

KAGplus

Product Guide

KAGplus

Clearstream Banking AG, Frankfurt

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Foreword

This guide (the "Product Guide") describes Clearstream Banking AG, Frankfurt's (CBF) KAGplus, a securities lending and collateral management service as defined in the Securities Lending and Borrowing Rules of Clearstream Banking AG, Frankfurt.

The Securities Lending and Borrowing Rules of Clearstream Banking AG, Frankfurt is the governing document for the use of KAGplus and prevails over this Product Guide. The agreement is governed exclusively by German law, which means that it benefits from clear, efficient and protective laws on securities and pledges.

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1. All times are in Central European Time (CET) unless otherwise stated.

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1. Overview

1.1 KAGplus for investment funds

KAGplus enables investors to enjoy improved yield on investment funds (both UCITS and AIFs) and assists in minimising legally defined risks. Securities lending is one way to increase the performance of investment funds. However, the German Capital Investment Code (KAGB - Kapitalanlagegesetzbuch) and the Derivatives Decree (DerivateV) limits the lending activities of some types of investment funds and also impose tight regulations on collateralisation:

- Collateral must be held on a 1:1 basis that is in a separate account for each component of investment funds;
- The framework for collateral eligibility criteria is defined and needs to be monitored;
- Pooling of collateral is not allowed;
- Collateral receivers need to manage a 20% issuer concentration limit.

Clearstream Banking Frankfurt's (CBF) with its unique role as Germany's Central Securities Depository (CSD) and its primary focus on investor protection has been certified as an organised system under Section 202 of KAGB. Therefore, the KAGplus service enables both lenders and borrowers to fully comply with regulatory requirements while at the same time maximising lending activities. By using KAGplus, investors do not have to consider these restrictions as CBF manages and monitors them. This saves the investment fund from requiring complex in-house structures.

KAGplus eases the engagement in securities lending for both those investment funds that are already active in securities lending - willing to manage existing relationships - and those who want to become active. KAGplus processing is fully automated, straight-through processing (STP) based on SWIFT standard messaging. Hence, it can (1) help make the maintenance of already existing relationships to borrowers more efficient, while being more flexible in terms of legal restrictions; and (2) help tap into a new revenue source for investment funds that have not been used for securities lending so far. For both, the time to market using KAGplus is very short and free of charge for the investment fund as lender.

Collateralisation is fully managed by CBF. Borrowers only need to collateralise one global loan exposure over all investment funds they are borrowing from and CBF takes care of the assignment of collateral to the exposures per investment fund. Additionally, CBF assures the quality of collateral by applying collateral eligibility criteria in line with KAGB and according to Eurex Clearing (ECAG) and European Central Bank (ECB) collateral standards and respective haircuts.

1.2 KAGplus for strategic securities lending customers

Strategic securities lending customers can manage their bilateral and multilateral securities lending relationships via KAGplus in a fully automated and STP set up. Bilaterally agreed loans or securities lending interest are sent to KAGplus by lender and borrower via SWIFT messages, registered and matched on the KAGplus platform. CBF manages the collateralisation in communication with the borrower.

KAGplus enables lenders to reduce manual intervention to a minimum, to outsource all maintenance issues regarding securities loans from a reporting point of view (for example, loan rerate treatment, corporate actions etc.) and to outsource the collateral management in terms of collateral schedules, concentration limits, haircut monitoring and adjustment and marking to market.

1.3 KAGplus in general

In KAGplus, loans are processed on a fully automated basis by using SWIFT standard messages transmitted via three possible electronic communication channels (SWIFT-Network, MQSeries, File Transfer).

In order to provide the highest degree of flexibility and to mirror the existing structures between investment funds/strategic lenders and their borrowers, KAGplus can operate based on two structures:

- The Position Model, in which the investment fund/strategic lender uploads lendable positions ("availability file") into KAGplus for one or several exclusive borrowers. These borrowers can, in turn, try to match against these positions by sending loan opening requests ("borrowing needs"). If a loan request matches with a lender's position, a loan is opened and KAGplus takes care of collateralisation and loan maintenance.

The figure below shows a simplified model of the service identifying the key elements and participants:

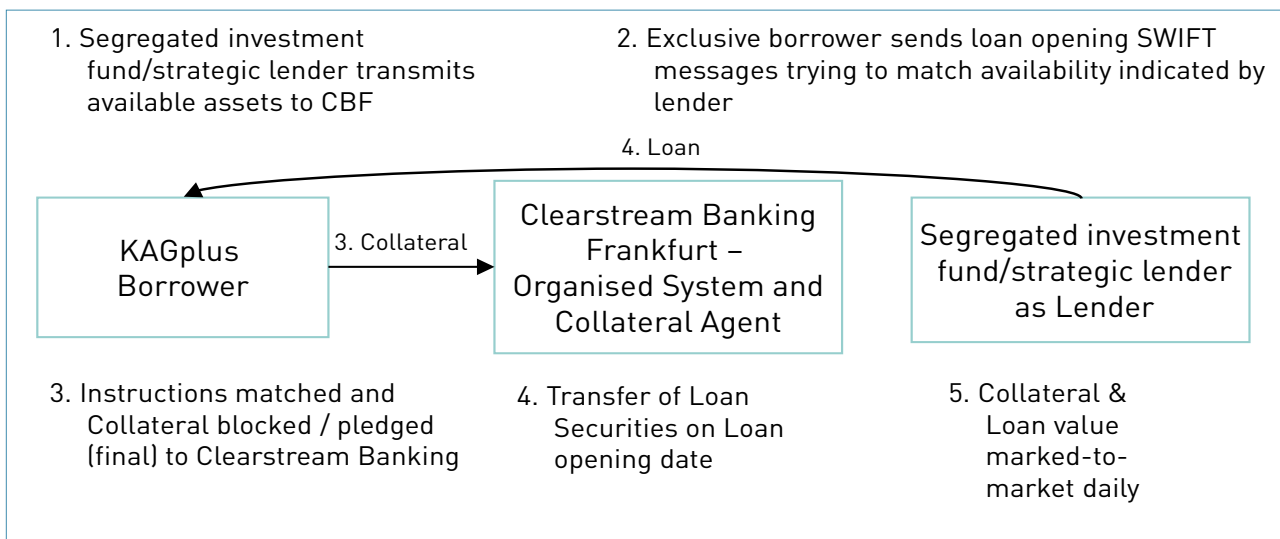


Figure 1.1 Key elements of the KAGplus Position Model

- The Instruction Model, in which the separated trust asset/strategic lender and its borrower negotiate loans outside KAGplus and send them after agreement to KAGplus for matching, collateralisation and loan maintenance.

The next figure shows a simplified model of the service identifying the key elements and participants:

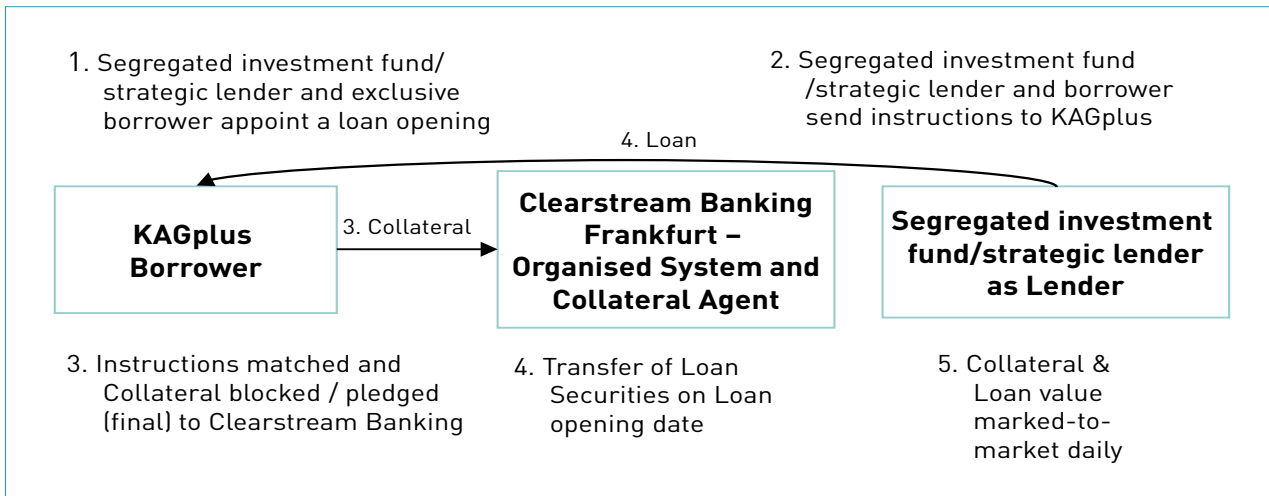


Figure 1.2 Key elements of the KAGplus Instruction Model

1.4 Benefits and features

For lenders and borrowers

- Reduced overhead costs as CBF manages matching, margining, collateral provision and corporate action processing;
- Negotiated rates on a loan-by-loan basis (CBF does not intervene here and does not withhold a respective fee cut but ensures investor protection via minimum lending rates per asset class);
- Fully automated and STP instruction handling using standardised SWIFT ISO 15022 formats and offering different communication channels (SWIFT network, MQSeries, File Transfer);
- Reduced risk as all loans are fully collateralised and monitored daily by CBF acting as collateral trustee;
- Flexibility and freedom as CBF gives customers the opportunity to further restrict their lending activity;
- Daily and monthly comprehensive and transparent reports, in PDF/CSV format or as SWIFT message.

