

## Changes in the FX and Equity markets ASTS trading and clearing system related to the Unified Collateral Pool project (UCP)

Project presentation is available at the NCC website:

<http://www.nkcbank.com/UserFiles/File/Unified%20collateral%20pool.pdf>

### Changes in software and connectivity protocols

Changes are implemented in:

- new ASTS Bridge broker interfaces `IFC_Broker28` (FX market) and `IFCBroker_28` (equity market);
- new versions of trader terminals - MICEX Trade Currency 3.12 и MICEX Trade SE 3.12;
- clearing XML reports.

FIX and FAST UDP multicast marketdata are not affected by this project.

Key changes in broker interfaces:

- New `BANKACC.UNIFIEDPOOL` flag (FX and equities) shows if a settlement account has the unified pool status.
- `TRADES.STATUS` field (FX and equities) – trade status.
- `SECTRANSFERS.TRANTYPE` and `TRADES.TRANTYPE` fields (equities) – type of transfer.
- `TRANYPES` table (equities) – list of available types of transfers.
- Length of all fields with total values (`QUANTITY`, `HIDDEN`, `BALANCE`, etc.) increased from 10 to 16 bytes.

New in MICEX Trade terminals:

- Option to connect to the NCC web service to manage collateral and assets.
- Request for asset profile transfer (using the NCC web service).
- Request for collateral transfer (using the NCC web service).
- Tables with details on the above named requests.
- New fields and tables similar to the ones added to broker interfaces.

Structure of clearing XML reports for all markets will be updated. More details to follow.

### Technical transfers

A new trading board is added to the FX and equity systems: `TRAD - NCC Transfers`.

There are additions on how information on assets and liabilities is displayed on the FX and equity markets. The following types of transactions that affect current position on a settlement account will be shown in trading and clearing systems as technical transfers:

On equity market:

- Dynamic deposit and withdrawal of assets.
- Transfer of money to/from a UCP account.
- Charge of commission fee.
- Crediting of variation margin calculated on the FX or derivatives market for the equity market UCP settlement accounts.
- Asset profile transfer for the UCP.
- Charge of commission fee for clearing collateral held in foreign currencies or precious metals.

On FX market:

- Crediting/debiting of variation margin.
- Charge of commission fee.
- Charge of commission fee for asset accounting.
- Debiting of a settlement account.
- Crediting of a settlement account.

Depending on a type of transaction a newly generated technical transfer includes either IDs of two clearing members or ID of a clearing member and the NCC's ID. The `TRANINFO` field in the `TRADES` and `SECTRANSFERS` tables will show transaction code and additional information. Available transfer type codes from the new `TRANTYPE` field are listed in the new `TRANTYPES` table.

Special technical accounts are created in the equity market trading and clearing system for such transactions related to the position updates.

Besides the above listed additions, the existing technical transfers for refund payment for REPO with CCP trades that are currently displayed on the `RFND`, `RFNU`, `RFNE` boards will also be moved to the `TRAD` board.

## Settlement accounts for UCP

The following new flag shows if a settlement account is used for the unified collateral pool: `BANKACC.UNIFIEDPOOL`.

If a clearing member decides to use the unified collateral pool technology then it is possible to merge a settlement account from another market with a UCP settlement account. In such case a settlement account in unsettled trades will be replaced with a UCP account. On the FX market this replacement will be displayed as two technical trades (opening trade and closing trade) on the `SHFT` board.

## Asset profile transfer to other markets

Clearing members can transfer asset profiles to the derivatives and FX markets using any of the following interfaces:

- MICEX Trade SE, MICEX Trade Currency and Spectra terminals.

- The NCC EDI system.
- The NCC Web Clearing portal.

Asset profile transfer is implemented as a distributed transaction process with the following workflow:

1. A technical trade is created on the equity market `TRAD` board.
2. If the derivatives or FX market system confirms a possibility of such a transfer then this trade is marked as settled.
3. If the derivatives of FX market system rejects this transfer then the technical trade status changes to "Cancelled by the trading system".

Status of technical trades is shown in a new field: `TRADES . STATUS`. This field may also be used to read status of other trades concluded by a trade member.

New position codes (`POSITIONS . TAG`) are added on the equity market:

BYCU	Profile transferred to FX market - BYN
BYFO	Profile transferred to derivatives market - BYN
CYCU	Profile transferred to FX market - CNY
CYFO	Profile transferred to derivatives market - CNY
EUCU	Profile transferred to FX market - EUR
EUFO	Profile transferred to derivatives market - EUR
GBCU	Profile transferred to FX market - GBP
GBFO	Profile transferred to derivatives market - GBP
GLCU	Profile transferred to FX market - GLD
GLFO	Profile transferred to derivatives market - GLD
HKCU	Profile transferred to FX market - HKD
HKFO	Profile transferred to derivatives market - HKD
KZCU	Profile transferred to FX market - KZT
KZFO	Profile transferred to derivatives market - KZT
RUCU	Profile transferred to FX market - RUB
RUFO	Profile transferred to derivatives market - RUB
SLCU	Profile transferred to FX market - SLV
SLFO	Profile transferred to derivatives market - SLV
UACU	Profile transferred to FX market - UAH
UAFO	Profile transferred to derivatives market - UAH
USCU	Profile transferred to FX market - USD
USFO	Profile transferred to derivatives market - USD
UTSA	Assets - UAH
UTSB	Assets - BYN
UTSH	Assets - HKD
UTSK	Assets - KZT

New settlement codes are used in technical transfer trades:

On equity market:

TRAN_B	Asset credit/debit
AO_B	Asset profile transfer/return, asset credit/debit in two phases
NO	Create T+ claims/liabilities

These transfers change the opening balance value for positions.

On FX market:

TRAN	Asset credit/debit
A0	Asset profile transfer/return, asset credit/debit in two phases
N0	Create T+ claims/liabilities

These transfers change the current position value.