

Project Engineering, Design, Procurement and Construction

Andrei Kalyuzhnov, Regional Vice-President Business Development 8 May 2014

Core Business Strengths



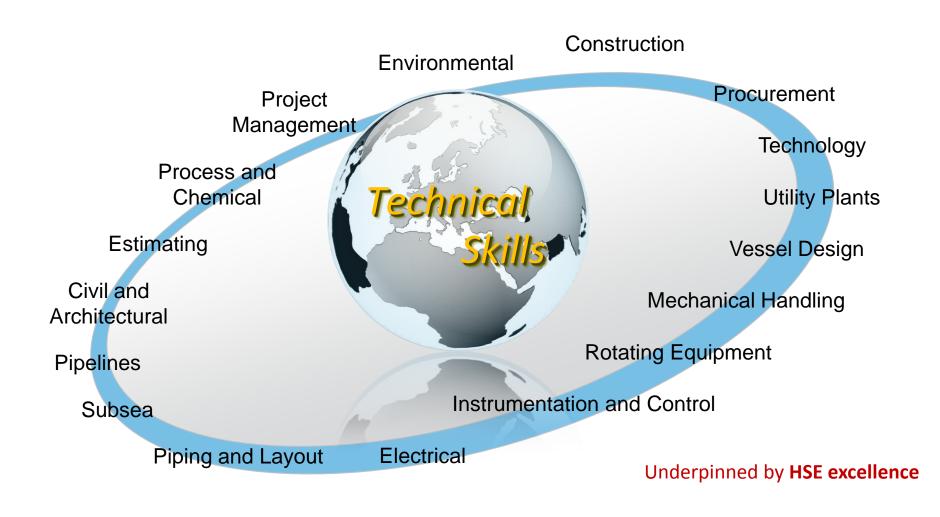
Total Project Capability for Kazakhstan



Underpinned by **HSE excellence**

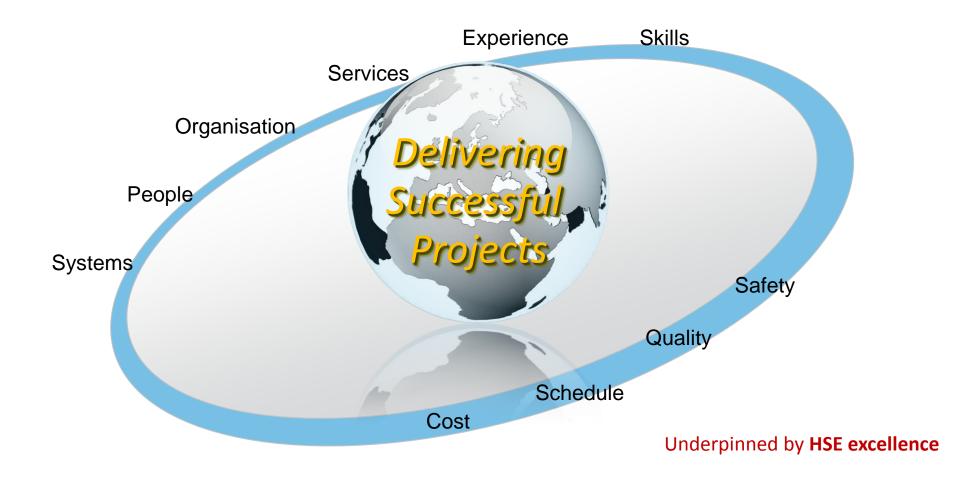


Technical Capability



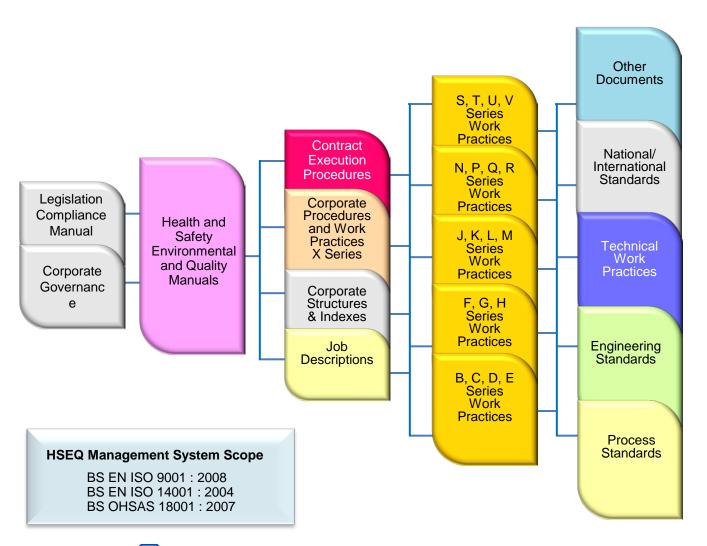


Foster Wheeler for Kazakhstan





Integrated Management System



Key

- **B** Proposals
- C Project Management
- D Process
- **E** Engineering
- F Materials Management
- **G** Construction
- H Information & Communication Technology
- J Human Resources
- K Quality Management
- Project Control
- M Sales and Marketing
- N Commissioning
- P Pharmaceuticals
- Q Finance
- R Oil & Gas/Business Solutions
- S Facilities Management
- T Fired Heaters
- U Legal Services
- **V** Compliance
- X Corporate





Project Delivery Platform

Kazakhstan

Project Delivery Model

Cost Estimate

Western Style

- User Owners, Investors, Cost Control
- Allowed contingency
- All the project expenses are included
- Construction part estimate based on past experience and quotes from Construction Contractors – Adequate price
- Quantities of bulk materials can be estimated

Kazakhstan State Style

- User State Expertise, Government Bodies
- Allowed contingency 0%
- Some expenses can not be included due to Estimate requirements i.e. procurement management, insurance, office support
- Construction estimate based on approved unit rates that is escalated according to the inflation rate – lower than adequate price
- No estimation on quantities of bulk materials



Cost Estimating Capabilities

What we propose within the cost estimate procedure:

to make resource based and analog based western style cost estimation with price proposals for future EPC execution

to make bridge between two styles of estimate and provide differences for understanding

to give client most convenient and effective way to control cost estimate prepared for state expertise





