





Service Description in connection with the Introduction of System



Based on the agreement made with the supplier of the IT system earlier stated in the document, KELER does not make any reference to the name and supplier of the software, therefore, such references are hidden in this document.

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This is a supplementary document to the document entitled Service Description Related to KELER Service Development Project (KSDP) developments, and is the GAP analysis of the developments published in the last version (V11.0) of the Service Description released in the earlier project of KELER and the developments currently planned in the KSDP.

INTRODUCTION

The change to the project timeline, the clarification of the project content since the publication of the earlier versions of the "Service Description" and the "KELER Services in T2S Environment" documents and the availability of more details require the publication of an updated document version.

At the start of the system replacement project, KELER set the objective to create the conditions of operation of a more modern, more competitive depository that provides higher quality services to Clients and that the Hungarian market enters Target2-Securities (T2S) with the new account management system.

This document describes in detail the changes in KELER services due to the system replacement and the entry into T2S.

The currently active services of the KELER Group will be available at the start of the new system and will be provided continuously.

This document describes the functions of the **system** and lists functions that are planned to go live, as part of the project, after go-live.

The parts of this document related to T2S focus on the services that will be available to our Clients in ICP mode and the changes to such services due to the launch of T2S. KELER will discuss the details of KELER services offered to DCPs, related terms, the details of the DCP licensing and certification process and the implementation project plan in bilateral consultations with parties using the DCP service.

No.	Term	Explanation
1		The name of the new account management system that KELER will launch in the Strategic Modernization Program.
2	T2S	Standard transaction settlement system for cross-border securities that operates on a technical platform created with the participation of European depositories and central banks.
5	ICP	Indirectly Connected Party - Our Clients with indirect connection that can use the T2S service through KELER, in the communication channels offered by KELER and with the use of the message formats defined by KELER.
6	DCP	Directly Connected Party - Our Clients with direct connection that have accounts in T2S, they are able to access T2S directly, without the use of KELER.
7	ЕКВ	European Central Bank
8	OWC	"Omnibus with client" (OWC), new securities account. Essentially, the total balance of the dedicated Client accounts linked to the OWC is shown as the OWC account balance in the KELER systems.
9	DCA	T2S omnibus dedicated cash account, KELER will serve its Clients through this account.
10	SME	Securities Maintenance Entity, SME, in T2S, resulting from the central securities depository role.
11	Client account	Dedicated Client account linked to OWC.



1. MASTER DATA

1.1. Clients

The new system to be introduced as part of the KELER system replacement project does not change the records of client data, and the continuity of services provided in line with the existing contracts is ensured. The group of any additional data depends on whether our client uses T2S services directly, indirectly or not at all.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

1.1.1. KELER code

The KELER code will be introduced to identify Clients. This code is a numeric, unique identifier of 8 characters.

For the current KELER Clients that have main account number in the current KELER systems, the KELER code will be created based on the main account number during the migration, as follows:

- Character 1: fix '1'
- Characters 2-5: the original main account number in 4 positions
- Characters 6-8: fix '000'.

For the current KELER Clients that have no main account, the KELER code will be created during the migration as follows:

- Character 1: fix '2'
- Character 2: fix '0'
- Characters 3-8: the original KPT identifier (KPT identifier is the internal Central Partner Identifier used in the current KELER systems).

Our new Clients will be issued the KELER codes generated by the system of KELER.

CHANGE related to the developments implemented in KSDP: KELER code will not be introduced with the implementation of KSDP.

1.1.2. Access to T2S services: ICP mode, DCP mode

KELER Clients can access T2S in two ways: in direct and indirect mode. Our indirectly connected Clients (Indirectly Connected Participants, ICPs¹) are connected to T2S through KELER, via using the communication channels and message formats provided by KELER.

Our directly connected Clients (Directly Connected Participants, DCPs²) have accounts in T2S and can access T2S directly and use T2S securities settlement services without using KELER as technical interface. Direct connectivity affects neither the business nor the legal relationships between the CSD and its Client. Direct connectivity refers that there is a direct network connection between the market participant (as T2S participant) and the T2S platform. DCPs can communicate directly with the T2S system (e.g. can submit settlement instructions, receive status notifications, query data, etc.) as well, but in ICP mode they can use KELER also to forward messages. Authorization by KELER (contractual relationship) and ECB certification are required for our Clients to become DCPs in T2S³.

The official list of entities registered as DCPs for all migration waves can be found on the ECB web site.⁴

¹ Indirectly Connected Party

² Directly Connected Party

³ For more information on the topic please contact the DCP Forum, the stakeholder group of market participants within the ECB T2S Program Organization. <u>http://www.ecb.europa.eu/paym/t2s/governance/tg/html/dcpg.en.html</u>

⁴ <u>http://www.ecb.europa.eu/paym/t2s/progress/pdf/tg/dcpg/dcps_consolidated_list_v76.zip?5fc0c272c9ded6d006543b73ee6ba3d9</u>



Direct connectivity to T2S offers access to T2S (settlement) services only. Other services offered by KELER (e.g. custody and other value added services) will not be available through direct connectivity to T2S and will still require a direct connection to KELER. T2S will always send response messages in line with the settings in the subscription table (i.e. the technical address determined in T2S), irrespective of whether the settlement instruction was received directly or through KELER.

Indirect (ICP) and direct (DCP) connectivity are compared as follows:	

Aspect	Indirect connectivity (ICP)	Direct connectivity (DCP)	Note
Technical connection	Through KELER	Own technical connection with T2S through a network service provider offering value added network services.	
Message format	XML (in part ISO20022) format KIDIO interfaces, the KELER KID interface or SWIFT ISO15022 messages (currently KELER examines the possibility of introducing the SWIFT ISO20022 standard)	ISO20022	
ECB certificate	Not required	Required	
Testing	Community testing	 Community testing Testing for licensing purposes with KELER in order to receive the central securities depository authorization 	
Contractual relationship	General contract with KELER	 General contract with KELER Contract on DCP service is required to be concluded 	
Method of submitting instruction to T2S	Through KELER	Directly, through the T2S platform (FOP, DVP, blocking, reservation, earmarking), or use of KELER as technical sender, in ICP mode.	The T2S system sends a copy to KELER on all activity undertaken by the DCP. Upon launch, trades denominated in EUR can be settled in T2S; however, KELER DCPs will be able to give settlement instructions for non-T2S currency trades directly in the T2S system (conditional FOP transaction, see later).

T2S settlement service can be used for FOP, DVP, blocking transactions only. Special transactions (e.g. repo, DVD or portfolio transfer) can be submitted to T2S through KELER only, in ICP mode. KELER offers so-called transformation services to forward for T2S settlement the listed transactions, broken down to basic transactions (if necessary), in the required format and with the required content.

CHANGE related to the developments implemented in KSDP: in the first phase of the project, there will be no direct access to T2S, thus it will not be possible to use T2S securities settlement services directly, as DCP.



1.2. Accounts

1.2.1. Account structure

In addition to maintaining the segregation of own and client assets, KELER unifies the cash and securities account structure. The main account, sub-account structure will be terminated. Some sub-account (e.g. collateral sub-account) balances will be shown as so-called balance types (e.g. available balance, collateral given balance, etc.) instead of independent sub-account balances to segregate assets for various purposes. Based on Client request, in independent accounts KELER continues to ensure the segregated management of securities to be blocked.

KELER opens and manages client or dedicated accounts as independent accounts.

CHANGE related to the developments implemented in KSDP: the securities and cash account structure currently applied in live operation will not change.

1.2.2. Securities accounts

Related to securities accounts, the own and client nature of the accounts remains a master data setting the KELER system. However, the method of display will change: the account type will define this data (except for the certificate type account, in which case the account type is determined upon account opening).

Major changes related to securities accounts:

• Increased number of accounts can be opened per client, change in the structure of existing account numbers

In line with the strong segregation requirement due to EMIR and the market needs, KELER increases the number of accounts that can be opened. This would not be possible with the present account structure; therefore it is necessary to modify the structure of account numbers. The 4 characters (main account number) + 6 characters (sub-account number) account structures will change to 11 characters in the new system. During the migration, the Client account numbers of 10 characters do not change, character'1' will be added in the first position. KELER will generate randomly the numbers of securities accounts opened later. KELER will accept securities related instructions only with securities account numbers of 11 characters.

Change in the generation of new account numbers

When a new account is opened, the account number generated by the KELER system is assigned to the account. Dedicated securities accounts (client) that can be opened in KID also are exceptions to this rule. In the case of migrated data, KELER identifies the Client on characters 1-5 that KELER provides and remain constant for each Client. In the new system, KELER will generate characters 6-11 randomly, however, for account opening instructions submitted in KID, the Client has the possibility to define freely the account number for positions 6-11 (free account number creation) as long as the account number is unique. Accounts opened in KID can be used for transacting from the following day.

Termination of alphanumeric account numbers

Alphanumeric account numbers (S00000 - settlement own account, M00000 - settlement client account) will be terminated. Accounts xxxxS00000 will be migrated as xxxxx400000, accounts xxxxM00000 will be migrated as xxxx400001, segregated accounts xxxxMyyyyy opened for non-clearing members will be migrated as accounts xxxx4yyyyy (xxxx represents the current main account number, xxxxx stands for the first 5 characters of the account number, yyyyy represents last 5 characters of the future account number).

• Non-clearing member settlements

After the new account management system of KELER goes live, any client/Client account can be used for non-clearing member settlements if the contract concluded with KELER CCP Ltd. allows it.



• "Omnibus with Client"- introduction of new securities account type

In addition to the own and omnibus account, KELER introduces the "omnibus with client" (OWC) securities account service. Essentially, the consolidated balance of the dedicated Client accounts linked to the OWC will be shown as the OWC account balance in the KELER systems, however, it will not be stated in client statements. Each Client type account will be linked to an OWC account.

• Termination of mandatory use of 676767 own and 787878 omnibus client dedicated accounts

As the result of the modification of the process of issuance, the mandatory use of accounts ending 676767 (Own) and 787878 (Omnibus) will be terminated. The currently used accounts will be migrated, but after the launch of ______ account holders will be free to determine (and modify) the own and client securities account (dedicated account) to be used for issuance, however, each custodian is required to have one own and one client dedicated account.

Introduction of issuer distribution account

Two so-called issuer distribution accounts will be introduced as new securities accounts. One account is for booking entries related to the process of Fresh Issuance/Top up, while the other account is for the booking entries related to the process of Reduction. These two securities accounts opened for different purposes are to be managed differently to prevent the mixing of the balance arising from the back transferability of the securities of the unidentified holder and the securities transferred back for reduction.

Dematerialized securities issued are allocated to the securities account holders through the Fresh Issuance/Top up securities account, and in the case of reduction the account holders are required to transfer back the securities to be withdrawn to the Reduction securities account. If an entire series is to be deleted due to a corporate action, the securities are debited to the Fresh issuance/Top up securities account.

KELER opens automatically the issuer distribution accounts for the issuers with active dematerialized securities, and informs the issuer thereon when the first corporate action is ordered after go-live.

• Physical securities custody account types

Physical securities kept as individual deposit are credited to the Clients' certificate accounts (individual securities custody accounts).

Securities in fungible custody are credited to the Clients' securities custody accounts (Own, OWC).

The following figure illustrates the account structure after migration and the related account numbers:

Current subaccount no.	Future account number	Note related to the account number and its name
XXXX-S00000	1XXXX400000	Own account: own regulated market transactions and own transactions other than regulated market transactions are settled in this account.
XXXX-M00000	1XXXX400001	Omnibus without detail: the securities for the owners of which the account holder did not open separate client accounts will be held in this account. The exchange transactions of the account holder with client segregation will be settled in this account also.
n/a / does not exist as of today	1XXXX400002	Omnibus with client detail: this account has no independent balance on its own, it collects and shows in summary the balances and turnover of dedicated client accounts.
XXXX-000000	1XXXX000000 (example)	Own account: transactions with own segregation, other than the regulated market transactions of the account holder are settled in this account.
XXXX-000001	1XXXX000001 (example)	client account linked to account 1XXXX400002
XXXX-000002	1XXXX000002 (example)	client account linked to account 1XXXX400002



Current subaccount no.	Future account number	Note related to the account number and its name	
XXXX-000003	1XXXX000003 (example)	client account linked to account 1XXXX400002	
XXXX-M00234	1XXXX400234 (example)	client account linked to account 1XXXX400002. Non-clearing member or settlement agent settlement by the account holder is in this account, in line with the applicable agreements and the instructions received from KELER CCP.	
XXXX-6773XX	1XXXX6773XX	Linked account: trades made at XETRA are settled in this account	
XXXX-1122XX	1XXXX1122XX	Linked account: (the US securities) of the client subject to preferential US tax rates are recorded in this account. KELER offers the possibility of preferential US tax rates for the corporate action entitlements of the securities held in this account, based on the Double Taxation Treaty (DTT).	
XXXX-237000	1XXXX237000	Derivative collateral account (client); in the future the accounts of this type will not have fix account numbers, i.e. it will be possible to open them with free account number combination.	
XXXX-236000	1XXXX236000	Derivative collateral account (own); in the future the accounts of this type will not have fix account numbers, i.e. it will be possible to open them with free account number combination.	
XXXX-51xxx5	1XXXX51xxx5	BÁT FCY client securities account; in the future the accounts of this type will not have fix account numbers, i.e. it will be possible to open them with free account number combination.	
XXXX-51xxx4	1XXXX51xxx4	BÁT FCY own securities account; in the future the accounts of this type will not have fix account numbers, i.e. it will be possible to open them with free account number combination	
XXXX-565656	1XXXX565656	Physical client settlement account (in the case of FISZER transactions)	
XXXX-606060	1XXXX606060	Demat investment unit daily cancellation securities account	
XXXX-787878	1XXXX787878	Securities issuance omnibus (client) account	
XXXX-676767	1XXXX676767	Securities issuance omnibus (own) account	
XXXX-111111	1XXXX111111	Certificate account (securities account for physical securities in individual custody (recorded by serial numbers))	

After the new system goes live, Clients will not need to maintain the earlier dedicated sub-accounts. It will be possible to request blocking in any account by stating the blocking purpose.

CHANGE related to the developments implemented in KSDP: no change is expected in the account structure and account types currently applied in live operation.



1.2.3. Securities account balances

Aggregated Balance = Available Balance + Non-available Balance

Available Balance = Aggregated Balance - Non-available Balance

The available balance always represents the free, available securities. This balance type does not change the positions in case of unmatched transactions, as at this point successful matching and securities cover validation are not yet concluded.

If securities cover validation fails, cover is not reserved.

The securities involved in the transaction get into the non-available balance only if KELER completed matching and securities cover validation successfully.

Blocked and Pledge Given Balance = unilateral blockings + bilateral beneficiary blockings + trilateral beneficiary blockings + joint blockings

Non-available Balance = Anticipated Debit Balance + Collateral Given Balance + Blocked and Pledge Given Balance + Repo (Hold in) Blocked Balance + Tendered Quantity

The non-available balance type is detailed as follows:

Anticipated Debit Balance = temporarily blocked balance of securities cover of DVP transactions subject to validation of cash cover

Collateral Given Balance = the securities blocked under beneficiary blockings accepted by KELER and KELER CCP for collateral purpose

Blocked and Pledge Given Balance = unilateral and joint blockings, and the securities balance blocked as the result of implementing blockings in favor of the MNB

Repo Blocked Balance = the balance of securities subject to hold-in-custody repo transactions blocked in favor of the buyer in the account of the seller

Tendered Quantity = balances blocked as the result of instructions that will be processed in corporate actions (typically as part of the service offered to Clients using custody services). The tendered balance blocked in the form of unilateral blocking instruction is shown in the 'Blocked and Pledge Given Balance'.



Figure 1. - Securities account balances: Aggregated Balance





Figure 2. - Securities account balances: Normal Balance

The Normal Balance will not be visible in the statements; however, Clients can check the Normal Balance in web service queries. The Normal Balance is a balance computed from the other balances; thus, it contains no material additional information. However, it can be checked in web service queries.

CHANGE related to the developments implemented in KSDP: No change is expected related to the balance types used in the current live operation.

1.2.4. Cash account

1.2.5. Cash account structure

The most important changes affecting our Clients are summarized as follows:

• Change in the generation of new account numbers

KELER plans no changes related to the existing account numbers (BBAN and IBAN account numbers). However, the method of generation of the account numbers to be issued in the future will change: account number generation based on running serial number principle (CDV correct) will be introduced in line with the basic principles of IBAN and BBAN generation.

• Consolidation of HUF accounts and foreign currency accounts (various currencies managed under the same account number)

The separately recorded HUF and FCY accounts and statements will cease to exist. In the future, balances and transactions will be shown in the same account, by currency.

