Implementation of intra-corporate improvement projects

In 2013, Zarubezhneft JSC implemented the “Strategic Organizational Improvement Projects” program, which it has been running ever since.

The key objective of the Improvement Project System is implementation of project initiatives aimed at optimizing and improving the organizational structure and business processes of the Company (including automation), initiated with the aim of implementing the Corporate Strategy of Company’s development and increasing the efficiency of its activities.

The past 2 years have witnessed a trend in the increase of the number of projects aimed at improving the existing processes in the Company, such as automation, optimization, improvement, implementation of fundamentally new approaches, and best practices.

The draft changes support the Company’s key strategic focuses:

Key strategic focuses

Development of technological competence
- the creation of “Technological framework”, the launch of the “Knowledge Management System”, since 2018 - the portfolio of technological development Projects

Entering new projects
- re-engineering of “Search and valuation of new assets” process;
- creation of tools and approaches to improve the efficiency of interaction with foreign partners;
- a large package of initiatives is being implemented to provide new projects with competent personnel; a system of key personnel rotation has been implemented, Nestro Lead internal corporate competition was held, as part of which the employee pool has been formed for future project teams.

Development of processes and training of competent staff

As part of processes and systems development:
- a Production System has been introduced, which is the foundation of process management in subsidiary companies;
- re-engineering of the regulatory system was carried out, including the creation of an organizational framework, a single set of rules for all subsidiaries on key processes and control systems;
- key requirements for implementing the business processes are highlighted and structured into matrices for assessing business processes maturity; the level of business processes maturity has been developed and evaluated taking into account the quality of requirements regimentation, appraisal of their performance, KPI ambitiousness taking into account the benchmarking;
- company’s IT strategy was approved and have been implemented;
- the Territory of Knowledge project was implemented, which is a creative space for working, training and knowledge sharing.

In terms of competent staff training:
- the work with employee pool for key positions has been intensified;
- regular management practices have been developed for using by managers of CC and SC;
- an institute of expert methodologists was created and has been developing;
- corporate training has actively been developing in 3 corporate schools: oil engineering, project management, school of leadership and management capacity development.

At all stages of draft change life cycle:
- the system of monthly monitoring and reporting of draft changes has been implemented;
- expert support of projects was organized, including with the involvement of experts from subsidiary companies;
- surveys/feedback have been conducted for judgmental estimate and results confirmation.

An important factor in the implementation of projects in the Company and initiation of new projects is the control and support from the top management of Zarubezhneft JSC. Since the beginning of the implementation of “Strategic Organizational Improvement Projects” Program, 94 projects have been initiated (incl. 10 technology development projects), of which:
- 63 draft changes were completed (incl. 4 technological development projects);
- 31 draft changes are underway

In 2018, a new project type was identified in the Zarubezhneft JSC project portfolio called Technological Development Projects – initiatives aimed at achieving technological efficiency in production processes.
## Key innovations in 2018

### Initiation of technological development projects in the production unit

- In 2018, the Improvement Project System was re-engineered; the perimeter of projects was expanded, the projects of technological unit changes were included - Technological Development Projects (TDPs);
- 10 Projects of Upstream technological development were initiated in 2018, of which 5 were successfully completed.

### Expansion of lean production perimeter to sc processes

- Mini-projects on Husbandry were started in Subsidiary Companies with implementation within 4-6 months:
  - LLC “JC “RUSVIETPETRO” - 17 projects
  - Zarubezhneft-Dobycha Kharyaga LLC - 15 projects
  - ZARUBEZHNEFT-Dobycha Samara LLC - 5 projects
  - RMNTK Nefteotdacha JSC – 3 projects

### Active involvement of subsidiaries in implementation of current changes projects

- To maximize the involvement of the examination by Company’s specialists SCs representatives were included in the project teams of 18 improvement projects.

## Key technology development projects and results of 2018

### Increase in the resource base of block 09-1 (JV “VSP”) based on 3d4c new drilling and seismic survey data

**Main project objectives:**
- identification of new objects for prospecting and exploratory drilling and appraisal drilling and increase in hydrocarbon reserves

**Achievements / effect:**
- prepared a concept for increasing the resource base of Block 09-1;
- according to 3D4C seismic exploration materials within Block 09-1, specialists of VNIIneft JSC together with CC prepared 23 facilities, both for the development of existing reservoirs, and for individual objects with P50 total resources along the terrigenous section part and along the foundation 173.5 million tons.
- ranking in terms of resources volume and geological success was performed.