For lenders (Kapitalverwaltungsgesellschaften; KVGs)

- Portfolio/strategic business yield increased;
- Outsourcing of compliance monitoring concerning investor protection requirements (KAGB);
- Monitoring and assurance of collateral quality by CBF;
- Corporate Actions: Full rights retained by lenders to income proceeds from securities on loan via compensation payments;
- Flexibility of investment decisions;
- No disruption to existing relationships to borrowers as CBF only acts as collateral trustee.

For lender's depositories

- STP solution with no manual intervention;
- Custody fees waived on lent positions;
- Complex in-house structures not required for securities lending;
- Flexible setup options.

For borrowers

- Only one global exposure to be collateralised, reducing collateral management efforts;
- Large pool of liquidity with very low recall rates;
- Larger loans and longer loan duration;
- Corporate Actions: Full rights retained by borrowers to income proceeds from securities posted as collateral;
- No disruption to existing relationships to borrowers as CBF only acts in collateral trustee role.

1.5 Role of Clearstream Banking Frankfurt

CBF is an organised system in line with Section 202 of KAGB and fulfils a facilitating role in the programme, as follows:

- Acts as trustee in the loan to both the lender and the borrower;
- Undertakes administrative functions, thus saving overhead costs for lenders and borrowers alike;
- Provides a secure environment;
- Marks securities to market daily;
- Manages collateral haircuts to be applied on a daily basis;
- Offers multiple ways to mobilise collateral, making use of borrowed securities and provision of collateral for international in the same way as for domestic participants;
- For loan management and pricing activities the CBF application LMS is dependent on master data and price data provisioning from external sources.

1.6 Legal documentation necessary for participation

For lenders, borrowers and lender's depositories

- General Terms and Conditions for the opening of a CBF account¹;
- Securities Lending and Borrowing Rules of Clearstream Banking Frankfurt;
- Know Your Customer (KYC) and Anti Money Laundering (AML) to be checked for compliance with CBF standards¹.

For lenders (KVGs)

- KAGplus Sideletter, necessary because investment funds are usually not direct CBF customers and access CBF's services via their depository as their commission agent.

For lender's depositories

- Application form: Securities Lending;
- KAGplus Sideletter, in order to grant CBF a Power of Attorney (PoA) over the CBF accounts where the investment funds are deposited. The sideletter must be signed by the depository as the investment fund's commission agent. This is necessary to perform securities transfers following concluded loan agreements.

For borrowers

- Application form: Securities Lending;
- If collateralising via Xemac: Application documents for Xemac²;
- If collateralising via Xemac including usage of Xemac-CmaX link: Application documents for Xemac and CmaX².

1. If not an already existing CBF customer.
2. If not already using the product.

2. System setup of KAGplus

In general, two systems are involved in delivering the CBF KAGplus offering domestically in Germany.

- Central Application for Settlement, Clearing and Depository Expansion (CASCADE);
- Lending Management System (LMS).

The use of three further systems called Creation (international settlement platform), Xemac and CmaX (for collateralisation purposes) is optional but allows international customers to access domestic securities.

As a supplementary system, TARGET2 is used to perform cash transfers between counterparties; for example, compensation payments etc.

2.1 CASCADE

CASCADE is the settlement system of CBF. Each customer of CBF has an account in CASCADE for the settlement of transactions in Collective Safe Custody (CSC) securities. This account is identified by a four-digit customer specific account number and a three-digit sub-account number. The main account number for each customer is always the customer specific four-digit account number plus the sub-account number 000 (for example, nnnn000). A KVG (Kapitalverwaltungsgesellschaft) in the sense of a capital investment company does not have an own main account; it makes use of the main account of its depository.

Sub-account numbers are used to give customers the possibility to separate different types of businesses. Some sub-account numbers are reserved for special CBF functions. Some reserved sub-accounts are automatically opened for each customer when opening a standard CBF account.

Conceptual example: The sub-accounts 510 for the Automatic Securities Lending Programme and 550 for the management of collateral (Xemac only) are automatically opened with the opening of a standard CBF account but can only be used once application forms for securities lending or Xemac are provided by the customer (see section 2 of CBF Customer Handbook at www.clearstream.com).

A third type of account is the 680 pledge account. This account is a special account, held in the name of CBF acting as a collateral trustee.

Transfers between CASCADE accounts are provided through different transaction types; for example:

- 11 to open a loan;
- 12 to close a loan.

On the standard CBF SWIFT reporting (MT536 Clearing & Settlement Statement, MT54x Settlement Confirmation) these transaction types and LMS loan trade numbers are shown.

2.2 Creation

Creation is the settlement platform of Clearstream Banking Luxembourg (CBL). Each customer of CBL has an account in Creation for the settlement of transactions in CSC or Non-Collective Safe Custody (NCSC) securities. This account is identified by a five-digit customer specific account number, the main account number. There is no sub-account logic in Creation; different types of business are segregated in separate accounts.

Securities held in Creation can be used for loan transactions and/or collateralisation. Securities to be provided to collateralise loans opened in KAGplus (if customers choose to collateralise via the CmaX-Xemac link) are sourced from the main account.

2.3 LMS

LMS is the system that manages all securities lending transactions. It is a satellite system that communicates with the CASCADE platform on settlement date (S). In LMS, operation types correspond to different transaction types in CASCADE. Operation types in LMS consist of two two-character parts:

- The first two-character part always indicates the underlying service type. Possible operation types are, for example;
 - “KT” indicating a KAGplus loan transaction;
 - “CO” indicating a collateral transaction.
- The second two-character part indicates whether the respective service type is opened (“OP”) or closed/returned (“RT”).

Hence, the operation type for the opening of a loan in the KAGplus is “KTOP”. The operation type for the closing of a collateral transaction is “CORT”.

The matching process for KAGplus takes place between 07:00 and 17:00 CET.

SWIFT instructions received afterwards will be rejected.

The deadline for receipt of CSV files that have to be manually uploaded to KAGplus and requests for manual collateral substitution via LMS is set to 16:00 CET, regardless if for same day or future value.

2.4 Xemac

Xemac is the collateral management system operated by CBF. In Xemac, customers can pool their assets from two possible collateral sources (CASCADE or Creation) via one common platform in order to manage their collateral for different purposes (for example, Eurex Clearing, GC Pooling and securities lending).

2.4.1 Collateral Source CASCADE

In order to pool assets held in CASCADE, customers must transfer their respective assets in Xemac to their CASCADE sub-account reserved for collateral management (550). The collateral can then be allocated to different counterparties identified by four-digit codes. To provide collateral for securities lending purposes within Xemac, the customer pledges collateral to the counterparty 8261 (account in the name of CBF).

2.4.2 Collateral Source Creation

The customer may collateralise its loan with assets held in Creation via a CmaX-Xemac link.

Securities held in Creation are booked from the main account to the reservation account to make them available for collateralisation purposes in Xemac via the CmaX-Xemac link. Securities on the reservation account are then blocked for further use by CmaX and marked in Xemac as available for collateralisation purposes. From there, the collateral can then be allocated to different counterparties identified by four-digit codes. To provide collateral for securities lending purposes within Xemac, the customer pledges collateral to the counterparty 8261 (account on behalf of CBF).

2.5 CmaX

CmaX (Triparty Collateral Management Service) is the collateral management system operated by CBL and primarily used by customers to collateralise transactions related to CBL products. Today, CmaX is linked to Xemac for pooling and mobilising collateral for use beyond CBL for different purposes (for example, Eurex Clearing, GC Pooling and securities lending).

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3. Collective Safe Custody Securities and Non-Collective Safe Custody Securities

Every security that is held by a participant or its custodian bank on a CBF account in CASCADE is a Collective Safe Custody (CSC) security, also referred to as “GS” security¹. The attribute all CSC securities share is that the transfer of ownership of such a security can be performed by bookings within CASCADE.

Every security that is not held by a participant or its custodian bank on a CBF account in CASCADE is a Non-Collective Safe Custody Securities (NCSC) security, also referred to as “WR” security. The attribute all NCSC securities share is that the transfer of ownership of such a security cannot be performed by bookings within the CASCADE system (because the holdings as such are not visible to CBF, ownership transfers take place outside CBF’s book-entry systems).

In KAGplus, every NCSC security that a customer wants to settle via a 6-series account² in Creation is called a “CR” security.

Consequences for eligibility of securities for securities loans

Depending on the chosen settlement location different sets of securities are eligible for securities loans in KAGplus:

For participants choosing to settle securities loans between two CASCADE accounts, CSC equity and fixed income securities are technically eligible without limitation. The securities subject to the loan are settled by CBF on the CASCADE platform.