• Termination of the mandatory use of separate cash accounts for collateral purposes

The existing cash accounts for collateral will be migrated, including the respective balances, into the new account management system of KELER. However, after migration, collateral in cash can be deposited in any cash account, taking into account the requirement of segregation, with a blocking transaction that states the collateral purpose of the blocking. Our Clients have a choice and can decide if they wish to keep in the future the accounts currently used as collateral purpose cash account.

• Cash account by securities main account (different KELER code)

In the case of clients that currently have several securities main accounts and thus will have several KELER codes after the launch of the present practice, i.e. securities transactions will be settled in separate cash accounts by KELER codes.



CHANGE related to the developments implemented in KSDP: no change is expected in the cash account management and structure currently used in live operation.

1.2.6. Cash account balances

Aggregated Balance = Available Balance + Not Available Balance

Available Balance = Aggregated Balance - Not Available Balance, (Over the available balance the Client is free to dispose.

Not Available Balance = Blocked Balance + Collateral Given Balance

Blocked Balance= blocking for beneficiary+ temporarily blocked amount of pending transactions (IG2, VIBER, Teller) until the final debiting on the account + manual blocking

Aggregated Balance					
Non-Availal	Available Balance				
Blocked Balance Collateral Given Balance					
 blocking for a beneficiary Transferred cash amount (IG2,VIBER, Teller) manual blocking 					

Figure 3. - Cash account balances: Aggregated Balance

Cleared Balance = Available Balance + Blocked Balance



Figure 4. - Cash account balances: Cleared Balance

CHANGE related to the developments implemented in KSDP: no change is expected in the cash account balances used in current live operation.



1.2.7. Linking securities and cash accounts

With the launch of the new system, one default cash account can be linked in each currency to each securities account in the following transaction groups:

- securities account transactions with cash movement
 - regulated market transactions (multinet settlement, derivatives physical delivery, derivative settlement)
 - transactions outside the regulated market (DVP trades, BSE fix and auction trades, repo transactions)
 - primary market transactions
 - cross-border transactions
- corporate actions

The default settings⁵ take into account the current market practices related to the cash account use of our Clients, such as:

- HUF settlement for credit institutions: MNB account number
- FCY settlement for credit institutions: KELER account number
- settlements in any currency for non-credit institution Clients: KELER account number
- cross-border transaction settlement in any currency: KELER account number
- domestic corporate actions settlement in any currency: based on the statement of the account holder

Credit institution Clients with several KELER codes can use the same MNB cash account with different KELER code also, however, they need to use different KELER cash account.

The above described rules apply to the settlement of primary deals in general, however, the bank Clients that currently use a cash account maintained in KELER for certain securities accounts to settle primary deals, this link will continue to be valid.

In addition to the above default settings, if the Client can dispose over several KELER cash accounts, it can instruct a cash account other than the default cash account. This applies to both domestic and cross-border transactions. This opportunity can be exploited for example if the Client uses as default account an account individually agreed with KELER for BSE fix and auction trades, while in DVP and REPO instructions it states as mandatory a cash account other than the default cash account to be debited/credited.

If the cash account instructed by the Client exist in the account management system of KELER but is linked to another Client, the instruction will be rejected. If the instructed cash account is not registered in the account management system of KELER, the system uses the default cash account for posting booking entries.

In case of corporate actions with entitlements the mapping of the cash accounts by securities type for each security account will change.

It will not be possible to state a different cash account by securities type to be credited. The account holder is required to give a statement to KELER for each securities account on the cash account to which corporate action related fund movements are required to be credited. One cash account can be linked to one security account in each currency. The selected cash account number will be displayed on the snapshot with cash accounts for the issuer and the issuer agent.

CHANGE related to the developments implemented in KSDP: With the launch of the new system, for transactions with fund movements, one default cash account can be assigned to each securities main account by currency and by transaction type.

⁵ After migration our Clients can modify the default setting.



1.2.8. Asset segregation

In line with the provisions of the Capital Market Act and international legal requirements, KELER provides the opportunity to segregate the own assets from the assets of Clients for KELER partners, keeps securities and cash in segregated accounts and manages segregated accounts to this end.

It will be possible to keep securities deposited as collateral in segregated accounts; however, the Collateral Balance can be used for this purpose also.

CHANGE related to the developments implemented in KSDP: compliance with legal requirements on the segregation of assets will be ensured, no change expected.

1.2.9. Account structure in T2S

1.2.9.1. Partial entry model

Based on the earlier decision of the National Bank of Hungary, the Hungarian Forint (HUF) will not be part of T2S. The partial entry model means that KELER enters with the securities issued in Hungary but without the national currency. Consequently, after migration, KELER will outsource its settlement activity in EUR to the T2S platform, while KELER will match and settle trades denominated in HUF using an omnibus account model. The ECB found this model viable both from legal and technical point of view.

CHANGE related to the developments implemented in KSDP: No change compared to the description above, i.e. KELER outsources T2S currency settlements to T2S, KELER keeps HUF and non-T2S dedicated subaccounts and remains the place of matching securities transactions and the place of settlement.

1.2.9.2. Account structure

Securities side

KELER plans to use an omnibus account in T2S and register the securities positions of its Clients in a consolidated manner.

At the request of our partners, including ICPs, DCPs and the investor CSDs⁶ maintained an account in KELER, several accounts (so-called segregated T2S accounts) can be opened in T2S for segregation purposes. The balance of T2S segregated accounts will be reflected in KELER in the so-called dedicated T2S accounts, with 1 to 1 mapping between accounts.

Only T2S instruments can be kept in segregated securities accounts.

Dedicated T2S accounts (only own or omnibus) can be opened after the new system goes live. Related to making the existing securities accounts T2S-conform, KELER is consulting the ECB on the instruments available on the migration weekend.

One issuer account will be opened in T2S to mirror the total quantity of securities that KELER registers in T2S. This will be the central securities account in T2S of the Hungarian, dematerialized securities issued by KELER as central securities depository. Furthermore, one distribution account will be also opened in T2S; the issuance of dematerialized securities will be managed in this account.

The link between the above mentioned T2S accounts and the accounts kept in KELER will be set in the system and KELER will ensure that two systems are continuously consistent.

⁶ Please see Section 3.7.2.1. for the special settlement rules applicable to investor CSDs.





Figure 5. - High level account structure of KELER in T2S

EUR side

Cash settlement in T2S is performed in EUR only, in the so-called DCAs (Dedicated Cash Account). KELER will settle transactions in EUR in the omnibus T2S dedicated cash accounts. The KELER DCA is kept at SGSS.

KELER can keep client EUR balances segregated in the DCA, and EUR settlement can be performed in a DCA external to KELER, other than the KELER DCA.

EUR settlement models offered by KELER

The account structure in T2S offers various options to our partners to execute securities settlement in EUR.

Possibilities on the securities side:

- KELER omnibus
- KELER segregated account (the participant is to be shown in T2S also as an account holder with BIC code)

Possibilities for cash account:

- KELER omnibus
- cash account external to KELER, with a National Bank or a Payment Bank in the Euro region



CO

		cecuritysio	cashside	
		T2S securities a/c	T2S cash a/c	
			IZJ LASII A/L	
ІСР	model 1	KELER omnibus	KELER omnibus	Defaul
ICP	model 1 model 2	KELER omnibus KELER segregated	KELER omnibus KELER omnibus	Defaul
ICP	model 1 model 2 model 3	KELER omnibus KELER segregated KELER segregated	KELER omnibus KELER omnibus KELER segregated	Defaul

Figure 6. - Possible T2S account structures for our partners

By default, ICPs settle both cash and securities in the KELER omnibus account. DCPs are required to keep segregated accounts in T2S related to which they can give direct instructions.

Only one cash account can be linked to one securities account.

Operation of the various models

1. KELER omnibus EUR account (models 1 and 2)

In the T2S system, KELER plans to consolidate the cash account balances of its clients in an omnibus cash account (model 1).

To this end, KELER opened a T2S EUR cash account (DCA) with Societe Generale Securities Services (SGSS) to execute the cash settlement of T2S transactions.

Societe Generale Securities Services SOGEFRPP FR7630003069900010161554183 001016155410 Beneficiary account number is the client KELER account number.

SGSS T2S EUR account number: CFREURSOGEFRPPTIT-DCA-SGSS.

Cut-off for direct EUR transfer to SGSS: SD 15:00.

Our clients can continue to use the KELER EUR account with Citibank London to transfer liquidity related to transactions to be settled in T2S.

Citibank, N.A. London Branch CITIGB2L GB42CITI18500814105877 14105877

If our clients transfer to Citibank London the amount that is cover of the EUR DVP transaction, the cut off is SD 14.00, i.e. the amount has to be credited to the client cash account kept by KELER.

If our client intends to open segregated securities account in T2S, the KELER omnibus EUR cash account can be linked to this account also (model 2).



2. Cash account external to KELER (model 3)

We link the securities accounts with the T2S cash accounts stated of our clients wishing to settle EUR in external T2S DCA instead of the KELER DCA.

This model is available to clients with segregated T2S securities accounts (model 3).

Differences in cover verification in the various models

If the KELER omnibus account is selected on either the securities and/or the cash side, due to the nature of the omnibus account structure, KELER verifies securities / cash cover before sending the settlement instructions to T2S. If cover verification is successful, securities / cash positions are blocked. Subject to the result of cover verification and the blocking date, KELER sends orders with CSD Release or CSD Hold status to T2S.

In the case of the segregated securities and/or cash account model, KELER does not verify cover in advance for the settlement instructions for the segregated securities / cash accounts, thus no blocking in advance is performed. KELER sends CSD Release instruction to T2S.

If a cash account external to KELER is used, having regard to the client EUR cash account kept outside KELER in this model, KELER does not verify cover for the transactions, T2S checks the cash position required for settlement in the DCA stated by the client. KELER sends CSD Release instruction to T2S.

CHANGE related to the developments implemented in KSDP:

Taking into account the already implemented entry model, the account structure that is the basis of settlement in T2S is created in line with the following key principles:

- possibility to open T2S dedicated securities account
- financial settlement of trades made in T2S currencies possible on segregated DCA and DCA external to KELER
- flexible linking of securities and cash accounts

The securities trades that can be settled on dedicated T2S securities accounts will be advised later.

1.3. Securities

1.3.1. Securities master data related validation rules

In line with international best practice KELER will consider the nominal value of debt securities and the number of units of shares and investment units as basic transaction data. The system will reject instructions that do not comply with this rule (with status code REJT//DQUA).

The minimum trading quantity will be introduced as instrument master data, this determines the lowest number of units that can be settled for shares and investment units and the lowest nominal value for bonds. For domestic securities this value equals the nominal value for bonds, for shares and investment units this is one unit. If a different nominal value or number of units is instructed, the instruction will be rejected (with status code REJT//MINO).

The multiples (tick) that can be settled above the minimum trading quantity will continue to be checked. The instruction can state the whole number multiple of the nominal value for bonds and the whole number multiple of number of units for shares and investment units. If this rule is not met, the instruction is rejected (REJT//MUNO status code).

Settlement instruction for instruments with unknown ISIN codes will be rejected also (REJT//DSEC status code)⁷.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

⁷ Cross-border orders, where the place of settlement is not KELER, are exceptions to this rule. In these orders KELER does not reject trades with unknown ISIN code.



1.3.2. Securities issued in Hungary eligible for T2S settlement

KELER develops its systems to be able to make available in T2S also all the securities with ISIN codes issued in Hungary that are fungible in terms of settlement, dematerialized in form or are created physically.

The physical securities in non-fungible safekeeping are linked to the depositing account holder based on series and serial number, are registered in custody accounts and their processing requires separate controls. KELER will use market specific attributes in T2S and will determine restriction rules⁸.

In harmony with the recommendation of the ECB, upon the request of the Client, KELER is required to open any ISIN code in T2S if it complies with the above described characteristics.

It is certain that the following securities will be available in T2S also at the launch of T2S:

- securities traded on the BSE
 - o premium equities category
 - government securities
 - mortgage bonds
- government securities and mortgage bonds denominated in EUR, issued privately

The group of additional securities available in T2S will be determined based on market consensus.

As soon as KELER becomes an active member of T2S, due to its role as central securities depository it becomes a so-called Securities Maintenance Entity (SME) also⁹ with respect to Hungarian securities. Additionally, in line with its T2S strategy, KELER plans to make available in T2S the securities of other Central Eastern European markets that do not enter T2S and thus allowing such securities to be settled in T2S.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

1.4. KELER and T2S operating time

KELER operating time is published in the Depository Announcement valid from time to time.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

1.4.1. Settlement calendar and settlement day in T2S

With the launch of T2S, KELER harmonizes partly its calendar and operating time with those of T2S¹⁰ and it continues to conform to the VIBER calendar.

T2S is open all days, except on the following days:

- Saturdays
- Sundays
- 25 December
- 26 December
- 1 January

⁸ See Attachment 2. - Market Specific Attributes (MSA)

⁹ SME: Legal entity in charge of maintaining the master data of securities in T2S. The issuing CSD automatically becomes SME for the securities it issues and if a CSD issuing a certain ISIN is not in T2S, a CSD in T2S needs to assume the role of SME so that the ISIN concerned becomes available in T2S.

¹⁰ Full compliance with the T2S calendar and settlement day is achieved if the T2S market/CSD concerned meets the following conditions: a) the securities accounts of the CSD are available for settlement in T2S during the entire operating time of T2S (credits, debits, realignment, etc.); b) settlement efficiency is not restricted in T2S, for example the T2S market/CSD takes part in the start of day process and ensures that corporate actions are processed by the applicable deadline (before the start of the nighttime settlement cycle); c) each daytime T2S cut-off is implemented; d) the CSD offers DCPs access to T2S (if it is required and the applicable T2S technical requirements are met).



Instructions for non-business days in the VIBER calendar cannot be settled in T2S. Similarly, T2S settlement is not possible on VIBER business days when T2S is closed (e.g. Saturday business days).

There are three more days when Target2 is closed, therefore no EUR settlement can be performed on:

- Good Friday
- Easter Monday
- 1 May¹¹

KELER plans to comply with the harmonized T2S calendar as follows.

The following figure summarizes the various business day-holiday scenarios in the relationship of T2S and KELER.

Scenario	T2S	Hungary	Availability of KELER services
1	Business day	Business day	• Normal business day, both domestic and T2S settlement is possible.
2	Weekend	Saturday business day	 Business day for domestic transactions. T2S will reject transactions to be submitted to T2S for Saturday value date on the following business day as the system is closed on Saturday. Participants can submit value dated T2S transactions, on the following T2S business day KELER will queue and process such transactions and then will submit them to T2S. Securities issuance, cancellation is not possible Securities master data cannot be changed.
3	Business day	Hungarian national holiday on weekday	 KELER does not accept transactions to be settled in HUF for this day as VIBER is closed. On the days before Hungarian national holidays participants can submit value dated T2S transactions to be settled on Hungarian national holidays, and KELER will process such transactions after the non-business day. DCPs can forward directly any instruction to T2S, but HUF settlement is not available to them.

Figure 7. - Settlement calendar of T2S vs. Hungarian market

The T2S settlement day is as follows:

- real-time settlement (RTS) window between 05:00 and 18:00
- end of day processing (EOD) and start of next business day (SOD) scheduled to take place between 18:00 and 20:00
- night-time settlement (NTS) between 20:00 and 03:00
- maintenance period between 03:00 and 05:00.

In order to adapt to T2S processing, KELER reschedules daily processing.

- End of day processing starts in KELER at 19:00. As part of this processing, KELER receives end of day reports from T2S, prepares daily reports for Clients, then the next settlement day is opened.
- T2S night-time settlement /NTS/ cycles (2 night-time batch cycles between 20:00 and 03:00) will be available in ICP mode also. Clients are required to submit value dated T2S orders to KELER until SD-1 17:30 for DVP, and until SD-1 18:00 for FOP settlement for settlement in the night-time settlement cycle. The instructions related to corporate actions created by KELER during the start of day process will also get into the T2S night-time settlement cycle.

¹¹ It is important to note that standardization of T2S and T2 calendars is being investigated. As suggested, T2S also would be closed on the 3 days referred to.



- T2S is not available between 18:00 and 20:00, in this period KELER Clients can submit orders as ICPs but these will be processed on the next value date only. The system will queue these orders and validate them the following morning, if necessary submits them to T2S in the next day real-time settlement period.
- KELER closes its systems for the night.
- Real-time settlement starts at 05:00. At this time, following the opening of systems, KELER receives the result of night-time settlement from T2S (status messages, confirmation). Our Clients will be advised on the result of night-time settlement in an appropriate way and in due time.
- Real-time settlement in KELER will be available until 18:30. The cut-offs determined by T2S will apply to T2S transactions; these will be integrated into the applicable regulations of KELER.

