
Direct Settlement

Advanced (DS.A)

Functional Guide

October 2010

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1 Introduction

1.1 Objective of the Functional Guide

The *Functional Guide* serve as introduction to the functional scope of the DS.Advanced System (hereafter called "DS.A"). This document provides a description of the individual areas of functionality within DS.A. The present document provides an overview of functionality within DS.A. Additional documentation, such as the DS.A User Manual and SWIFT Manual is at your disposal.

1.2 Contents of the Functional Guide

The *Functional Guide* outline the methods of communication supported by the DS.A system and provide an overview of the system's scope, describing fundamental concepts and basic principles. It also includes a detailed description of the workflows for the individual transaction types.

2 Communication in DS.A

Communication in DS.A is effected either via SWIFT message exchange or by using the Web based Online client. It is possible to combine these two communication types.

2.1 SWIFT Communication

DS.A system customers can instruct their securities transactions by sending SWIFT messages. Via SWIFT messages they can also receive up-to-date information on the current status of the settlement process.

In addition, customers using this method can choose which SWIFT message types they want to receive in DS.A. Status messages can be broken down to their individual process transition level.

For details of how the functionality offered by DS.A affects SWIFT message content requirements please refer to the *SWIFT Manual*.

2.2 Online Client

As an alternative to SWIFT communication, OeKB provides a modern Online client for DS.A customers. The client is accessible by means of an Internet browser. The secure online access provided (https) also offers new and extended query options.

Using the Online client requires no preparations/installations on the customer's part. However, in order to take advantage of all the advanced features Microsoft Internet Explorer® browser (version 6.0 or higher) is required.

In consideration of the worldwide customer base of OeKB and given the fact that numerous terms used are already in English, the Online client will also be implemented in an English-language version.

2.3 Authentication

Logging on to the system will be carried out by using the user name, password and the unique ID number (Keyfob number). To log on to the system, each user needs a so-called Keyfob. The ordering and registration procedure of a new user is described in the *Administrator Guide*.

2.4 Data Export

The Online client is designed to support simple data export of the displayed instructions into Microsoft Excel®. This allows customers to download their data for later processing.

3 System Scope

The following section describes the transaction types supported by DS.A in more detail.

3.1 DS.A Transaction Types

3.1.1 Transaction Type INTERNAL

Instructions for delivery of securities to a different OeKB safekeeping account:

- IDF: free of payment
- IDVP: versus payment

Instructions for receipt of securities from a different OeKB safekeeping account:

- IRF: free of payment
- IRVP: versus payment

3.1.2 Transaction Type EXTERNAL

Instructions for delivery of securities which OeKB holds with a foreign depository - to a safekeeping account at this depository:

- EDF: free of payment
- EDVP: versus payment

Instructions for receipt of securities which OeKB holds with a foreign depository - from a safekeeping account at this depository:

- ERF: free of payment
- ERVP: versus payment

3.1.3 Transaction Type REALIGNMENT

For every instruction and securities position DS.A records at which depository OeKB holds the securities involved.

The transaction type REALIGNMENT allows a change of depository for a given securities position (see 4.3).

3.1.4 Transaction Type PHYSICAL

Supports the physical deposit and withdrawal of securities in/from the OeKB vault.

3.1.5 Transaction Type CHANGE GLOBAL CERTIFICATE

Allows the increase or decrease of global certificates.

3.2 Overview of DS.A Trade Types, Instruction Types and SWIFT Message Types

Trade type	Instruction type		SWIFT
INTERNAL	IRF	(Internal Receive Free of Payment)	MT 540
	IRVP	(Internal Receive versus Payment)	MT 541
	IDF	(Internal Deliver Free of Payment)	MT 542
	IDVP	(Internal Deliver versus Payment)	MT 543
EXTERNAL	ERF	(External Receive Free of Payment)	MT 540
	ERVP	(External Receive versus Payment)	MT 541
	EDF	(External Deliver Free of Payment)	MT 542
	EDVP	(External Deliver versus Payment)	MT 543
PHYSICAL	DPH	(Physical Deposit of Securities)	Online input only
	WPH	(Physical Withdrawal of Securities)	Online input only
CHANGE GLOBAL CERTIFICATE	IGC	(Increase Global Certificate)	MT 540
	DGC	(Decrease Global Certificate)	MT 542
REALIGNMENT	REAL	(Realignment)	MT 542

4 Basic Principles

4.1 Safekeeping Account Structure

Each customer can hold one or several main and sub-safekeeping accounts with OeKB.

4.2 Cash Settlement

The following currencies can be used for for cash settlement: Euro, Swiss Franc, .British Pound, US Dollar.

4.2.1 Cash Account Structure

Cash settlement in Euro can be effected via a cash account held at either OeKB or the corresponding Central Bank. Each customer can define his required default setting.

This setting can be overruled for an instruction

- by including an indicator in the corresponding SWIFT message or
- by selecting the *Cash System* on the Online client.

Non- Euro cash settlement can be only effected via a cash account held at OeKB.

For cash settlement via OeKB a separate cash account must be set up.

4.2.2 Available Balance on Cash Accounts Held at OeKB

When cash settlement in Euro is effected via a cash account held at OeKB, the cash coverage check is made against the available balance of this account. The available balance is calculated by summing the account credit balance and any existing overdraft limit. The provision of collateral for the overdraft limit may be securities deposited in a collateral safekeeping account.

When non-Euro cash settlement is effected the cash coverage check is made against the account credit balance. An overdraft limit cannot be granted.

For cash settlement involving the instruction type ERVP the cash amount in the relevant currency is reserved in a first step. Only after settlement confirmation has been received from foreign depository is the cash account at OeKB or the corresponding Central Bank finally debited.

4.3 Linked Loco

Linked Loco means that each securities position held at OeKB has assigned to it a given depository (either OeKB Vault or a foreign depository). In DS.A the customer can see where OeKB holds the securities. It can happen that in one and the same security different positions may be held at different foreign depositories. This may occur, for example, if the customer has purchased the same securities at different foreign depositories.

As a result, the securities coverage check for the instruction types EDF and EDVP considers only those securities deposited at the foreign depository indicated in the instruction by the customer as the place of settlement (see 5.1.3.3).

For instruction types IDF and IDVP the customer can indicate, which securities position to deliver, i.e. which position from which foreign depository (*Place of Safekeeping*) will be transferred. If the customer does not indicate a *Place of Safekeeping* DS.A will automatically select one or several holdings from the available holdings at foreign depositories.