For participants choosing to settle securities loans between two Creation accounts, CSC and NCSC equity and fixed income securities are technically eligible without limitation³. The securities subject to the loan are settled by CBF on the Creation platform.

1. Positions eligible to be held by a participant or its depository on a CBF account in CASCADE are: all DE ISINs, all German Bonds, Foreign ISINs that are held in CBF via links to other CSDs (for example, OeKB or Monte Titoli).

2. 6-series accounts are Creation accounts under German law, hence, legally CBF accounts on the Creation platform.

3. Some countries might be excluded. Please ask your GSF Sales representative for the most recent list of excluded countries.

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4. Opening a loan

In the legal documentation provided by the investment funds participating in KAGplus, the scope of potential borrowers is defined. The investment funds (or KVG as deputy) can then assign one or several borrowers as exclusive borrowers. This assignment defines the legitimacy of future securities loans concluded between counterparties. These settings are stored in the CBF lending system (LMS) for each investment fund.

Strategic lenders using KAGplus can also define specific lender and borrower relationships if needed.

In addition to this basic setup, the investment fund/strategic securities lender must reach a consensus with its borrowers as to which KAGplus setup will be used in the context of communicating securities positions available for lending and concluding securities loans. In general, two operating types are available; the Position Model and the Instruction Model (as mentioned below). For each lender, only one of the models can be chosen.

4.1 Communication of the counterparties with KAGplus

Counterparties communicate with CBF via messages in SWIFT ISO 15022 format. These messages can be transmitted to CBF via three different communication channels:

- SWIFT Network;
- MQSeries;
- File Transfer.

Two message types are used by both lenders and borrowers: MT542 (Deliver Free) and MT540 (Receive Free).

Note: KAGplus participants, who are not yet SWIFT users, can communicate lending supply and demand via CSV files by email, for a transition period until they can use SWIFT.

CBF provides real-time reporting to investment funds/strategic lenders and borrowers via MT548 (Settlement Status and Processing Advice) messages and all supported communication channels.

4.2 Position Model

4.2.1 Lender availabilities in the Position Model

The position-based processing in KAGplus, the Position Model, is based on position messages (MT542) that a lender enters into KAGplus in the morning of each business day. Each position message represents one lending supply position. At the end of the business day (17:30 CET), all availabilities are emptied. P-type availability is expected from 00:30 till 10:00 CET during a business day (please refer to [Position model business matching](#) on page 8-1). However, P-type availabilities are accepted until the end of the business day.

Please note that P-type availabilities received after 10:00 CET will only be considered for the matching of borrowing requests received subsequently during the business day.

4.2.1.1 SWIFT

An MT542 Deliver Free message is used and each instruction consists of the following mandatory information:

- Sender reference ("SEME") (individually definable, max. 16 characters, alphanumeric);
- Intended settlement date (value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- ISIN;
- Nominal (marked with "FAMT" for bonds and with "UNIT" for shares);
- CBF settlement account (own account number where the assets are deposited);
- Category of the position (for example, L for Lending);
- Sender ID (which is the disclosure key of the respective lender holding the assets);
- Delivering / Receiving agent ID (CBF BIC: "DAKVDEFF");
- Function ("NEWM" or "PREA" in combination with the field place of settlement: "NEWM"/"DAKVDEFF" for CSC ISINs settling on CASCADE; "NEWM"/"CEDELULL" for CSC and NCSC ISINs settling on Creation; "PREA"/"CEDELULL" for NCSC ISINs without settlement);
- Place of settlement / Custody type ("DAKVDEFF"/"CEDELULL" in combination with the field function, please see under the field function).

Optional fields are:

- Rate (expressed as percentage; for example, 3 basis points (bps) expressed as 0,03; comma separated).

4.2.1.2 CSV

The investment fund/strategic lender can also send its daily availabilities using CSV files. CBF provides a template in XLS format. The manually filled spread sheet creates a CSV file consisting of the same information as necessary/possible for SWIFT messaging. The finished CSV file is sent to CBF and there manually uploaded to KAGplus.

4.2.2 Lender position updates in the Position Model

4.2.2.1 SWIFT

Lenders can update their positions available for lending by sending new SWIFT messages (MT542) per position to be revised. These position update messages need to include a reference to the earlier provided position. This is done with the "Sender reference" field. If no position with a corresponding sender reference is known to CBF, the position update will be rejected.

The position is updated by providing a new position nominal. If the position nominal is less than the earlier position nominal, the position update potentially leads to a cancellation of borrower requests, successfully matched trades and returns (if the corresponding trades have to be deleted).

If trades that were grouped and reported with a pool reference (for more information please refer to [KAGplus pool reference concept](#) on page 10-1) have to be cancelled, all related trades with the same pool reference and corresponding returns will also be deleted.

4.2.2.2 CSV

Lender position updates via CSV files work in the same way as updates via SWIFT messages except that one consolidated CSV file for all positions can be sent and that the Sender Reference is not a mandatory field.

If an old position sent with the last file is not updated, it will remain in the system as it was delivered with the last position file.

4.2.3 Borrowing requests in the Position Model using SWIFT

The borrower sends a borrowing instruction (MT540) in order to match an availability of one of its dedicated lenders; including the following information:

- Sender reference ("SEME") (individually definable, max. 16 characters, alphanumeric);
- Match ID (internal reference of the borrower, individually definable, max. 16-digits);
- Intended settlement date (value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- Price (marked with "PRCT" for percentage, "ACTU" for currency and amount; price field mandatory, actual price information optional);
- ISIN;
- Nominal (marked with "FAMT" for bonds and with "UNIT" for shares);
- CBF settlement account (own account number where the loan should settle);
- Rate (expressed as percentage; for example, 3bps expressed as 0,03; comma separated);
- Category of the position (for example, B for Borrowing);
- Sender ID (which is the disclosure key of the respective borrower);
- Delivering / Receiving agent ID (CBF BIC: "DAKVDEFF");
- Function ("NEWM" or "PREA" in combination with the field place of settlement: "NEWM"/"DAKVDEFF" for CSC ISINs settling on CASCADE; "NEWM"/"CEDELULL" for CSC and NCSC ISINs settling on Creation; "PREA"/"CEDELULL" for NCSC ISINs without settlement);
- Place of settlement / Custody type ("DAKVDEFF"/"CEDELULL" in combination with the field function, please see under the field function).

Two other optional fields play a special role in the borrower's instruction.

(1) The Minimum execution quota is expressed as a percentage with the following functions:

- If the value is zero: as much as possible of nominal indicated in the borrower inquiry is tried to be matched.
- If the value is greater than zero and less than one: at least a certain percentage of the nominal needs to be matched until a loan is concluded.

- If the value is 1: a loan is only concluded if the full nominal can be matched for a loan.

(2) The Counterparty ID has to following functions:

- If a certain lender's disclosure key is mentioned, only loans with this lender can be concluded;
- If a certain lender group's disclosure key is mentioned, only loans with this lender group can be concluded;
- If it is not filled: all lenders the borrower is permitted for are considered to conclude loans.

Once a borrower's request matches with a lender's position and subject to sufficient collateralisation, a loan is opened for the defined value/settlement date. Matching criteria for the borrower and the lender's lendable asset in the Position Model are:

- ISIN;
- Nominal (must be less than or equal to what is shown as available by the lender);
- Function;
- Place of settlement;
- Intended settlement date (value date of the loan opening).

The price at which the loan opens is the price that is used for the calculation of the loan fees. If the price is not provided by the borrower, the CBF system price (prior day closing price) is used. The price the borrower provides cannot be outside a certain price range from the CBF system price. If the price the borrower provides is outside this range, the corresponding loan opening is kept on hold until end of business. During this time, a manual adjustment by CBF in line with customer feedback is possible. Loans, that have not been manually adjusted are rejected at the end of business day.

The provision of a rate by the lender is optional. If the lender uses this option, no loan will be opened below this rate. If the borrower inputs a trade with a lower rate, the trade will be rejected. Furthermore, due to investor protection requirements, there are minimum rates set up in KAGplus for both bonds and shares.

Loan positions are reduced following successful loan openings. Opened loans are assigned an LMS trade number and pool reference (where applicable) that serves as an LMS reference. For further information on the pool reference concept, please refer to [KAGplus pool reference concept](#) on page 10-1.

If sufficient collateralisation of loans cannot be ensured, the loan will be cancelled and intraday notifications are sent the borrower, only.

4.2.4 Borrowing request in the Position Model using CSV files

If SWIFT cannot be used on the borrower side, the use of CSV files is possible for a transition period until SWIFT capability is established. CBF provides a file in XLS format to both parties. The manually filled spread sheet creates CSV files consisting of the same information as necessary/possible for SWIFT messaging. The finished CSV file is sent to CBF and there manually uploaded to KAGplus.

For matching and other general rules, the same rules as mentioned for SWIFT messages apply (see [Lender availabilities in the Position Model](#) on page 4-2).

4.3 Instruction Model

4.3.1 Opening a loan in the Instruction Model using SWIFT

The instruction-based processing in KAGplus, the Instruction Model, only concludes loans that have already been bilaterally agreed between the investment fund/strategic lender and its borrower before being sent to CBF. Therefore a loan is opened, only if all the details of the instructions are matching.

