and obligations from securities and forward transactions for the optimisation of delivery and accounting processes (settlement netting). Clearing determines the bilateral net debt of the buyer and the seller from a transaction. This job is usually done by a central institution.

CP

Acronym standing for commercial paper. A debt instrument similar to a bill of exchange with a short to medium-term maturity that is traded on the money market.

Creation

CBL's central settlement platform for clearing and settlement, custody and reporting that CBF uses for the settlement of transactions in NCSC securities.

Cross-CSD settlement

Settlement between two clients located in different CSDs.

CSC

Acronym standing for collective safe custody.

CSD

Acronym standing for central securities depository. A CSD assumes responsibility for the physical custody and transfer of securities by delivering physical individual certificates or by making entries in the accounts. CBF is the German national CSD.

CSDR

Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories.

Full text available [here](#).

D**DCA**

Acronym standing for dedicated Cash account. Account used for cash settlement on T2S.

DS.A

Settlement platform of Oesterreichische Kontrollbank CSD GmbH (OeKB) in Austria. CASCADE has a link to DS.A for the admission of Austrian securities to collective safe custody with CBF.

DvP

Acronym standing for delivery versus payment: name of a securities transaction with simultaneous delivery of securities and payment of cash countervalue.

E**ECB**

Acronym standing for European Central Bank

ECC

Acronym standing for European Commodity Clearing AG

EEA

Acronym standing for European Economic Area

EEX

Acronym standing for European Energy Exchange: integrated spot and futures market for trading in electricity and electricity futures in Continental Europe.

Eurex

Eurex stands for the leading European derivatives exchange and – with Eurex Clearing – one of the leading central counterparties globally. On the trading side, Eurex is the centre of European equity and equity index derivatives markets, offering a global product range, operating the most liquid fixed-

income derivatives markets in Europe. As a central counterparty, Eurex Clearing enables effective risk management and delivers high efficiencies to clients.

External settlement

Settlement between a CBL client and a client located in domestic CSD.

F

FC (WR)

Acronym standing for foreign currency (Fremdwahrung), that is, non-EUR currency or other currency than EUR.

FoP

Acronym standing for free of payment: name of a securities transaction where only the securities are delivered, but no cash countervalue is paid.

Front leg

Specifies the term of a repo transaction. The “front leg” is the name given to the date when the transaction starts on the delivery of the securities (opening date) and the “term leg” is the date of when the transaction is completed (trade/ transaction date) and the securities are returned.

FTT

French Financial Transaction Tax

FWB

Acronym standing for FWB Frankfurt Stock Exchange.

G

GNA

Global net amount; refers to the actual monthly debit or credit amount of cash penalties reported by CBF to its clients (per counterparty-CSD and per penalties currency). CBF will collect or distribute each “Global Net Amount” once a month, on the 18th PBD of the following calendar month.

Gross delivery management (GDM)

Central service of Eurex Clearing AG for monitoring and processing spot market transactions pending for delivery that are settled against the central counterparty (CCP).

I

ICSD

Acronym standing for international central securities depository. The original task of international central securities depositories was the clearing and settlement of transactions in Eurobonds, for which no market infrastructure existed. Since they first came into existence over three decades ago the business of ICSDs has expanded to include most securities traded in local and international markets.

Internal settlement

Settlement between two CBF clients.

Intra-CSD settlement

Settlement between two T2S participants located in the same T2S CSD (for example, a transaction between two CBF participants).

ISD

Intended Settlement Date.

ISIN

Acronym standing for international securities identification number. Internationally recognised code for clear identification of securities. ISO has laid down rules for the allocation of securities ISINs. The allocation of these numbers is carried out by determinate national and international organisations (known as numbering agents). In Germany, this task is performed by the Wertpapier-Mitteilungen (WM).

Instruction

In CASCADE, every kind of order that a client issues to CBF (for example, every transfer of securities) is known as an instruction.

Instructions entered

Positions of pending OTC transactions: instructions entered online become part of the “instructions entered” (or enter instruction processing) after verification and, from this moment, represent a legally binding instruction to CBF. Instructions sent by File Transfer or via Swift enter instruction processing immediately after technical verifications of receipt and plausibility tests.

ISO

Acronym standing for International Standard Organisation.

K**KUSTA**

Acronym standing for CBF's database of client master data (Kunden-Stammdatenbank). This database contains all the necessary details on CBF account holders, stock exchange participants, participants of CSDs outside Germany, and clearing organisations. The database stores the most important information on account management and transaction settlement for each account.

KWG

Gesetz über das Kreditwesen - German Banking Act.

L**LBS**

Acronym standing for Loyalty Bonus Shares (Primes de fidélité (PF)).

These securities are a subcategory of VON securities.

In order to qualify for a loyalty bonus programme, the securities must be registered in the name of the beneficial owner. They give the right to a loyalty bonus if the temporary LBS are held by the BO for a pre-defined amount of time (typically two years, sometimes four years).

The temporary LBS and LBS ISINs cannot be settled. In order to process DvP instructions, LBS must first be converted into VON registered securities and then converted to bearer securities (two-step process). Any right to a loyalty bonus is lost during this process.