KELER will keep current -operating time after 18:00 for domestic settlement transactions; however, the cut-offs determined by T2S will apply to transactions involving T2S (EUR counter value, transactions involving dedicated account or cross-CSD transactions).

T2S cut-offs are as follows:

- FOP: 18:00
- DVP (EUR): 16:00
- KELER will apply the T2S FOP cut-off (18:00) to HUF DVPs affecting a T2S account as these transactions will be managed by T2S as FOP instructions.
- Securities blocking: 18:00

KELER will accept transactions arriving after the cut-off and will recycle them to the following value date.

KELER will publish detailed cut-offs, the services available on certain business days and the availability of its customer service in a Depository Announcement to be released later and based on market consensus, taking into account the opening time of VIBER and BSE.

CHANGE related to the developments implemented in KSDP: the terms and the implementation method of ensuring consistency with the T2S calendar are being reviewed, details will be advised later.



2. CASH MANAGEMENT SERVICES

2.1. Transaction types

The following transaction types can be submitted to the cash accounts managed by KELER:

Clients can submit the following transaction types:

Transaction	Transaction code
IG2 payment	IG2
IG2 recall	IG2R
VIBER payment	VIBT
Internal cash payment between own accounts	INTR
Internal cash payment between KELER accounts	INTE
Pre-advice/Aviso	PREA
FCY payment	FCTX
SEPA payment	SEPA
FCY/HUF and HUF/FCY conversion	FCTR
FCY/FCY conversion	FXTR

Clients cannot submit the following transactions:

Transaction	Transaction code
Commodities futures trade	CMFT
KELER CCP transactions (energy market, gas market, TP)	CCPS
Interest payment related to guarantee funds	GFIN
Variation margin settlements, purchase price	VMAR
Collection of fees	FBLD
Balance query and blocking in the case of multinet default	BLOK

The transactions that Clients can initiate can be submitted as instructions, transactions which cannot be initiated by Clients cannot be submitted as instructions; however, they will be shown in statements.

The transaction codes in the column called transaction code will be shown in the statements for transactions submitted both trough KID and SWIFT. The list includes the set of values of transaction types of the KIDIO and SWIFT User Guide.

Modification of the priority of cash transactions will not be possible. In the future, the uncovered transaction(s) with earlier positions in the queue need to be deleted or the necessary funds provided to settle the cash transactions standing in the queue.

At the launch of the new system, KELER plans no basic changes in payment methods and order execution; the most important changes affecting our Clients are covered in Sections 2.2.-2.6.

CHANGE related to the developments implemented in KSDP: the payment transaction types used in current live operation do not change.



2.2. Scheduled cash transfers

Intraday timing is possible for payment transactions executed in the InterGiro2 (IG2) platform, i.e. the number of the IG2 session can be instructed. Our Clients can state in the instruction the number of the session of the IG2 platform in which they wish to settle the order. If the cut-off time of the session stated is already passed or the applicable field is not filled in, the item will be settled in the next IG2 settlement cycle.

CHANGE related to the developments implemented in KSDP: in the case of payment transactions executed in IG2, it will not be possible to specify that the order is executed in a specific cycle.

2.3. Postal service

If the instructing party states the BBAN account number in 3x8 characters (in case of IBAN this is from character 5 until character 28) in case of credit transactions, and the third 8 characters are numbers other than zero, KELER books the amount on the account to be credited based on 2x8 characters and provides the numbers in the third 8 characters as information (in the remarks field) to the Clients. Based on the third 8 characters Clients can identify the client accounts they keep.

In line with the present practice, the new account management system of KELER will continue to offer this functionality so our Client can use the third 8 characters of the account number to identify their Clients.

CHANGE related to the developments implemented in KSDP: no change compared to the current live operation.

2.4. Foreign exchange (FX) transactions

FX orders can be submitted for two currencies of the same account only. E.g. for an order to sell HUF, buy EUR, the transaction will be performed by debiting the HUF balance and crediting the EUR balance of the own account.

The FX amount to be sold is blocked in the client account on the day the instruction is submitted.

CHANGE related to the developments implemented in KSDP: no change compared to the current live operation.

2.5. Defining the interest payout account

By default, the interest amount computed on the balances of the accounts involved in interest computation is credited on the same account. However in the future, Clients will have the opportunity to state another own account kept with KELER as the account of interest booking.

CHANGE related to the developments implemented in KSDP: the development will be implemented outside KSDP.

2.6. Message channel in the case of financial transactions

The KELER account management systems sends advice on the acceptance, rejection of the instruction, the settlement of the transaction in the message channel the instruction related to the cash account is sent. In other words, if the instruction is received in the KID system, advices will also be available in KID. If the instruction is received in SWIFT, the system will send advices in SWIFT.

If the cash account movement is not triggered by client instruction (e.g. credit, interest settlement, fee debited), the so-called default channel will be used to send advices to the client on debits and credits.

CHANGE related to the developments implemented in KSDP: no change compared to the current live operation.



2.7. The impact of T2S entry on cash management services

2.7.1. Partial entry model

T2S has no direct impact on KELER's cash management services, as on the one hand based on the decision of the National Bank of Hungary the Forint will not be part of T2S when joining T2S - settlements in central bank money can be performed only in central bank money in T2S, on the other hand T2S manages only securities related to fund cash movements (settlement, corporate action related payments), it does not execute any other payment orders.

KELER needs to manage liquidity in EUR in its T2S cash accounts to offer settlement services in T2S.

CHANGE related to the developments implemented in KSDP: the above are to be understood in T2S currency instead of EUR due to the entry of the Danish Krone into T2S in 2018.

2.7.2. Funds transfer within T2S (Payment free of delivery/PFoD)

The PFoD transaction type is a funds transfer related to securities, but without movement of securities. PFoD is used related to the processing of corporate actions that result in some payment, such as dividend and interest payment or the settlement of "market claim" (see later). This transaction type is not available to our partners directly; it will be used by the depositories only.

CHANGE related to the developments implemented in KSDP: the PFoD transaction type will be introduced in general, i.e. our Clients will be able to use it for trades to be settled both within KELER and in T2S.



3. SECURITIES SETTLEMENT

3.1. Transaction types

The following transaction types can be settled in the securities account kept by KELER related to securities settlement. The codes related to the transaction type concerned (if SWIFT or KIDIO is used) have to be stated in the instructions. The end-of-day statements also include these codes.

Clients can submit the following transactions:

Transaction type	Transaction code in messages	Transaction code in reports
Securities transfer (FOP)	TRAD	TRAD
DVP	TRAD	TRAD
Intra-BP FOP	OWNI	OWNI
Blocking	-	KELR+BLOC/KELR+BLOR
REPO (opening leg)	REPU/RVPO	REPU/RVPO
Cross-border	TRAD	TRAD
Delivery Versus Delivery (DVD)	-	KELR+DVDT
Securities creation	KELR+DISI	KELR+DISI

Clients cannot submit the following transactions:

Transaction type	Transaction code in messages	Transaction code in reports
XETRA	TRAD	TRAD
Primary transaction	KELR+PRMT	KELR+PRMT
Multinet	KELR+MTNS	KELR+MTNS
Multinet default (on available balance)	KELR+MTNF	KELR+MTNF
Multinet default (on remaining position)	TRAD	TRAD
FISZER	KELR+PDSS	KELR+PDSS
FISZER default	TRAD	TRAD
BSE Fix	KELR+BSEF	KELR+BSEF
BSE Auction	KELR+BSEA	KELR+BSEA
Investment unit cancellation	REDM	REDM
Investment unit creation	SUBS	SUBS

The above codes are to be stated in the instructions that can be submitted by Clients. The instructions that Clients cannot submit cannot be placed by Clients, however, the transaction codes are stated in the messages sent related to these transactions and in the statements also.

The above list is the transaction type set of values stated in the KIDIO and SWIFT User Guide. The detailed transaction code list is also available in Attachment 5. of these documents.

CHANGE related to the developments implemented in KSDP: transaction types and transaction codes are expected to change. Detailed specification will be included in interface descriptions.



3.2. References

3.2.1. References in domestic settlements

In line with market needs, the system and operation of transaction references will be renewed substantially. The settlement instructions submitted will be identified with the following references during the process of settlement:

Reference type	Content	Format	Shown in client advices
Partner reference	 Common trade reference: trade reference that can be stated in the instruction. Reference bilaterally agreed by Clients and sent to KELER as part of the instruction (optional) related to the transaction. It is an optional matching criterion, i.e. if both counterparties complete the field, it becomes a matching element. Partner reference: the partner's own internal instruction reference. Repo reference: reference to identify the starting repo transactions; it identifies the expiring repo and the modified repo also. 		 before matching in status advices after matching in status advices the common trade reference is part of the allegement message
KELER reference	 KELER trade reference: reference allocated to the instruction by KELER after acceptance. Matching reference: reference allocated by KELER to the transaction with matched status if the place of matching is KELER. 	 FOP, DVP, BSE fix price and auction, primary, DVD: OTCxxxxxxxxxxx Unilateral, joint blocking: LENxxxxxxxxxxx Beneficiary blocking: PLDxxxxxxxxxxx Beneficiary collateral blocking RSKxxxxxxxxxxx Beneficiary collateral blocking RSKxxxxxxxxxx Beneficiary collateral blocking RSKxxxxxxxxx Beneficiary collateral blocking RSKxxxxxxxxx Repo: RPOxxxxxxxxxx BSE exchange sec. and Physical delivery settlement: TRDxxxxxxxxxxx Cash settlement of commodity futures traded on the BSE: PDDTSxxxxxxxxxx Cross-border, Xetra: CBSxxxxxxxxxx Matched reference: FOP: FOPxxxxxxxxxxx 	 before matching in status advices after matching in status advices Matching reference: included in the financial orders sent to the NBH, the NBH can forward this information in MT900/MT910 VIBER message in the case of Clients that have cash accounts with them.

The references stated in the ISO15022 and ISO20022 messages are included in Attachment 1.



The following figure illustrates the use of references in the case of an OTC transaction.



Figure 8. - Use of references

CHANGE related to the developments implemented in KSDP: no changes are expected related to the key principles of using reference numbers, types, content (reference number generation). Interface descriptions will include detailed specification on format.

3.2.1.1. References in T2S

The entry into T2S extends the group of references used in the case of domestic settlements.

With regards to the reference numbers available during the life cycle of trades, the T2S reference (Market Infrastructure Reference - MITI) will be introduced for transactions submitted to T2S as a reference in addition to the references of domestic settlements. KELER will forward the T2S reference to its partners if the place of settlement is T2S, otherwise - in line with the solution before the introduction of T2S, when transactions are not submitted to T2S - only KELER references will be used.

T2S references are stated in status messages, allegements, confirmations and end of day pending and settled transaction statements also.

If the place of matching is T2S, the matching reference generated by T2S is confirmed to Clients. This is stated in status messages and confirmations only.

T2S reference (MITI): reference allocated by T2S after acceptance if the instruction is submitted to T2S

Format: numeric identifier of 16 digits

T2S matching reference: reference by T2S for transactions already matched if matching is performed by T2S.

Format: numeric identifier of 16 digits



The following figure illustrates the use of T2S references in the case of an OTC transaction that is matched by the system of KELER and is submitted to T2S as already matched:



Figure 9. - Use of KELER references, supplemented with T2S references

CHANGE related to the developments implemented in KSDP: the use of references in T2S does not change.



3.3. Settlement instructions lifecycle



Figure 10. - Settlement instructions life cycle in KELER and in T2S

3.3.1. Submitting and validation of instructions

Related to the submitting of instructions, market consensus was reached that with the go-live of the new system market participants partly comply with the instruction requirements of T2S. This decision results the following fundamental changes compared to the current market practice in addition to the introduction of uniform rules on submitting FOP and DVP settlement instructions.

CHANGE related to the developments implemented in KSDP: full compliance with T2S order requirements is expected.

3.3.1.1. Counterparty identification

Counterparty identification in T2S is based on the BIC code of 11 digits. KELER will adopt this practice for domestic settlements. Clients will be registered in the depository system with the BIC11. The BIC code can be a so-called connected BIC that allows submitting SWIFT instructions or non-connected BIC that does not allow submitting SWIFT instructions. Our Clients identified with non-connected BIC code can submit instructions in the KID system.

In the case of settlement with partners without BIC code¹², KELER will allow the use of a technical BIC code (KELEHUH1XXX) to identify them as counterparty. As the technical BIC code on its own is not sufficient to identify clearly the settlement counterparty, the KELER code or the technical BIC plus the account number jointly are recommended to be stated in the instruction.

KELER allows the use of the BIC code of 8 digits in the instruction. If the instructing party uses 8 digits to state the BIC code of the counterparty, the system will recognize the partner and the related 11-digit BIC if one BIC8 is associated with only one BIC11. Otherwise the instruction will be rejected.

¹² Issuers, fund managers, municipalities, state organizations: ministries and institutions managing the assets of the state.



If the counterparty has several KELER codes but only one BIC code, we recommend applying for the BIC codes of 11 digits for each KELER code in the interest of clear identification.

Identification of KELER as CSD happens also on 11-character BIC code. In line with this, to identify the place of settlement (PSET), KELRHUHBXXX BIC code is to be used. If the BIC of KELER is populated on 8-digit BIC, the instruction gets rejected.

We support the use of the KELER code to be introduced in the new system in both domestic and T2S settlements. If the place of settlement is T2S, the system will automatically replace the KELER code in the instruction with the BIC code of 11 digits of the counterparty and will send the instruction with this code to T2S.

CHANGE related to the developments implemented in KSDP: counterparty identification at instruction level is based on 11-digit BIC, counterparty identification with 8-digit BIC code will not be possible. KELER code will not be introduced, therefore, our Partners with several main accounts are recommended to apply for individual BICs for each main account.

3.3.1.2. Introduction of new attributes

Opt-out, Ex/Cum indicators

The so-called Opt-out and Ex/Cum indicators, relevant to market claim management and transformation will be newly introduced. These attributes will be considered as additional matching criteria during matching, i.e. if either instructing party provides them, they become mandatory matching components, thus replacing the currently used "Market Claim" form.

KELER launches the service provided by the system related to market claim compensation and transformation after go-live. In the meantime, KELER offers transaction management for the BCP side in line with the valid T2S Depository Announcement.

CHANGE related to the developments implemented in KSDP: no change in the description related to the introduction of the Opt-out and Ex/Cum indicators. Market claim and transformation processes are not impacted by KSDP, current live operation remains unchanged.

Common trade reference

The trade reference that can be stated in the instruction, bilaterally agreed by the Clients and sent to KELER as part of the instruction (optional).

CHANGE related to the developments implemented in KSDP: no change compared to the description.

Partial settlement indicator

The partial settlement indicator is not applicable in the instruction submitted to KELER, as with the introduction of KELER does not support partial settlement in domestic and T2S settlements (except for transactions between DCP and Investor CSD, two participants with direct connectivity to T2S). The system of KELER populates automatically this indicator in all instructions submitted to T2S, the default value is "NPAR".

CHANGE related to the developments implemented in KSDP: with the implementation of KSDP, KELER introduces the possibility of partial settlement. Details will be advised in a later phase of the project.



3.3.1.3. Field-level changes

Trade date

It is a change compared to the present practice that, in line with T2S standards, trade date, as a matching criterion, will be a mandatory field.

From the go-live date of the new system, the date of submitting the instruction or an earlier day or holidays can be also stated as trade date.

CHANGE related to the developments implemented in KSDP: no change compared to the description.

Counterparty account number

The use of the settlement counterparty's securities account number will change also. For FOP trades the currently mandatory field will become optional as matching will be completed on BIC11 level.

Only the securities account number of 11 digits of the counterparty can be stated optionally in the account number field. If the main account number (in the future characters 1 to 5 of the account number) of the current practice is stated, the instruction will be rejected. Also, the instruction will be rejected if the KELER code is stated in the account number field.

If the counterparty's KELER-code is instructed, the system is able to forward the allegement message to the counterparty because the KELER-code unambiguously identifies the counterparty.

If BIC code is instructed, then the allegement message also gets forwarded but please kindly note that in case more than one KELER-code belong to one BIC then if securities account number of the counterparty is not present, the allegement message may be sent to the wrong settlement party.

Using the securities account number of the counterparty in the instruction is advised because based on this information the Client concerned in the settlement can unambiguously be identified. Furthermore, not populating the securities account can also cause cross-matching.

In case the securities account of the receiving settlement party is set up to automatically receive credits, then the delivering party should populate the receiver's account number in its instruction. Unless this account number is populated, the receiver leg does not get auto-generated by the system, hence the transaction can only be settled as a normal FOP (receiver has to instruct, too), after successful matching.