Any *Place of Safekeeping* indicated in the instruction types IRF or IRVP is ignored in DS.A, because the *Place of Safekeeping* is not a matching criterion. It is the *Place of Safekeeping* defined by the seller that is used for settlement.

Example 1: Place of Safekeeping

Securities positions before settlement (fictitious values):

ISIN	Name	Position	Place of Safekeeping
ANN757371433	Rorento	100	OeKB
		500	CBF
		2.000	Euroclear Nederland

Assumption 1 – Best Fit (The most appropriate position is selected.):

Delivery of 1,200 units without indicating the *Place of Safekeeping*.

Position determined by DS.A for the sale:
1,200 units Euroclear Nederland

Assumption 2 – Splitting of securities holdings required:

Delivery of 2,550 units without indicating the *Place of Safekeeping*.

Positions determined by DS.A for the sale:
100 units OeKB

500	units	CBF
1,950	units	Euroclear Nederland

Assumption 3 – No securities position at the indicated Place of Safekeeping:

Delivery of 1,200 units with CBF as the Place of Safekeeping.

The instruction cannot be settled, because the securities holdings at the external depository CBF are not sufficient to cover the indicated quantity.

4.4 Charging of Fees

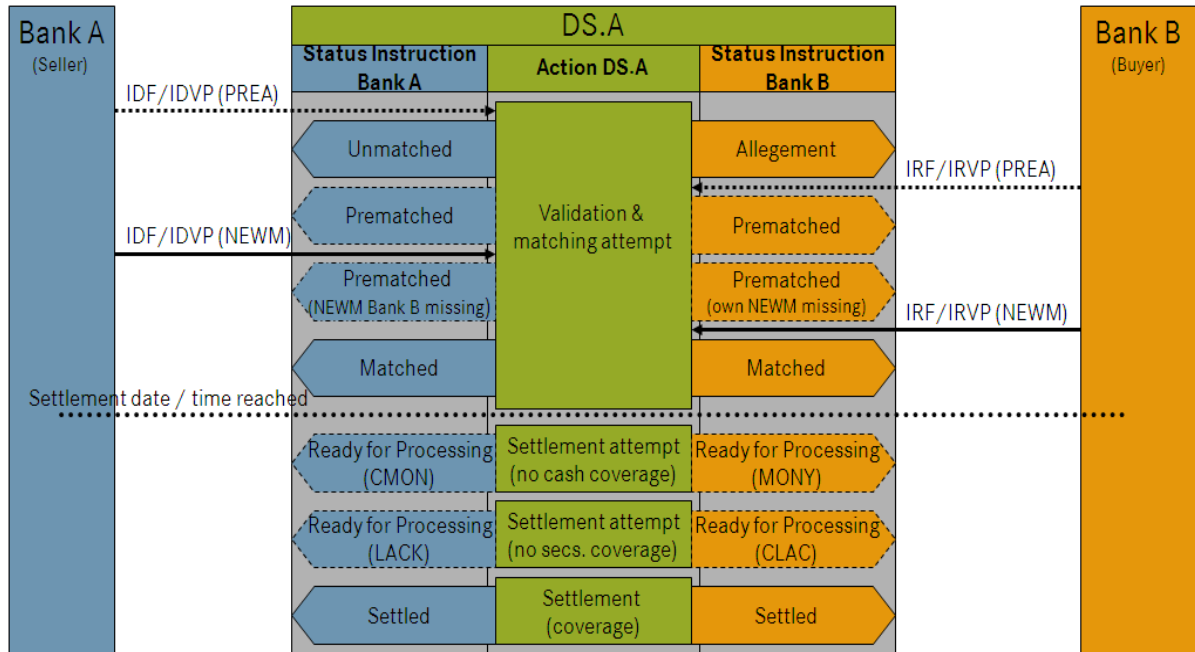
All transaction fees (including cancellation or penalty fees) accumulated in DS.A are charged monthly in arrears.

Penalty interest on arrears for transaction type INTERNAL is charged immediately, as at present.

5 Transaction Type INTERNAL

5.1 General Process Workflow

The following figure shows a simplified process flow for the transaction type INTERNAL:



5.1.1 Submission and Validation of Instructions

5.1.1.1 Instruction Requirements

As already described in chapter 3.1, the transaction type INTERNAL can be executed either versus payment or free of payment.

For instruction types IRVP and IDVP both the buyer and the seller must submit the corresponding instructions in DS.A.

In the case of the instruction types IDF and IRF the receiver of the securities can decide whether to invoke matching by sending a counterparty instruction by means of a customer-defined parameter. This parameter specifies whether the customer wishes to accept receipts free of payment without submitting an instruction (Auto-Receive), or by entering/sending a counterparty instruction of type IRF.

The following table presents an overview of the settlement options for delivery free of payment (instruction types IDF and IRF):

Default setting of securities receiver	Receiver – action	Result
Acceptance of free of payment deliveries without matching (Auto-Receive)	no IRF-instruction	IDF-instruction and an automatically generated IRF-instruction are executed.
	IRF-instruction via SWIFT MT540	IRF-instruction is rejected.
Acceptance of free of payment deliveries only with matching	IRF-instruction via SWIFT MT 540 or acceptance via online-client	IDF-instruction and the IRF-instruction are executed after successful matching.
	no IRF instruction	IDF-order is not executed.

5.1.1.2 Type of Instruction Submission

Instructions are submitted either via SWIFT or the online client.

The following SWIFT messages are used:

Instruction type	SWIFT	
	Message type	Name
IRF	MT 540	Receive Free
IRVP	MT 541	Receive Against Payment
IDF	MT 542	Deliver Free
IDVP	MT 543	Deliver Against Payment

The trade date and settlement date can be set to up to 60 calendar days in the past from the date of the submission of the instruction. The settlement date can be set to up to 30 calendar days in the future.

Instructions submitted via the Online client are subjected to a check based on the 4 eyes principle. This is done by separating the input and release functions from each other both at system level and in terms of the persons involved. An instruction not released by the end of the day of input is cancelled by DS.A.

5.1.1.3 Quality of the Instruction

DS.A differentiates between two instruction qualities:

- Preadvice and
- Instruct

Instructions can be sent in advance in the form of a *Preadvice*. If there is a counterparty instruction then instructions of this type are also matched (see chapter 5.1.1.6). Final settlement (see chapter 5.1.3), however, is only possible when both counterparties have issued instructions of the quality *Instruct*. It is left to the customer to choose whether to send *Preadvice* instructions beforehand, or whether to send only instructions of quality *Instruct*.

