

Project Data Sheet

Project	Kirinskoye Umbilical Project
Scope	Installation of Infield Umbilicals, Hydraulic Jumpers and Electrical Jumpers

1. Project Overview

The Kirinskoye field is located 30 km offshore east of Sakhalin Island, in the sea of Okhotsk belonging to the Russian Federation. The water depth is between 85-90 m. The umbilical project consists of 1 main umbilical and 4 infield subsea umbilicals connecting the subsea structures with the top-side on shore hang-off arrangement.



Figure 1 • Location Kirinskoye Field.

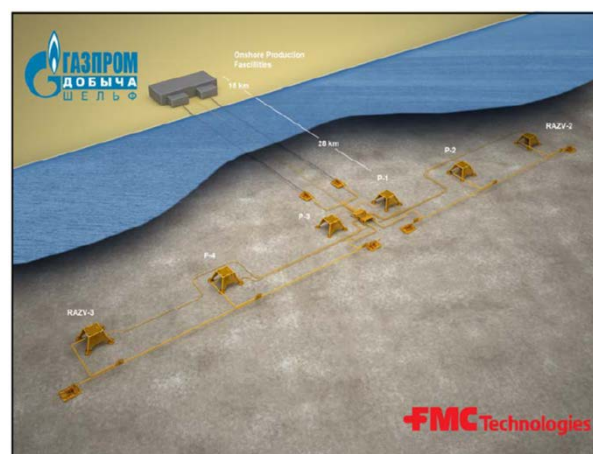


Figure 2 • Kirinskoye subsea development.

2. Scope of Work

DMM/Jan de Nul (JdN) has contracted Blue Offshore for the provision of project management, project & installation engineering and installation services. The installation has been executed from the JdN rock dumping vessel Simon Stevin. The poop deck of the Simon Stevin was changed into a subsea installation area. Blue Offshore's project team has set up the engineering management tools to ensure that all design and engineering performed complies with the relevant design codes and standards and processes and procedures within Blue Offshore's integrated management system.

The sequence of the engineering activities was fully detailed within the overall project schedule and clearly showed the engineering effort required throughout. The project team prepared and submitted the engineering documents to JdN and its client MRTS for review and approval. A detailed master document register was generated to identify the document deliverables. Blue Offshore's scope of work included the following activities:

- Project management & engineering;
- Project & installation engineering - monitoring & testing;
- Interface management;
- Review engineering & operational procedures;

- Provision of crew: project/field engineers, jumper installation superintendent, umbilical/jumper installation foremen;
- Provision of installation equipment, like:
 - Provision of under-roller drive systems 360mT c/w HPU;
 - Provision of tensioner 10 Te c/w HPU;
 - Provision of cable guidance;
 - Provision of overboarding chute;
 - Provision of installation rigging & ancillary installation equipment.

3. Mobilisation and installation

The mobilization of Blue Offshore equipment onto the Simon Stevin was done in Zeebrugge, Belgium and in Singapore. The reels with umbilical were lifted in Busan, Korea.



Figure 3 • Lifting of Blue Offshore equipment, Singapore.



Figure 4 • All reels mobilised at Busan, Korea.

The installation of 4 umbilicals and jumpers was executed successfully and the project was completed in October 2012.



Figure 5 • Ready for umbilical installation.



Figure 6 • SDU 1 in position on chute.