In case of a position transfer, population of the securities account number of the receiving party is mandatory, otherwise the instruction gets rejected.

If there is cross-matching, the transaction is not settled based on the counterparty and/or account number intended by the settlement counterparties. Counterparty-level cross-matching may take place if the BIC code of 11 digits of the counterparty is linked to several KELER codes (e.g. in the case of KELER technical BIC code).

Account-level cross-matching may occur due to failure to state the account number.

It is not possible to identify the transactions subject to cross-matching at KELER level, Clients are responsible to identify and manage such transactions.

Clients are kindly reminded to state the counterparty KELER account number only for domestic settlements.

CHANGE related to the developments implemented in KSDP: the securities account structure used in current live operation will not change with the implementation of KSDP. The counterparty account number format can be populated accordingly in the order (4-character main account number and 6-character subaccount number). KELER code will not be introduced.

3.3.1.4. Validation of orders upon acceptance

Instructions received are validated in terms of format and business logic. Our Clients are sent status messages on the result of the validation (accepted or rejected).



If the instruction is submitted after the cut-off times per transaction published by KELER, KELER stops the instruction and sends a technical message (admi.009; MT598). On the following business day, after the start of the day, the account management system receives these instructions and forwards the appropriate status messages (NORE; IPRC//PACK) to counterparties.

The settlement process for each DVP scenario is illustrated in detail in the following figures:

FÁ3_DVP_Rejection_scenario_ISO15022_201510.docx FÁ4_DVP_scenarios_ISO15022_201510.docx FÁ12_DVP_Rejection_scenario_ISO20022_20151105.docx

CHANGE related to the developments implemented in KSDP: there will be no change in the key elements of order validation upon acceptance, specific field related validations will be finalized in the interface specifications.

3.3.1.5. Changes in Settlement Finality rules

In line with the basic principles of T2S (T2S Eligibility Criteria), and in order to comply with the harmonized rules on settlement finality (SF) in T2S¹³, the following principles will apply to matching and settlement processes after T2S entry.

Due to the partial entry model, the T2S platform and the KELER **I** system will jointly determine and manage the various degrees, times of settlement finality of settlement instructions (SF I - validation - acceptance, SF II - unilateral irrevocability from the time of matching, SF III - finality and irrevocability after booking). The place of SF I-II-III of various settlements can be different.

T2S or KELER may also determine the **moment of acceptance of the settlement instruction (SFI)**. In the case of ICP transactions, KELER determines it; T2S determines this moment for DCP transactions directly submitted to T2S.

Matching (SF II) can be performed in KELER or in T2S. The place of matching is determined as follows:

If both legs of the transaction, i.e. both settlement instructions are received by KELER, matching is performed in KELER, however, if one of the KELER partners submits at least one of the instructions directly to T2S, the place of matching will be T2S.

KELER declares **the finality and irrevocability (SF III) of the transaction** if KELER can settle it as domestic transaction (not submitted to T2S) or it occurs simultaneously with posting in T2S if the transaction is submitted to the platform.

The place of settlement is determined jointly by the type of connectivity of the settlement parties (ICP or DCP), the account types involved in the settlement instructions (either dedicated T2S account kept in KELER with one to one mapping to a segregated account in T2S, or an account kept in KELER linked to the KELER omnibus account in T2S) and the currency of the transaction (in case of DVP).

¹³ The different degrees of finality of transactions in T2S are determined as follows:

Settlement finality I (SF I) is the moment the transfer order is received in the system, from this moment the transfer order is protected against insolvency proceedings. The central securities depositories using the T2S platform identify the time when their own systems receive the securities transfer orders: this is identical to the moment the order is validated. This validation can take place in the T2S platform or in the system of the central securities depository (for central securities depositories that offer matching services).

^{2.} Settlement finality II (SF II) is the irrevocability of the transfer order, in line with the rules of the system designated in line with the settlement finality rules. In the T2S system the rule protects the irrevocability of orders by forbidding that forbids the unilateral cancellation of instructions after the order is matched.

^{3.} Settlement finality III (SF III) is the irrevocability of transfer orders (booking in the accounts of the central securities depository) in line with the rules of the system designated in line with the settlement finality rules. In the interest of legally valid and seamless cross-border settlements against payment (DVP), the regulatory/legal environments of the central securities depositories participating in T2S are required to acknowledge that T2S account movements / booking entries are unconditional and irrevocable.



Transactions denominated in Euro are to be settled in T2S, however, FOP or HUF DVP transactions between two ICPs remain in the settlement system of KELER as they do not change the balance of the omnibus account in T2S. Nevertheless, our partners - irrespective of whether they are central securities depositories with accounts in KELER, DCPs or ICPs - in the case of HUF-based transactions and FOPs can choose freely the place of settlement (T2S or KELER) by being able to open segregated T2S accounts that will be a dedicated account in KELER.

Thus, the place of settlement for settlements among KELER Clients (intra-CSD) is as follows:

- DVP transaction settlement in EUR: the place of settlement is T2S only, regardless of the type of connectivity of counterparties and the account types involved;
- DVP settlement in non-T2S currency (e.g. HUF): the place of settlement can be T2S with the use of conditional FOP (CoSD FOP) functionality or KELER with the use of real DVP transaction;
- FOP settlement: the place of settlement can be T2S and KELER also depending upon the account types of the settlement counterparties;

Scenario	Payment type	ls either counterparty a DCP?	Does either counterparty have dedicated T2S account?	T2S currency	Place of settlement
1	DVP	No	No	No	KELER
2 ¹⁴	DVP	No	Yes	No	T2S
3	DVP	No	No	Yes	T2S
4	DVP	No	Yes	Yes	T2S
5	DVP	Yes	Yes	Yes	T2S
6 ¹⁵	DVP	No	Yes	No	T2S
7	FOP	No	Yes	n/a	T2S
8	FOP	No	No	n/a	KELER
9	FOP	Yes	Yes	n/a	T2S

• If any of the participants is a DCP, the place of settlement is T2S only.

Figure 11. - Place of settlement of transactions

If any of the settlement counterparties is a DCP or has segregated T2S account or the counter value of securities is payable in EUR, T2S is the place of settlement. In other cases there is no change in the settlement flow and the transaction will be settled in KELER.

We recommend sharing the above information with the settlement counterparties before the instruction is submitted.

Our Clients are reminded that in the case of domestic settlements only the KELER account number of the counterparty should be stated.

Any reference to a T2S account number will result in the rejection of the instruction. After T2S entry, if the place of settlement is T2S, the system will automatically derive the T2S account number of the counterparty from the internal KELER account number.

CHANGE related to the developments implemented in KSDP: no change in the use of the principles of settlement finality during the implementation of KSDP.

¹⁴ ¹⁷The HUF leg is settled outside T2S, KELER submits a conditional FOP instruction (CoSD FOP) to T2S.



3.3.2. Allegement function

The system sends allegement advice to the settlement counterparty on orders received and validated (format, business).

If KELER is the place of matching, KELER sends the allegement messages.

The account management system sends nearly real-time allegement messages (in 5-minutes batch periods) to the counterparty.

The cancellation of the unmatched instruction triggers the cancellation of the allegement message (allegement cancellation). Allegement cancellation is sent immediately. If a new instruction is submitted subsequently, this means a new allegement will be sent.

At the end of the recycling period, the system cancels allegement messages linked to unmatched transactions.

If the missing counterparty instruction is submitted, after successful matching, the system removes the allegement message (allegement removal) sent earlier and informs the instructing party thereon without delay.

CHANGE related to the developments implemented in KSDP: the times of sending allegement will be aligned with the provisions of the CSDR Settlement Discipline Regime, based on which KELER will have to send allegement within 1 hour, or immediately if matching attempt is made within 5 hours of cut off.

3.3.2.1. Allegement in T2S

T2S manages two parameters in terms of sending allegement messages:

1. <u>Allegement sending before the transaction settlement date or minimum 5 hours before the settlement date.</u>

If the settlement date instructed is a future date, unless a counter instruction is given, the system generates the allegement message 2 hours after the first unsuccessful matching attempt.

 Allegement sending on the transaction settlement date within 5 hours of the settlement cut-off The system generates real-time allegement message on instructions received within 5 hours of the settlement cut-off.

If the place of matching is T2S (e.g. transaction with a DCP or in the case of cross-CSD settlement), the instruction is submitted to T2S and T2S will manage the sending, cancellation, removal of the allegement messages, in line with rules that differ from the rules applied in the Hungarian market.

KELER sends to its clients the allegement advice received from T2S only if the instructing party clearly states the KELER counterparty (with BIC11).

CHANGE related to the developments implemented in KSDP: the times of sending allegement will change in T2S also in line with the provisions of CSDR Settlement Discipline Regime: thus, the sytem will have to send allegement within 1 hour at the latest, or immediately if matching attempt is made within 5 hours of cut off.

3.3.3. Matching

Matching in securities settlement is the process when KELER compares the settlement details submitted by the buyer and the seller of the securities to validate that the counterparties agree on the terms of the settlement. KELER ensures real-time matching continuously during the settlement day.

After the go-live of the new system, KELER matches domestic settlements in line with the T2S rules. Accordingly, matching becomes BIC code based in the case of DVP and FOP also, i.e. matching is performed based on BIC codes of 11 digits.

Counterparty identification in securities instructions is based on BIC codes of 11 digits, however, KELER allows to state BIC codes of 8 digits and the KELER code also. The account number of the counterparty becomes an optional matching element, i.e. it is not mandatory to state in the instruction; however, if either counterparty



completes the counterparty account number field, the system treats it as mandatory matching criterion as the account number of the instructing party is always included in the instructions.

If the account number field is completed, the account number of 11 digits is to be stated; otherwise the instruction will be rejected. Main account based matching, the basis of current DVP settlements, will cease to exist.

Although T2S does not match transaction type, in line with the practice to date, for domestic settlements KELER matches transaction type.

Trade date is a mandatory matching element in T2S; KELER adopts this practice in domestic intra-CSD settlements from the time of go-live. From this time, instructions without trade date will be rejected.

The system applies mandatory, additional and optional criteria during matching. The following data are mandatory matching criteria to be instructed by both counterparties:

- transaction type
- trade date
- settlement date
- ISIN code
- quantity
 - number of units is mandatory to be instructed in share and investment funds transactions
 - fixed income settlement matching is based on nominal value
- settlement amount and currency (only in the case of DVP)
 with settlement tolerance limit taken into account
- with settlement toterance time take
- counterparty data
 - BIC11 or BIC8 code, or KELER code

The so-called additional matching fields will be introduced. These fields are not mandatory to be completed; however, if either counterparty completes these fields, they become mandatory matching terms.

- Opt-out indicator
- Ex/Cum indicator

Optional matching criteria under the T2S matching concept are as follows:

- common trade reference
- counterparty account number

The optional matching fields become matching elements if both counterparties complete them.

However, if either counterparty completes the counterparty account field, the system treats it as mandatory matching criterion as the instructing counterparty account number is always part of the instruction.

Obviously, it will be possible to state additional data in the instruction; however, KELER will not take such data into account for matching purposes.

In the future KELER will continue to support DVP settlement between settlement parties under the same KELER code. In the case of such transactions, cash side booking entries will be posted.

CHANGE related to the developments implemented in KSDP: the key principles of matching do not change compared to the above description, however, KELER code will not be introduced and securities account numbers used in current live operation remain unchanged.



3.3.3.1. Matching in T2S

From the time of T2S entry, **matching (SF II)** can be completed in KELER or in T2S. The place of matching is determined as follows:

If both legs of the transaction, i.e. both settlement instructions are received by KELER, matching is completed in KELER, but if at least one of the instructions is submitted directly to T2S by a KELER partner, T2S will be the place of settlement.

When T2S performs matching, KELER only forwards instructions to T2S and the KELER system does not perform the matching process.

Attachment 3. contains the full list of matching fields.

CHANGE related to the developments implemented in KSDP: no change in the key principles of matching in T2S compared to the above description.

3.3.4. Purchase price tolerance limit

Based on market consensus, KELER harmonizes partly the application of tolerance limit with the practice of T2S from the launch of the new system.

The settlement amount is a mandatory element of settlement instructions involving payment (DVP/RVP), and it is the only field during matching that can differ in the counterparty instructions. A predetermined tolerance limit will apply to the settlement amount. The tolerance limit is the potential maximum difference of the cash countervalues instructed by the buying and the selling parties. The system performs matching if the difference of settlement amount is less than the tolerance limit amount. The system takes the counter value instructed by the buyer to validate the acceptable range of amount based on the limit, but, based on the recommendation of the ECB, if there is a difference in settlement amounts in the matched instructions, settlement will be performed based on the amount instructed by the seller.

In case of transactions settled within the tolerance limit, the buyer will receive back the seller's settlement amount in the status messages sent after matching and also in the confirmations and end-of-day statements. The tolerance limit will be determined by currency, and KELER will continue to apply the bands currently used in the Hungarian market.

It is important to note that the ECB plans to issue a recommendation on the application of the standard tolerance limit on non-T2S currencies. This may impact the current HUF band of HUF 5 000.00 also. Until this recommendation is finalized, in the new system KELER introduces the tolerance limits for the currencies published by the ECB; however, only one band will be introduced.

If there is any purchase price difference, KELER performs settlement at the value instructed by the seller.

KELER publishes the purchase price tolerance limits by currencies in the applicable Depository Announcement.

If there are more than one settlement instructions with similar parameters, the two instructions with the lowest purchase price difference will be matched. If the purchase price is the same for several transactions, the LIFO principle (the most recently submitted instruction from among the potential matches will be selected) will be applied.

CHANGE related to the developments implemented in KSDP: tolerance limit bands in line with CSDR Settlement Discipline Regime (SDR) will be introduced, conforming to T2S requirements also. FX rates published by the ECB at year end have to be used when defining bands.

3.3.5. Client priority management

The real-time processing of securities transactions is completed with priority and queue management. From the time of system replacement, KELER harmonizes the current number of client priorities (0-9) with the priorities Clients can use as determined by T2S (3-4), with 3 meaning so-called High and 4 meaning Normal priority.



The KELER system will allocate Normal (4) priority as default priority to orders. Client transactions with identical KELER priorities continue to be processed in line with the order of acceptance.

In case the instruction contains other values than 3 or 4 as priority, the instruction will be rejected.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.3.5.1. Client priority modification

KELER continues to allow Clients to modify instruction priority in the securities processing order until the instructions submitted are settled or cancelled. Priority modification continues not to apply to the cash queue and this is applicable to buyer side securities transactions also. If the transaction is subject to provision check and a related priority modification order is received, the system will reject it. However, the hold-release functionality can apply to financially uncovered items and bilateral cancellation can also be submitted.

Please note that similarly to the current practice one modification request message can contain only one request, i.e. either modification of hold/release or priority modification. The two functionalities are not accepted in one message by the system, hence such orders will be rejected.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.3.5.2. Priority management T2S

KELER maps T2S priorities to the transaction level priorities used in the domestic environment and to Client priorities; accordingly, it will submit settlement and blocking transactions to T2S.

The following priorities are available in T2S: Reserved, Top, High, Normal.

Mapping is as follows:

KELER priority	T2S priority
1	Reserved (cannot be used by Clients, only KELER can use this priority)
2	Top (cannot be used by Clients, only KELER CCP can use this priority)
3	High
4	Normal

In the case of DCP counterparties, the processing order of T2S applies to T2S transaction settlements, while settlements not involving T2S or T2S settlements by ICP Clients are performed in line with the KELER priorities.

Transaction type, settlement date and the priority instructed by the T2S participants determine the settlement order of instructions in T2S.

During the processes of T2S optimization and recycling, related to the settlement of an instruction involving several identical transaction types, T2S takes first the instruction with the highest priority. It also checks the settlement date of instructions and processes first the instruction with the earliest value date from among the instructions of the same type.

The settlement of instructions submitted during the intra-day real-time settlement cycle is preceded by the settlement of the pending (recycled) transactions in the night-time settlement cycle.

CHANGE related to the developments implemented in KSDP: no change in the priority management in T2S compared to the above description.



3.3.6. Hold/Release mechanisms

The instruction can be submitted in release and in hold status. If the instruction is submitted in hold status, instruction settlement will be withheld; however, such instructions also take part in matching. The modification of instructions in hold status (release) starts instruction settlement.

With the launch of the new system, account level hold/release setting will not be possible. In the future, it can be stated in the instruction only and determined from the instruction only if it was submitted to the KELER system in release or hold status. This applies to realignment instructions among the own accounts of the counterparty also.

KELER sends status messages to confirm the acceptance and the result of the matching of instructions with hold/release functionality. The participants can send hold or release messages as many times as justified.

