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Clearing
department

Clearing
Terminal

Clearing Terminal is a Web service, which gives an opportunity to manage clearing objects

Main functions:

✓ **demonstrates clearing objects:**

- settlement accounts
- collateral accounts
- accounts for collateral return
- tariffs
- assets
- trade accounts
- sub-accounts clusters
- etc

✓ **provides Clearing Members with tools to manage clearing objects:**

○ object-oriented interface **WEB API[1]**

(software interface for the use of Clearing Terminal functions in client own software)

○ adaptive user interface (**WEB UI**)

✓ **provides Clearing Members with an opportunity to receive information**

from Trading and Clearing Systems of the securities, FX, derivatives and standardised derivatives markets of the "Moscow Exchange" Group

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[1] – based on RESTful architectural style

Clearing Terminal Version 1.5

Includes the most demanded requests among Clearing Members (check slide 4), and also:

opportunity to manage clearing objects offline through:
- submission of requests to transfer/return assets
- setting Stand-By instructions (certain features of any object, Standing instruction to return funds for example)

simplified role model (standard set roles):

Standard role	Operations groups	
	Operations with c/f	Clearing operations
Operations with cash funds (c/f)	add: ✔ view: ✔ reports: ✔	add: ✘ view: ✘ reports: ✔
Clearing operations	add: ✘ view: ✘ reports: ✔	add: ✔ view: ✔ reports: ✔
All operations	add: ✔ view: ✔ reports: ✔	add: ✔ view: ✔ reports: ✔
Transfers within NCC	Collateral transfers and assets profiles transfers	

signature according to the format defined in the standard GOST R 34.10-2012 and in the RSA standard (for non-residents)

API Gateway to prevent DDOS and other cyber attacks

interface both in Russian and English languages

four eyes principle «maker-checker» (one makes, other checks)

crypto security using СКЗИ Validata

two factor authentication: through EDI key certificate and MOEX Passport

Version 1.5 of the Clearing Terminal can be used:

only by **Clearing Members**

List of requests, submitted by Clearing Members via Clearing Terminal Version 1.5

✓   Request for registration of the Account for Collateral Return details

✓   Request for setting correspondence of an Account for the Collateral Return with a Settlement Account

✓   Request for changing details of an Account for Collateral Return

✓   Request for collateral return

✓   Standing instruction to return collateral

✓   Request for collateral transfer

✓   Request for the execution of early exit from trading

✓   Standing Instruction to execute early exit from trading

✓   Request for depositing

✓   Depositing Standing Instruction

✓   Request for information on cash flow

✓   Request for the assignment to a Settlement Account of the feature "Unified pool"

✓   Request for changing the scope of application of a Unified Pool Settlement Account

✓   Request for Asset Profile transfer

✓   Request for changing Settlement Account "NCC-NSD account" parameter

✓   Request for Clearing Member parameters change

Object model data available to the Clearing Member

Reference data:

- Assets
- Market sections list
- Assets, available on the Market section
- Kind of transaction
- Transaction type
- BIC SWIFT guide
- Tariff fees

Clearing Member information:

- Required sums of contributions to the Default Fund and Collateral for Stress
- ID code of the Clearing Member and parameters, set for such ID code
- List of registered TAs and parameters, set for such TA
- List of Sub-accounts Clusters and parameters, set for such Sub-accounts Clusters
- Clearing registers sections and parameters, set for such clearing registers sections
- List of registered Settlement Accounts and parameters, set for such Settlement Accounts
- Market section, where Settlement Account is registered
- List of registered Accounts for Collateral return
- Account for Collateral return details assigned to the Settlement Account
- Collateral Accounts, opened within Settlement Account
- Balance list under Collateral Accounts
- Aviso (debit and credit)
- Record book regarding Collateral accounts per day
- List of requests, submitted via the Clearing Terminal

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Clearing Terminal version 1.6

Additionally includes:

function regarding clearing objects management when separating statuses of Clearing Member and Market Participant:

- managing Settlement Account model use
- managing client level
- managing list of blocked clients

automatic performance of frequently used requests:

- opening/closing/changing Settlement Accounts and TA of all levels
- TA replacement in trades

choosing Settlement Accounts for fees withdrawal

**Segregated Clients access to the Clearing Terminal** (with separate rights and responsibilities)

Market Participants access to the Clearing Terminal (with separate rights and responsibilities)

separate tariff fees for exchange and clearing fees

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Plans for further development of the Clearing Terminal

1. **Refusal from existing services of interaction between NCC and Clearing Member through transferring these functions to the Clearing Terminal:**

Web-clearing

Forwarding requests via EDI

Reports distribution via EDI

➡️

Clearing Terminal
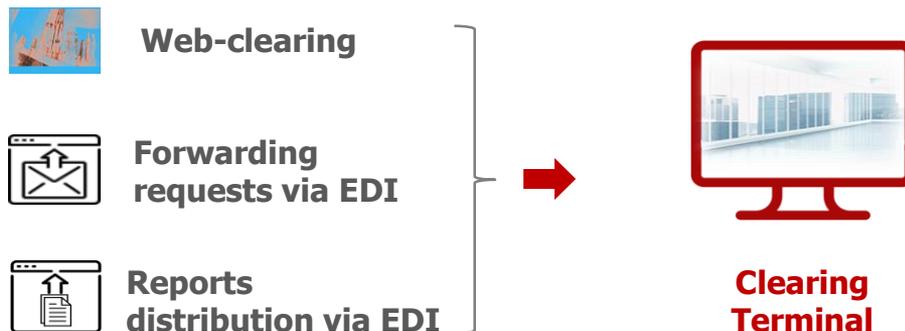
2. **Implementation of additional functions:**

opportunity to visualize and to manage clearing objects online:

- positions, trades, account balance and other fast changing objects

full role mode (standard roles with fine adjustment of permissions)

automatic performance of all requests to manage clearing objects

harmonization of clearing reports on all markets and its provision via WEB API of the Clearing Terminal

Roadmap

Clearing Terminal Version 1.5

December 2017: implementation of the Unified Collateral Pool functional, transfer of collateral, between markets inclusively, simplified role model.
Access via trading terminals interface

September 2018: implementation of WEB-API of the Unified Collateral Pool functional, transfer of collateral, between markets inclusively, two factor authentication

August 2019: access for Clearing Members to the functional of the version 1.5 in the test environment*

2nd quarter 2020: implementation of full functional of Version 1.5
Access via WEB API and WEB UI

Clearing Terminal Version 1.6

2nd half of 2020

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* - To receive access to the test environment please contact Support division of the Moscow Exchange
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Contacts

On general issues regarding Clearing Terminal:

to your personal manager

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