Whether an instruction is defined as a *Preadvice* or a final instruction (*Instruct*) is determined both on the Online client and in the SWIFT message by the *Function of the instruction*.

5.1.1.4 Instruction Validation and Status Messages

DS.A validates the instructions submitted for their functional correctness.

Instructions submitted via the Online client are validated immediately they are entered.

SWIFT messages with incorrect content are rejected. Their rejection is communicated by a SWIFT MT548. Wherever possible, the standardised SWIFT status and reason codes are used. Proprietary error codes are only used for OeKB-specific functionalities, such as, for example, incorrect series instructions.

5.1.1.5 Settlement of Serial Instruments

The serial numbers and the nominal values of the series must already be included in the SWIFT instructions for the instruction types IDF and IDVP, or entered in the instruction in the case of a submission via the Online client. As long as the instruction has not been successfully matched, the series information can be modified on the Online client.

5.1.1.6 Timeline

Instructions are accepted into the system and validated in real time in DS.A. Any status messages are also returned in real time in DS.A.

5.1.2 Matching

5.1.2.1 Matching Criteria

During matching DS.A searches for a counterparty instruction that fits the received instruction.

For two instructions being matched the following details of the instructions must be identical or complementary:

- Corresponding instruction type
 - IDF against IRF

- IDVP against IRVP
- ISIN
- Quantity/Nominal value
- Currency
- Corresponding cash value (for IDVP and IRVP) with a matching tolerance of EUR 25 for instructions in Euro, no matching tolerance for instructions in currencies other than Euro.
- Settlement date
- Trade date
- Counterparty

Some counterparties (in particular other (I)CSDs, such as CBF or Euroclear) require the customer's securities account number as an additional matching criterion (e.g. the number of the CBF securities account of a counterparty who wants to settle a transaction over CBF).

5.1.2.2 Matching Results

The matching process can produce the following results:

- Unmatched:
No corresponding counter instruction as defined in chapter 5.1.2.1 was found.
- Prematched:
A corresponding counter instruction was found, but one of the instructions had the quality *Preadvice*.
- Matched:
A corresponding counter instruction was found and both instructions had the quality *Instruct*.

For free of payment deliveries without matching requirement (see chapter 5.1.2.1) a counter instruction is generated automatically. This changes the instruction status to "Matched".

5.1.2.3 Status Messages

The instruction status is displayed on the Online client, or reported to the customer via SWIFT message MT548 (Settlement Status and Processing Advice).

Instructions submitted by a counterparty for which as yet no own instruction exists are also displayed on the Online client and reported via SWIFT MT578 (Settlement Allegement).

5.1.2.4 Timeline

Matching and sending of SWIFT MT548 messages are both done in real time.

5.1.3 Settlement

Settlement is the final booking of the securities and cash transaction. These bookings can only be done, if certain prerequisites are fulfilled.

Prerequisites for settlement are

- that all settlement conditions must be met and
- successful checks of securities and cash coverage

5.1.3.1 Timeline

Settlement is carried out in batch or in real time. Real-time processing is done in-between batch runs. The aim is to execute batch runs at hourly intervals.

An overview over the daily routine DS.A including CCP.A settlement runs is at your disposal on our website: www.oekb.at/en/capital-market/csd/settlement.

5.1.3.1.1 Processing type (real time or batch processing)

For every instruction the customer can define on the Online client, whether settlement should be initiated immediately (real time) or in a batch run. For SWIFT instructions the processing type can be defined by a special indicator. SWIFT instructions without this indicator, and with an instruction date identical to the settlement date, are by default processed in real time.

The processing type is not a matching criterion. In the case of two DS.A customers having defined different processing types in instruction and counterparty instruction, these instructions are processed in a batch run (provided that settlement maturity and any settlement time indicated have been reached).

5.1.3.1.2 Settlement time

In addition to the definition of a settlement date, an instruction may also contain an earliest possible settlement time. With no settlement time indicated and a settlement date in the future, the settlement time is automatically set to 00:01 hours on the settlement date.

For instruction and counterparty instruction with different settlement times, the later of the two times is used as settlement time.

Because most instructions are entered before the actual settlement date and there is usually no settlement time entered, most instructions will be processed during the first batch run of the day (scheduled for 07:00 CE(S)T).

5.1.3.2 Settlement conditions

The following conditions must be met before a settlement process can be started:

- The instruction must have status "matched" and
- the settlement time must have been reached.

5.1.3.3 Securities and Cash Coverage

Before final booking can take place

- The seller must have a sufficient quantity of securities on his safekeeping account at OeKB and
- The buyer must have sufficient coverage on his cash account at OeKB or the corresponding Central Bank.

The coverage checks depend on the selected processing type:

- Real-time processing

In the case of real-time processing the securities to be delivered are blocked on a separate safekeeping account.

Then the cash payment order to debit the buyer's account and credit the seller's account is sent to the payments transaction system of OeKB or TARGET2.

After the payment order is completed, the blocked securities are credited to the safekeeping account of the buyer. Transactions are executed on a single-trade basis (*gross processing*). Instructions are not netted during processing.

- Batch processing

During batch processing all securities positions are reserved for batch processing during the time of the batch run. Further steps during batch processing depend on whether the cash transactions are made via an OeKB account or an OeNB account.

5.1.3.3.1 Cash transactions via OeKB:

If an account at OeKB is used for the cash transactions, the account of the buyer is locked for other payments for the duration of the batch run. Instructions are “combined” and the purchases and sales are netted¹ (*net processing*). If the net total securities and cash coverage is available, the final securities and cash transactions are booked. In this way some transactions may be settled which could not be processed previously in real time.

5.1.3.3.2 Cash transactions via corresponding Central Bank

When settling transactions via a Central Bank account the reservation of cash balances is not possible. The transactions are dealt with as in real-time processing, but with several attempts at settlement during one batch run. Ideally this will increase the number of successfully settled instructions.

If the securities or cash coverage is insufficient, the instruction will not be processed. Another attempt at settlement will be made during the next batch run.

After a certain amount of time transactions that cannot be settled are cancelled by the system (see chapter 5.2.1). Until this time has elapsed such transactions are rescheduled at the end of a business day for processing on the following business day. The original settlement date defined in the instruction remains unmodified. This also applies to instructions which do not yet have status "matched".

5.1.3.4 Status Messages and Advice of Execution

Customers are notified of the coverage check status of their instructions on the online client or via SWIFT MT548 message.

A successful execution of settlement is also displayed on the online client. Also, the settlement confirmation SWIFT messages MT544 – MT547 (Settlement Confirmation) are sent.