Please note that similarly to the current practice, one modification request message can contain only one request, i.e. either modification of hold/release or priority modification. The two functionalities in one message are not accepted by the system, hence such orders will be rejected.

CHANGE related to the developments implemented in KSDP: The principle of using hold/release function does not change, however, it will be extended to cover all settlement order types in line with the requirement of the CSDR Settlement Discipline Regime (SDR).

3.3.6.1. Hold/Release mechanisms in T2S

If the KELER omnibus account is selected on the securities and/or the cash side, due to the nature of the omnibus account structure, KELER verifies cover on the securities/cash side before sending the settlement instructions to T2S. If cover verification is successful, the securities/cash positions are blocked. Subject to the result of the cover verification and the due date of blocking, KELER sends CSD Release or CSD Hold status messages to T2S.

In the case of the segregated securities and/or cash account model, KELER does not verify cover in advance for the settlement instructions for the segregated securities/cash accounts, thus no blocking in advance is performed. KELER sends CSD Release instruction to T2S.

If a cash account external to KELER is used, having regard to the client EUR cash account kept outside KELER in this model, KELER does not verify cover for the transaction, T2S checks the cash position required for settlement in the DCA stated by the client. KELER sends CSD Release instruction to T2S.

If counterparties submit orders with hold status and the place of settlement is T2S, KELER forwards the order in unchanged form (hold status) to T2S. This is the Party Hold functionality in T2S terminology.

Prior to settlement, hold/release messages can be instructed during the lifecycle of transactions in T2S on as many occasions as needed.

The Hold/Release function does not apply to settlement restrictions in T2S.

CHANGE related to the developments implemented in KSDP: no change in the Hold/Release function compared to the above description.

3.3.7. Instruction cancellation by the Client

Based on market consensus, in the new system KELER will manage the instruction cancellation that Clients can submit in harmony with the practice of T2S. As a consequence of the harmonized finality rule, after the launch of **E**, KELER will accept bilateral cancellation only if matching is completed, i.e. both counterparties need to submit cancellation ("binding matching"), irrespective of whether the place of settlement is T2S or KELER.

The securities orders received can be cancelled until settlement as follows:

• unmatched or unsuccessfully matched transactions (in line with the current practice) with unilateral cancellation;



• transactions successfully matched by KELER or T2S with bilateral cancellation.

The selling counterparty continues to be able to cancel unilaterally the transfer orders auto-generated on the buyer counterparty's account and the so-called Intra BP transfers with the cancellation instruction submitted.

KELER checks if the instruction the counterparty wishes to cancel exists in the system and also if cancellation is possible. If the instruction status is settled, cancellation will be rejected.

In the case of bilateral cancellation, the cancellation instruction will be matched also. In the case of cancellation by one of the parties, the counterparty will be sent a status message (with IPRC//CPRC code), however, the transaction takes part in settlement (and can also be settled) until the other counterparty submits cancellation. It is recommended to set the instruction status to hold to avoid settlement and the cancellation request is to be sent only after the instruction was put on hold successfully.

In line with the recommendation of ESSF/ECSDA, KELER cancels unmatched instructions on the 20th business day after the latest of the originally intended settlement day or the date of last status change.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.3.8. Status management

In the new account management system, KELER expands the group of the status codes used in status messages related to FOP and DVP transactions, and thus enables Clients to perform matching more efficiently and to improve the matching rate.

If the incoming instruction cannot be matched, in line with the matching criteria KELER checks which other instruction already in the system could be potentially matched with the incoming instruction.

If only one of the attributes checked does not match, the system sends advice to the counterparties submitting the instructions on unsuccessfully matching, including the reason of mismatch in the status message. Upon the launch of the system, status messages will be sent if the following fields do not match. In these cases the following status codes will be applied:

- instrument (ISIN): NMAT//DSEC
- settlement date: NMAT//DDAT
- settlement amount (in case of DVP only and only if the tolerance limit is exceeded) NMAT//DMON

KELER's system sends NMAT//CMIS status notification in the below cases:

- from the above mentioned attributes more than one is not matching in the given instructions
- besides the above mentioned attributes other elements of the instructions are also not matching
- except for the above mentioned attributes any element(s) is/are not matching

In the case of several, seemingly potentially matching transactions, the system sends advice for the earlier received trade in line with the LIFO principle (in line with the principles of matching), in the case of instructions received later, the Client gets back the currently used, unmatched, missing counterparty instruction status (NMAT//CMIS).

If the opposite side instruction match, with all data matching, is among the instructions received later, the system performs matching successfully and ignores the earlier submitted instruction that was considered a possible match.

The following figure illustrates the possible statuses of the unsuccessfully matched instruction:







CHANGE related to the developments implemented in KSDP: the key principles of status management do not change compared to the above description, status codes will be finalized in interface descriptions.

3.3.8.1. Status management in T2S

KELER provides real-time information to Clients on settlement instruction status. Status advices are sent by KELER to ICPs, T2S sends status advices to DCPs.

T2S does not manage unmatched statuses; however, if KELER is the place of matching, our Clients continue to receive this information.

Due to the partial entry model, if a trade is submitted to T2S, in addition to the standard KELER status messages, our Partners will receive the status messages sent by T2S also that include the T2S reference, too.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.3.9. Recycling

In line with the agreement with market participants, T2S recycling rules will be adopted in domestic FOP and DVP settlements already from the launch of the new system. Accordingly, KELER manages all transactions as to be recycled, and in the instruction, unlike the current practice, the Client cannot request end of day cancellation.

Similarly to T2S, KELER recycles matched transactions for an indefinite term but not later than the bilateral cancellation of settlement counterparties or the maturity of the securities.

Cancellation by the system after 20 business days continues to apply to unmatched transaction recycling.

Future and back dated orders

The rule on submitting future and back dated orders to KELER is amended to 20-20 business days.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.3.10. Provision check and posting booking entries

Settlement is considered completed, final in KELER when the cash and securities debit and credit entries related to the transaction concerned are posted in the respective cash and securities accounts. If cash settlement is related to the securities transactions, the cash accounts involved can be stated in the settlement instructions but can also be predetermined default cash accounts.

Posting is completed only if cover is verified successfully in the instructed securities or cash accounts.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.



3.3.10.1 T2S optimization, provision check and posting booking entries

Transactions are posted in both **and T2S** on a gross basis. This is the case when the system performs provision check in T2S for the net position (e.g. technical netting or settlement of linked transactions).

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.3.10.2. Optimization in T2S

T2S operates sophisticated optimization mechanisms in the night-time batch settlement period. The purpose of the optimization process is to maximize the settlement volume and value that can be reached with the available securities and cash instruments and thus minimize the number and value of unsettled transactions at the end of the settlement process and the settlement day. Hence, the optimization algorithm ensures the optimal balance of quantity (the number of settled transactions) and value (cash counter value of DVP transactions) maximization.

During the settlement day, KELER provides the following optimization services for the transactions submitted to T2S with the T2S settlement engine:

- technical netting: aims to maximize, with taking into account the final net balance from all the transactions, the resources needed to settle certain transaction groups. This allows increasing the number and value of transactions settled, booking entries are posted on a gross basis;
- partial settlement: minimizes the value and number of transactions that would remain unsettled at the end of the day due to the lack of securities available in DCP mode only, if the counterparty is also DCP or Investor CSD;
- determining instruction priority: can be applied if the settlement of an instruction is to be put before another instruction related to the same securities and cash resources (similarly to the operation of the domestic market);

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.3.10.3. Blocking of cover for transactions to be submitted to T2S

If T2S is the place of transaction settlement, KELER automatically adds the T2S specific attributes (e.g. T2S securities account number) to the instruction to T2S.

Also, due to the nature of the omnibus account structure, by checking the parameters for this purpose KELER blocks securities or cash before the settlement instructions are sent to T2S. If a blocking is due to be performed in the securities or cash account, the system performs it without delay after the successful provision check. If the provision check fails, the system sends to T2S the instruction in Hold status.

If the date of blocking (= value date) is in the future, the instruction is sent to T2S in Hold status, Release status will be set when blocking becomes due and KELER performed successful provision check.

No blocking in advance is made in KELER in the dedicated T2S accounts related to which segregated securities or cash accounts are linked in T2S.

CHANGE related to the developments implemented in KSDP: no change compared to the above description, however, securities cover will be blocked in the case of orders for T2S dedicated accounts also.



3.3.11. Exchange gross settlements, multinet, FISZER and derivative transactions, primary trades and orders related to other markets

The launch of the does not change exchange gross settlements (BSE fix price, auction), multinet and FISZER transactions, primary market settlements and settlements related to derivatives and other markets (e.g. energy markets). However, KELER submits to T2S for settlement the EUR DVP transactions (except for multinet transactions).

CHANGE related to the developments implemented in KSDP: with the implementation of KSDP, multinet settlement transactions will also be submitted to T2S, provided the applicable conditions are met.

BSE fix price and auction transactions

Fix price transactions concluded on the exchange and auction transactions are settled based on the instruction of the BSE and on DVP basis. The launch of the Berne system and the entry into T2S do not change these transactions, except for self-deal settlement when financial cover is to be provided (contrary to the present practice). The current practice does not change on the securities side, cover needs to be provided.

The cancellation, modification and recycling of fix price and auction transactions will not be possible, furthermore in the status messages and settlement confirmations the net rate will be stated as trade price. Nevertheless, during the actual settlement the accrued interest will be considered (gross price). In the transaction notifications (status, confirmation), this amount will be reflected as settlement amount.

CHANGE related to the developments implemented in KSDP: no change is expected in the basic operation. T2S currency trades will be submitted to T2S, and HUF trades involving dedicated securities and /or segregated (or external) cash account will also be settled in T2S. As an additional change, messages related to BSE fix price and auction trades will be available on SWIFT also. Cancellation, amendment and recycling functions will be available for fix price and auction trades also for the submitting counterparty. Further clarification will be provided as specification progresses.

Multinet settlements

KELER CCP provides clearing services for the following securities markets: Budapest Stock Exchange, MTF market operated by the BSE, and the MTS Hungary trading platform. The transactions created on these platforms are settled in KELER in line with the BIS 3 model with cash and securities side multilateral netting. The transactions are settled mainly in HUF; however, settlement in EUR or any other foreign currency is also possible.

In the multinet default process the available position will settle via MTNF transaction type, whereas the settlement of the remaining position will use the normal DVP transaction type.

Having regard to the fact that KELER CCP Ltd. decided to enter T2S indirectly, through KELER and will not open a dedicated account in T2S either, KELER will not ensure the settlement of exchange trades in T2S. KELER performs the settlement of multinet transactions in the non-T2S dedicated securities account of the Client kept in KELER. If the multinet cover is provided from a T2S dedicated account, the Client needs to transfer the position between the two accounts.

CHANGE related to the developments implemented in KSDP: no change is expected in the basic operation, except for the multinet default process that is currently being reviewed related to the implementation of SDR requirements. As an additional change, multinet trades will be submitted to T2S if the trade concerned involves dedicated securities account also. The submitting counterparty (and KELER CCP also) will be able to cancel, amend and recycle the order in line with the requirements of the SDR. Consequently, interface descriptions are expected to be extended regarding status messages and confirmations. As an additional change, multinet trade related messages will be available on SWIFT also.



Physical delivery of derivatives (FISZER)

Similarly to multinet settlements, KELER settles FISZER trades on a DVP basis, based on the instructions of KELER CCP. The **system** does not change it.

In case of a default, normal DVP settlement will be used.

CHANGE related to the developments implemented in KSDP: no change is expected in the basic operation, except for the multinet default process that is currently being reviewed related to the implementation of SDR requirements. As an additional change, FISZER trades will be submitted to T2S also if HUF trades involving dedicated securities account and or segregated (or external) cash account are also settled in T2S. The submitting counterparty (and KELER CCP as central counterparty also) will be able to cancel, amend and recycle orders in line with the requirements of the SDR. As an additional change, FISZER trade related messages will be available on SWIFT also.

Primary market transactions

Primary market trades are settled based on the allocation data received from the issuer or its agent, on a DVP basis.

The recycling period for such transaction types remains three days.

Cancellation and modification continue to not apply to primary transactions.

The default cash account settings by securities account numbers for primary transactions, in line with the present practice, will be migrated.

CHANGE related to the developments implemented in KSDP: no change is expected in the basic operation, EUR trades will be submitted to T2S, but HUF trades involving dedicated securities and or segregated (or external) cash account will be settled in T2S also. As an additional change, messages related to primary market trades will be available on SWIFT also. The submitting counterparty (ÁKK) will be able to cancel, amend and recycle primary trades. As an additional change, messages related to primary trades will be available on SWIFT also.

3.3.12. DVD

DVD is the transaction type that is implemented with the debit of one or more securities in a series against the credit of one or more securities in a securities series. The credit and debit entries are posted simultaneously. The order is performed if the quantity of the securities to be credited and debited is fully available in the securities accounts of Clients.

When instructing a DVD transaction, the population of the KELER-code and the 11-digit securities account number is mandatory, in both the instructing party's and the counterparty's instruction. This means that DVD transactions will not be harmonized with T2S in this respect.

With regards to DVD type transactions, the following changes will be introduced from the launch of the new system:

- the standard recycling rule (20 business days) will not apply to the recycling of unsettled transactions. DVD transactions unsettled until the end of the day will be cancelled automatically.
- DVD instruction matching, verification of cover and settlement will be performed with minimum delay, in batches of 15 minutes. Consequently, the FIFO principle does not apply to DVD transaction settlement.
- in the future, transaction level priority will not be applied on DVD transactions. Meaning that, settlement of DVD orders in case of sufficient securities on the deliverer account will happen before every other, higher priority transactions (e.g. multinet settlements).
- at the start of the new system, hold/release and client priority modification function are not supported for DVD transactions; however, KELER plans to offer these functions later.



- the transaction cancellation functionality will be introduced for DVD transactions also, in line with T2S, i.e. unmatched orders can be cancelled unilaterally, while the cancellation of matched transactions requires bilateral cancellation.
- allegement message sending will be supported in line with Section 3.3.4.
- KELER, in the process of DVD transaction settlement, will do the matching on the securities in the "pool" separately (i.e. per ISIN code) and will send notifications and confirmations on every matching and settlement per ISIN code.

CHANGE related to the developments implemented in KSDP: For DVD trades, KELER will ensure the use of T2S order elements, however, this transaction type will be available on KID only, and can be input in the individual message format and screen that KELER will create. DVD transactions cannot be initiated on SWIFT, as there is no applicable ISO standard.

3.3.12.1. DVD settlement in T2S

T2S does not support DVD settlement directly; however, during the settlement of the DVD trades, KELER submits instructions to T2S by converting the Client orders into T2S-eligible /linked FOP/ settlement instructions.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.

3.4. Blockings

Our Clients remain entitled to submit securities blocking orders to KELER. At the request of the Client, or mandatorily in the case of securities subject to joint blocking, KELER issues ownership certificate.

In the case of blocking in own account, the blocking certificate and at the same time ownership certificate will be issued to Clients, while only the blocking certificate can be requested in the case of omnibus account related blocking.

The process of partial release will change compared to the current practice because the certificate of deposit and beneficial ownership on the part that remains blocked will be produced based on the details of the original blocking instruction (it will not be possible to make a different declaration in the case of partial release).

In the future, blockings can last until the maturity of the instrument, except for the VIBER limit blockings where it will be possible to block until the business day before the maturity date and collateral blockings, where it will be possible to block until the second business day before the maturity date. Additionally, value dated order can be submitted related to blocking only, no value dated order related to release can be submitted.

Current practice will change with regards to the possible values of the start and end day of a blocking, the two days cannot fall on the same day (there must be at least one business day difference).

Related to blocked securities, in line with the requirement in Section 144 (1) of the Capital Market Act, the new system maps by default the special blocked balance of the securities account to the blocked securities account required by the law, i.e. blocking is shown as part of this balance.

When blockings are implemented, the securities positions posted are shown as part of the following balance types:

The Collateral Given Balance reflects the blocked securities positions for collateral purpose, accepted by KELER and KELER CCP as beneficiary blocking.

KELER posts unilateral and joint blockings will be reflected in the Blocked balance whereas blocked securities resulting from the implementation of blockings in favor of the NBH will be posted as part of Pledge Given Balance.



The various blocking types are introduced as follows:



Unilateral and joint blockings

The so-called blockings for covered position linked to exchange (multinet and derivative) settlements, for the sake of simplicity, are part of unilateral blockings.

In the future, joint blocking can be submitted in KID and SWFIT also (hence there won't be a need to submit the so-called disposal letter anymore), however, release before maturity requires that both blocking certificates issued on paper are returned to KELER. Joint blockings remain possible in dedicated client accounts (securities accounts as of client type) only.