LMFP

Late Matching Fail Penalty.

One of the two types of cash penalties. LMFP applies due to the matching taking place after the ISD.

M**Marginal lending facilities**

Facility for commercial banks to obtain liquidity in central bank money at short notice (overnight) with Deutsche Bundesbank in return for the provision of collateral.

Matching

This process describes the matching of mandatory and optional fields of counter instructions.

Pre-matching is the process whereby the trade and settlement details given by two counterparties are compared for accuracy and consistency and the results are reported to the concerned parties.

The passive matching service creates the corresponding required matching instruction for the buyer. The instruction details are based on the instruction of the seller.

The settlement matching is an integral part of the process of settlement of counter-instructions entered for settlement on the intended value date.

N

NCSC

Acronym standing for non-collective safe custody (securities), also referred to as book-entry credits on a fiduciary basis or trustee business.

NCSC-T

Acronym standing for non-collective safe custody (securities) with T2S-eligibility.

O

OneClearstream

The OneClearstream service offers a unique value proposition for all CSD and ICSD clients with harmonised end-to-end processes and service standards.

Online information (KVGII)

Online display of information in CASCADE giving clients pre-advice of income events (in particular interest, income, repayments/redemption) and non-income events (mandatory and voluntary Corporate Actions.) In the case of income events, settlement information is also shown, as from Ex-Date.

OTC

Acronym standing for over the counter.

Overnight repo

Repo transaction that is closed again on the business following the opening day.

P

PBD

Penalties Business Day. Used for the penalties-specific monthly reporting, appeals, and payment processing. This is any day of the year except for 1 January, 25 December, Saturdays and Sundays.

PFOD

Acronym standing for Payment Free of Delivery (cash settlement with no delivery of securities).

R

Repo - repurchase agreement

Contract to sell securities and to repurchase the same securities at either a specific date or some time in the future.

RTS

Acronym standing for real-time settlement processing. A settlement cycle in CASCADE in which individual, validly entered instructions are settled immediately and in succession on the basis of an individual transaction.

RTS 2017/390

Commission Delegated Regulation (EU) 2017/390 of 11 November 2016 supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with regard to regulatory technical

standards on certain prudential requirements for central securities depositories and designated credit institutions offering banking-type ancillary services.

RTS 2017/392

Commission Delegated Regulation (EU) 2017/392 of 11 November 2016 supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with regard to regulatory technical standards on authorisation, supervisory and operational requirements for central securities depositories.

S

S

Stands for settlement date, the day when a securities transaction is to be settled, with legal obligations discharged, by the transfer of securities and, if applicable, payment of the cash countervalue. For CBF, the settlement date already starts in the evening before the actual settlement date with the start of night-time processing (STD) and ends with the last possible daytime processing cycle on settlement date (RTS).

SDR

Commission Delegated Regulation (EU) 2018/1229 of 25 May 2018 supplementing Regulation (EU) No 909/2014 of the European Parliament and of the Council with regard to regulatory technical standards on settlement discipline.

Full text available [here](#).

SECOM

Settlement platform of SIX SIS AG. CASCADE has a link to SECOM for the admission of Swiss securities to collective safe custody by CBF.

SEFP

Settlement Fail Penalty.

One of the two types of cash penalty. SEFP applies due to the non-settlement of a matched transaction on or after its ISD.

SETI

Stock Exchange Transaction Interface (SETI). All non-cleared SE instructions will be provided to this hub which will create the SE instructions and route the instructions to the respective settlement platform.

Settlement

Settlement of a securities transaction through delivery of securities and payment of cash countervalue (instructions against payment). Settlement in CSC and NCSC securities is carried out by making accounting entries in the securities and cash accounts of the parties to the transaction.

Settlement blocking

Blocking of an OTC transaction or a stock exchange trade to prevent processing and final settlement. A blocked instruction does not enter the subsequent processing cycles. The settlement of an OTC transaction can be blocked by the instructing party and/or the receiving party. Positions pending for delivery from stock exchange trading can only be blocked by the seller.

Spot next

Specifies the term of an overnight repo transaction. In the case of a spot next transaction, the contract starts the day following the next day (T + 2 business days) and ends on the day after that (T + 3 business days).

Spot term

Specifies the term of a Repo transaction. In the case of a spot term transaction, the contract starts on the day following the next day (T + 2 business days) and ends on a settlement date agreed between the two parties (T + X business days).

Stock exchange trades

In this Handbook, stock exchange trades are all stock exchange traded non-CCP instructions in CSC and NCSC-T eligible securities.

STR

Acronym standing for individual safe custody of physical securities, also referred to as jacket custody (Streifbandverwahrung).

T

T

Stands for trading day or trade day: the date on which a stock exchange trade is concluded.

T2S

Acronym standing for Trans-European Automated Real-time Gross Settlement Express Transfer Two-Securities. This is the platform operated by the European Central Bank for the settlement of securities and cash payments.