5.2 Cancellation/Modification of an Instruction

5.2.1 Cancellation by System

Instructions with status “unmatched” remain in DS.A for 20 bank working days after the instructed settlement date or the entry date of the instruction (the later of the two dates is used). After reaching

¹ The actual batch coverage check algorithm is in practice not merely a simple netting. A detailed description of this complex algorithm, however, would be beyond the scope of this document.

status “prematched” instructions remain in DS.A for 20 bank working days after the instructed settlement date.

After this period, instructions are cancelled by DS.A.

All instructions, which have not been released according to the four eyes principle by the end of the day, are cancelled by DS.A if the settlement date has been reached or has been exceeded.

System cancellations are visible on the online client and are reported by SWIFT MT548 messages.

5.2.2 Modification by Customer

Instructions can be modified only via the online client. Changes can be made at any time before an instruction has been successfully matched. At any later time, and in the case of SWIFT messages, the instruction must be cancelled and a new, corrected instruction created.

5.2.3 Cancellation by Customer

Customers can cancel their instructions unilaterally, as long as they have not been successfully matched. If they are already matched but not finally settled, cancellation is possible if done for both instructions. In this case, both partners must cancel their own instructions. The cancellation can be done on the online client or via SWIFT MT 540 - MT 543 messages.

5.3 Safekeeping Accounts Involved

The seller can select the safekeeping account from which to debit the securities to be delivered. The buyer can select the safekeeping account to which to credit the securities. All safekeeping accounts assigned to a customer can be used as delivery accounts or receiving accounts during these transactions.

When blocked safekeeping accounts are used for the instruction, OeKB checks if all conditions are fulfilled for debiting the account before attempting any settlement of the instruction. Only then is further processing allowed. If no approval can be given by OeKB the instruction is cancelled in DS.A.

The trade type INTERNAL can also be used for transfers between different safekeeping accounts of the same customer.

5.4 Compensation of Dividend Payment

Compensations of dividend payments are done under the following conditions:

- The instruction is successfully settled
- Trade date < Ex date
- Original settlement date (equals the effective settlement date) ≥ Ex date

The amount to be compensated is calculated as follows:

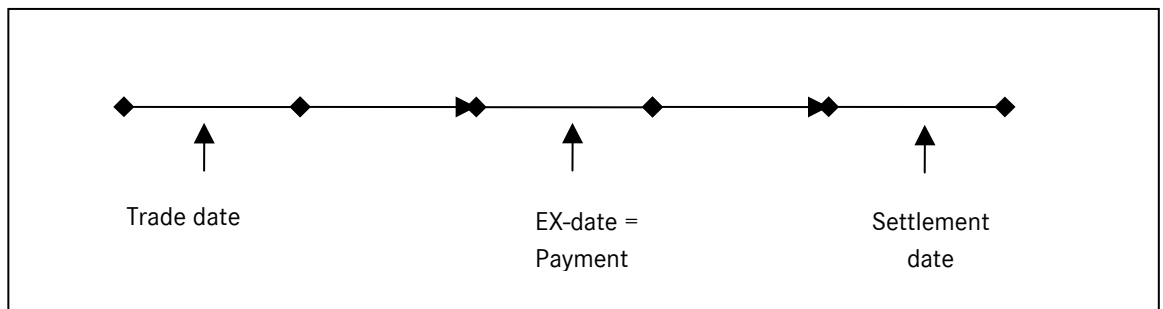
$$\text{Settlement quantity} * \text{Dividend (minus KEST)}.$$

The amount to be compensated is always booked using a customer account at OeKB. This also applies to customers who, by default, settle the cash side of transactions of type INTERNAL using an OeNB account.

Compensation for dividend payments is done for all instructions against payment (instruction types IDVP or IRVP) and for instructions free of payment (instruction types IRF or IDF).

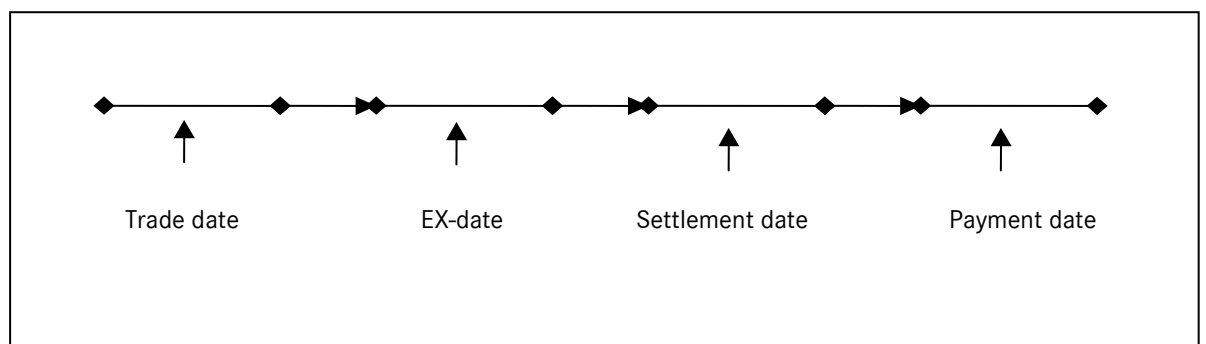
One can differentiate two cases regarding the time at which compensations for dividend payments are made:

Case 1: Ex date = Payment date \geq settlement date



In this case the compensation for a dividend payment is made on the settlement date by debiting the account of the securities deliverer and crediting the account of the securities receiver, with the settlement date as value date.

