Version 7.27 Changes and Updates

1. Premium futures options

TS Spectra 7.27 has implemented a support for new derivative instrument – premium options on the commodity futures. The new contracts have the following key features:

- Underlying asset is the commodity futures. It is planned to launch options NG, BR, GOLD, SILV futures.
- The method of exercise is European option, Option type is ash-settled.
- Option maturity: weekly, monthly, quarterly.
- The option is exercised at its intrinsic value during the evening clearing session or intraday clearing session. The settlement price for the underlying futures is the strike, considering the sign for call/put. If the option has the same expiration date as the underlying futures, it will be exercised during the same clearing session as the underlying futures; if the expiration date of the option is different from the expiration date of the underlying futures, the option will be exercised during the evening clearing session.

For more detailed information, please see the corresponding contracts specification.

2. Closing auction prices for settlement prices of the ‘perpetual’ equity and on-the-index futures

Settlement pricing during the evening clearing session changes for daily futures contracts with automatic prolongation (‘perpetual’ futures). The settlement price for ‘perpetual’ equity and on-the-index futures is determined as follows:

- ‘Perpetual’ equity futures: the closing price of the share, equal to the price of the Closing auction on the Moscow Exchange Securities market.
- ‘Perpetual’ futures on the index: as the index closing price calculated on the basis of the closing prices of the shares.

There will be no changes for the intraday clearing session: settlement prices are determined in a standard way, as described in the settlement price methodology.

3. Algorithm for calculating options price limits

The algorithm used to calculate the option price limits has changed, affecting both the upper and lower limits. The calculation algorithm has 6 new parameters:

- SHIFTPRICE_BA_UP – up shift value of the underlying asset price, expressed in fractions
- SHIFTPRICE_BA_DOWN – down shift value of the underlying asset price, expressed in fractions
- SHIFTVOLAT_UP – up shift value of the volatility, expressed in fractions
- SHIFTVOLAT_DOWN – down shift value of the volatility, expressed in fractions
- DELTA_LIMIT – limit of option delta value, an unrequired parameter to control price limits calculating for ‘deep out-of-the-money’ options.
- APPLY_DELTA_LIMIT – a flag indicating whether DELTA_LIMIT parameter to be applied

These parameters are calculated and set based on NCC risk management's expert estimates and members' needs, using statistical data on options spreads on the derivatives market. Shifts can be either symmetrical or asymmetrical.

Parameters are common to all options for a particular underlying asset and are set at underlying futures contract level. Existing parameters at the option series level for calculating option price limits ('Out-of-the-money limit' and 'In-the-money limit') will no longer be used.

The logic of orders validation for price limits remains the same.

4. Funding calculation based on the CNY exchange rate (stage 1)

For cases when the FX market has suspended trading in currencies that are the underlying for ‘perpetual’ futures, an alternative method of calculating USDRUBF and EURRUBF funding is implemented. The calculation is based on the CNY exchange rate and an over-the-counter fixing that is set manually. USD/RUB (EUR/RUB) rates are calculated based on the exchange rate CNY/RUB and over-the-counter fixing USD /CNY (EUR/CNY). CNY/RUB is equal to the CNYRUB_TOM online rate. USD/CNY (EUR/CNY) is equal to the fixing, the value of which is manually entered into the system. On this basis, USD/RUB and EUR/RUB cross rates are calculated, which are used in the calculation of the funding based on deviations for each minute from 10:00 to 18:50. For ‘perpetual’ futures, in order to calculate the funding based on the cross rate, the parameter “MD cross rate” must be set at the level of the underlying futures contract.

5. Inclusion of premium under the option in the funds volume available for withdrawal

TS Spectra has added possibility to withdraw premium under the option calculated in the intraday clearing. Now the premium received/withdrawn in the first clearing is taken into account when calculating the amount of funds that are available for withdrawal. There are no other changes in the calculation of the volume of funds available for withdrawal mechanism. The premium under the option received/withdrawn at intraday clearing is transmitted in the gateway in the premium field of the table opt_intercl_info of the FORTS_REFDATA_REPL stream.

6. Change in the settlement price of options and futures on gold

The algorithm of calculating settlement prices for commodity contracts has been changed. Now the value of the new GOLDFIXME fixing calculated at 12:30 of the execution day is taken as the settlement price. The fixing methodology can be found at MOEX website: https://fs.moex.com/files/3971 (only in russian). If there is no trading in gold on the FX market on the execution day, the GOLDFIXME will be equal to the RUGOLD index. Time of expiration and price fixing for options and futures on gold in TS Spectra remains the same.

7. matchref field on negotiated orders

The matchref field transmission is added to the own negotiated orders activity log. FORTS_TRADE_REPL stream in the gateway has the new field added to the ‘orders_log’ and ‘multileg_orders_log’ tables:

- match_ref (c10) – Identical text values entered by both trading parties to match negotiated orders.

8. Cgate.NET switch to netstandard2.0, AnyCPU

The Spectra version 7.27 has a Derivatives market gateway Cgate.NET standard 2.0 implemented. The use of .NET Standard 2.0 allows cross-platform realization when code needs to be shared between platform .NET Framework and any other .NET implementation, such as .NET Core.

Note that this distribution is a **beta**-version. Please send suggestions for improvement to help@moex.com.

9. Improvement on ChangeBFLimit non-trading operation

Increased system performance when processing the non-trading ChangeBFLimit operation to change brokerage firm trading limits. The speed of the operation is comparable to the speed of processing trade orders.

This improvement requires no changes on the client side.

10. Changes to the user interface and API

10.1. CGATE

- FORTS_TRADE_REPL stream has the new field added to the ‘orders_log’ and ‘multileg_orders_log’ tables:
  - match_ref (c10) – Identical text values entered by both trading parties to match negotiated orders.
- Obsolete FORTS_MISCINFO_REPL removed. FORTS_RISKINFOBLACK_REPL and FORTS_RISKINFOBACH_REPL streams should be used instead.

10.2. FAST\SIMBA

The CFI codes are added for premium European cash-settled futures options:

- CFICode = "OCEFS" – European cash-settled futures option Call
- CFICode = "OPEFS" – European cash-settled futures option Put

11. Changes in reports

- Terminated the generation and sending of the FO_MON.zip report package. The main report package contains all the reports from the terminated one.
- To the end of mmopt_strikesXXXX.csv, mmopt_averageXXXX.csv and mmLP_XXYY.csv reports new MARGIN_STYLE field of c1 type (Option margin style) is added:
  - M – Futures-style
  - P – Premium
- In MM_PAYMENT_XX00.xls report on the MM_payment_details sheet there is new "Margin Style" field:
  - M – Futures-style
  - P – Premium
- In MM_RANKING_XXYYZZZ_XXYY.xls report there is new "Margin style" field (added after the "Instrument Type (F/O/E)" field):
  - M – Futures-style
  - P – Premium