The message type to be sent by the lender is the same as in the Position Model (MT542) but with more information to be provided and more fields relevant for matching.

The instruction consists of the following mandatory information:

- Sender reference ("SEME") (individually definable, max. 16 characters, alphanumeric);
- Match ID (internal reference of the lender, individually definable, max. 16 digits);
- Intended settlement date (value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- Price (marked with "PRCT" for percentage, "ACTU" for currency and amount; price field mandatory, actual price information optional);
- ISIN;
- Nominal (marked with "FAMT" for bonds and with "UNIT" for shares);
- CBF settlement account (own account number where the assets are deposited);
- Rate (expressed as percentage; for example, 3bps expressed as 0,03; comma separated);
- Category of the position (for example, L for Lending);
- Sender ID (which is the disclosure key of the respective lender holding the asset);
- Delivering / Receiving agent ID (CBF BIC: "DAKVDEFF");
- Function ("NEWM" or "PREA" in combination with the field place of settlement: "NEWM"/"DAKVDEFF" for CSC ISINs settling on CASCADE; "NEWM"/"CEDELULL" for CSC and NCSC ISINs settling on Creation; "PREA"/"CEDELULL" for NCSC ISINs without settlement);
- Place of settlement / Custody type ("DAKVDEFF"/"CEDELULL" in combination with the field function, please see under the field function).

The borrower sends a borrowing instruction (MT540) in order to match the instruction of the lender, including the following information:

- Sender reference ("SEME") (individually definable, max. 16 characters, alphanumeric);
- Match ID (internal reference of the lender, individually definable, max. 16 digits);
- Intended settlement date (value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- Price (marked with "PRCT" for percentage, "ACTU" for currency and amount; price field mandatory, actual price information optional);
- ISIN;
- Nominal (marked with "FAMT" for bonds and with "UNIT" for shares);
- CBF settlement account (own account number where the loan should settle to);
- Rate (expressed as percentage; for example, 3bps expressed as 0,03; comma separated);
- Category of the position (for example, B for Borrowing);
- Sender ID (which is the disclosure key of the borrower);
- Counterparty ID (disclosure key of the lender to be borrowed from);
- Delivering / Receiving agent ID (CBF BIC: "DAKVDEFF");

- Function (“NEWM” or “PREA” in combination with the field place of settlement: “NEWM”/ “DAKVDEFF” for CSC ISINs settling on CASCADE; “NEWM”/“CEDELULL” for CSC and NCSC ISINs settling on Creation; “PREA”/“CEDELULL” for NCSC ISINs without settlement);
- Place of settlement / Custody type (“DAKVDEFF”/“CEDELULL” in combination with the field function, please see under the field function).

The matching criteria of the borrower’s and lender’s instructions are:

- Match ID (internal reference of the lender, individually definable, max. 16 digits);
- Intended settlement date (value date of the loan opening);
- Price (marked with “PRCT” for percentage, “ACTU” for currency and amount; price field mandatory, actual price information optional);
- ISIN;
- Nominal (marked with “FAMT” for bonds and with “UNIT” for shares);
- Rate (expressed as percentage; for example, 3bps expressed as 0,03; comma separated);
- Counterparty ID (disclosure key of the lender to be borrowed from);
- Function;
- Place of settlement / Custody type (“DAKVDEFF” for CSC ISINs, “CEDELULL” for NCSC ISINs).

The Match ID is the first matching criterion checked in both the lender’s and the borrower’s instructions. It must be identical in both messages.

Once matching is successful and subject to sufficient collateralisation, a loan is opened. Opened loans are assigned an LMS trade number and pool reference (where applicable) that serves as an LMS reference.

If sufficient collateralisation of loans cannot be ensured, the loan will be cancelled and intraday notifications are sent to the borrower and the lender.

4.3.2 Opening a loan in the Instruction Model using CSV files

If SWIFT cannot be used on the borrower side, the use of CSV files is possible for a transition period until the SWIFT capability is established. CBF provides a file in XLS format to both parties. The manually filled spreadsheet creates CSV files consisting of the same information as necessary/possible for SWIFT messaging. The finished CSV file is sent to CBF and there manually uploaded to KAGplus.

For matching and other general rules, the same rules as mentioned for SWIFT messages apply (see [Opening a loan in the Instruction Model using SWIFT](#) on page 4-5).

5. Closing a loan

The recall by a lender is subject to a notice period of three business days (or two business days if it is transmitted before 12:00 CET on the transmission day).

A return by the borrower can be transmitted for same-day value date as long it is transmitted before 12:00 CET.

The information to be provided on lender recalls and borrower returns is the same in the Position Model and Instruction Model. Requirements vary according to whether communication is done via SWIFT or CSV files.

5.1 Using SWIFT

Lenders and borrowers can recall or return their loans by sending a SWIFT message (MT540/MT542) providing the following mandatory information:

- Sender reference ("SEME") (individually definable, max. 16 characters, alphanumeric);
- LMS reference (LMS trade number or pool reference);
- Intended settlement date (value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- ISIN;
- Nominal (marked with "FAMT" for bonds and with "UNIT" for shares);
- CBF settlement account (own account number);
- Category of the position (for example, L for Lending / B for Borrowing);
- Sender ID (which is the disclosure key of the respective lender / of the respective borrower);
- Delivering / Receiving agent ID (CBF BIC: "DAKVDEFF");
- Function ("NEWM" or "PREA" in combination with the field place of settlement: "NEWM"/ "DAKVDEFF" for CSC ISINs settling on CASCADE; "NEWM"/"CEDELULL" for CSC and NCSC ISINs settling on Creation; "PREA"/"CEDELULL" for NCSC ISINs without settlement);
- Place of settlement / Custody type ("DAKVDEFF"/"CEDELULL" in combination with the field function, please see under the field function).

5.2 Using CSV files

Lenders can recall their loans by providing CSV files with the following mandatory information:

- LMS reference (LMS trade number or pool reference);
- Intended settlement date (value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- ISIN;
- Nominal (marked with "FAMT" for bonds and with "UNIT" for shares);
- CBF settlement account (own account number);
- Category of the position (for example, L for Lending / B for Borrowing);
- Sender ID (which is the disclosure key of the respective lender / of the respective borrower).

Optional:

- Sender reference ("SEME") (individually definable, max. 16 characters, alphanumeric).

6. Return queue concept

Complete or partial returns for same-day value date are immediately triggered for settlement (subject to sufficient collateral remaining for collateral returns) in Real Time Settlement (RTS) mode (except for trades in "WR" securities, where CBF does not process the settlement).

Complete or partial returns or recalls for T+x (x>0) settlement date are stored until the settlement date and then processed according to a so-called "return queue".

Borrowers can instruct complete or partial returns and lenders can instruct complete or partial recalls.

On settlement date, the entries are processed in the order of the return queue (as described below) in RTS mode (except for trades in "WR" securities, where CBF does not process the settlement).

In case the settlement of a recall or return fails due to a lack of securities on the borrower side, the loan will remain open. The counterparties receive a cancellation report immediately via SWIFT or in the end of day reporting. A new return/recall must be instructed.

6.1 For borrower loan returns or lender recalls

For securities on loan, the concept of the return queue is described in the example below. A collateral position with a nominal of 1000 that has the following partial returns in the queue:

Recall/Return nominal	Value date	Remark
100	T+3	
200	T+4	
700	T+5	

If a further return of the borrower of, for example, 300 nominal for settlement date T+2 arrives, the return queue will be updated:

Recall/Return nominal	Value date	Remark
300	T+2	new entry
100	T+3	
200	T+4	
700	T+5	deleted because total return queue exceeded 1000 nominal

The lender and the borrower will receive KAGplus intraday reporting concerning the deleted return entry.

6.2 For borrower collateral returns

For loan collateral provided via LMS, the concept of the return queue is the following:

The following example shows a collateral position with a nominal of 1000 that has the following partial returns in the queue:

Recall/Return nominal	Value date	Remark
100	T+3	
200	T+4	
700	T+5	

If a further return of the borrower of, for example, 300 nominal for settlement date T+2 arrives, the return queue will be updated:

Recall/Return nominal	Value date	Remark
300	T+2	new entry
100	T+3	
200	T+4	
400	T+5	adjusted because total return queue exceeded 1000 nominal

For collateral returns, lenders and borrowers do not receive an intraday reporting concerning adjusted return entries. Information on these is provided via the standard end of day reporting provided by CBF.

7. Cancellations of openings, recalls or returns

Until settlement, trade openings, recalls or returns can be cancelled via SWIFT by sending the original opening/recall/return instruction again with the following differences:

- A new sender reference must be inserted (new "SEME");
- An original sender reference of the original message must be inserted (in "PREV");
- A function field in the SWIFT message must be inserted "CANC" (cancel) instead of "NEWM" (new message).

Exception:

Lender positions cannot be cancelled in the aforementioned way. Instead, lenders can send position updates with nominal = 0 to cancel openings on trade date. After trade date and before settlement, openings can only be manually cancelled by CBF.

