Saint-Petersburg International Mercantile Exchange

E-trading system for commodity market

In the system of commercial relations among the Russian domestic enterprises nowadays a well-established commodity market becomes more and more demanded. The main goal of the exchange is to establish an organized commodity market which concentrates supply and demand and at the same time creates a clear and transparent mechanism to form fair prices for basic raw commodities. A well-established exchange develops a system which guarantees the settlement of concluded transactions, facilitates the liquidity of commodity market which implies growth in popularity of the organized exchanged trade through the exchange infrastructure.

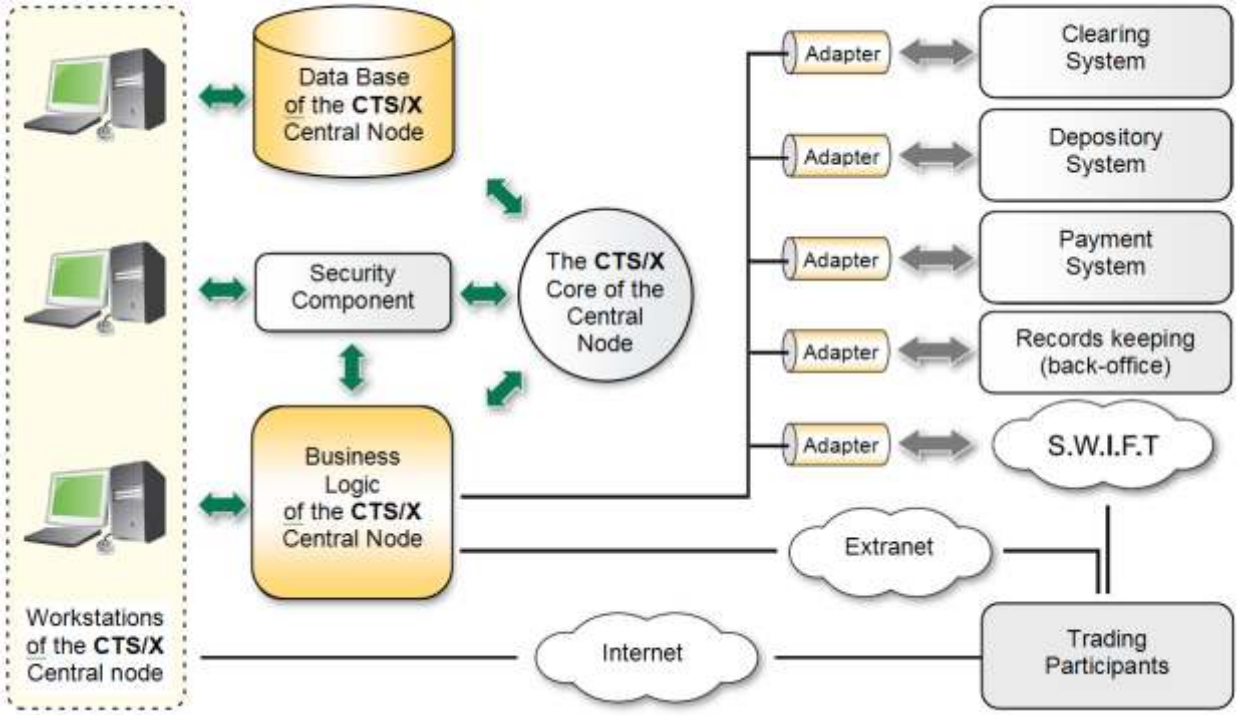
The creation of a state-of-the-art exchange infrastructure on the basis of electronic trade system takes place gradually through commodity exchange lots range and contracts enlargement from spot-trading of agreements on real goods supplying to futures contracts and other financial derivatives trading.

Saint-Petersburg International Commodity Exchange (SPIMEX) is a legal entity aimed at forming the wholesale market by establishing and regulating the exchange trade carried out in a form of electronic auctions hold at the pre-agreed premises and in time subject to SPIMEX regulations. In order to meet the demand of the major dealers on the Russian market of oil products and provide a fair price-forming mechanism through a planned trade system and a complex of information services, SPIMEX has formed a sector of Oil Products based on an integrated technological platform developed by CMA.

Project description

In July 2008, CMA signed a contract with SPIMEX for supply of the e-trading system for commodity spot market. In September 2009 the first trading took place. The system is based on CMA product - TRAD/X, which is a software platform for a full-scale trading system of commodity exchange. TRAD/X has a modern component service-oriented architecture providing the necessary performance and flexible functionality that can be used in conjunction with other products of the CMA Company, intended for automation of financial markets infrastructure (depository, clearing, payment systems).

CMA's commodity exchange trading solutions take into account modern trends and open up opportunities for possible infrastructure development for electronic trading in exchange commodities and over-the-counter (conversations) deals finalization. The company's solutions include the possibility for systems scaling according to the market demands growth and integration into regional and world financial structures.



Structural scheme of the SPIMEX Commodity Trading System (CTS)

Functional Highlights

Standard package of the TRAD/X system functions includes:

- Automatic orders matching and deals conclusions for real goods:
  - simple anonymous deals;
  - targeted deals;
  - partial orders satisfaction;
  - fill or kill deals (partially or fully) etc.
- Clearing system interaction interface in an online mode.
- Interface for data import for information disclosure including the Internet.
- Trading participant workplace.
- System administrator workplace.
- Trades controller workplace.

In addition the system provides futures contracts trading functions

Trades Organization Principles

- Possibility of operations with any tools set, i.e. with standard contracts for different exchange goods (oil, diesel fuel, other oil products, building materials etc).
- Advance reservation of financial and trade recourses prior to start of trades and online checking of orders provisioning via the clearing system.
- Different mechanisms for orders input:
  - remote via trade participant workplace;
  - via trade participant workplace in the sales area;
  - via trade system employee workplace on the basis of faxes, mail etc.
- Online information transfer to the clearing system for finalized deals.
- Automatic reports for traders and market regulators.
- Information disclosure.
- Automatic production of document package for deals legal registration.

Interaction with security system

- A full-function interface is implemented in the system for security system connection which is certified for use in the trade participant's country.
- The system can interact with commercial security systems used in international payment systems (RSA, Entrust, etc.)
- Successfully tested for certified national security systems and operation with local authorized organizations

Key Benefits of CMA Solutions

- The TRAD/X system is an easy to install solution
- Orders and deals messages, as well as other electronic documents, are processed in UML language for business logic graphic description:
  - provides functional flexibility,
  - simplifies system adjustments according to trade organization's peculiarities;
  - can modify system operation logic according to market needs and changes in regulatory requirements,
  - provides compliance with the customer's requirements,
  - simplifies system comprehension.
- The system uses the integration bus that is a part of the CMA's PIEÒ (Processware Integration Environment). The bus:
  - Provides solution for information interaction with other systems through electronic messaging.
  - Allows to build integrated hybrid solutions.
- The TRAD/X system was developed in accordance with industry standards and international organizations recommendations:
  - IOSCO, BIS and World Bank recommendations and principles;
  - SWIFT, SWIFTNet Standards;
  - ISO15022, ISO20022, UNIFI-ready;
  - XML;
  - UML;
  - UNIX and Microsoft Windows Standards.

Distributed multi-level structure of the trade system

- Multi-level structure provides security and high efficiency.
- Distribution of functions between the levels allows preventing bottlenecks.
- The module solution allows for:
  - component functionality distribution;
  - component reuse;
  - easily enlarge the functionality.
- Approach oriented for function efficiency through:
  - STP – Straight Trough Processing;
  - Unprogrammed processing logic adjustment
- Monitoring of operational continuity and integrity on every system level.