Term leg

Specifies the term of a repo transaction. The front leg specifies the start of the term (opening date) and the term leg the end of the term (closing date) for the transaction.

Trades pending for delivery

All stock exchange trades that have not yet been settled.

V

VEN

Acronym standing for Valeurs Essentiellement Nominatives (Essentially Registered Securities).

For these securities, registration with the issuer is mandatory. VEN securities are by default registered in the name of CBF (except for French residents or specified otherwise by the counterparties).

VON

Acronym standing for Valeurs Occasionnellement Nominatives (Occasionally Registered Securities).

These securities can exist in bearer or registered form. The bearer form can be settled whereas the registered form is excluded from any settlement activity, except when a portfolio transfer occurs without a change of beneficial owner (BO).

Registration is optional and at the discretion of the client. If registration occurs, it must be done in the name of the final BO.

W

WKN (German securities identification code)

The German securities identification code (Wertpapierkennnummer; WKN) clearly identifies a security. The German securities identification code is a six-digit alpha-numeric code. On 22 April 2003, the securities code was officially replaced by the 12-digit ISIN (international securities identification number) which allows identification of securities worldwide. However, for practical reasons the German securities identification code is still used as well. The German securities identification code (WKN) and the ISIN are allocated by Wertpapier-Mitteilungen (WM), the national numbering agency.

WSS (Securities Service System) CBF

Decisions, notices and announcements of the CSC admission and corporate actions are published in WSS CBF (WSS Online and PROPRIS). For further information please refer to the [Market Data + Services website](#).

X

Xact Web Portal

Web-based connectivity channel offering online access to clients for the full range of Clearstream Banking services.

Xetra

Electronic trading platform of Deutsche Börse AG based on the T7[®] trading system for the spot market at Frankfurter Wertpapierbörse (FWB[®], the Frankfurt Stock Exchange).

Index

A

Accounts	
Main accounts	2-3
Sub-accounts	2-3
Types	2-3
accounts	
Collateral	8-17
AIFMD	9-12
Allocated positions	8-1

C

CASCADE	
CASCADE-Host	9-3
cash	
Collateral	8-17
Cash financing	1-17
Clearing and Settlement	
Eurex exercises	4-26
Fractional co-ownership of German global bearer certificates	4-25
OTC-Crossborder	4-21
OTC-Domestic, DvP in EUR	4-13, 4-16
OTC-Domestic, DvP in non-EUR currency	4-19
Stock exchange trades (LION)	4-7
Collateral	
bank guarantees	8-17
eligibility changes	8-18
eligible account position	8-17
eligible cash	8-17
eligible securities	8-13
exchange rates	8-17
prices	8-17
revaluation	8-17
Collateral management	1-13
Collective safe custody (CSC)	1-4, 1-5, 2-3, 4-10
Custody	1-11
Custody account ledger	9-11
Customer accounts	
CASCADE accounts	2-1

D

Deadlines	
Entering instructions	9-6
Depository	1-16, 1-18

E

eligible securities	8-13
Entry of instructions	
Eurex Ausübungen	4-25
OTC-Crossborder	4-24
OTC-Domestic, DvP in EUR	4-13
OTC-Domestic, FOP	4-11
Euro Night-Time Funding Link	8-17

F

File-Transfer	9-4
FMB	8-1

G

General Meetings services	5-19
Gross delivery management	4-25

H

HB	8-1
----	-----

I

Individual safe custody	1-4
-------------------------	-----

J

Jacket custody	1-4, 1-14
----------------	-----------

M

Matching	
Eurex exercises	4-26
Fixed Income CCP	4-25
OTC-Crossborder	4-24
OTC-Domestic, DvP in EUR	4-15
OTC-Domestic, DvP in non-EUR currency	4-18
OTC-Domestic, FOP	4-12
Monthly movement report	9-11

N

Non-collective safe custody (NCSC)	1-5, 1-16
------------------------------------	-----------

O

OTC trades	
Eurex exercises	4-25
OTC transactions	
Crossborder	4-21
Fractional co-ownership of German global bearer certificates	4-25
OTC-Domestic, DvP in EUR	4-13

P

Physical securities	1-4
Processing instructions	
Equity CCP	4-25
Eurex exercises	4-26
OTC-Crossborder	4-24
OTC-Domestic, DvP in EUR	4-14
OTC-Domestic, DvP in non-EUR currency	4-17

R

Reg.-über (third-place accounts)	2-5
Registered positions	8-1
Registered shares	1-12
Reports	9-1
Reservation process	
Securities	4-19

S

securities	
Collateral	8-13
Settlement	

Client Handbook

Eurex exercises	4-25
Settlement Failure	
OTC-Domestic, DvP in EUR	4-17
OTC-Domestic, DVP in non-EUR currency	4-20
OTC-Domestic, FOP	4-13
Stock exchange trade(LION)	4-8
Source of information	1-19
Stock exchange trades	3-1
SWIFT	9-6

U

UCITS	9-12
Unregistered positions	8-1

V

Vaults	1-11, 1-14
--------------	------------

Z

ZMB	8-1
-----------	-----

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