Message types for cancelling openings are:

- MT540 for borrowers with above-mentioned two changes to the original message;
- MT542 for lenders with above-mentioned exception, just nominal = 0.

Message types for cancelling recalls / returns are:

- MT542 for borrowers with above-mentioned two changes to the original message;
- MT540 for lenders with above-mentioned two changes to the original message.

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8. KAGplus operating day and settlement cycles

Messages are accepted throughout the business day between 00:30 and 16:45 for processing with the same value date. Messages sent by customers outside these business hours are automatically rejected and the customer is notified accordingly.

CSV files sent to CBF for processing will be uploaded on a near-time basis during the CBF operating hours (please refer to [“Foreword”](#) on page i).

8.1 Instruction model business matching

If no matching counterparty instruction arrives during the business day, the pending borrower or lender instruction is automatically deleted at 17:30.

8.2 Position model business matching

From 00:30 till 10:00 during a business day, P-type borrowing instructions are stored, waiting for lending position files. After 10:00, stored borrowing instructions not matching with lending positions are deleted and new borrowing instructions are rejected and deleted if not matched with a lending position.

8.3 Collateralisation

Sufficient collateralisation must be ensured on settlement day. If a loan is matched for settlement and sufficient collateral is not available until 10:00, the respective loan will be “delayed” and resubmitted for settlement upon sufficient availability of collateral. If the loan remains “delayed” until the end of business, the loan is deleted and must be resubmitted by the counterparties.

8.4 Loan opening

Successful openings take place on settlement day if successful collateralisation has been provided. The exact settlement cycle on value date depends on the time between trade date and settlement date and on the settlement location.

- If the loan security is a “WR” security, the loan is settled immediately on value date (without any security movements in CASCADE or Creation).;
- If the loan security is a “GS” security, the settlement takes place immediately once value date is reached (security movement in CASCADE).
- If the loan security is a “CR” security, the instruction is sent to Creation on value date after 10:00 (security movement in Creation).

8.5 Loan recalls or returns

Successful recalls or returns are settled in line with the following logic:

- Returns are being processed after STD.
- If the loan recall cannot be settled due to lack of securities, the return will automatically be rejected by the system and a new recall has to be instructed.

9. Reporting

9.1 SWIFT reporting

Customers can opt for “near-time reporting” within KAGplus. This means that the customers, lenders as well as borrowers, receive standardised fully automated SWIFT messages upon status change of their transactions.

Customers will be notified on:

- Openings, returns, modifications;
- Failures; and
- Cancellations.

If a customer is not set up for near-time reporting, no intraday notifications will be sent but end of day standard reports via email.

9.1.1 Opening, return and modification of a transaction

Opening/recall/return confirmation

Confirmations of successful openings, recalls or returns are sent via MT548 (Settlement Status and Processing Advice) to the customer, containing of the following information:

- Sender reference (internal reference of CBF, max. 16 characters, alphanumeric);
- Function (“INST” for message from CBF);
- Date (on which the message is sent to the customer; equal to trade date);
- Original Sender reference (reference of message previously sent to CBF by customer);
- LMS reference (LMS trade number);
- Status (“MACH” for successful matching of openings or successful allocation of returns to trades);
- ISIN;
- Nominal (marked with “FAMT” for bonds and with “UNIT” for shares);
- CBF settlement account (receiving customer account number);
- Category of the position (for example, L for Lending or B for Borrowing);
- Deliver / Receive (“DELI” for a lender in an opening or a borrower in a return; “RECE” for a borrower in an opening or a lender in a return);
- Payment (always “FREE”);
- Intended settlement date (Value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- Record type, rate, price (type is “Opening” or “return”; rate as percentage; price “DEPR” for percentage or “DEAC” for currency and amount);
- Sender / Counterparty ID (Disclosure key of lender for opening, of borrower for return);
- Counterparty / Sender ID (Disclosure key of lender for return, of borrower for opening);
- Delivering / Receiving agent ID (CBF BIC: “DAKVDEFF”s);

- Place of settlement / Custody type ("DAKVDEFF" for bookings in CASCADE, else "CEDELULL").

If applicable:

- Pool reference.

Manual modification confirmation

Confirmations of manual modifications by CBF are sent via MT548 (Settlement Status and Processing Advice) to the customer, containing the following information:

- Sender reference (internal reference of CBF, max. 16 digits);
- Function ("INST" for message from CBF);
- Date (on which the message is sent to the customer; equal to trade date);
- Original Sender reference (always "NONREF" because modification is not triggered by customer);
- LMS reference (LMS trade number);
- Status (always "MODI");
- ISIN;
- Nominal (marked with "FAMT" for bonds and with "UNIT" for shares);
- CBF settlement account (receiving customer account number);
- Category of the position (for example, L for Lending or B for Borrowing);
- Deliver / Receive ("DELI" for a lender in an opening or a borrower in a return; "RECE" for a borrower in an opening or a lender in a return);
- Payment (always "FREE");
- Intended settlement date (Value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- Record type, rate, price (type is "Modification"; rate as percentage containing original or modified rate; price "DEPR" for percentage or "DEAC" for currency and amount containing original or modified price);
- Send. / Counterp. ID (Disclosure key of lender for opening, of borrower for return);
- Counterp. / Send. ID (Disclosure key of lender for return, of borrower for opening);
- Delivering / Receiving agent ID (CBF BIC: "DAKVDEFF");
- Place of settlement / Custody type ("DAKVDEFF" for bookings in CASCADE, else "CEDELULL").

If applicable:

- Pool reference.

9.1.2 Failure of a transaction

Matching failure

Matching failures for openings or returns are sent via MT548 (Settlement Status and Processing Advice) to the customer, containing the following information:

- Sender reference (internal reference of CBF, max. 16 digits);
- Function ("INST" for message from CBF);
- Date (on which the message is sent to the customer; equal to trade date);
- Original Sender reference (reference of message previously sent to CBF by customer);
- For failed returns: LMS reference (LMS trade number);
- Status ("NMAT" for matching failure);
- Failure reason (description of the matching failure).

If applicable:

- Pool reference.

Data failure

Data failures because one or more crucial fields cannot be validated for openings or returns are sent via MT548 (Settlement Status and Processing Advice) to the customer, containing the following information:

- Sender reference (internal reference of CBF, max. 16 digits);
- Function ("INST" for message from CBF);
- Date (on which the message is sent to the customer; equal to trade date);
- Original Sender reference (reference of message previously sent to CBF by customer);
- For failed returns: LMS reference (LMS trade number);
- Status ("REJT" for data failure);
- Failure reason (description of the data failure);

If applicable:

- Pool reference.

9.1.3 Cancellation of a transaction

Cancellation (short)

Short cancellation messages are sent by CBF for instructions that are cancelled but were not yet confirmed (opening or recall/return). The following fields in MT548 (Settlement Status and Processing Advice) will be filled with the values received in the corresponding opening or return instruction:

- Sender reference (internal reference of CBF, max. 16 digits);
- Function ("INST" for message from CBF);
- Date (on which the message is sent to the customer; equal to trade date if an instruction was deleted);
- Original Sender reference (reference of message previously sent to CBF by customer; if an unmatched instruction is deleted, the original Sender reference is reported back in this field);
- For returns: LMS reference (LMS trade number);
- Status ("CAND" for cancellation);
- Failure reason ("NARR" if cancelled by Ops; "CANS" if cancelled by system; "CANI" if cancelled by customer);

If applicable:

- Pool reference.

Cancellation (long)

Long cancellation messages are sent by CBF for instructions that are cancelled but had already been confirmed before settlement. The following fields in MT548 (Settlement Status and Processing Advice) will be filled with the values received in the corresponding opening or return instruction:

- Sender reference (internal reference of CBF, max. 16-digits);
- Function ("INST" for message from CBF);
- Date (on which the message is sent to the customer; equal to trade date if an instruction was deleted);
- Original Sender reference (always "NONREF");
- LMS reference (LMS trade number);
- Status ("CAND" for cancellation);

- Failure reason (“NARR” if cancelled by Ops; “CANS” if cancelled by system; “CANI” if cancelled by customer);

Plus all fields that have been sent to the customer before in the trade or return confirmation:

- ISIN;
- Nominal (marked with “FAMT” for bonds and with “UNIT” for shares);
- CBF settlement account (receiving customer account number);
- Category of the position (for example, L for Lending or B for Borrowing);
- Deliver /Receive (“DELI” for a lender in an opening or a borrower in a return; “RECE” for a borrower in an opening or a lender in a return);
- Payment (always “FREE”);
- Intended settlement date (Value date of the loan opening);
- Trade date (date on which the message is sent to CBF);
- Record type, rate, price (type is “Modification”; rate as percentage containing original or modified rate; price “DEPR” for percentage or “DEAC” for currency and amount containing original or modified price);
- Send. / Counterp. ID (Disclosure key of lender for opening, of borrower for return);
- Counterp. / Send. ID (Disclosure key of lender for return, of borrower for opening);
- Delivering / Receiving agent ID (CBF BIC: “DAKVDEFF”);
- Place of settlement / Custody type (“DAKVDEFF” for bookings in CASCADE, else “CEDELULL”).

