Global Marine

OIL AND GAS

CASE STUDY

Continued work for market leaders in the oil & gas industry

Global Marine worked successfully with oil & gas client Tampnet over a number of years. This project is the fourth of its kind in a series of critical North Sea installations.

Tampnet operate the largest offshore high-capacity communication network in the world in both the North Sea and the Gulf of Mexico. This project was designed to further enhance high-capacity communications networks in the North Sea, including a platform-to-platform cable system with four branching units.

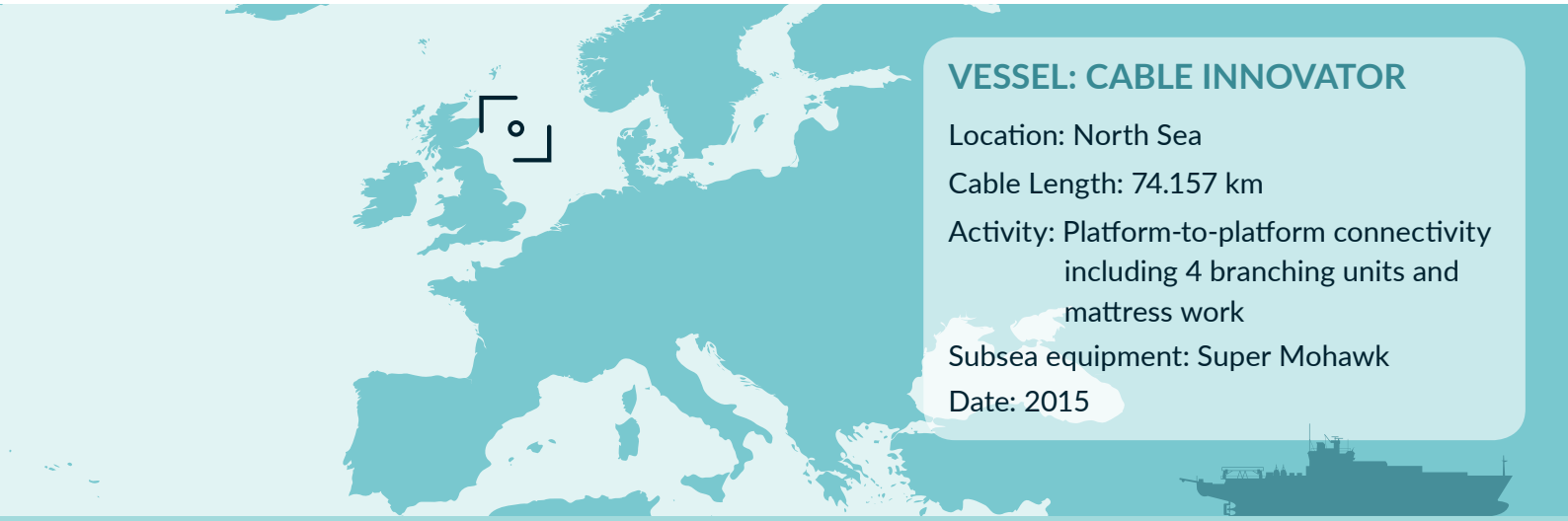
Following the successful installation of a prior Tampnet project in 2014, Cable Innovator was contracted to complete the work. The project incorporated 74.157 km of fibre optic cable, with a cable spur for the second platform also laid to allow for platform connection at a later date.

TECHNIQUES USED

The project initially required highly skilled route survey work followed by an innovative solution to install and future-proof pipeline crossings using mattressing.

Cable Innovator, an experienced offshore engineering vessel successfully executed the installation phase of the project operating in close proximity to both pipelines and platforms.

Plough burial was carried out for the whole length of the cable excluding a 9 km stretch passing through a boulder field.



VESSEL: CABLE INNOVATOR

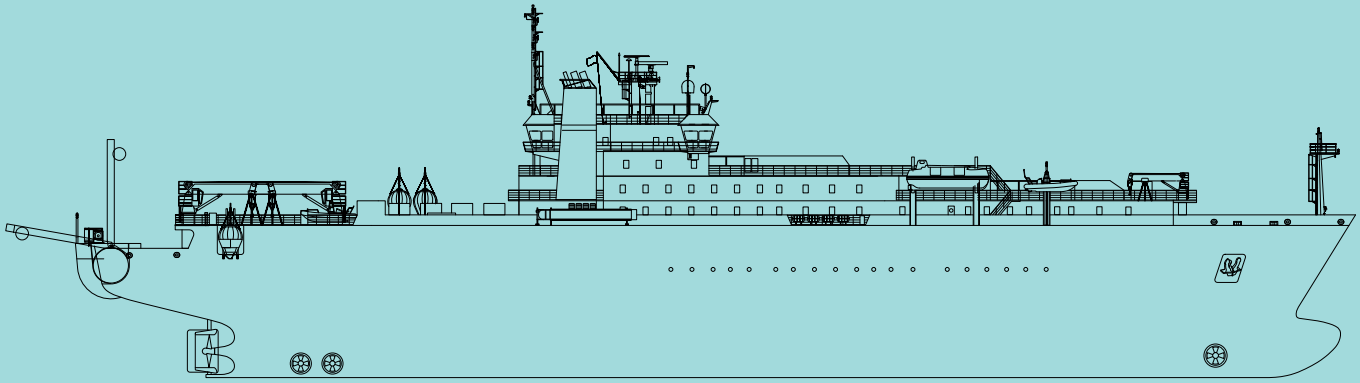
Location: North Sea

Cable Length: 74.157 km

Activity: Platform-to-platform connectivity including 4 branching units and mattress work

Subsea equipment: Super Mohawk

Date: 2015



KEY CHALLENGES

Initially, mattress deployment work was undertaken across various oil and gas pipelines, as well as umbilicals. This was prior to Cable Innovator laying fibre optic cable in the centreline of a channelled mattress on the seabed nearly 120 m below the surface.

The mattress design has been developed specifically for this project utilising concrete mattresses and combining this with recycled rubber providing greater support to the cable over the pipeline crossings and ensuring the cable is retrievable for future maintenance operations, should this be required. This inventive solution required the extensive capability of Cable Innovator and the Mohawk submersible ROV.

INNOVATIVE APPROACH

The newly developed Cable Crossing Units (CCU) were developed in conjunction with East Anglian based firm Scour Prevention Systems Limited (SPSL).

The innovative and patented solution used a matrix of end-of-life recycled rubber tyres to remediate and eliminate scour around offshore structures and over cables and pipes, which is recognised as a significant problem within the offshore energy industry.

The approach protects the cable from any unnecessary 'free-spanning' of the cable left suspended in open water presenting significant risk of damage due to commercial fishing activities.

> *"Our partnership with Global Marine has strengthened and this is as a result of their continued project delivery, meeting the oil & gas sectors' notoriously precise and high standards. It is clear they have exceptional capability in subsea cable operations. Their innovative engineering solutions and the ability to install subsea structures accurately and safely is an example of that."*
>
> Anders Tysdal
> Technical Director of Tampnet

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For further information on Global Marine please visit:
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