



Subsea structure during installation activities



## Field Information

The Brent field, operated by Shell, lies off the north-east coast of Scotland, midway between the Shetland Islands and Norway. It is one of the largest fields in the North Sea and is served by four large platforms - Alpha, Bravo, Charlie and Delta. When the Brent field was discovered in 1971, it was one of the most significant oil and gas finds made in the UK sector of the North Sea. At that time the expected life span of the field was 25 years at the most. To date, the Brent field has produced around three billion barrels of oil equivalent. Now, after many years of service to the UK, the Brent field is reaching the stage where almost all the available reserves of oil and gas have been retrieved. The next step in the lifecycle is to retire or 'decommission' the Brent field's four platforms and their related infrastructure.

Source: Shell.co.uk



OUR VALUES



Safety



Integrity



Sustainability



Performance



Collaboration



Innovation



PROJECT CLIENT

Shell

# Brent Bypass Phase 2 and Gas Export Pipeline

## Project at a glance

Subsea 7's workscope involved the Engineering, Procurement fabrication and installation of two structures, 7km pipeline and 11 spools.

The workscope allows the client to decommission two platforms from one of the North Sea's oldest and most successful field developments as well as providing tie-in points for future developments.

Full project information overleaf

## Highlights

- Award to execution in less than 12 months.
- Executed in collaboration with the client to utilise low cost specifications and industry standards.
- Completion will allow full decommissioning of the Brent Alpha and Bravo platforms.
- 7km of 16-inch pipeline.
- Use of 36-inch isolation tool and 36-inch mechanical connector (20t) on the FLAGS trunk line which supplies 30% of the UK's gas.
- 11 tie-in spools (16-inch and 36-inch).
- 2 subsea structures (150t and 250t).
- Project provides future tie-in point for Shell Penguins project.







# Shell Brent Bypass Phase 2 and Gas Export Pipeline

## Project

Brent Bypass Phase 2 and Gas Export Pipeline

## Location

Brent Field, North Sea. 186 kilometres north-east of Shetland

## Water depth

140m

## Project Type

EPCI

## Date Awarded

October 2017

## Date Completed

February 2019

## Vessels

Seven Navica,  
Seven Kestrel,  
Seven Falcon,  
Seven Atlantic,  
Various third party vessels

## Scope of Work

After the successful completion of Phase 1 of the Brent Bypass, Subsea 7 were awarded Phase 2 of the decommissioning scope of the Brent Field in the North Sea. Subsea 7's workscope involved the engineering, procurement, construction and installation (EPCI) of two subsea structures, 7km of 16-inch pipeline and tie-in of eight 16-inch and three 36-inch spools (includes one dummy spool).

The project allows the client to decommission two platforms from one of the North Sea's oldest and most successful field developments as well as providing tie-in points for future developments, including the Shell Penguins project which Subsea 7 is currently executing.

## Project Milestones

Subsea 7 committed to deliver the Gas Export Pipeline (GEP) workscope in a tight timescale which has allowed Shell to accelerate their decommissioning scope.

## Technology and Innovation

Use of a 36-inch isolation tool and 36-inch mechanical connector (20t) on the FLAGS trunk line which supplies 30% of the UK's gas. These items were selected for their cost and time benefits to the overall project. This connector was the largest of its kind installed in the world.

## Assets and Worksites

- Vigra Spoolbase in Norway was utilised for the fabrication and loadout of the 7km 16-inch pipeline.
- Various Subsea 7 vessels undertook offshore operations for this project along with several third party vessels.