Client Information

Conceptual description of the migration of
pending transactions when the KELER Service
Development Program is activated
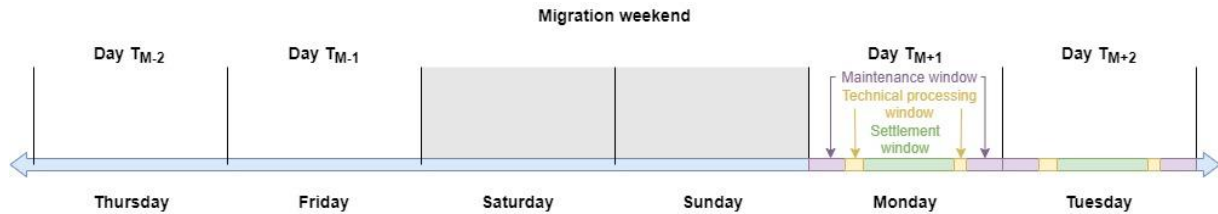
21 October 2021

Contents

1. Terms, migration weekend schedule

The terms and time windows for the migration weekend are defined in the figure below and in the individual definitions:

Migration weekend: Time to migrate from the current operation to the new operation. Migration takes place between two business days, but is in fact a multi-day transition process, with preparatory steps starting before the migration weekend and follow-up activities that may continue after the new operation has started.

T_{M-1}: The last business day before migration

T_{M+1}: The first business day after migration

Maintenance period: The period between the closing of a business day and the opening of the next business day in the new operation, when only internal processing and maintenance operations are performed. Messages received during this period are acknowledged by the new system to the sender with a technical acknowledgement message, but processing (acceptance, validation, matching, settlement) does not start until the beginning of the next business day.

Technical processing period: Restricted operation period between the opening of the business day and the start of the settlement period, and between the closing of the settlement period and the end of the business day for each type of transaction. At such times the system does not yet perform settlement or no longer does, but is able to accept, validate and match instructions, performs modification, cancellation of instructions, and provides real-time status of instructions to clients. The technical preparation of messages received during the maintenance period also takes place during this period.

Settlement period: The period of time between the opening and closing of a slice of the business day associated with each type of transaction when the securities settlement system is operating at full functionality. Each step of the business process that has been initiated can be executed: the system receives new instructions, performs status changes and cancellations, or processes recycled transactions that failed during previous settlement days.

2. Transaction types affected by migration

During the start-up weekend of the KSDP program, instructions with future ISD or failed (recycled) transactions in the settlement system will be deleted or migrated at the closing of business on 3 December 2021, based on the following:

No.	Securities transaction type	Party submitting the instruction	Migrated?	Remark
1.	BSE Auction transactions	BÉT	No	Cannot be recycled during current operation
2.	BSE Fix transactions	BÉT	No	Cannot be recycled during current operation
3.	Primary market transactions	ÁKK	No	Cannot be recycled during current operation
4.	Expiring repo transactions	Clients	Yes	Will be migrated as a DVP transaction
5.	Daily cancellation and creation of open-ended investment units	WARP system	No	Cannot be recycled during current operation
6.	Cross border transactions	CB system	No	Cross border transactions are not part of the KSDP
7.	Multinet securities transactions	KELER CCP	No	KELER CCP will implement the migration in its own system
8.	Multinet default securities transactions	KELER CCP	No	KELER CCP will implement the migration in its own system
9.	OTC DVP transactions	Clients	No	KELER cancels transactions pending at the closing of business on 03.12, clients have to re-submit them on 06.12.
10.	FOP Transfers	Clients	No	KELER cancels transactions pending at the closing of business on 03.12, clients have to re-submit them on 06.12.
11.	DVD instructions	Clients	No	KELER cancels transactions pending at the closing of business on 03.12, clients have to re-submit them on 06.12.
12.	Future value dated/uncovered blockings	Clients	No	KELER cancels transactions pending at the closing of business on 03.12, clients have to re-submit them on 06.12.
13.	Live blockings	Clients	Yes	

No.	Securities transaction type	Party submitting the instruction	Migrated?	Remark
14.	Physical delivery of fixed-term derivative transactions (FISZER transactions)	KELER CCP	No	FISZER items are dispatched on the 3rd Friday of each month and are therefore not included in the KSDP migration.

The migration of transactions that are due to be settled on 3 December 2021 will be achieved by orderly cancellation from the existing system(s) and re-insertion of the transactions through the systems and system versions operating under the new securities settlement processes (and functions).

In all cases, the deletion will be performed by KELER for transactions pending at the closing of business on 3 December 2021 as part of the closing of day process.