Case 2: Settlement date < Payment date

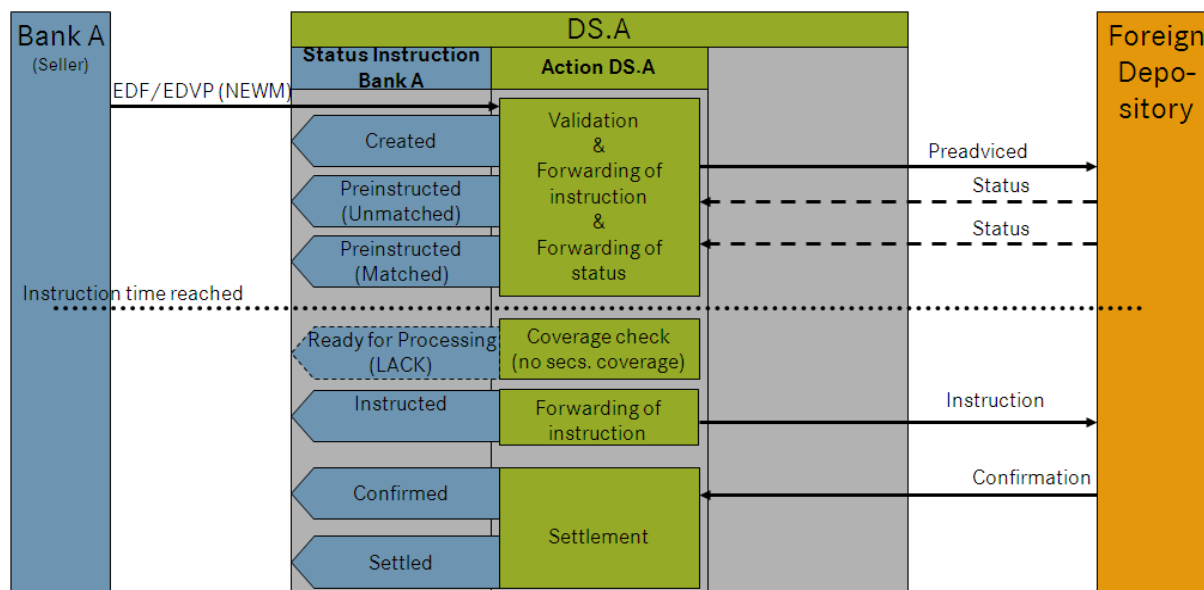


In this case the compensation for a dividend payment is made on the payment date by debiting the account of the securities deliverer and crediting the account of the securities receiver, with the payment date as value date.

6 Transaction Type EXTERNAL

6.1 General Process Workflow

The following figure shows a simplified process flow for the transaction type EXTERNAL:



The transaction type EXTERNAL can be used to settle instructions, in which the counterparty is a customer of a foreign depository where OeKB holds securities accounts on behalf of its customers. Another prerequisite for this transaction type is that the securities involved are (can be) held with this foreign depository.

The current foreign depositories you'll find on our website:
www.oekb.at/en/capital-market/csd/settlement/Pages/external

The following chapters describe the communication between the customer and DS.A in connection with the transaction type EXTERNAL. This in turn depends on the communication between OeKB and the foreign depository and on the settlement modalities of the foreign depository.

6.1.1 Submission and Validation of Instructions

6.1.1.1 Instruction requirements

Depending on the foreign depository involved the transaction type EXTERNAL can be either against payment or free of payment (see table in section 3.2).

Delivery versus payment always requires an instruction of the type EDVP or ERVP to be submitted to DS.A.

For a receipt free of payment it depends on whether the foreign depository requires an instruction of type ERF from OeKB. If this is the case, an instruction of this type is mandatory.

6.1.1.2 Type of Instruction Submission

Instructions are submitted either via SWIFT or the Online client.

The following SWIFT messages are used:

Instruction type	SWIFT	
	Message type	Name
ERF	MT 540	Receive Free
ERVP	MT 541	Receive Against Payment
EDF	MT 542	Deliver Free
EDVP	MT 543	Deliver Against Payment

Depending on the instructed *Place of Settlement* DS.A recognises the foreign depository with which to settle the instruction.

How far in the past the trade date and settlement date of an instruction may be and how far in the future the settlement date may be depends on the foreign depository involved. These parameters of the foreign depository are taken into consideration by DS.A.

Instructions submitted via the Online client are subjected to a check based on the 4 eyes principle. An instruction not released by the end of the day of input is cancelled by DS.A.

6.1.1.3 Quality of the Instruction

As for the transaction type INTERNAL there are also two qualities of instructions for the transaction type EXTERNAL:

- Preadvice and
- Instruct

Depending on the foreign depository this concept is also used for the transaction type EXTERNAL (see also chapter 6.1.2.3).

6.1.1.4 Instruction Validation and Status Messages

DS.A validates the instructions submitted for completeness and their functional correctness.

Instructions submitted via the Online client are validated immediately they are entered.

SWIFT messages with functionally incorrect content are rejected. Their rejection is notified via SWIFT MT548. The standardised SWIFT status and reason codes are used.

The foreign depository performs additional validation after receipt of the instruction forwarded from OeKB. If the instruction is rejected by the foreign depository, the customer is also notified via SWIFT MT548 (the SWIFT status and reason codes being forwarded), or the reason for rejection is displayed on the Online client.

6.1.1.5 Timeline

Instructions are accepted into the system and validated in real time in DS.A. Any status messages are also returned in real time in DS.A.

It depends on the system used by the foreign depository, when the instruction will be forwarded.

6.1.2 Status Transfer and Coverage Checks

6.1.2.1 Status Messages

For instruction type EXTERNAL matching and settlement is carried out by the foreign depository. DS.A processes the instruction statuses according to the information received from the foreign depository and forwards this status information to the customer.

The instruction statuses are displayed on the Online client, or reported to the customer via SWIFT message MT548.

Instructions sent to a foreign depository by a counterparty, but for which the customer has not yet submitted his own instruction, are displayed on the Online client, or reported via SWIFT MT578. This requires that the OeKB customer must be identifiable in the information received from the foreign depository. This kind of notification is restricted to those foreign depositories that offer this service to OeKB.

6.1.2.2 Coverage Checks

Before DS.A sends an instruction of quality *Instruct* to the foreign depository, it

- blocks the customer's securities to be delivered in the case of the instruction types EDF and EDVP and
- reserves the cash amount on the cash account of the customer.

Reservation of the cash amount, when cash settlement is in Euro, can only be done on cash accounts at OeKB, because TARGET 2 currently does not offer the service of a request for reservation. For the reservation the account's available balance is used, which is the total of the overdraft limit plus the actual cash balance. The final cash booking can be done via an account at OeKB or the corresponding Central Bank.

When non- Euro cash settlement is effected the cash coverage check is made against the account credit balance. An overdraft limit cannot be granted.

If the securities coverage is insufficient, or if the available balance does not cover the cash amount to be reserved, no instruction is sent to the foreign depository. In this case the customer is informed via the Online client or via SWIFT MT548.

6.1.2.3 Timeline

The timeline of the process largely depends on the system used by the foreign depository.

DS.A attempts to carry out the blocking of securities and the reservation of the cash amount at the latest possible time in order to keep the blocking/reservation time as short as possible.

