

MultiDmarket

Digital trading platform Multi-D Market

Dmitry Rudakov Project Manager ASE Group

November 16, 2017



PROJECT MISSION

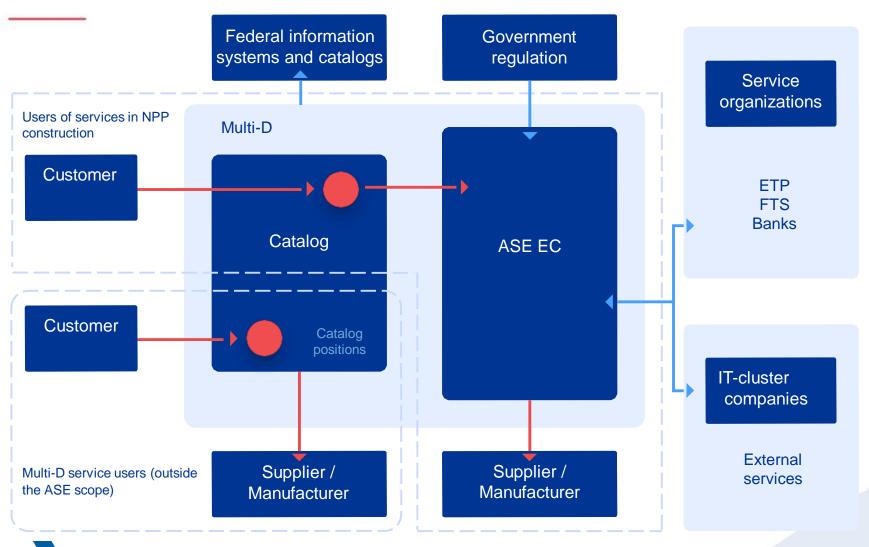
Multi-D Market is a scalable open platform for the provision of equipment selection services, designing complex engineering facilities, construction, provision of services based on the Multi-D technology, which is being developed to achieve the objectives as follows:

- Optimizing costs for interaction between the customer and the supplier before the start of and during the project
- Developing a service and complex equipment ordering tool using the Multi-D platform (customer-supplier communication via technically verified questionnaires, catalogs, standard projects) regardless of their location in electronic form
- Establishing a cooperation chain in the implementation of complex projects

- Making it possible to negotiate and promptly conclude contracts in electronic form, to provide contract follow-up and to execute contracts
- Ensuring the connection of procurement processes with financial structures and tax reporting
- Delivering sectoral directories and catalogs to the federal level
- Establishing a communication platform for certified experts and knowledge accumulation
- Delivering new customer-supplier communication services to the international level



PLATFORM USER INTERACTION PATTERN





The engineering catalog is the basis of Multi-D services

DIGITAL COOPERATION CHAINS BASED ON THE ENGINEERING CATALOG

A full engineering description of equipment for the entire life cycle is the basis of a quality industrial catalog

CUSTOMER \rightarrow DESIGNER \rightarrow MANUFACTURER \rightarrow SUPPLIER

- Supplying equipment and components for the construction of nuclear power plants and divisions of the Rosatom State Corporation (without canceling procurement standard requirements);
- Closing the digital chains of equipment supply and services within the region (outside the Rosatom scope);
- Adjacent services in construction and equipment supply;
- Potential entry into foreign markets with equipment sales quotes.



SERVICES FOR SUPPLIERS











В каталоге находится более 2 000 видов продукции

Publication of company procurement plans (based on an equipment catalog)

Standardization of equipment and material catalogs, a directory of services when logging in with the Platform

Counterparty verification

Keeping a purchaser rating

Advising in the project follow-up

Shaping cooperative chains for networking

Electronic document flow for contracting in electronic form

Preparing passports and operational documentation in electronic form

Possibility to lease IT tools for design, engineering, project management

Possibility to use the customer management system within the Platform



EXTRA SERVICES























Electronic document flow and "smart" contracting with the option of providing warranty and postwarranty service

Sharing information using a unibus supporting typical formats and interfaces to exchange:

- Project documentation
- Financial information to the client's accounting systems, banks
- Certificates, acts, etc.
- Data with electronic trading platforms
- Data with EDF operators

Expert maintenance of:

- Document normative base
- Typical requirements for complex systems and projects
- Equipment catalogs

Company plans (based on single catalogs of requirements and equipment):

- Manufacturers' capacity utilization
- Consumers' procurement

Data exchange with the "Industry" Federal Information System

Execution of work using the resources of ASE and through subcontracting:

- Digitization and conversion of projects into formats required
- Description digitization of 3D equipment models

Accumulating a professional knowledge base using information from authorized experts