Detailed information on the migration (or cancellation) of each transaction type is provided below:

2.1. Future value dated or recycled OTC DVP, transfer, DVD transactions, future value dated blocking

OTC DVP, transfer, DVD transactions and future value dated blocking instructions in the settlement system that have not yet been settled at the time of migration will be cancelled from the system by KELER and a list of the cancelled items will be provided to the clients. The cancelled items will have to be re-submitted by the clients to KELER after the changeover according to the new operation.

At the end of the Friday preceding the start-up weekend, i.e. after the closing of the business day / settlement of securities transactions (around 18:30-19:00), KELER will perform the cancellation of the recycled and future value dated instructions, still according to the old architecture, old system and old processes.

This includes all the following future value dated and/or recycled, covered and uncovered transactions in the securities queue:

- Transfer
- Blocking
- OTC DVP transaction
- Repo opening leg

The process for cancellation will be as follows:

1.) On the last business day prior to migration, KELER will close out the business hours according to normal business procedures.
2.) A query will be run to collect all non-rejected and non-end-status (ie. pending) items.
3.) The future value dated, recycled items will be cancelled after the closing of the settlement

perifod, but before the end of the day. The affected items will be given a cancelled status in line with current practice, still generated and sent from the current settlement system. The cancelled status will be returned in a KIDUZENET or via SWIFT in MT548 message. Furthermore, before and after cancellation, there will be a query for the items to be cancelled and already cancelled, which will be broken down by client and sent in excel for retrieval and sending after the closing of business on Friday.

2.2. BSE auction and fix transactions

At present, auction and fix transactions concluded on BSE are settled on the basis of transaction lists sent by the BSE to KELER in files. The files contain matched transactions and settlement takes place on the 2nd business day after receipt for auction transactions, while for fix transactions, settlement of debt securities takes place on T+2 and settlement of equity securities takes place within a period of not less than T+1 but not more than T+7 days, depending on the exchange contract.

In agreement with the BSE, transaction feeds for the settlement days after migration (T_{M+1} - T_{M+7}) made prior to migration (T_{M-7} - T_{M-1}) will no longer be sent in file form but in messages corresponding to the new operation.

During the migration, the KELER system will only send a receipt message back to the sender (BSE) for the instructions already sent in the new format, until the first business day following the migration is opened. Clients will receive status messages about the instructions during the technical processing period (before the opening of the relevant settlement period) following the opening of the first business day (T_{M+1}).

Instructions will be processed on the ISD, after the opening of the relevant settlement period for that settlement date, according to the normal processing order of the new settlement system. Further processing status messages are sent accordingly.

We do not count on failed items for settlement days prior to migration, as these types of transactions currently may not be recycled.

2.3. Primary market transactions

Based on current practice, Government Debt Management Agency (ÁKK) sends primary market transactions in already matched mode, which may be settled on a same-day or next-day basis.

Transaction feeds from AKK made on the day before migration (T_{M-1}) but relating to the settlement date after migration (T_{M+1}) will no longer be sent in file format but in XML messages in accordance with the new operation.

It is important to note that under the new operation, the ÁKK will no longer submit the primary market instructions to KELER as already matched instructions, but as instructions to be matched. The settlement will also require the submission of a counterparty instruction by the client. The same applies to items carried over from the migration date, i.e. our clients will have to submit their

own instructions for these.

During the migration, the settlement system will only send a receipt to the senders for the instructions already submitted in the new format, until the first business day following the migration is opened. During the technical processing period following the opening of the first business day (T_{M+1}) (before the opening of the relevant business day slice), clients will receive an allegement message for instructions sent by the AKK, as well as acceptance and matching status messages for any instructions sent by the AKK before the opening of the business day. (Client-side instructions for day T_{M+1} can be submitted during the normal settlement period of day T_{M+1}.)

Instructions will be processed on the ISD, after the opening of the relevant business day for that settlement date, according to the normal processing order of the new settlement system. Further processing status messages are sent accordingly.

Although primary market transactions are currently recycled for three days by KELER, no failed items for settlement days prior to migration are expected. If they do occur, they will be cancelled by KELER before the close of the day preceding the migration. A list of the items cancelled in this way will be provided by KELER to the AKK and the clients concerned.

2.4. Expiring repo transactions

Only those delivery repo transactions already booked with a repurchase date greater than or equal to the first business day following the day of settlement (T_{M+1}) will be migrated.

For technical reasons, since the history (initial repo opening legs) is not included in the new system, the migrated legs will not be "real" expiring legs, but transactions of type DVP_TRAD with ISD corresponding to the repurchase date of the original repo transactions.