Challenges, which foreign EPC contractors are experiencing in Kazakhstan, could be mitigated if EPC contractors manage to build cooperation with Kazakhstan contractors

Key challenges existing in the Kazakhstani market

Key challenges Lack of experience in executing projects through **Engineering & EPC** contractors project **Need to comply** with Kazakhstani standards and execution norms Language barrier Lack of effective interaction and integration between Contractors and Kazakhstan Design Institutes (KDI) Limited experience of EPC contractors **Procurement** working with Kazakhstani equipment and materials suppliers Lack of experience of dealing with Kazakhstani Logistics logistic companies Difficulties experienced by EPC contractors Construction in managing Kazakhstani construction subcontractors

- experience challenges that are specific to Kazakhstan market
- Building cooperation with Kazakhstan contractors will allow more effectively mitigate these challenges and ensure EPC success in Kazakhstan



Key conclusions

- 1
- Oil and Gas Industry in Kazakhstan is currently going through development of new and modernization of existing facilities. Oil & gas companies are in decision-making process of choosing the Engineering & Construction companies to execute the projects
- 2
- Involvement of foreign EPC-contractors allows Kazakhstan oil&gas companies to manage and execute large projects with minimum increase of own resources
- 3
- The success on the Kazakhstan EPC market is possible, if foreign contractors are
- •Ready to take project execution risks under the EPC scheme
- Able to organize effective management
- •Capable to mitigate challenges, specific to Kazakhstan market, by **building** cooperation with Kazakhstan contractors
- 4
- At the same time Kazakhstani engineering and construction contractors are also demonstrating a strategic interest in the local EPC market and are actively expanding their services towards EPC. The winners could be both Kazakhstan and foreign contractors depending on their level of activeness and determination to propose the optimal project execution and value proposition for the Owner





www.fwc.com