In connection with *Preadvice/Instruct* the following three models can be described:

- Foreign depository offering the *Preadvice* option will receive the customer *Instruct* first as a *Preadvice*. This allows an immediate matching. Only shortly before the settlement run at the foreign depository will DS.A perform the coverage checks and forward the actual *Instruct*.
- For foreign depositories, who do not offer the option of *Preadvices*, DS.A will have a table of the times at which *Instructs* must be forwarded to the different foreign depositories. The times will be set in such way as to allow matching to take place in time whilst keeping the blocking period as short as possible.
- Basically, DS.A supports the forwarding of *Preadvices* by the customer to the foreign depository (see 6.1.1.3). However, this concept will not be applied in Stage 1 of DS.A, because it is assumed that the customers will (continue to) instruct the instruction type EXTERNAL exclusively with *Instructs*.

6.1.3 Settlement

Settlement is done at the foreign depository. DS.A is responsible for processing the incoming settlement status information and settlement confirmations. It will also handle the final booking on the cash accounts and safekeeping accounts at OeKB.

6.1.3.1 Securities and Cash Bookings

The securities and cash bookings are executed as soon as OeKB receives the settlement confirmation from the foreign depository.

When booking EDVP or EDF instructions, the previously blocked securities are debited from the customer's safekeeping account. Additionally, in the case of EDVP instructions, the corresponding cash amount is credited to an account at OeKB or the corresponding Central Bank.

When booking ERVP or ERF instructions, the securities are credited to the customer's safekeeping account. Additionally, in the case of ERVP instructions, the corresponding cash amount is debited from the customer account, if the cash settlement is done via an account held with OeKB. Prior to this the reservation of the cash amount, effected during the cash coverage check, is lifted.

If cash settlement is done via an account at a Central Bank, the payment order for debiting this account is submitted. If TARGET 2 sends no processing confirmation by the end of the day, the customer's account at OeKB will be debited with the amount. After the successful execution the reservation of the cash amount is lifted.²

6.1.3.2 Status Messages

After the successful execution of settlement and the securities and cash bookings at OeKB, the instruction will be displayed as executed on the Online client and the SWIFT messages MT544 – MT547 (Settlement Confirmation) sent as required.

If the foreign depository could not execute settlement, DS.A will forward the "reasons for error" received from the foreign depository to the customer, and either display them on the Online client or send a SWIFT MT548 message.

6.2 Cancellation

The possibilities of cancelling instructions depend on the common practice of the foreign depository. Cancellation orders of the customers to DS.A are forwarded to the foreign depository provided no settlement confirmation has yet been received. The incoming status messages are forwarded to the customer. These messages are sent to the customer either via SWIFT MT548 or via the Online client.

6.3 Safekeeping Accounts Involved

Concerning the safekeeping accounts involved the same principles apply as for type INTERNAL (see chapter 5.3).

6.4 Compensation and Adjustment

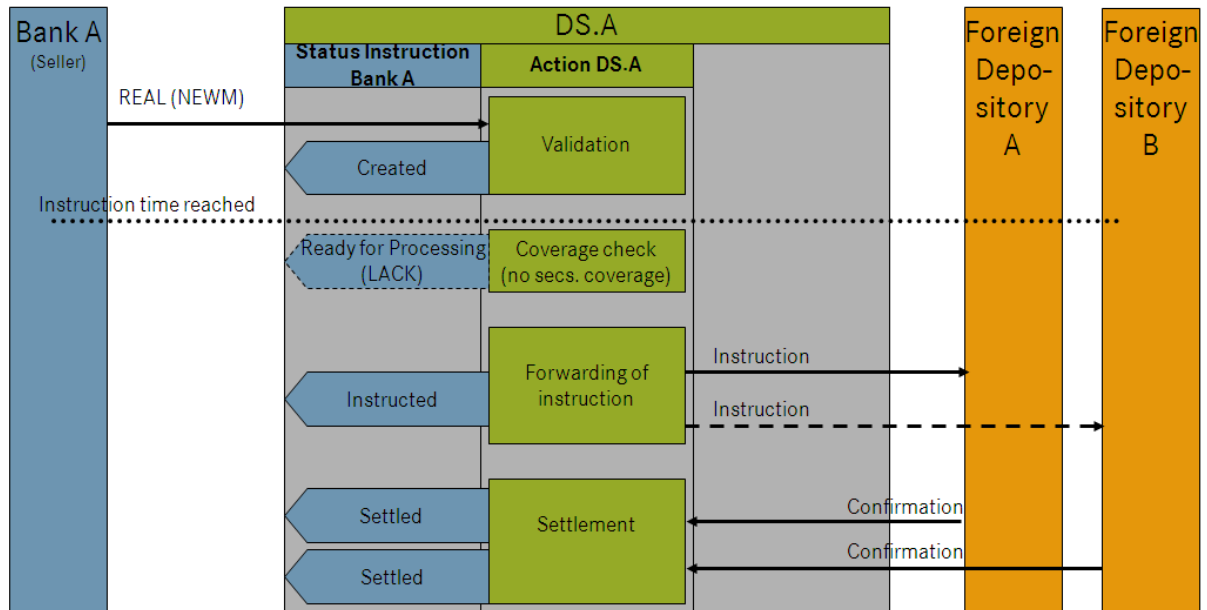
The options for compensations and adjustment also depend on the common practice of the foreign depository. Generally, any compensations or adjustments made by the foreign depository will be reflected on the customer safekeeping accounts and cash accounts in DS.A.

² If cash settlement is effected via Central Bank, the Central Bank account of the customer is debited. After the amount has been credited to the OeKB's loro account the amount reserved on the customer's account at OeKB will be released again.

7 Transaction Type REALIGNMENT

7.1 General Process Workflow

The following figure shows a simplified process flow for the transaction type REALIGNMENT:



The transaction type REALIGNMENT (REAL) allows the transfer of a securities position to a different depository.

7.1.1 Submission and Validation of Instructions

For the transaction type REAL only a delivery instruction is required from the customer. Any receiving instruction (the necessity of which depends on the requirements of the receiving foreign depository for the matching of free of payment deliveries) is automatically generated by DS.A.

7.1.1.1 Type of Instruction Submission

Instructions are created either via SWIFT or on the Online client.

The following SWIFT messages are used:

Instruction type	SWIFT	
	Message type	Name
REAL	MT 542	Deliver Free

The transaction type REAL is recognised in the SWIFT message by using a special indicator (see SWIFT Manual).

Instructions submitted via the Online client are subjected to a check based on the 4 eyes principle. An instruction not released by the end of the day of input is cancelled by DS.A.

7.1.1.2 Instruction Validation

Instructions submitted via the Online client are immediately validated when they are entered. Additionally, DS.A checks whether the transfer of the securities between the selected foreign depositories is possible.