If applicable:

- Pool reference.

9.1.4 Settlement confirmation (opening and return)

After the confirmation of the loan opening and successful settlement in CASCADE/Creation, settlement confirmations are produced for all customers (borrower and lender) involved in the lending (as part of the CASCADE/Creation standard reporting that is MT536 Statement of Transactions report and MT54x Confirmations reporting). Depending on the disclosure key publication settings chosen by the customer, lenders and borrowers can see the counterparties on their reports.

9.2 PDF or CSV reporting provided by CBF

Reports are distributed manually by CBF, in the desired format (PDF or CSV) to authorised addresses of customers at the end of each business day.

For further information about individual reports, please refer to Electronic reports in securities lending, which is available on the Clearstream website www.clearstream.com under Key Documents / CSD / Global Securities Financing.

9.2.1 Settlement confirmation

The settlement confirmation reporting gives lenders and borrowers an overview over all the securities loans that have settled on the date the report was issued, separated by the product type the securities loans were concluded in. The trade date is also displayed on the report, either being the same as the settlement date (same day securities loans) or being in the past.

9.2.2 Positions

This report gives the customers an overview over all their activities: currently active loans, when they were agreed and when they were settled for the opening, as well as closings, when they were agreed and when they are planned for settlement

9.2.3 Trade confirmation (opening and return)

The trade confirmation reporting gives lenders and borrowers an overview over all the securities loans that have been agreed on the date the report was issued, separated by the product type the securities loans were concluded in. The intended settlement date is also displayed on the report, either being the same as the trade date (same day securities loans) or being in the future.

9.2.4 Pledged collateral and collateral movement

All borrowers can receive the "Pledged Collateral" report, which displays all pledged securities, mark-to-market information, exposures and collateral values.

The "Collateral Movement" report is distributed to show changes in collateral positions.

9.2.5 Collateral lender and collateral borrower

Lenders can receive the "Collateral Lender" report, borrowers the "Collateral Borrower" report. This report displays the securities received (lender) or pledged (borrower) as collateral, grouped by counterparty. The actual counterparty is displayed in coded format.

9.2.6 External Collateral Lender

Displays a breakdown of collateral positions pooled in Xemac and pledged to CBF in its fiduciary role for the respective counterparty. Breakdown is a mathematical pro rata allocation of collateral posted to CBF as collateral taker. Allocation follows the overall LMS principle (please refer to [Collateral lender and collateral borrower](#) on page 9 - 5).

9.2.7 Monthly tax information

The "Monthly Tax Information" reporting is sent once a month to lenders as well as borrowers. It shows information about who their counterparty was, in securities lending transactions, for the purposes of tax reporting.

9.2.8 Monthly fee

The “Monthly fee” report is sent once a month to lenders as well as borrowers. It shows the securities lending fees to be received or paid due to securities lending activity during the respective month.

9.2.9 Trade Opening

The “Trade Opening” report contains information concerning opened securities loans, separated per single transaction, for the borrower and the lender.

9.2.10 Return

The “Return” report contains information concerning closed securities loans, separated per single transaction, for the borrower and the lender.

9.2.11 Lender Cancellation

If the lender recalls, the “Lender Cancellation” report is sent to both, the lenders (as receipt confirmation) and the borrowers (as notification).

9.2.12 Trade Confirmation Storno

If either loan openings and/or returns are cancelled, the “Trade Confirmation Storno” report is sent before settlement of the opening/the return.

10. KAGplus pool reference concept

Within KAGplus for borrowers, it is possible to assign a “pool reference” to loan instructions that should match with several other lender instructions. This eases the reconciliation efforts of borrowers and lenders.

A borrower, for example could open a loan with a nominal of 100 but this loan is split over three lenders as lender counterparties (for example, with nominal 20, 30 and 50). This would result in three different loans, each assigned a unique trade number. If the borrower assigns a pool reference to the trade, each of these three loans is assigned the same pool reference number in addition to the unique trade numbers.

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11. Collateralisation of a loan

In general, loans are always required to be fully collateralised, and will be marked to market on a daily basis. The collateral to be provided is subject to haircuts as described below.

The loan exposure of a loan settlement during the night-time STD settlement batch is subject to an additional haircut of 10% that must be precollateralised. The borrower must provide less than 20% collateral of the same issuer, calculated per exposure. Should the borrower provide more than 20% collateral of the same issuer, they will be requested to substitute with other collateral within the accepted thresholds.

For further details on collateral reporting, please refer to [References](#) on page A -1.

11.1 Collateralisation with securities using the CBF pledge account

A borrower can collateralise its loans with securities according to CBF eligibility criteria. All securities collateral is booked on 680 pledge accounts. These 680 pledge accounts are not normal sub-accounts of the customer account but specific pledge accounts held in the name of CBF acting as lending agent. The account numbers of these specific pledge accounts are composed by inserting "680" after the first digit of the customer account number. If, for example, the customer account number is 1234, the pledge account number for this specific customer would be 1 680 234.

The construction of the 680 pledge accounts allows that the legal beneficiary of the pledge accounts is CBF while the pledged securities remain linked to the original beneficial owner.

11.2 Collateralisation with securities using Xemac

A borrower can collateralise its loans via collateral held in and managed via Xemac. In order to pool assets in Xemac, customers must transfer the respective assets into the Xemac pool (CASCADE and Creation). In CASCADE, the borrower does so by transferring securities via Xemac to the 550 sub-account of his CBF main account. Once pooled on the Xemac platform, the assets can then be managed for different purposes by pledging them to different counterparties, identified by four-digit Xemac counterparty codes. To pledge collateral for securities lending purposes within Xemac, the customer must allocate collateral to the Xemac counterparty 8261 (CBF as collateral trustee). For 8261, a dedicated customer reference CBF w/ WP-Leihe (in English: CBF regarding securities lending) is used to receive collateral to cover exposures resulting from the CBF lending service transactions.

Once pledged to CBF with the correct counterparty customer reference, the collateral positions are marked as blocked in Xemac and the related Xemac claim amount is registered in LMS as collateral provided by the borrower in favour of CBF as collateral trustee. This collateral value is subject to the Xemac specific haircuts for the respective instruments. In LMS, this collateral value (net after haircut) is marked as "Xemac Collateral".

The collateral claim amount in Xemac is updated by LMS on a daily basis to reflect price movements in collateral. If price movements in collateral result in an under-collateralisation, the customer is informed by CBF via a margin deficit call and must instruct the allocation of additional collateral for the use of lending services. Further use of pledged and blocked securities by the customer within Xemac is no longer possible unless the pledged and, hence, blocked securities are substituted by other securities.

As the 550 sub-account is a sub-account of the customer's main account, the borrower remains the beneficial owner for corporate actions during the collateralisation. CBF acts as trustee, only.

11.3 Collateralisation with Creation via the CmaX-Xemac link

A borrower can collateralise its loans from holdings in its Creation securities accounts by mobilising collateral from multiple collateral source accounts in Creation: via the CmaX-Xemac link.

Via the CmaX-Xemac link, the Auto Assign and automatic substitution facilities with its Creation source account are offered by the CmaX-Xemac link. Collateral mobilised via the CmaX-Xemac link will be part of the "Xemac Collateral" position in LMS.

11.4 Collateral maintenance

Positions pledged as collateral are reviewed in accordance with fluctuations in market values. While the loan is outstanding, all collateral is marked to market daily, including collateral haircuts and returns.

11.5 Collateral margin deficit calls

If a customer is undercollateralised for the opening of new securities loans or becomes under-collateralised due to a mark-to-market of already existing securities loans, CBF issues a margin deficit call to the customer, via email. In this margin deficit call, the customer can identify the amount of its undercollateralisation and advise CBF on how respective coverage will be provided.

12. Eligibility criteria

12.1 Loans

All standard ISINs (for example, shares, bonds etc.) eligible for settlement in CASCADE can be processed via LMS. Subject to the discretion of the CBF board and specific criteria in line with the Securities Lending and Borrowing Rules of Clearstream Banking AG, Frankfurt, a subset of these ISINs can be used for opening loans.

12.2 Collateral

In general, all loans must be pre-collateralised before they can be opened.

With regard to risk, CBF can unilaterally modify the collateral eligibility criteria from time to time, thus taking into account potential changes to the market conditions. Criteria such as the instrument type, issue characteristics, issuer country, industry sector, currency denomination and the issuer rating are used to determine whether a security is to be accepted.

Collateralisation can be provided via the following:

- CBF pledge account;
- Xemac;
- CmaX-Xemac link.

12.2.1 CBF pledge account

All standard ISINs (for example, shares, bonds etc.) eligible for settlement in CASCADE can be processed via the CBF pledge account. Subject to the discretion of GSF management and provided that certain specific criteria are met, a subset of these ISINs can be used as collateral via 680 pledge accounts.