Beneficiary blockings (bilateral and trilateral blockings)

With regards to the blocked securities in line with the regulations of Tpt. 144.§ (1), the new system will consider by default the special blocked balance of the securities account as the blocked securities account defined in the law, i.e. it will show the blockings in that balance.

In the future, Clients can initiate the release of the beneficiary blockings via the KID system or they can even reject it (if upon blocking no certificate of deposit / of beneficial ownership is issued). The same process will not be supported via SWIFT, in these cases the Beneficiary is required to send to KELER a printed consent to blocking release (signed by the authorized signatories on the signature card, in original, via fax or scanned).

For beneficiary blockings, the third party (on-behalf party) is stated with the KELER code. If the on-behalf party has a client type account, the client KELER code must be stated in the blocking instruction.

For one blocking only one partial release can be requested at the same time, any second partial release can be started after the first request by the beneficiary is accepted or rejected.

The blocking release request submitted as a printed document can be confirmed in a printed document only; confirmation via KID is not possible. This is not only the BCP procedure, but it also means that if the certificate of deposit / beneficial ownership is issued, release request can be submitted as printed document only, and the beneficiary confirmation can be printed document only.

In the case of collateral type blocking, securities and cash blocking can be instructed in KID only.

The following diagram illustrates the process of blocking transactions:



CHANGE related to the developments implemented in KSDP: the basic business rules of blockings and unblockings conform to the rules of current live operation, no significant changes are expected in this respect. Additional details will be available as specification progresses.



3.4.1. Blocking purpose (in the case of non-collateral blocking)

Blocking transaction types:

Blocking type (SettlementParameters <sttlmparams>/ BlockTrade <blcktrad>/ Proprietary <prtry>/ Identification <id>)</id></prtry></blcktrad></sttlmparams>	Blocking purpose	Blocking purpose code (SettlementParameters <sttlmparams>/ BlockTrade <blcktrad>/ Proprietary <prtry>/ Issuer <issr>)</issr></prtry></blcktrad></sttlmparams>	Beneficiary
	General	GNRL UNIGEN	-
	Multinet covered position ¹⁶	MNCP UNIMUL	-
Unilateral blocking (UNBL)	Derivative covered position ¹⁷	DRCP UNIDER	-
	Compulsory blocking for legal reason	CBLR UNICOM	-
	Corporate Action	CRAC UNICOR	-
Joint blocking (JNBL)	General	GNRL JOIGEN	-
	General	GNRL BILGEN	optional
	Balancing energy market operation MAVIR	BEMO BILMAV	MAVIR
Bilateral beneficiary	KÁT (MAVIR)	MKAT BILKAT	MAVIR
blocking (BIBL)	Capacity auction (MAVIR))	CPOD BILCAP	MAVIR
	VIBER/GIRO	VIGI BILVIB	NBH
	Visacard	VISA BILVIS	NBH
	Eurocard/Mastercard	EUMA BILEMC	NBH
Trilateral beneficiary blocking (TRBL)	General	GNRL TRIGEN	optional

CHANGE related to the developments implemented in KSDP: the basic business rules of blockings and unblockings conform to the rules of current live operation. No significant changes are planned related to blocking types, legal grounds, codes and validation aspects. Additional details will be available as specification progresses.

3.4.2. Blocking purpose (in the case of collateral blocking)

Collateral blocking purposes apply to the following blocking types.

Blocking type	Blocking purpose	Blocking purpose code	Beneficiary
	Cash trades/Multinet settlement	MTNS BLMUL	KELER CCP
	Derivative settlement	DERS BILDER	KELER CCP
Bilateral beneficiary	CEEGEX	CEGX BILCEE	KELER CCP
J ()	КЕР	NFKP BILFGS	KELER CCP
	Energy Market - ECC	ENLC BILELE	KELER CCP
Trilateral beneficiary	Cash trades/Multinet settlement	MTNS TRIMUL	KELER CCP
blocking (TRBL)	Derivative settlement	DERS TRIDER	KELER CCP

¹⁶ This blocking type reduces the collateral need

¹⁷ This blocking type reduces the collateral need



CHANGE related to the developments implemented in KSDP: the basic business rules of blockings and unblockings conform to the rules of current live operation. No significant changes are planned related to blocking types, legal grounds, codes and validation aspects. Additional details will be available as specification progresses.

3.4.3. Legal grounds for blocking

In line with Section 144 (2) of the Capital Market Act, the account holder is required to state the legal grounds for blocking when submitting the blocking instruction. The following legal grounds for blocking exist/may exist, from among these the account holder is required to select the appropriate legal grounds for the blocking transaction concerned.

Legal grounds for collateral blocking: BAIL

Legal grounds for blocking for non-collateral blockings can be as follows:

Legal grounds code	Legal grounds in English	Legal grounds in Hungarian	
LIEN	Lien	zálogjog	
BAIL	Bail	óvadék (including all collateral blocked in favor of KELER CCP)	
DECO	Deposit in court	bírósági letét	
DCPN	Deposit in the care of a public- notary	közjegyzői letét	
RFLA	Registration of filing for legal action	perfeljegyzés	
EXPO	Executory power	végrehajtási jog,	
REOC	Restriction on conveyance	átruházás korlátozása,	
RPEM	Right of pre-emption	elővásárlási jog,	
RREP	Right of repurchase	visszavásárlási jog,	
RSEL	Right of sell	eladási jog,	
RPUR	Right of purchase	vételi jog,	
PSFM	Provision/safeguard measure	biztosítási intézkedés,	
INTM	Injunction/temporary measure	ideiglenes intézkedés,	
BLAW	Blocking based on law	egyéb jogszabályon alapuló zárolás,	
BJUM	Blocking based on juridical measure	egyéb bírósági intézkedésen alapuló zárolás,	
BREM	Blocking based on regulatory measure	egy hatósági intézkedésen alapuló zárolás,	
BBCO	Blocking based on contract	egyéb szerződésen alapuló zárolás,	
BBIN	Blocking based on instruction	egyéb instrukción alapuló zárolás	

In the future, both the account holder submitting the blocking/party executing the blocking and the beneficiary of the blocking will be informed and sent detailed blocking reports. In the case of trilateral blocking, when the account holder blocks securities in the name of another KELER partner, KELER will inform the third party also.

Due to the requirements of Section 144 (4) of the Capital Market Act, it is not possible to submit a new blocking instruction to securities already blocked.



It is always the party that originally submitted the blocking that needs to request release and the beneficiary approves (if there is no blocking certificate, approval is in KID, if there is a blocking certificate approval continues to be issued on paper) or rejects this release request.

The beneficiary can instruct KELER to take the blocked securities by stating the account number to be credited.

Unlike currently, collateral blockings in favor of KELER CCP and blockings involving collateral will become blockings without expiry, similarly to the VIBER/GIRO limit related blockings in favor of the MNB.

Blocking for general meetings becomes separate from disclosure event; thus, in the future, disclosure event can be submitted for the entire quantity of securities. At the same time, but as a separate process, the position is to be blocked unilaterally until the day of the general meeting, with CRAC blocking purpose identifier.

In the future, partial and full securities releases need to refer to the reference of the original blocking instruction.

After the launch of the new system, it will not be possible for Clients to modify the priority of blockings without securities cover. The system will cancel insufficient blocking instructions at the end of the settlement cycle.

Blocking statements:

- EP05 Blocking statement for the account holder executing blocking
- EP06 Blocking statement for the beneficiary of the blocking
- KOLL01 Collateral statement
- KOLL02 Collateral statement For the beneficiary of the blocking

When bail is given (Civil Code, Section 5:95 (3)), KELER states the existing lien related to the dematerialized securities and the payment account receivables also on the EP05 blocking statement, our Clients need to manage this statement jointly with portfolio statement EP01 in order to comply with legal requirements.



Figure 13. - New balance types to settlement restrictions

CHANGE related to the developments implemented in KSDP: the basic business rules of blockings and unblockings conform to the rules of current live operation. No significant changes are planned related to blocking types, legal grounds, codes and validation aspects. Additional details will be available as specification progresses.



3.5. REPO transactions

3.5.1. REPO transaction management

Related to repo settlements, KELER continues to support hold-in-custody and delivery-out repo transaction types in the new system. The settlement of repo transactions on FOP basis, and negative interest settlement within the repo transactions will be introduced as new repo transaction types.

Similarly to submitting FOP and DVP transactions in line with the requirements of T2S, repo transactions will be submitted in a manner harmonized with T2S already from the start of the new system. This means the earlier detailed counterparty identification based on BIC11 furthermore repo orders will be added the new attributes to be introduced with T2S. Trade date becomes mandatory after the go-live of the system also, while counterparty account number will be an optional field.

The new system will not change tolerance limit and recycling; thus, in line with the present practice, KELER will not apply tolerance limit or recycling to repos, KELER initiates end of day cancellation for the (opening and expiring leg of the) unsettled FOP and DVP repo transactions.

It will not be mandatory to state the repo interest (in the form of percentage or amount) in the new system. It will be enough to state the starting purchase price and the purchase price upon expiry (and the expiry date).

KELER continues to support repo transaction extension (both full and partial extension) and the modification of starting repo transactions (hold/release function).

There will be a change related to repo extensions: the original repo instruction must be cancelled and a new, extended repo instruction must be submitted.

KELER continues to generate automatically the expiry leg.

If the expiry leg fails to settle, in the case of hold-in-custody repo transactions KELER starts default proceedings by unblocking initiated on the securities account of the seller and transferring the securities to the buyer. In the case of default on the expiry date of the delivery-out repo, KELER does not start separate proceedings for the seller and the buyer.

In order to avoid situations when OTC transactions cannot be settled (that may result in multinet default also) due to uncovered repo expiry transactions, KELER assigns a lower priority to repo transactions than to OTC transactions.

In case of default on the delivery repo expiry date, KELER does not start separate proceedings with respect to the seller and the buyer, at the end of the day the defaulted expiring delivery repo transaction will be deleted.

Another change is that in addition to the transaction statements sent, KELER will send a statement (EP08) on the expiring repo transactions also.

The following new services will be introduced related to repo settlements upon the launch of the new system:

FOP repo

In the case of FOP repo, only securities settlement is performed. It will be possible to settle and extend both delivery-out and hold-in-custody repo types.

In case of default on the delivery FOP repo expiry leg, KELER does not start separate proceedings with respect to the seller and the buyer, at the end of the day the defaulted expiring delivery repo transaction will be deleted.

In the case of default on the delivery-out FOP repo expiry leg, KELER does not start any procedure with respect to the seller and the buyer.

Negative interest

It will be possible to state negative interest in the transaction; it means that the settlement amount of the repurchase leg can be less than the amount of the opening leg.



It will not be possible to state negative interest percentage in the instruction directly, only by stating the starting purchase price and the purchase price upon expiry.

Allegement sending

Similarly to FOP and DVP transactions, KELER sends allegement message to the settlement counterparties, in the case of matched or cancelled transaction KELER sends allegement removal and allegement cancellation messages.

Repo hold/release

The hold-release function will be introduced for starting repo transactions; our Clients will be provided detailed information on repo transaction statuses. (Expiring and extended repo transactions cannot be amended, cancelled.)

Repo extension on expiry date

KELER allows repo transaction extension on expiry date. The priority management of expiring trades will change: on the day of expiry, after beginning of day, expiring repo items will be moved to the settlement queue in the order of trade date.

In the future, repo extension order can be submitted by giving a cancellation instruction and a new extended repo instruction.

If a repo transaction is extended.

- the extension cannot be cancelled (cannot be withdrawn) by the clients,
- if a repo transaction was already extended, it cannot be extended again, including the repo transactions pending settlement at the time the new system goes live, these will get migrated into the **system**.

Repo early expiry

KELER allows settlement before the repo expiry date, subject to the joint instruction of both counterparties. Early expiry cannot be instructed in the interface, only printed, free format letter can be used to give such instructions. The early expiry instruction must state the business day stated by the counterparties and the amended (time proportionate) repo expiry purchase price.

Already extended repos cannot be instructed to expire early.

CHANGE related to the developments implemented in KSDP: the "FOP repo" will not be introduced as a new transaction. It will be possible to use hold-in-custody and delivery repo trades. It will be necessary to state repo interest %/value, similarly to current operation. Repo trades can be made to expire early through the interface.

Regarding the processing of repo orders, compliance with certain SDR requirements (recycling, tolerance levels, cancellation) is being investigated.

3.5.1.1. REPO settlement in T2S

T2S does not support repo transactions directly, however, when the different legs of repo orders are settled, KELER submits instructions to T2S so that T2S is able to convert the Client orders into settlement instructions. DCPs or account managed CSDs will continue to enjoy the benefits of KELER services related to repos in ICP mode.

CHANGE related to the developments implemented in KSDP: no change compared to the above description.



3.6. Management of investment fund orders

The WARP (Wide Application Routing Platform) system of KELER offers simple, efficient and economical access to market participants involved in investment fund sales. KELER developed WARP with functions that allow the automation of back office processes related to the settlement and distribution of investment units, eliminate the risk of error and facilitate the extension of distribution relationships.

3.6.1. Investment fund order settlement

The launch of the new account management system of KELER (E results in the modification of internal communication interfaces, data structure and processes between WARP and the back office system; therefore, it will bring changes primarily in master data management in WARP, the processing logic of settlement transactions and (internal) status management.

Please note the following changes affecting the operation of WARP:

The counterparties registered in the account management system will be identified based on the KELER code (BPID) instead of the current KPT identifier and/or securities main accounts. This also means that one WARP partner can dispose over the accounts under one KELER code only in the future. (This change affects partners that currently manage several securities main accounts under one WARP ID.)

The format of securities accounts changes; thus, instead of the currently used separate main and sub-account, a series of numbers consisting of 11 digits will identify accounts. All instructions, reports and interfaces will be adapted to this new structure.

In the case of the cash accounts managed by KELER, the currently used account numbers by currency will be replaced with so-called multi-currency cash accounts with the same account number. Consequently, the same cash account can be used for several currencies (based on pre-defined settings).

Due to the changes in securities issuance and registration, it will not be mandatory to use the account numbers ending in 606060 and 787878, account holders will be free to define the securities accounts to be used for issuance / cancellation.

Standard ISO20022 messages will be used to generate settlement instructions and manage related statuses; thus, new (settlement) statuses will be displayed in the settlement transaction overview screen and lists, although these will not change instruction management statuses. (Note: The launch of the ISO20022 interface affects communication between WARP and only, there are no further steps to be taken by our Clients related to WARP).

DVP-based issuance and cancellation transactions will be submitted unilaterally, i.e. each transaction is submitted to **each** in the name of the settlement counterparty only. (As of now, separate seller and buyer transactions are generated and then matched.)

The currently used separate transfer type related to FOP redemptions (so-called demat transfer) will be terminated and replaced with standard FOP OTC transactions.

If the trailer fee service is subscribed, it will be possible to query retrospectively the portfolios registered in securities accounts from the first day of the subject month.

The master data of new securities will be available in WARP before the first issue.

The WARP I/O¹⁸ document includes the detailed description of WARP import and export formats and the overview of settlement transaction.

CHANGE related to the developments implemented in KSDP: The KELER code will not be introduced, and the current securities and cash account structure do not change.

¹⁸ The document is available on the KELER website.



FOP trade settlement will be achieved with a special transaction, i.e. transfer and top-up/cancellation steps will be linked when executed. Investment unit daily top-up and settlement continue to be made in the currently used dedicated securities accounts. Based on current plans, settlement orders will be submitted to the settlement system in ISO20022 format on behalf of both sides (seller and buyer). For investment unit top-up and cancellation orders hold-release and cancellation option will be provided.

Clarifications on new securities master data access and any other functionality changes will be available during specification.

3.6.2. Investment fund order settlement in T2S

The WARP system will not change in the T2S environment. The service will be available indirectly through KELER (ICP connectivity).

CHANGE related to the developments implemented in KSDP: WARP orders (in any currency) involving dedicated T2S accounts will not be available, however, DVP settlements in EUR, involving any other account, will be submitted to T2S.

3.7. Cross-Border settlement

3.7.1. Cross-Border settlement in the CSD

KELER established relationship with international service providers such as SIX Securities Services (SIX SIS) and Citibank Frankfurt to perform the settlement of foreign securities and cross-border settlements.

Consequently, KELER has a custody network to provide settlement and asset servicing services related to international securities in more than 60 international markets. KELER offers omnibus account structure; however, account segregation (linked account) is also available for tax reasons or in order to comply with regulatory requirements.

In cross-border settlements, KELER offers FOP and DVP settlement to its Clients and also executes corporate actions related to the securities positions of Clients. The service includes income collection, processing of corporate actions, proxy voting and tax services.

The system replacement affects the registration, management and international settlement of foreign securities in the following fields:

The master data of foreign securities will be available in KID, with the help of this database new securities will be easy to register in the systems of Clients.