If the instruction of the type REAL could not be processed by DS.A, this will be displayed on the Online client, or the customer is informed of the instruction being rejected via SWIFT MT548 message. If possible, DS.A will use the corresponding SWIFT reason codes.

7.1.2 Coverage Checks and Blocking

During the coverage checks the securities to be withdrawn are blocked on a separate safekeeping account. For this purpose only the customer's securities position at the delivering foreign depository will be used.

If this safekeeping account of the customer is not sufficiently covered the instruction is not forwarded to the foreign depository. In this case the customer is informed of the coverage status via the Online client or via SWIFT MT548 message.

7.1.3 Booking

The securities booking on the customer's safekeeping account is done as soon as the execution confirmation from the foreign depository is received. The execution confirmations for delivery and receipt of the securities are processed immediately after they are received. They are processed independently of one another.

7.1.4 Status Messages and Advice of Execution

The customer is informed of the instruction status via the Online client or via SWIFT MT548 message.

The successful execution of an instruction is also displayed on the Online client and reported to the customer via SWIFT message (MT546 for Delivery of Securities/MT544 for Receiving of Securities) if required.

7.2 Cancellation

The possibilities of cancelling instructions depend on the common practice of the foreign depositories. Cancellation orders of the customers to DS.A are forwarded to the foreign depository(s), as long as no settlement confirmation has been received. The incoming status messages are forwarded to the customer. These messages are also sent to the customer either via SWIFT (MT548) or via the Online client.

7.3 Safekeeping Accounts Involved

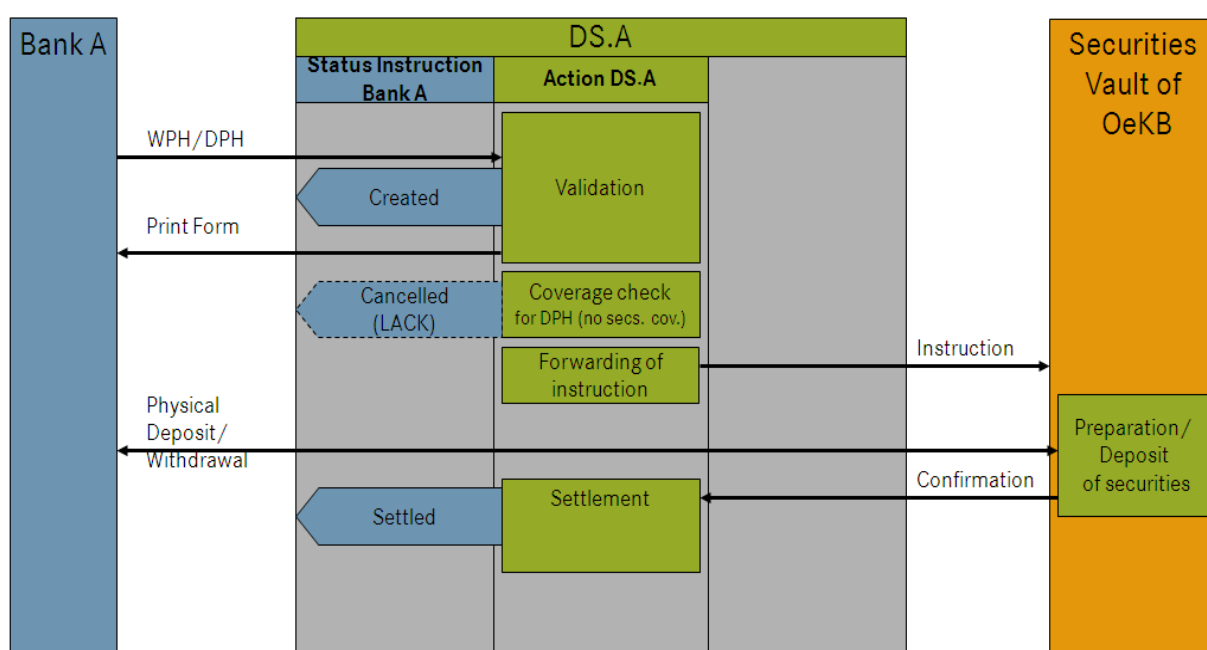
Concerning the safekeeping accounts involved the same principles apply as for type INTERNAL (see chapter 5.3).

8 Transaction Type PHYSICAL

The Transaction type PHYSICAL supports the physical withdrawal and deposit of securities in the OeKB Vault. This is done via the Online client.

8.1 General Process Workflow

The process workflow can be represented schematically as follows:



8.2 Physical Deposit of Securities (Instruction Type DPH)

Submission and Validation of Instructions

8.2.1 Type of Instruction Submission

Before depositing physical securities certificates, the customer must announce this by issuing an instruction of the type DPH (*Physical Deposit of Securities*). DS.A validates all data and creates an instruction for deposit.

The Online client ensures the application of the 4-eyes principle.

8.2.1.1 Instruction validation

DS.A validates the deposit instructions (DPH) for their functional correctness.

8.2.2 Physical Deposit and Examination of Securities

As soon as the instruction for deposit has been released by the customer and accepted by DS.A the customer can print the deposit confirmation. The deposit confirmation must be duly signed and presented together with the securities to be deposited at the securities counter of OeKB. Here, the securities to be deposited will be checked against the instruction for deposit.

8.2.3 Booking

After the securities deposited have been examined they are credited to the safekeeping account of the customer at OeKB.

8.2.3.1 Status Messages and Confirmation of Execution

The customer is informed of the status and of the execution via the online client.

8.3 Withdrawal of Securities (Instruction Type WPH)

8.3.1 Submission and Validation of Instructions

8.3.1.1 Type of Instruction Submission

Before withdrawing physical securities certificates the customer must announce this by submitting an instruction of the type WPH (*Physical Withdrawal of Securities*). DS.A checks all data of this instruction for withdrawal and blocks the securities to be withdrawn.

The online client ensures the application of the 4-eyes principle.

8.3.1.2 Instruction Validation

DS.A checks the withdrawal instructions (WPH) submitted for their functional correctness.

8.3.1.3 Coverage Checks and Blocking

During the coverage checks the securities to be withdrawn are blocked on a separate safekeeping account.

8.3.2 Preparation of Securities and Pickup

After DS.A has successfully performed the coverage checks, the customer can print the withdrawal form. The status of the instruction indicates when the securities are ready for pickup. The securities are handed out by OeKB against the presentation of the duly signed withdrawal form.

8.3.3 Booking

As soon as the securities are prepared for pickup, they are debited from the OeKB safekeeping account of the customer.

8.3.4 Status Messages and Advice of Execution

The customer is informed of the status and the execution of the instruction via the online client.