The following securities are eligible as collateral via the CBF pledge account:

Equities basket (Equities main EU indices)

- DAX 30;
- MDAX;
- Dow Jones Euro STOXX 50 Index;
- Austrian Traded Index (ATX);
- BEL 20 Index;
- Swiss Market Index (SMI);
- IBEX 35 Index;
- HEX 25 Index;
- CAC 40 Index;
- Amsterdam EXchanges (AEX) Index;
- PSI 20 Index.

Haircuts applied on collateral

Haircuts are applied as set up in the LMS system, as follows:

Equities: 10%;

Fixed Income: 5%.

12.2.2 Xemac

For collateral provided via Xemac, the following securities can be used as collateral.

Via Xemac and the CmaX-Xemac link, it is also possible to pledge securities as collateral that are non-collective safe custody (NCSC) securities in CASCADE.

Equities basket (Equities main EU indices):

- DAX 30;
- Dow Jones Euro STOXX 50 Index;
- Austrian Traded Index (ATX);
- BEL 20 Index;
- Swiss Market Index (SMI);
- MDAX;
- IBEX 35 Index;
- HEX 25 Index;
- CAC 40 Index;
- Amsterdam EXchanges (AEX) Index;
- PSI 20 Index.

Fixed Income basket:

- GC Pooling® ECB Basket;
- GC Pooling® ECB EXTended Basket (EGCPx).

For further information concerning the mentioned fixed income baskets, please refer to the Eurex Repo website under www.eurexrepo.com and the GC Pooling section.

Haircuts applied on Xemac collateral

Haircuts are applied as set up in the Xemac system, as follows:

Equities: 10%;

Fixed Income: in line with the EAD list¹ provided by the ECB.

12.2.3 CmaX

If CmaX is used for collateralisation via the CmaX-Xemac link, the same eligibility criteria as for Xemac collateral apply.

For further information, please refer to the Triparty Collateral Management Service (CmaX) - Product Guide, reference available in the section [References](#) on page A-1.

Haircuts applied on CmaX collateral

Haircuts are applied as set up in the Xemac system (via CmaX-Xemac link).

1. EAD - Eligible Asset Database. For further reference please visit www.ecb.int/paym/coll/assets/html.

13. Late delivery procedures

13.1 Late delivery by the lender

In cases of late delivery of securities on loan, the borrower is entitled to demand that the lender reimburses the borrower a compensation for the period of delay. This amount is the difference between the remuneration (including any other related expenses incurred) for conclusion and arrangement of a substitute loan and the remuneration (including any other related expenses incurred) that the borrower would have had to pay if the delivery had been made on time (substitute loan costs).

13.2 Late redelivery the borrower

In cases of late redelivery of securities on a loan, the lender is entitled to claim an amount from the borrower to cover the substitute loan costs incurred by the lender. This amount is at least the lending remuneration calculated for the period from recall transfer date (inclusive) until the day of actual recall transfer of the lent securities (exclusive).

Alternatively, the lender can - after prior announcement and extension of the deadline by a minimum of one settlement day - refuse the return transfer of the lent securities and can instruct CBF to execute a buy-in, on the account of the borrower, for a corresponding quantity of securities of the same type and quality on the settlement day following the date of expiry of the extended period and to transfer these securities to the lender. If this buy-in is not possible, then CBF will credit the cash equivalent of the securities to the TARGET2 account of the lender and debit such equivalent plus a remuneration according to the then valid service price schedule to the TARGET2 account of the borrower.

Decisive for a calculation of the equivalent is the price quoted on the Frankfurt Stock Exchange, another German stock exchange, or the respective reference price of a stock price information system acknowledged by the market (market price) on the return transfer entitlement date.

If a cash equivalent is booked to the borrower's TARGET2 account and the borrower does not cover its TARGET2 account with the respective amount, the securities pledged or assigned as collateral will be realised by CBF on the settlement day following expiry of an advance notice period of two settlement days (following written notification to the borrower).

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14. Criticality of corporate actions

Certain corporate actions are seen as business critical by CBF. In these terms, a differentiation is observed between loan critical and collateral critical corporate actions as shown in the following table.

Description	Loan critical	Collateral critical
Interest payment	No	No
Dividend payment	Yes	No
Maturity date	Yes	Yes
Maturity partial	Yes	Yes
Rights issue	Yes	Yes
Conversion	No	Yes
Redenomination	No	Yes
Split series	No	Yes
Distribution	Yes	Yes
Distribution compensation	Yes	No
Maturity profit-sharing rights	Yes	Yes
Maturity certificates	Yes	Yes
Maturity liquidation	Yes	Yes
Funds income	Yes	No
Other income	Yes	No
Participation rights income	Yes	Yes
Partial call up to pool factor	Yes	Yes
Redemption in securities	Yes	Yes

14.1 Impact on loans

Loan critical corporate actions and impact on loans to be opened

The opening of new loans in LMS is not impacted by loan critical corporate actions. Nevertheless, respective openings should be avoided.

Loan critical corporate actions and impact on already open loans

In general, corporate actions in ISINs for which loans are already open are displayed on the positions report up to twelve business days before its entitlement date (subject to availability of the corporate action information in CBF's custody systems KADI/WSS).

If a corporate action in a specific ISIN for which a loan is already open is critical, no automatic treatment is foreseen. Nevertheless, the participants should recall or return their loans respectively.

14.2 Impact on collateral

Collateral critical corporate actions and impact on positions available as collateral

If a critical corporate action date is pending for a specific security, the corresponding inventory will not be available for opening new collateral positions.

Collateral critical corporate actions and impact on already pledged collateral positions

The collateral positions are checked on a daily basis for critical corporate actions scheduled for the following business day. When this is the case, the respective collateral position is automatically returned in its entirety. The return will also take place if trade operations with a date in the future are entered for this collateral position. These will be cancelled and a full return will be entered.

15. Custody events and corporate actions

This chapter describes the processing of different corporate actions in KAGplus. The TARGET2 account linked to the respective CBF account is used to perform cash transfers due to cash settled corporate actions.

Note: Holdings of securities in collateral accounts (550 sub-account, see Xemac Product Guide) are tax-neutral for the borrower in relation to coupon or dividend payments.

No compensation payments for US securities will be performed by CBF regardless of the settlement location given.

No compensation payments for “WR” securities will be performed by CBF.

15.1 Cash income distributions for equities (dividends)

Entitlements to cash income distributions resulting from equities on loan must be claimed by the lender. After the lender has announced a dividend claim concerning a security under loan to CBF and the correctness of the dividend claim is validated, CBF will debit the borrower’s cash account and credit the lender’s cash account with the respective amounts.

For further information about the calculation of the amounts claimed, please refer to [Tax treatment](#) on page 16-1.

Investment fund (KVG) specific regulations

According to §201 of KAGB investment funds must recall securities on loan that are subject to voting rights in order to exercise these voting rights during the Annual General Meeting (AGM). Due to the fact that, in most of the cases, the dividend payment date is equal to the date of the AGM, investment funds need to recall the securities on loan before the dividend date.

15.2 Cash income distributions for bonds

CBF will debit the borrower’s cash account and credit the lender’s cash account with the interest payments calculated based on the respective coupon and nominal amounts.

For further information about the calculation of the amounts claimed, please refer to [Tax treatment](#) on page 16-1.

15.3 Non-income corporate actions

Non-income corporate actions are processed differently, as shown below.

15.3.1 Reduction of nominal

The amount of the equity capital will remain unchanged but the emission ratio of the shares will change and also the price in relation to the reduction of the nominal.

CBF will change the nominal amounts along with the new price.

15.3.2 Capital increase without issuance of subscription rights

If a capital increase without transferable subscription rights takes place, the loan amount (nominal) will be changed by CBF in proportion to the capital increase.

15.3.3 Capital increase with issuance of transferable subscription rights

If a capital increase with transferable subscription rights takes place, a new loan is opened in the respective ISIN with an amount of subscription rights calculated based on the split ratio and the value of each subscription right either calculated from the prior ex-date closing price and the strike price of the new shares or taken out of WSS¹. This new loan will be assigned a new trade number, different to the one of the original loan which was subject to the corporate action.

The borrower must return the subscription rights to the lender, at the latest after three days, to ensure ability to trade the subscription rights for the lender.

15.3.4 Mandatory conversion

In a mandatory conversion, the current ISIN will cease to exist. To reflect this, a return in the old ISIN and an opening in the new ISIN will be performed.

15.3.5 Voluntary conversion

Unless the lender instructs CBF to tender the position, no action will be taken.

1. WSS - Source for decisions, notices and announcement of the CSC admission.

16. Tax treatment

16.1 Introduction

With the opening of a securities loan, a transfer of title of the securities underlying the loan is made from the lender to the borrower. Nevertheless, the lender still remains entitled to receive any cash compensation resulting from corporate actions impacting the underlying loan securities. To reimburse the lender for its entitlement, the borrower makes a compensation payment to the lender. This compensation payment is to bring the lender back to the position he would have had if he had held the securities on loan on his own accounts at the time the corporate action was processed (as defined in the Securities Lending and Borrowing Rules of Clearstream Banking AG, Frankfurt section 13, please refer to [References](#) on page A-1). This has tax implications, as explained below.