### “Well workover” information target telemetry program (tmwwo)

**Main project objectives:**
- improving the development, maintenance and well work management efficiency;
- the achievement of the productive time coefficient by WSWO teams in 2018 is at least 0.9.

**Achievements / effect:**
- a centralized system of accounting, control and management of PMCWD (production maintenance and capital workover department) operations;
- reduced labor intensity and time of work on the assembly, processing and analysis of data during PMCWD;
- improved quality and speed of reporting;
- the unified referenced data database (RD) was created for the entire information space;
- the unified database was created for all information on PMCWD work performed.

### Developing a concept for involving the marginal plots of block 09-1 into development

**Main project objectives:**
- selection of efficient technologies and solutions for profitable development of marginal reserves of Block 09-1;
- development of Zarubezhneft JSC competencies in the field of processes and technology for the effective development of marginal offshore fields.

**Achievements / effect:**
- the project considers the most advanced technologies, possibilities and constraints of using these technologies and the degree of effectiveness of their influence on projects;
- an upside matrix has been developed, the technologies suitable for the marginal fields of Block 09-1;
- preliminary calculation was performed of the option of developing two sections 5 and 8 of Block 09-1 from one WHP, as a result, the NPV project is expected to increase by almost 3 times.
### Key organizational improvement projects and 2018 results

#### Formation and implementation of the corporate interaction process in Zarubezhneft JSC

**Main project objectives:**
- to form and implement the process of organizing corporate interaction based on the PDCA principle: development of key principles, information tools and control tools (P), penetration into regular activities (D), monitoring and control (C), assessment of principles implementation (A).

**Achievements / effect:**
- 12 principles of corporate interaction in 4 areas have been developed;
- information tools have been developed;
- control and enforcement actions instruments have been developed;
- the plan for implementing the corporate interaction principles was developed and approved;
- the assessment of the effectiveness of corporate interaction principles implementation was carried out.

#### Development of the IT strategy of Zarubezhneft Group of Companies up to 2022

**Main project objectives:**
- increasing the efficiency of Zarubezhneft GC information technology management by defining the target architecture of information systems, prioritized IT initiatives and the organizational IT model necessary for their implementation.

**Achievements / effect:**
- strategic priorities and target business structure in first priority areas (GiR, BEF, major construction, procurement) were determined;
- the selection of a contractor for the IT strategy development analyzing the adequacy of the proposed competencies in all areas of business and realistic work deadlines were summarized;
- there were surveys, formation of results on current situation analysis, assessment of existing risks, conclusions and recommendations on the diagnostics results;
- a study of applicable international and Russian practices on IT solutions was carried out;
- functional unit requirements (BEF, Upstream, other supporting functions) in the implementation and/or development of IT systems have been formed. An approach to prioritizing IT initiatives has been defined.
- the main provisions of the IT strategy have been formed, initiatives passports and integrated roadmap have been created;
- IT strategy details have been agreed with relevant departments.

#### Organization of the process of managing the risk of a change in crack spreads in oil refining

**Main project objectives:**
- creating a new business process for managing the risk of changing crack spreads in oil refining in Bosnia and Herzegovina:
- development of a mechanism and strategy of crack spread change risk management;
- minimization of potential tax risks associated with derivative financial instruments transactions.

**Achievements / effect:**
- strategy for managing calendar risk was optimized, risk minimization;
- implementation of a dynamic crack spread change risk management strategy allows increasing the positive financial result (back-testing);
- legal, accounting and tax aspects of the proposed strategies have been reviewed;
- a flexible quantification model for commodity risks has been developed.

#### Creating a knowledge management system at Zarubezhneft JSC

**Main project objectives:**
- creation of an integrated system for sampling, accumulation and spread of knowledge in the field of the Company's technological focus.

**Achievements / effect:**
- The knowledge management system corresponding to the best practices in this field was developed and put into operation.
- KMS (knowledge management system) provides a complete cycle of work with knowledge: preservation, accumulation and spread with the possibility of quick and convenient access to relevant information within the framework of technological focus through the intelligent search.
- KMS content passes an expertise for relevance and necessity. Built-in communication tools allow capturing the implicit knowledge of experts and employees and provide for production information exchange. Services for working with ideas are the tools for finding new technologies that are promising for implementation in production activities.