8.4 Cancellation

8.4.1 Cancellation by System

Independent of their status, instructions remain in DS.A for 20 days after the instructed settlement date or the entry date of the instruction (the later of the two dates is used). After this period, instructions are cancelled by DS.A.

If the coverage checks fail or if the transaction is rejected by the OeKB Vault system, the instruction is cancelled by the system. All instructions, which have not been released according to the 4-eyes principle by the end of the day, are also cancelled by DS.A.

System cancellations are visible on the online client.

8.4.2 Cancellation by Customer

Customers can cancel instructions as long as they have not been forwarded for processing by DS.A, or before settlement date. Cancellation is done via the Online client.

8.5 Safekeeping Accounts Involved

The customer can select the safekeeping account from which to withdraw the securities to be delivered and the safekeeping account on which to deposit the securities. All safekeeping accounts assigned to a customer can be used as delivery accounts or receiving accounts for these transactions.

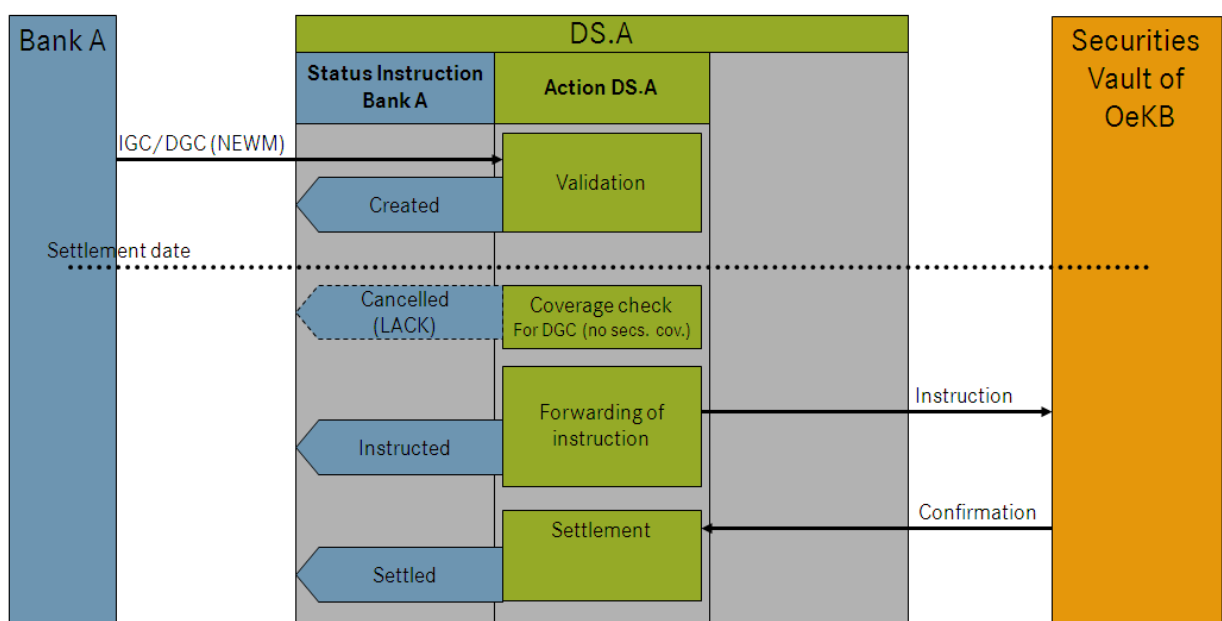
When blocked securities accounts are used for the instruction, OeKB checks if all conditions are fulfilled for crediting or debiting securities on the safekeeping account in question. If the approval by OeKB cannot be given the instruction is cancelled in DS.A.

9 Transaction Type CHANGE GC (Global Certificate)

The transaction type CHANGE GC (Global Certificate) allows the increase and decrease of the volume of a global certificate. This process is supported both by the Online client and SWIFT.

9.1 General Process Workflow

The process workflow can be represented schematically as follows:



9.1.1 Submission and Validation of Instructions

9.1.1.1 Type of Instruction Submission

The increase or decrease of the volume of a global certificate volume can be initiated by the customer by entering the corresponding instruction via the Online client or by sending an instruction of the type IGC (*Increase Global Certificate*) or DGC (*Decrease Global Certificate*) via SWIFT. DS.A validates all data and creates the instruction.

The following SWIFT messages are used:

Instruction type	SWIFT	
	Message type	Name
IGC	MT 540	Receive Free
DGC	MT 542	Deliver Free

The Online client ensures the application of the 4-eyes principle.

9.1.1.2 Instruction Validation

Instructions submitted via the Online client are immediately validated for their functional correctness when they are entered. SWIFT messages with incorrect content are rejected. Their rejection is communicated via SWIFT MT548. Wherever possible, the standardised SWIFT reason codes are used.

The checks for authorisation of the customer to change a global certificate are made separately by the OeKB Vault system to which the instruction is forwarded by DS.A.

9.1.2 Coverage Checks and Blocking

During the coverage checks for an instruction of the type DGC for decreasing the volume of a global certificate the securities to be delivered are blocked on a separate safekeeping account.

9.1.3 Booking

After the Global Certificate change has been validated by the OeKB Vault system the securities are credited to or debited from the customer's OeKB safekeeping account.

9.1.4 Status Messages and Advice of Execution

The customer is informed of the instruction status via the Online client or via SWIFT MT548 message. The successful execution of the instruction is displayed in the Online client, or reported to the customer via SWIFT messages MT544 or MT546.

9.2 Cancellation

9.2.1 Cancellation by System

If the coverage checks fail or if the transaction is rejected by the OeKB Vault system, the instruction is cancelled by the system. All instructions, which have not been released according to the 4-eyes principle by the end of the day are also cancelled by DS.A

System cancellations are visible on the Online client or are reported via SWIFT MT548.

9.2.2 Cancellation by Customer

Customers can cancel an instruction as long as it has not been forwarded for processing by DS.A, or before its settlement date. Cancellation is possible via the Online client or via SWIFT messages MT540 or MT542.

9.2.3 Safekeeping Accounts Involved

The customer can select the safekeeping account from which to debit the securities to be delivered and the safekeeping account to which to credit the securities. All safekeeping accounts assigned to a customer can be used as delivery accounts or receiving accounts for these transactions.

When blocked securities accounts are used for the instruction, OeKB checks if all conditions are fulfilled for crediting or debiting securities on the safekeeping account in question. If approval by OeKB cannot be given, the instruction is cancelled in DS.A.



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