As the transactions will be loaded into the settlement system as DVP transactions, no maturity date changes (rollovers or repo calls) can be entered for these items in the same way as for delivery repos. Maturity changes are available by cancelling and re-submitting of pairs of closing legs migrated as DVP transactions.

The field-level mapping used to convert expiring repo transactions into DVP transactions is shown in the table below.

Interpretation of the colouring:

	Value from the seller side of the opening leg (It is important to note that the roles are reversed for the final leg.)
	Value from the buyer side of the opening leg (It is important to note that the roles are reversed for the final leg.)
	The common value from the transaction data is the same for both the seller and the buyer.
	A constant value, fixed during the mapping, not dependent on the input data.

	Value read from the parameter table used during mapping (Parameterization is used to help running in different test environments.)

AppHeader	Sender ID	BIC	M or …		
		Proprietary ID	… or M	Receiving party main account	Delivering party main account
		Proprietary ID Issuer	… or M	"KELR"	"KELR"
	Receiver ID	BIC	M or …	From KELER BIC Parameter	From KELER BIC Parameter
		Proprietary ID	… or M		
		Proprietary ID Issuer	… or M		
	Business Message ID		M if left blank, automatically generated		
	Message Definition ID		M	"sese.023.001.09"	"sese.023.001.09"
	Creation Date Time		M if left blank, automatically generated		
Keler header	Fee Reason		O		
	Fee Description		O		
Transaction ID			M	Receiving party message ID	Seller message ID
Intended Settlement Date			M	Repurchase date	Repurchase date
Settlement Instruction Processing Additional Details (Comment, Narrative?)			O	Receiving party reference number	Delivering party reference number
ISIN			M	ISIN code	ISIN code
Settlement Quantity	Unit		M or … (if not a bond)	Number of securities	Number of securities
	Face Amount		…or M (if bond)	Nominal value	Nominal value
Account Owner	BIC		O		
	LEI		O		
	Proprietary ID		O		
	Proprietary ID Issuer		O		
Safekeeping Account ID			M	Receiving party securities main+sub-account	Delivering party securities main+sub-account
Securities Movement Type			M	"DELI"	"RECE"
Payment			M	"APMT"	"APMT"
Common ID			O	KELER ID	KELER ID
Number Counts	Current Instruction		O		
	Total Linked Instructions		O		
Linkages	Linkage Type		O		
	Pool ID		O		
Place of Trade	MIC		O		
	Description		O		
	LEI		O		
	Type		O		
Place Of Clearing	BIC		O		
	LEI		O		
Trade Date			M if left blank, automatically generated	Original Tday	Original Tday
Trade Transaction Condition (Cum/Ex)			O		
Reporting Code			O		
Matching Status			M	"NMAT"	"NMAT"
Settlement Parameters	Hold Indicator		O	"false"	"false"
	Priority		O	"0003"	"0003"
	Securities Transaction Type		M or…	"TRAD"	"TRAD"
	Securities Transaction Type Proprietary ID		…or M		
	Securities Transaction Type Proprietary ID Issuer		…or M		

Generated seller-side instruction | Generated buyer-side instruction

	Settlement Transaction Condition	O		
	Settlement Transaction Condition Proprietary ID	O		
	Settlement Transaction Condition Proprietary ID Issuer	O		
	Partial Settlement Indicator	O	"NPAR"	"NPAR"
Delivering Parties	Depository BIC	M/O	From KELER BIC Parameter	From KELER BIC Parameter
	Depository LEI	O		
	Party[1] BIC	M/O	Receiving party matching BIC based on main account number	Receiving party matching BIC based on main account number
	Party[1] LEI	O		
	Party[1] Proprietary ID	O		
	Party[1] Proprietary ID Issuer	O		
	Party[1] Name	O		
	Party[1] Safekeeping Account ID	O	Receiving party securities main+sub-account	Receiving party securities main+sub-account
	Party[2] BIC	M/O		
	Party[2] LEI	O		
	Party[2] Proprietary ID	O		
	Party[2] Proprietary ID Issuer	O		
	Party[2] Name	O		
	Party[2] Safekeeping Account ID	O		
	Party[3] BIC	M/O		
	Party[3] LEI	O		
	Party[3] Proprietary ID	O		
	Party[3] Proprietary ID Issuer	O		
	Party[3] Name	O		
	Party[3] Safekeeping Account ID	O		
Receiving Parties	Depository BIC	M/O	From KELER BIC Parameter	From KELER BIC Parameter
	Depository LEI	O		
	Party[1] BIC	M/O	Delivering party matching BIC based on main account number	Delivering party matching BIC based on main account number
	Party[1] LEI	O		
	Party[1] Proprietary ID	O		
	Party[1] Proprietary ID Issuer	O		
	Party[1] Name	O		
	Party[1] Safekeeping Account ID	O	Delivering party securities main+sub-account	Delivering party securities main+sub-account
	Party[2] BIC	M/O		
	Party[2] LEI	O		
	Party[2] Proprietary ID	O		
	Party[2] Proprietary ID Issuer	O		
	Party[2] Name	O		
	Party[2] Safekeeping Account ID	O		
	Party[3] BIC	M/O		
	Party[3] LEI	O		
	Party[3] Proprietary ID	O		