BENEFITS FOR SUPPLIERS









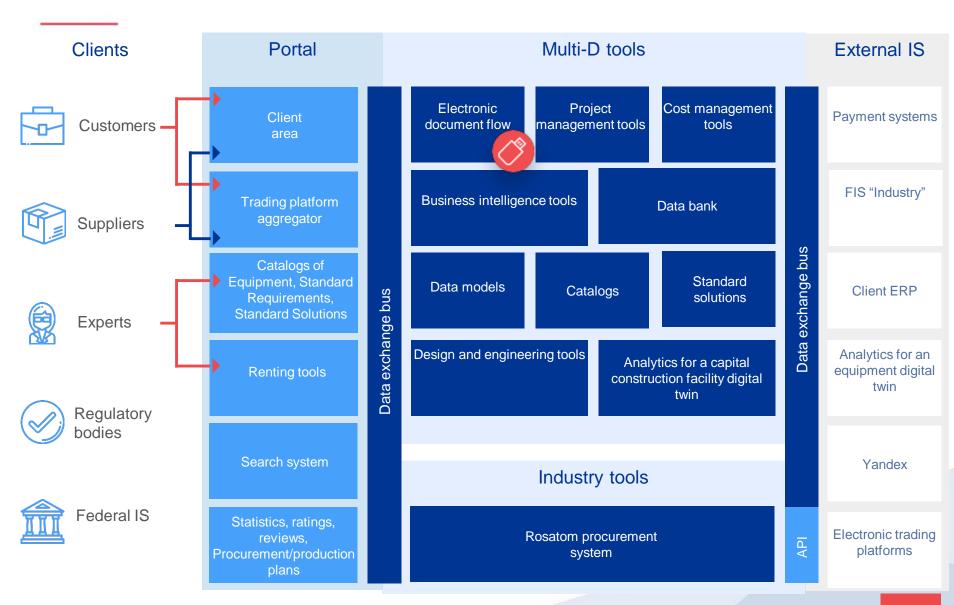
Increasing sales of nuclear industry businesses due to having the catalog of manufactured or sold products included in the industry reference book with technical characteristics specified and regulatory documents attached - an ease of using products in the equipment and material design and selection at the pre-procurement stage.

Automatic inclusion of the catalog in the "Industry" Federal Information System using an integration solution and pursuant to the Agreement between ASE EC and the Foundation for Enterprise Restructuring and Financial Institutions Development of the Ministry of Industry and Trade of the Russian Federation in the Industry" Federal Information System's sales catalog. Registering the catalog with the Gazprombank ETP and other ETPs (in the future)

Increasing sales of customers outside the nuclear industry, including in the 18 countries of ASE business presence

Free services at the pilot stage for a limited list of suppliers.

Multi-D-BASED MARKET STRUCTURE



SUPPLIER AREA'S STRUCTURE

Clients

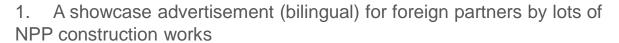
Client



Suppliers

Service catalog	Sales	Support for deals	Services of the platform
Publication of typicals for requirement templates	Trading platform aggregator	Project management	Advising on how to use the platform
Updating the equipment catalog by parameters	Model contracts	Harmonization and submission of docum	Renting design, engineering and project management tools
Updating the catalog of components and their analogs	Purchaser Management System	Interacting with regulatory authorities	Subcontracting work management
Publication of production plans	Contract conclusion	Creating a digital twin	Digitization of documentation and maintenance of the manufacturer's catalog
Integration with IS of the Client	Payments	Claim management and after-sales service	Submitting the catalog for the FIS "Industry"

Notifying the market participants in the localization of the nuclear power plant under construction about the possible performance of the work package











- 1.1. Includes description of lots, document headers
- 1.2. Includes the application form for access to the private part
- 2.4. Chatroom for consultations
- 2.5. Monitoring the statistics of views
- 2. Interface of password access to the private part
- 3. Managing the electronic archive Data representation in the system:
- 3.1. Contract requirements
- 3.2. Project documents
- 3.3. Schedule of work
- 3.4. Detail design (examples)
- 3.5. Database of equipment (analogues)
- 3.6. The general contractor's requirements to the contractor regarding work deliveries and their IS representation
- 3.8. Search by documents

COOPERATION OF ASE EC WITH THE NIZHNY NOVGOROD REGION

Interaction between ASE and the Government of the Nizhny Novgorod Region in the digitalization of the Region's economy:

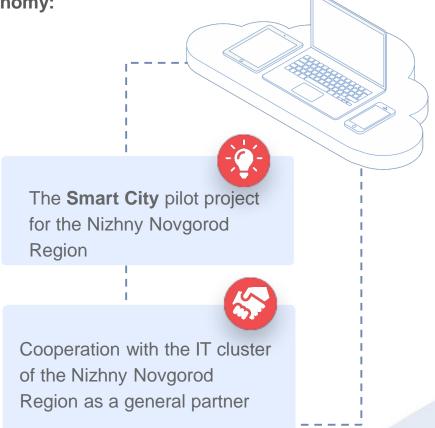


Digitization of the catalog of regional industrial enterprises

Attracting large customers and suppliers of the Region to using MultiD Market

Attracting regulatory authorities to using digital platforms

Launching the MultiD Market pilot project in the Nizhny Novgorod Region





THE WAY TO BECOME A PARTICIPANT OF THE PILOT PROJECT?





THANK YOU FOR YOUR TIME!

We are open for cooperation and always ready to answer your questions

Dmitry Rudakov, Project Manager, Multi-D Market of ASE EC

Tel.:+7 495 737 90 37 ext. 7-45-62

Mob. +7 (915) 139-81-47

e-mail: dm.rudakov@niaep.ru