Tax principal based on account holdings

With the opening of a loan, the securities subject to the loan are transferred from the lender account to the borrower account. Hence, the beneficial ownership of the securities lent goes over to the borrower. From this it follows that the tax status of the lender no longer applies, either to the securities themselves or to the cash proceeds resulting from those securities. During the period of a loan, the tax status of the borrower applies to the securities on loan.

Tax treatment based on nature of cash proceeds

The nature of cash proceeds determines the tax to be applied, as follows:

- **Cash proceeds from dividend payments on equities**
Cash proceeds from dividend payments on equities are dividend income. Dividend income is subject to a withholding tax on capital in Germany, plus the solidarity surcharge. These taxes are deducted from the gross dividend payment at source because CBF only pays out dividends net to the respective beneficial owners' cash accounts (based on the accounts where the securities are held).
- **Cash proceeds from coupon payments on bonds**
Cash proceeds from coupon payments on bonds are interest income and are not subject to withholding tax on capital in Germany. They are subject to the individual corporate tax level of the entity holding the respective bonds on its accounts.
- **Cash proceeds from compensation payments made by the borrower to the lender**
Cash proceeds from compensation payments made by the borrower to the lender are treated as other income and are not subject to withholding tax in Germany. Hence, they are like coupon payments, subject to the individual corporate tax level of the entity receiving the respective compensation payment.

16.2 Cash distributions for securities on loan

This section describes the processing of different corporate actions in the KAGplus programme. The TARGET2 account linked to the respective CBF account is used to effect cash transfers due to cash settled corporate actions.

Note: Holdings of securities in collateral accounts (550) are tax-neutral for the borrower in relation to coupon or dividend payments.

16.2.1 Equity dividend payments

In general, the borrower must bring the lender back to the position he would have had if he had held the securities on loan on his own accounts at the time an equity dividend was paid. This is done through a compensation payment. Furthermore, on the lender side, the compensation payment is subject to its individual corporate tax level. Hence, the amount due to pay by the borrower is based on two variables:

- The net dividend that the lender would have received if it had held the securities on loan on its own accounts; and
- The corporate tax level subject to the compensation payment to be received by the borrower.

This can be expanded as follows:

$$\text{comp. percentage} = \frac{\text{as if net dividend payment on lender side}}{(1 - \text{lender individual corporate tax level})} = \frac{(1 - \text{tax at source} - \text{solidarity surcharge})}{(1 - \text{lender individual corporate tax level})}$$

For example, as soon as the individual corporate tax level on the lender side is higher than the dividend tax level on the lender side, the borrower would have to compensate the lender with a compensation payment bigger than 100% of the actual dividend payment, irrespective of the amount the borrower received as net dividend.

In practice, as the lender's corporate tax level is not known to the borrower, the lender will claim an absolute amount due as compensation payment from the borrower to CBF. For further information, please see [Custody events and corporate actions](#) on page 15-1.

16.2.2 Bond coupon payments

Bond coupon payments are not subject to tax at source and hence the borrower, as beneficial owner of the securities, will receive 100% of the coupon payments that apply to the loan.

In terms of compensation, the same is valid as for equity dividend payments:

The borrower must bring the lender back to the position he would have had if he had held the securities on loan on his own accounts at the time a bond coupon was paid.

As the coupon payments on bonds and the compensation payments made by the borrower to the lender are subject to the same tax on the lender side, the amount due to be paid by the borrower is just 100% of the coupon payment. With that, the lender is in the targeted position.

16.3 Cash distributions for securities as collateral

In contrast to the securities on loan and due to the agency function CBF provides, the securities provided as collateral by the borrower are pledged only (no transfer of title) - no matter whether equities or bonds.

Due to the setup in CBF, the pledging accounts via Xemac (550 sub-accounts) are directly linked to the original owners. Hence, while pledged, the tax status of the original owner, the borrower, still applies to the securities.

17. Disclosure of counterparties in KAGplus

CASCADE

On the CASCADE level the actual counterparties of a loan are not disclosed. The following detail is shown: CBF account number 7945 as counterparty. If automatic bookings are generated via LMS the customer will see "****" in CASCADE instead of 7945.

LMS

In LMS, the disclosure of counterparties is managed via the "Disclosure Key".

The customer can choose whether it wants to see its counterparties' disclosure keys on its own reporting or not. As a standard, borrowers as well as lenders are set up in LMS as seeing their counterparties' disclosure keys. That way the counterparty will be able to see, via the standard LMS reporting, for example the "Settlement Confirmation", who the counterparty of the loan is. Customers can opt not to see their counterparties' disclosure keys.

TARGET2

On the TARGET2 level the following detail is shown for cash debits and credits performed by CBF (corporate action processing, billing): CBF account number 7518 as counterparty.

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18. Billing in KAGplus

Customers are credited/debited on a monthly basis in EUR on the fifth business day of the month following the billed month. If the 5th falls on a non-business day, CBF bills on the next business day.

18.1 Corporate action processing fees

For the processing of corporate actions of ISINs under loan, the borrower is charged EUR 20.00 per loan position.

18.2 Overdue return transfer fee

If a borrower does not return its securities in time as obliged by the General Terms and Conditions forming the basis for loan transactions, the borrower is charged a penalty of EUR 1,000.00 per late return.

18.3 Commission fees

All loans that are closed during the month are taken into consideration for monthly billing until day of closing. However, all loans that are still pending at month-end are pro-rata billed until the end of the month. Calculations are based on the following standard: the opening day of a securities loan is chargeable while the closing day of a securities loan is not.

Calculation of commission fees

The KAGplus pricing follows collateral management characteristics. KAGplus does not participate in the lending rates negotiated between investment funds/strategic lenders and the borrowers, nor does KAGplus pose additional charges to the investment fund/strategic lender as such. The investment fund/strategic lender only benefits from participation in KAGplus. The borrower on the other hand is charged a variable fee, listed in the Domestic Fee Schedule of Clearstream Banking Frankfurt, based on the weighted monthly average of outstanding loan volumes.

Weighted monthly average outstanding loan volumes:

$$\text{weighted monthly average outst.} = \frac{\sum_{x=1} \text{Loan Nom.}_x * \text{price}_x * \text{no. of days loan open}_x}{\text{total no. of days in month}},$$

where:

x = no. of loans in respective month

Glossary

Basis point

One hundredth of 1% (= 0.01%).

Borrower

A person that has applied, met specific requirements, and received a loan from a lender.

Business Day

CBF business day in line with the TARGET2 Calendar.

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 customers' holdings that are kept in collective safe custody with CBF, and the custody services in relation to these holdings.

Cmax

CmaX is the collateral management system linked to the Creation settlement engine at CBL.

Collateral

Collateral is a borrower's pledge of specific property to a lender, to secure repayment of a loan.

CR

In KAGplus, every NCSC security that a customer wants to settled via a 6-series account in Creation is called a "CR" security.

Creation

CBL's central settlement platform for clearing and settlement, custody and reporting that CBF uses for the settlement of transactions in NCSC securities.

CSC

Collective Safe Custody, security managed through CASCADE.

FOP

Free of payment.

GS (Girosammelverwahrung)

See CSC.

KVG (Kapitalverwaltungsgesellschaft)

A KVG (Investment trust) is a form of collective investment. Investment trusts are closed-end funds and are constituted as public limited companies.

Lender

A CBF customer who has made securities available for loans or has lent out securities.

LMS

LMS is the system that manages all securities lending transactions.

Loan

A loan entails the redistribution of financial assets over time, between the lender and the borrower

Mark-to-market

Daily process of marking to the market the pledged collateral for re-evaluation.

Settlement

The process whereby securities (and corresponding funds, if any) are delivered (and credited) simultaneously to the accounts involved.

WR or NCSC

Every security that is not held by a participant or its custodian bank on a CBF account in CASCADE.

Xemac

Xemac is a comprehensive collateral management service for securities transactions. Xemac is the collateral management system (satellite system) of CBF.

References

General Terms and Conditions of Clearstream Banking AG, Frankfurt:

Clearstream website www.clearstream.com under Key Documents / CSD / General Terms and Conditions

Securities Lending and Borrowing Rules of Clearstream Banking AG, Frankfurt:

Clearstream website www.clearstream.com under Key Documents / CSD / General Terms and Conditions (access to Premium Users only)

Special Conditions for Collateral Management (SC Xemac):

Clearstream website www.clearstream.com under Key Documents / CSD / General Terms and Conditions (access to Premium Users only)

Xemac Registration for participation and modification:

Clearstream website www.clearstream.com under Products and Services / Global Securities Financing / Global Liquidity Hub CSD services / Triparty collateral services (Xemac) / Xemac registration and legal documentation (access to Premium Users only)

Domestic Fee Schedule Clearstream Banking Frankfurt:

Clearstream website www.clearstream.com under Key Documents / CSD / Fee Schedule

Triparty Collateral Management Service (CmaX) - Product Guide:

Clearstream website www.clearstream.com under Key Documents / CSD / Global Securities Financing

Electronic reports in securities lending:

Clearstream website www.clearstream.com under Key Documents / CSD / Global Securities Financing

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