	Party[3] Proprietary ID Issuer	O		
	Party[3] Name	O		
	Party[3] Safekeeping Account ID	O		
Cash Account	Account IBAN	O	Receiving party cash account 1+2+3 to IBAN	Receiving party cash account 1+2+3 to IBAN
	Account Proprietary ID	O		
Cash Debtor	BIC	O	From KELER or MNB BIC Parameter	From KELER or MNB BIC Parameter
	LEI	O		
	Account IBAN	O	Receiving party cash account 1+2+3 to IBAN	Receiving party cash account 1+2+3 to IBAN
	Account Proprietary ID (BBAN)	O		
Cash Creditor	BIC	O	From KELER or MNB BIC Parameter	From KELER or MNB BIC Parameter
	LEI	O		
	Account IBAN	O	Receiving party cash account 1+2+3 to IBAN	Receiving party cash account 1+2+3 to IBAN
	Account Proprietary ID (BBAN)	O		
Settlement Amount	Amount	M	Purchase price+Repo interest	Purchase price+Repo interest
	Currency	M	"HUF"	"HUF"
	Credit Debit Indicator	M	"CRDT"	"DBIT"

The consequence of migrating (and then booking) expiring repo transactions as DVP transactions is that the display of the relevant transactions on reports will also change. They will be confirmed as OTC DVP transactions instead of delivery repo.

- in the O400/V400 gross settlement list by transaction type,
- also in the O411 MNB repo statistics,
- in the transaction status messages (sese.024, MT548), and
- EP02, EP03 (pdf, XML and SWIFT) reports.

It is also important to highlight that in the December monthly fee calculation for maturing repo transactions affected by the migration, a DVP transaction fee will be charged instead of a repo fee.

2.5. Daily mark-downs and top-ups of investment fund units

The daily mark-down (redemption) and top-up (subscription) transactions for investment fund units will be submitted from the WARP system to the settlement system. The book entry will be made on the current day, no recycling is possible for these orders and therefore, in principle, no migration is required. The new WARP version will be activated at the same time as the new settlement system.

2.6. Cross border transactions

Cross-border transactions for foreign securities will continue to be settled through KELER's Cross Border system and will only be minimally affected by the new settlement system.

Foreign securities transactions submitted prior to the migration weekend that have not yet reached the securities blockage will be cancelled and will need to be resubmitted to KELER for settlement

after the migration weekend.

Of the foreign securities transactions, those for which the securities have already been blocked in the account management system (i.e. the securities side is covered) would be migrated in the same way as other live blocked transactions. For these transactions, there is no action to be taken by the client, the execution of the orders will be performed by KELER.

2.7. Multinet securities transactions

The multinet securities instructions for intended settlement dates beyond the migration date will already be submitted by the KELER CCP to the new system, in line with the new operation, so that the migration is fully transparent for the clients. The transfer of cash items will not change.

The failed multinet securities transactions will be cancelled on the scheduled settlement date, no recycling is possible for these orders, therefore in principle no migration is necessary. Multinet default transactions, if not executed prior to the migration weekend, will also be cancelled and resubmitted to the settlement system by the KELER CCP.

2.8. Physical delivery of futures derivative transactions (FISZER transactions)

FISZER items are dispatched to KELER for settlement on the 3rd Friday of each month. As such, no FISZER transactions are expected to be settled at the time of migration.

2.9. Blockings

As the activation of the KSDP does not involve a change of the securities account management system, the blockings already booked will remain after the migration, and no migration with data movement is required. However, the new operation requires a more extensive data content for blockings than currently stored, so blockings already booked in securities accounts will need to be supplemented with additional data fields (e.g. blocking reference) during the migration to be further managed under the new operation (e.g. during releasing).

The new data will be generated by an algorithm and loaded automatically. The loaded data will be notified to the clients (T521 list as MQS message and the new type of XML based EP056 report to the KID).