Introduction of new fields:

The expansion of the KID interface includes the extension of fields that can be populated in cross-border orders. It will be possible to complete the so-called settlement-related indicators (daylight, delivery without matching, stamp duty, beneficial ownership, registration-related, opt-out, ex-cum indicators) and the data of the receiving/delivering counterparty and the seller/buyer counterparty will be extended with 'additional identifier' values (BIC, name, other identifier).

The Place of Settlement field will be shown in KID with the BIC and can be selected from the dropdown menu; thus, it will be no longer linked automatically to the security. This solution will allow selecting the exact place of settlement in markets with several depositories.

It will be possible to state new, additional fields: the deliverer's/receiver's custodian additional fields will allow stating the custody chain more transparently in the settlement instruction.

Bearing in mind the harmonization of T2S instruction content elements, it will be possible to complete the common trade reference field in cross-border instructions also. It will be an optional field, similarly to T2S matching criteria.



Cross-border orders involving payment will be booked in line with the DVP principle.

The use of the so-called linked account type will allow flexible account structures in markets requiring accounts to be kept for end investors. KELER continues to offer the opportunity of using preferential tax rates that can be used in US corporate actions related to securities kept in linked accounts.

The restriction related to linked accounts remains: instructions involving this account type can be settled in cross-border transactions only, except if the counterparty KELER securities account is also a linked account.

Flexible calendar management by sub-custodian will be introduced based on the securities and currency settlement calendars of the service providers, furthermore, it will be possible to settle a currency in DVP in KELER on the currency holiday of the currency concerned.

Due to the omnibus account structure of KELER with its sub custodians, the settlement process will involve blocking on both the securities and the cash side. If the cash or securities cover is insufficient on either of the counterparty's account, KELER will use the CSD Hold functionality to submit the instructions in Hold status. If the market concerned offers pre-advice functionality, our Clients will receive matching information before settlement.

Additional functions offered:

- STP instruction processing, use of repair function in the case of instructions failing successful validation. KELER publishes STP criteria by market in the Depository Announcement under Cross border section.
- Access to foreign securities master data in KID.
- Introduction of the minimum tradable denomination and minimum settlement multiply quantity on KID master data level.
- Cross-border orders can be submitted in various channels (KID / KIDIO ISO 20022 / SWIFT ISO 15022).

CHANGE related to the developments implemented in KSDP: cross border settlements are out of scope of the first phase of the project.

3.7.2. Cross-Border settlement in T2S

In line with the agreement of KELER and SIX SIS, acting as sub custodian of KELER, cross-border settlements continue to be performed outside T2S after the T2S entry of KELER.

CHANGE related to the developments implemented in KSDP: no change compared to the description.

3.7.2.1. Settlements with investor CSDs in securities issued in Hungary

If our Clients wish to settle Hungarian securities with a CSD Client that is also a member in T2S (based on current information OeKB), such settlements cannot be performed as a traditional intra CSD settlement in KELER, a so-called Cross-CSD settlement needs to be submitted to KELER.

The Cross-CSD settlement instruction can be submitted in KID in the Cross-Border interface or as an MT54x SWIFT message.

The orders need to be stated as follows:

- the place of settlement is the counterparty CSD, e.g. OeKB BIC
- the counterparty can be identified with the 11-digit BIC
- the counterparty account number is optional

The following OeKB example illustrates the fields that need to be completed in the settlement instruction:

Field name	Field type	Field value
Instructing party BIC/KELER code	Mandatory	KELER Client
Instructing party account number	Mandatory	Client account number in KELER
Place of settlement	Mandatory	OeKB BIC (OCSDATWWXXX)



Field name	Field type	Field value
Receiving/Delivering agent	Mandatory	OeKB client BIC
Account number of Receiving/Delivering agent	Optional	OeKB client account number in OeKB

CHANGE related to the developments implemented in KSDP: no change in the operation mechanism of Cross-CSD settlements compared to the above description.

3.8. XETRA settlement

As a result of the cooperation between the Budapest Stock Exchange (BSE) and Deutsche Börse AG (DB), the members of the BSE can become DB AG members at preferential terms and can trade directly in the XETRA trading system. Related to this arrangement, KELER opened an account directly with Clearstream Banking Frankfurt that as CSD undertakes to settle transactions and with Citibank Frankfurt that as sub custodian and clearing service provider offers clearing and settlement services to KELER. Owing to the cooperation with its partners in Germany, KELER provides direct clearing and settlement services to its Clients with respect to the securities transactions they conclude in the XETRA system.

A change due to the E**SET** system is that the system will attempt to block the cover of XETRA transactions at the time the transaction is received (T+1).

KELER sends the following daily reports to its Clients on XETRA trades:

- Executed transactions
- Settled transactions
- Pending transactions

3.8.1. XETRA settlement in T2S

T2S does not affect XETRA settlements.

Although these transactions are denominated in EUR, they are settled in T2S; however, due to the above settlement chain, this has no direct effect on KELER Clients.

CHANGE related to the developments implemented in KSDP: XETRA settlement related service is out of scope of the project. The service was phased out in the meantime.

3.9. Account operations instructed in KID

3.9.1. Account opening instruction in KID

KELER partners with KID can submit Client type securities account opening instructions in KID, in line with the practice to date. Client type securities accounts opened in KID can be used for transaction purposes on the following settlement date.

The cash account linked to the Client account opened in KID will be the same as the cash account linked to the Partner Omnibus with Client account, in other words the default cash account will be linked to the new account also.

Account opening can be requested with or without stating the last 6 characters of the account number. The first 5 characters of the account number are the first 5 characters of the partner identifier (KELER code), thus it is ensured that the last 6 characters of the account number in the case of migrated partner data are unique. If the first 5 characters of the KELER codes of new partners generated by the system are identical, restrictions apply to the definition of the account number.



CHANGE related to the developments implemented in KSDP: the securities account structure, similarly to the subaccount opening process, used in current live operation do not change.

3.9.2. Account data modification instructed in KID

The modification of some of the data of Client type securities accounts can be instructed in KID also.

Data that can be modified in KID:

- Short name, long name
- Company form
- Identification number (not type)
- Address data
- Contact person data

The modified data can be seen in KID after a few minutes, when system data synchronization is completed.

CHANGE related to the developments implemented in KSDP: the securities account structure, similarly to the subaccount amendment process, used in current live operation do not change.

3.9.3. Account cancellation instructed in KID

KELER partners with KID can instruct Client type securities account closing in KID. Confirmation of successful receipt of the account closing instruction does not mean the account is actually closed. The account can be closed if there is no pending transaction in the account and the account balance is zero. If these conditions are met, the account is closed on the following business day.

CHANGE related to the developments implemented in KSDP: the securities account structure, similarly to the subaccount closing process, used in current live operation do not change.



4. Collateral management

4.1. Changes in collateral management

KELER plans no material changes in the system of acceptance and valuation of collateral to be provided by Clients related to the services used. There will be no material change in the group of collateral instruments accepted (cash, securities, bank guarantees).

The on-behalf field is optional in the blocking instruction of bilateral cash and securities collateral blocking. The on-behalf field can be populated with the KELER code.

- If the on-behalf field is populated with the KELER code, the collateral need registered under the KELER code of the on-behalf entity stated in the collateral blocking transaction will be covered with the value of the blocked collateral instrument, in line with the segregation type (own or client) and legal grounds that are mandatory to be stated in the transaction. The cash and the securities blocked in the transaction will be booked in the cash/securities account instructed; however, it will cover the collateral need of the on-behalf entity stated.
- If the on-behalf field is not populated, the value of the instruments blocked in the transaction will be included in the value of the collateral instruments registered under the KELER code linked to the account concerned, in line with the instructed segregation type (own or client) and legal grounds.

In the case of trilateral blocking, the population of the on-behalf field leads to the above described result, i.e. the blocking will cover the collateral need of the on-behalf entity; however, securities blocking will be posted in the account linked to the KELER code of the blocking party. Trilateral blocking applies to securities only, and in the case of trilateral blocking the on-behalf entity will be notified on the blocking.

Securities collateral account and balance queries will not change. Funds to be provided as collateral are to be deposited in the cash account concerned instead of the separate collateral accounts, similarly to securities blocking. Section 3.4. on Blockings contains more details on the operation of blocking/unblocking functions.

Similarly to the operation to date, deposited collateral instruments will be marked to market once a day, at the end of the day; however, extraordinary market activity may trigger intra-day mark to market that may result in the requirement to provide additional collateral during the day. KELER CCP applies concentration limits to the entire collateral portfolio on the client side; thus, certain deposit instructions would be rejected if they violated the limit.

CHANGE related to the developments implemented in KSDP: the collateral management process used in the current live operation remains valid, no change is expected.

4.1.1. Collateral management in T2S

T2S has no direct impact on collateral management; KELER, however, needs to submit collateral blockings to T2S also.

CHANGE related to the developments implemented in KSDP: the collateral management process used in the current live operation remains valid. Blockings, including blocking for collateral, will not be submitted to T2S.



5. Central Securities Depository services

5.1. Management of physical securities

New account types will be introduced to manage physical securities. As mentioned in Point 1.2.2., physical securities in individual custody will be credited to the individual securities custody accounts (certificate account type) of Clients, while securities in fungible custody will be credited to the Own custody accounts (OWC) of Clients.

The process of deposit and withdrawal of physical securities of the CSD will not change.

The securities series that issuers declare invalid and the securities series of companies deleted from the company register are withdrawn in corporate actions from the accounts of custodians.

CHANGE related to the developments implemented in KSDP: the management of physical securities is out of scope of the first phase of the KSDP.

5.2. Management of dematerialized securities

5.2.1. The process of issuance to be executed not as corporate action in KELER

eDEMAT is the method that KELER intends to prefer from among the methods (eDEMAT/KID/personal/remotely managed) to execute dematerialized (in short: demat) events in the future and it will terminate this function in KID. These events will relate only to the fresh issue of securities series or the execution of issuer resolutions that are not to be performed as corporate action. Attachment 4. includes the group of corporate actions, related details are covered by the corresponding point.

In the future, the issuer will not credit directly the securities issued to the securities account dedicated to issuance (the securities accounts ending 676767/787878 currently) of the investment service provider, but to the Fresh Issuance / Top up account opened and registered for the issuer as part of the central securities account. The issuer will allocate from this account the securities issued to the dedicated securities account of the custodian of the end investor and receives in this account the securities unidentified by the securities account manager. Additionally, another issuer account (Reduction account) will be opened for the issuer, the custodian transfers to this account the demat securities to be withdrawn in reduction.

In order to increase the transparency of issuance, one Registrar NOSTRO account will be opened for each issuer as part of the central securities account, KELER will register in this account all the demat securities issued by the issuer.

Issuance is completed if the issuer can allocate fully the securities from its Fresh Issuance / Top up account to the dedicated accounts of securities account managers. Account managers will receive advices (sese.024, sese.025) on the allocation. KELER will publish on its website the file structure (excel format, DISI file) for securities allocation for issuers. The excel spreadsheet on the website will include the actual dedicated accounts of account managers.

In the case of new issuance, securities account managers will have the opportunity to transfer back unilaterally the securities allocated to them or to their Clients, without contacting the issuer, to the Fresh Issuance / Top up account, within 3 business days as stated in the General Business Rules of KELER, if they cannot identify the final holder. After this cut-off, transfer back is to be submitted as bilateral instruction; thus, transfer is completed after matching with the issuer is completed. The issuer is required to allocate again the balance of the Fresh Issuance / Top up account. Allocation is to be submitted bilaterally; thus, the transfer (FOP) will be performed after matching with the custodian is completed.

After issuance and top-up, the content of the valid certificate of the dematerialized securities will be displayed in pdf format in KID.



5.2.2. Reduction

With the introduction of the system, in the case of reduction, the Account Manager Statement on Transfer Back and the KELER fax/e-mail advice on the value date of the transfer to the technical accounts (676767/787878) will be terminated. In the new system, the process of reduction will start based on the instruction of the issuer that states the dedicated securities accounts of the account managers involved on the securities side, including the amount of securities to be withdrawn by custodian and the value date of execution of the reduction. KELER records the details of the issuer instruction and sends allegement to the account managers involved. Based on this allegement, account managers are to transfer back the quantity of securities from their Clients' accounts to the issuer distribution account until the deadline therein stated, by first debiting the quantity of securities to be withdrawn to the accounts of Clients as per the allegement. The transactions related to the reduction stated in the issuer instruction will be settled after the transfers submitted by the account managers are matched, on the same value date, i.e. the securities will be withdrawn to the Reduction account.

CHANGE related to the developments implemented in KSDP: The management of demat securities is out of scope of the first phase of KSDP.

5.3. CORPORATE ACTION MANAGEMENT

With the introduction of the system, as part of the preparation for T2S, KELER decided to implement gradually a corporate action management solution that is in harmony with the applicable international industry standards and practices. The system will be the common platform of KELER to provide all corporate action management related services and execute such actions in an integrated manner.

5.3.1. Major changes in corporate action management

The majority of the current demat events (conversion, merge, spin off, split, reverse split, full cancellation of series, and exchange of certificate of the dematerialized securities) will be executed in the future as part of corporate actions.

- Events will be announced, processed, executed and booked and the preferential days will be managed in line with the SMPG and the CAJWG standards if possible, taking into account the integration into processes of the various market attributes due to legal requirements primarily. As in the future a large part of the current demat events will be managed as corporate actions, changes can be expected with regard to preferential days also:
 - In the future the event date (e.g. payment date/effective date) will be the date of corporate action execution. If the event date scheduled in the certificate of the dematerialized securities fell on a weekend (e.g. interest payment), the event date will be moved to the business day before/after based on the business day convention set for the securities. There will be events (e.g. deletion due to expiry -REDM) where the event option is cash; however, the corporate action itself involves the withdrawing of securities.
 - The record date that is minimum 1 business day must be used for corporate actions where cash or security option is set. Thus, in the future, corporate actions involving the conversion/issuance/ deletion of securities can be executed with a record date of minimum 1 business day (e.g. MCAL, MRGR).
- Management of the securities of companies deleted from the company register:
 - In the case of dematerialized securities:
 - if KELER becomes aware that the issuer is subject to dissolution, liquidation or is involved in bankruptcy proceedings, KELER setups a corporate action (LIQU) for the securities series involved in the central database;
 - if it becomes aware that the company concerned is deleted definitely from the company register and the issuer did not take steps to cancel the securities, it determines the event date (PD) of the corporate action (LIQU) earlier recorded, and on this date KELER deletes



the securities issued by the terminated issuer in the accounts of the account managers and the Registrar NOSTROs;

- In the case of physical securities in fungible custody (model 1): if KELER becomes aware that the issuer ceased to exist without legal successor without the issuer taking steps to invalid or destroy the physical securities, KELER informs Custodians that they can request the withdrawal of the securities concerned within 30 days. If no such request is received or withdrawal is not possible due to consolidated shares, KELER registers the securities in a technical account until they are destroyed.
- The full deletion of dematerialized securities series will be performed as corporate action in the future. On the value date of the deletion transaction, the securities to be deleted are withdrawn from the securities accounts of account managers to the Issuance/Top up account, then in this account, and with account operations in the Registrar NOSTROS, KELER executes the full deletion of the series. In the future, issuers cannot request the full deletion of series in KID and the full deletion of share series in eDEMAT.
- In the future there will be no separate excel spreadsheets to list corporate actions (anticipated events, general meetings, retrospective disclosure events). In the future, account managers can learn about the corporate actions, related changes in data and status in the CA01 report (CA01-Report on corporate actions) that will be available on the official KELER website and in KID also. The report will be updated after a new event is entered or an existing event is modified. The report covers a period of 120 days, showing corporate actions 90 days before and 30 days after the event date.

The CA01 report includes:

- for listed companies the last trading day on the BSE
- in disclosure event (Event with DSCL:Y) the market deadline
- if the event date falls on a holiday or weekend, the actual payment date
- in case of dividend payment the payment date is the earliest payment day of dividend payment.

Contrary to earlier published information, the current practice will remain with respect to blocking recycling in conversion.

5.3.2. Groups of corporate actions

Corporate actions are grouped into even categories in line with the SMPG and CAJWG recommendations. (The 51 corporate actions managed by KELER can be found in Attachment 4.)

5.3.2.1. Events with securities movement (e.g. BONU)

Issuance of bonus share (BONU): the shareholders receive new securities from the issuer at the same rate either from the existing series or from a newly issued series. This corporate action involves securities credit and the increase of the securities issued by the issuer. Earlier KELER executed these corporate actions with top up or fresh issuance of new series.

5.3.2.2. Events with cash movement (e.g. INTR, DVCA, CAPD)

The system replacement will not change the KELER services related to these corporate actions.

