

Additional wells: co-exist brownfield upgrade



Client:

CNR

Location:

North Sea

Equipment:

Two subsea control modules and open communications hub

Depth

130 m

the Toni Field using Proserv's open communications hub (OCH) and two additional latest generation Proserv subsea control modules (SCMs). The existing topology utilised separate communications and power, enabling Proserv to co-exist with the existing umbilical power cores and share these services with the incumbent system.

Benefits

Proserv enabled CNR to improve production from the Toni field by adding two wells without a full system replacement. This not only saved significant CAPEX, but also avoided the carbon costs involved in the manufacture of a full subsea control system.

The flexibility of this co-exist system now enables CNR to consider other wells and field tie-ins, which were otherwise not available, thereby increasing the life and production from the Toni field.

Project Background

Operated by CNR, the Toni field consists of two subsea templates. CNR were looking for a solution to increase production by adding an additional well to each template. However, this was not possible because the existing OEM subsea control modules were obsolete. The incumbent controls supplier's solution for expanding capacity for additional wells was a full control system replacement. This was not economically viable, so CNR contacted Proserv to find a solution that prioritised augmentation and upgrade over replacement.

Solution

Proserv provided a brownfield upgrade solution. By utilising the power conductors for both communications and power, Proserv minimised any cross talk between the two systems. This approach provided the client with a cost-effective solution that did not require full system replacement, did not impact on the day-to-day operation of the Toni Field and provided the flexibility to continue to upgrade and add a further field into this controls infrastructure in the future.

Scope

Proserv upgraded the existing subsea control system on



“Proserv stepped up to the challenge of providing a co-exist controls solution to ‘extend and enhance’ our aging subsea asset where no viable solution was available from the OEM”

Paul Hunter – CNR Aberdeen