Mandatory security distributions without options can be announced

• 30 days before payment date. If the certificate of the dematerialized securities issued on the demat bond incudes interest payment date (INTR), Partial Redemption Without Reduction of Nominal Value date (PRED), and the certificate of the dematerialized securities issued on the demat investment units includes yield payment (CAPG) and capital redemption (REDM), KELER registers such dates as anticipated corporate actions and informs the market thereon 30 days before payment date. If the issuer or the paying agent modifies the announced anticipated event dates, KELER informs Clients on data changes in the CA01 report.



• on a case by case basis, when the company general meeting decided on dividend payment (DVCA, SHPR) or the issuer stated the payment observation date only instead of a concrete payment date. KELER announces these corporate actions in the CA01 report, based on the announcement of the issuer.

5.3.2.3. Events with securities and cash movements (e.g. REDM, LIQU, MCAL)

Securities series deleted due to maturity (REDM): KELER will use this event to delete fully both bonds and investment units with maturity. If the paying agent is not KELER, KELER performs the event based on the payment confirmation by the issuer related to the series, in the case of investment units based on the resolution of the MNB. In this event the full quantity of the securities issued are deleted and the status of the securities series involved changes.

Dissolution, bankruptcy, liquidation (LIQU): if KELER becomes aware that the issuer is subject to dissolution, bankruptcy or liquidation, KELER enters a corporate action (LIQU) for the securities series concerned in the central database, this will be reflected in report CA01. If KELER becomes aware that the company is definitively deleted from the company register and the issuer did not take steps to cancel the securities, KELER determines the value date related to the corporate action earlier entered, and on this date it cancels the securities issued by the terminated issuer in the account managers' accounts and the Registrar NOSTROS. The record date does not need to be determined to execute the event. In this event the full quantity of the securities issued are deleted and the status of the securities series involved changes.

Full deletion of securities series before maturity date (MCAL): Earlier the issuer requested the full deletion of the securities series for other reasons. KELER will use this event to delete fixed income instruments before maturity and investment units without maturity date. If the payment agent is not KELER, the issuer needs to document before the securities are withdrawn from the accounts of the account managers that it met all the obligations towards investors related to the series, in the case of investment units the MNB resolution on investment unit deletion is required to be submitted. In this event the full quantity of the securities issued are deleted and the status of the securities series involved changes.

5.3.2.4. Events with the exchange of securities (e.g. DECR, INCR, REDO, CONV, SPLF)

If the issuer orders from KELER the event involving the exchange of securities, KELER enters the corporate action in the central database and the event will be shown in report CA01. The issuer states the rate of exchange of old and new securities for each corporate action involving the exchange of securities. Accordingly, KELER withdraws the old securities series from the accounts of the account managers and credits the new securities to the same accounts, without involvement by the custodians, based on the balance on the record date.

5.3.2.5. Events without settlement (e.g. EXTM, MEET, DSCL, CHAN)

If the issuer orders from KELER the event without settlement (e.g. general meeting, extraordinary general meeting, disclosure event, change of certificate), KELER setups the corporate action in the central database and the event will be shown in report CA01. The process of disclosure of the personal data of holders (DSCL) is detailed in Point 5.3.4.

5.3.3. CSD services performed as part of corporate actions

- In the future, report CA01 may include corporate actions related to the execution of which KELER as CSD does not provide any services. In the case of MEET, XMET, DVCA, if KELER as CSD is involved in the execution of the event, it links the event to the disclosure event (DSCL).
- In the case of corporate actions that require securities account operations the CSD executes the necessary transactions in the accounts of the account managers and the Registrar NOSTROS.



5.3.4. Execution of disclosure event

The structure and processing of the disclosure of the personal data of holders will be renewed. DSCL is the new name of disclosure of the personal data of holders - Disclosure Event. XML message communication will replace file based communication. In line with the details in KIDIO, new elements will be added to the structure of the disclosure event.

Holder type "0" will be introduced to refer to the shareholders in a consolidated manner by accounts that do not wish to be stated in the share registry.

No personal data of holders are required to disclose such owners, only the account number and the number of units need to be stated. This makes it possible to identify the entire position.

The number of the cash account to be credited can be stated for distributions that require disclosure event. The account number is to be stated in IBAN format for domestic custodians.

Holders' data can be submitted in batches, in line with the usual practice, each submitted batch has a batch identifier, but it will be also possible to identify the items within the batch. This way it will be possible to cancel fully the earlier submitted batch or cancel the data of individual holders.

The disclosure event can be submitted before the record date also. Once the disclosure event is received, sends an automated status message at batch and item level.

Only the message structure is validated before the record date, the status message sent by **message** informs on the result of this validation.

After the record date, the system sends a status message again on the validation of the position. Therefore, it may happen that the holder data accepted before the record date (ACPT status) becomes rejected (PART, REJT status) after validation on the record date.

Rejected/failed data can be submitted again in KID until the applicable cut-off. The rejected batches/items (REJT) will not be processed.

- DSCL message batch level status meaning: ACPT -> The DSCL includes only accepted items, i.e. items without error.
- REJT -> The DSCL is rejected as it does not comply with the validation rules, it contains items with error.
- PART -> The message is accepted in part, i.e. it includes accepted and rejected items also.

The meaning of statuses linked to items in the batch:

- ACPT -> Holder data accepted.
- REJT -> Holder data rejected due to error.

CHANGE related to the developments implemented in KSDP: the management of corporate actions is out of scope of the first phase of the KSDP.

5.3.5. Paying agent services

KELER continues to offer paying agent services related to interest payment, principal redemption and dividend payment both in HUF and other currencies. The issuer is required to have a cash account managed by KELER to make the payments.

Once payment is made, in order to identify the credited item, KELER sends ISO20022 standard seev.036.001.05 (CorporateAction/MovementConfirmation) message or MT566 message, as subscribed.

CHANGE related to the developments implemented in KSDP: the payment agent service is out of scope of the first phase of the KSDP.



5.3.5.1. Changes due to T2S entry

After the entry into T2S, the payment due in EUR related to corporate action must be settled in T2S in dedicated T2S cash accounts, with PFoD transactions submitted by KELER.

Cash payment in HUF continues to be executed outside T2S.

In the case of Cash Dividend, Interest Payment, Partial Redemption Without Nominal Value Reduction (NTR, DVCA, PRED) and reorganization type corporate action (e.g. MRGR, SPLF), KELER submits the necessary settlement instructions or restrictions to T2S.

CHANGE related to the developments implemented in KSDP: no change compared to the description.

5.3.6. Other services

5.3.6.1. Share registry

KELER continues to offer share registry services that are based on the disclosure of holder data, as in the past. The content of the share registry report in KID (status and change report) will change in line with the data of the DSCL.

KELER does not require to state holders in separate lines for each share acquisition.

CHANGE related to the developments implemented in KSDP: share registry management is out of scope of the first phase of the KSDP.

5.3.6.2. General meeting service

The launch of the new system does not impact this service. Regardless whether the issuer requested the blocking of securities as the condition of taking part at the general meeting or not, based on the opinion of KELER, the data of each holder are to be disclosed and can be shown in the share registry. Blocking for general meeting in the future will be independent from the disclosure event.

CHANGE related to the developments implemented in KSDP: no change compared to the description.

5.3.6.3. Advisory service

The launch of the new system does not impact this service.

CHANGE related to the developments implemented in KSDP: no change compared to the description.



6. CLIENT REPORTS, QUERIES

Statements were rationalized and consolidated to improve transparency and ease of use. To this end, the currently available reports that contain information that are linked based on content or sometimes redundant were consolidated into 24 well-structured statements, separated at service level that will replace the earlier used 72 reports.

The reviewed data content does not mean the reduction of information content; reports show all data relevant for our Clients. Ease of interpretation and bilingualism (Hungarian, English) were key aspects when the reports were reviewed. Additional information will be offered in several fields and useful fine-tuning was completed with the launch of the new reports, from among which the area of blockings (EP05 and EP06) is to be highlighted as related reports will be fully renewed.

As the result of the replacement of the account management system and the optimization of Client statements, the following new statements will be available:

Ac	15	Nama	Format		Frequency					
Area		Name	Prop.XML	15022	20022	PDF	XLS	Periodicity	Schedule	Ad-hoc query
										Prop. query
Security	EP01	SECURITIES ACCOUNT STATEMENT		1	1	1		Daily	EOD	(Between today BOD and
										actual time)
Security	EP02	STATEMENT OF SETTLED SECURITIES TRANSACTIONS		1	1	1		Daily	EOD	(Between today BOD and
,								,		actual time)
Security	EP03	STATEMENT OF PENDING SECURITIES TRANSACTIONS		1	1	1		Daily	EOD	Prop. query
Security	EPO4	STATEMENT OF CANCELLED/DELETED SECURITIES TRANSACTION	1			1		Daily	EOD	
Security	EPO5	BLOCKED SECURITIES/INSTRUMENTS OF BLOCKERS	*			1		Daily	EOD	
Security	EPO6	BLOCKED SECURITIES/INSTRUMENTS OF BENEFICIARY	1			1		Daily	EOD	
Security	EP08	MATURING REPO TRADES	1			1		Daily	Twice a day:	
			-			-		,	BOD + EOD	
Security	EP10	STATEMENT OF INDIVIDUAL SECURITIES ACCOUNT TRANSACTI	1			1		Daily	EOD	
Collateral	KOLLO1	FINANCIAL POSITION EVALUATION FOR PLEDGED SECURITIES	1			1		Daily	EOD	
Collateral	KOLLO2	FINANCIAL POSITION EVALUATION FOR PLEDGED SECURITIES	1			1		Daily	EOD	
										PNZ01 statement
Cash	PNZ01	CASH ACCOUNT STATEMENT	1	1		1	1	Daily and monthly	EOD	(Between today BOD and
Crah	01/200							D-11-	500	actual time)
Cash	FINZUZ		*			*		Daily .	200	Prop. query
Cash	PNZO3	CASH PROJECTION REPORT	-			~		Daily	EOD	
Cash	PNZO4	SUMMARIZED INTEREST STATEMENT	1			1		On the day of interest payout (default Monthly)	EOD	
Cash	PN705	DETAILED INTEREST STATEMENT	1			1	1	On the day of interest payout	FOD	
						•		(default Monthly)		
Fee	DIJ01	SUMMARIZED FEES STATEMENT	1			1	1	On the day of the bill generation	EOD	
Fee	DIJ02	DETAILED FEES STATEMENT	1			1	1	On the day of the bill generation	EOD	
CA	CA01	REPORT ON CORPORATE ACTION SET-UP	1			1	1	Daily	EOD	
CA	CA02	SNAPSHOT WITH CASH A/C NUMBER	1			1	1	Daily	EOD	
CA	CA03	SNAPSHOT WITH ENTITLEMENTS AND CASH ACCOUNT	1			1	1	Daily	EOD	
Depository	DEP01	REPORT ON DEPOSITORY EVENTS	1			1	1	Daily	EOD	

Figure 13 - Statements

In the new account management system, KELER will introduce queries that Clients can make (Ad-hoc queries). In addition to statements, Clients can access certain data in queries, with the frequency and at the time the Client prefers.

Area	ID	Queries name
Securities	EP51, MT535	Securities position inquiry
Securities	EP52, MT536	Settled trade inquiry

Figure 14. - Client queries

The interface descriptions (KIDIO, SWIFT User Guide) cover in detail the content and the technical issues related to the above reports and queries.

CHANGE related to the developments implemented in KSDP: the statements and queries, including detailed content, available to customers will be advised after specification.



7. FEE CALCULATION, INVOICING

7.1. Changes related to fee calculation

The Fee Schedule of KELER provide information on fees, fee structures, including T2S fees and any changes in the process of fee calculation applied in the future.

CHANGE related to the developments implemented in KSDP: no change compared to the description.

7.2. Reverse Billing

With reverse billing KELER enables Clients to pay directly to SWFIT the fees or a part of the fees that KELER charges related to SWFIT communication. The benefit of this service is that for the Clients having already SWIFT membership fee will be charged in line with the agreement they concluded with their service provider.

CHANGE related to the developments implemented in KSDP: no change compared to the description.



8. MIGRATION

8.1. Migration upon go-live

8.1.1. Client and account data

8.1.1.1. Migration of client data

All client data provided by our Clients will be migrated into the **system**.

The only exception to this: in the case of the dedicated sub-account, the system does not store the consent of the sub-account holder to show it automatically in the share registry of the issuer company, this possibility will be terminated in the future.

KELER will create the so-called KELER code from the current securities main account number, for more details on the use of the code and the method of creation please refer to Section 1.1.1. on the KELER code.

8.1.1.2. Migration of account data

As stated in Section 1.2.1. Account structure, the KELER account structure will change. This involves the migration of all currently active accounts, including account balances, i.e. the already existing sub-accounts will be opened as separate accounts in the new system. The balances of the sub-accounts will be stated as part of the appropriate balance of the account concerned.

The number combinations of the securities accounts inactive at the time of migration can be allocated again in for account openings in KID, if necessary.

For more details on account/account number migration, please refer to Section 1.2.1.

It is important to note that the information related to the securities account and containing the settlement cash account of the transactions will be retained; thus, there will be no change in the place of settlement after migration, the current settings will be migrated (see Section 1.2.7.).

KELER will migrate without any change the setting related to the automated generation of orders to receive.

The accounts and balances that are created as the result of the migration can be reconciled based on the closing statements before migration (generated by the old systems) and the statements including the opening balances after migration.

In line with Section 1.2.1., the so-called issuer accounts will be introduced in the new account structure, these accounts will be used to allocate the securities created to the securities account holders and owners. KELER does not open these accounts automatically as part of the migration for the account holders also active as issuers, these accounts will be opened in line with a separate procedure and based on a separate contract.

8.1.2. ISIN codes and securities master data

- Hungarian securities: all active and inactive securities will be migrated; additionally, the ISIN codes not yet created will be migrated also.
- Foreign securities: only the foreign securities with a balance in the securities accounts kept by KELER at the time of migration will be migrated.

8.1.3. Transactions and corporate actions

8.1.3.1. Transactions

The data of all transactions submitted before go-live but not yet settled, including recycled transactions also, will be migrated. The expiry legs of repos and blockings will be migrated also, in the case of these transactions, information on the applicable references will be provided later.



8.1.4. Corporate actions

Similarly to transactions, corporate actions with record date after the go-live date, known to KELER and corporate actions with record date in the past but future payment date will be migrated also.

8.1.5. Fees and interests

KELER will apply the following method related to fees and interests:

8.1.5.1. Calculation

Interest and fee amounts due until the time of migration will be calculated in the current systems; accordingly, the current system will issue the invoices also.

8.1.5.2. Payment of calculated interests and fees

After June 2016, interest payable on 1 July 2016 will be posted in the current system on 1 July 2016, and the balance including the interest posted will be migrated upon go-live.

Clients paying invoices by transfer will continue to pay by transfer after the migration also, in line with the current practice; Clients settling the invoice with collection will be informed later on the method of payment of the fees payable at the time of migration.

8.1.6. Statements and queries

8.1.6.1. Statements

In line with the current practice, statements will be available for 9 months retrospectively in KID after the migration also, including the statements of the period before the system replacement.

8.1.6.2. Queries

After migration, data with past time series will not be directly available in Client queries.

CHANGE related to the developments implemented in KSDP: Migration tasks related to the start of KSDP will be assessed in detail later.



9. SERVICES PLANNED TO BE INTRODUCED IN THE FUTURE, AFTER GO-LIVE

This section lists the services that KELER plans to introduce in the future. KELER will decide on the order of implementation and the timeline of introduction after **construction** go-live, following market consultation related to the detailed content and priority of the various items.

Securities settlement

- Repo transaction extension
 - exchange of repo securities cover during the term of the transaction
 - possibility of cover consisting of several securities
 - expiry before the end of the repo term
- Linked transactions Back-to-back transactions
- Optimization batch settlement for domestic transactions not involving T2S settlement
- Securities lending and borrowing
- Management of non-par-value securities
- Management of fractional face-value securities
- Management of fractional securities
- Portfolio transfer
- Extension of collateral services:
 - external collateral management
 - triparty collateral management
- Group-level interest calculation
- Group-level fee calculation
- Reservation, earmarking
- Cross-border hold-release and priority amendment
- RWP, DWP
- External T2S settlement
- Partial settlement
- DCP service
- Full-scale, automated market claim, transformation transaction management
- Introduction of optional matching criteria for the KELER partner client (buyer/seller) BIC or KELER code
- T+0 repo transactions
- T2S settlement model: possibility to link omnibus securities account and cash account external to KELER

Payments

- Standing orders
- Auto FX
- Credit line limit
- Auto-collateralization

Further development of corporate action management