



## North West Hutton Decommissioning

6<sup>th</sup> February 2003




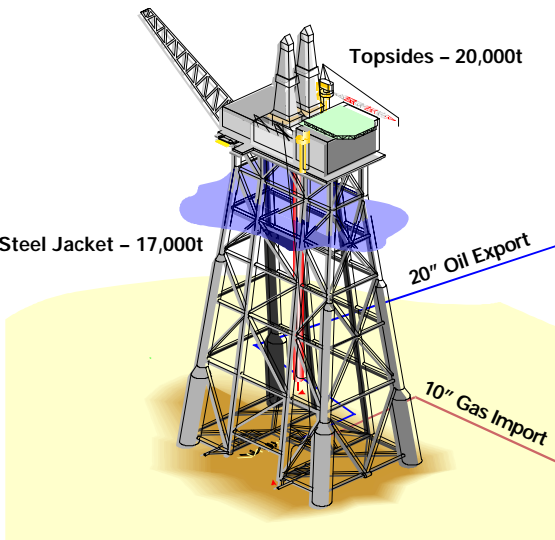
- The first stakeholder consultation on North West Hutton decommissioning took place in Aberdeen on 6<sup>th</sup> February 2003.
- A full report of the meeting is available on this website.

# Agenda



- Introduction
  - What we hope to achieve today
- Decommissioning overview
  - North West Hutton status
- Comparative assessment studies
  - Detailed discussion
- Stakeholder views
- Summary, future plans and wrap-up

# The NW Hutton platform



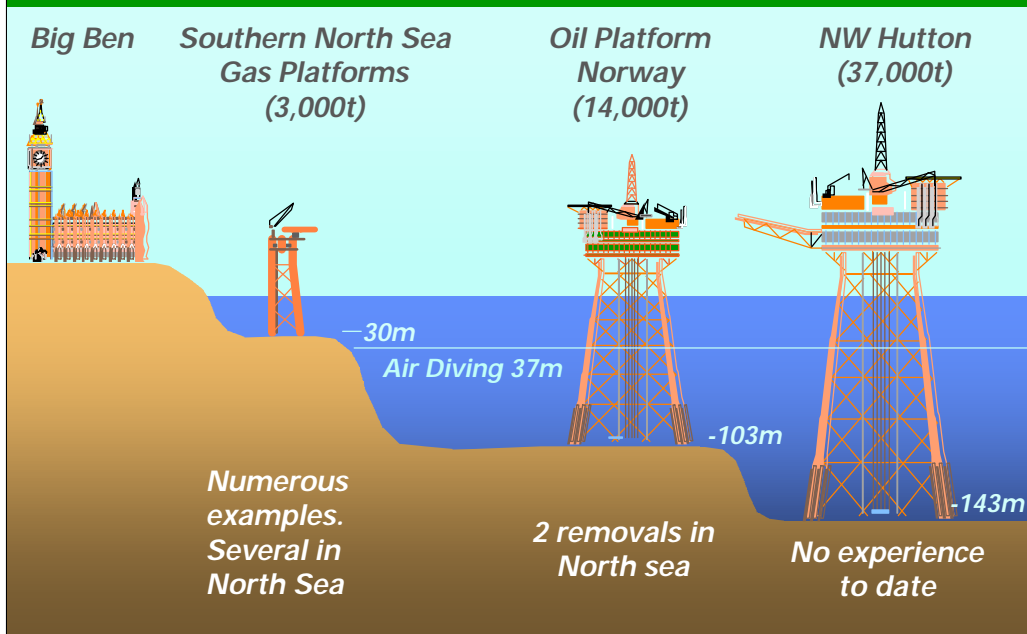
**Current Status**

- Platform operational, no oil production
- Well decommissioning ongoing
- Topsides cleaning commencing
- Decommissioning team in-place
- Comparative assessment studies starting
- Stakeholder dialogue underway

**Field Owners** BP 26% (operator), Enterprise Oil UK 28%, Mobil North Sea 20%, Cieco 26%

- North West Hutton was discovered in 1975 and came into production in 1983.
- The field is 130km NE of the Shetland islands.

## Fixed platform decommissioning experience



- Several smaller structures have already been removed from the Southern North Sea.
- North West Hutton will be the first fixed steel jacket installation of this size to be decommissioned.
- Note – some large structures (eg gravity base and tension leg platform) have been removed but they were designed for this.

## In perspective...topside



- Accommodation and support facilities for up to 210 personnel
- 2 Drilling rigs with 53 wells drilled from 40 well slots
- Power generation
- Water injection systems
- Capacity for 130,000 barrels per day of oil production
- Gas compression

- Total topsides weight is 20,000 tonnes.
- The topsides is made up of 22 modules each weighing between 500 and 2,500 tonnes.

## In perspective...jacket



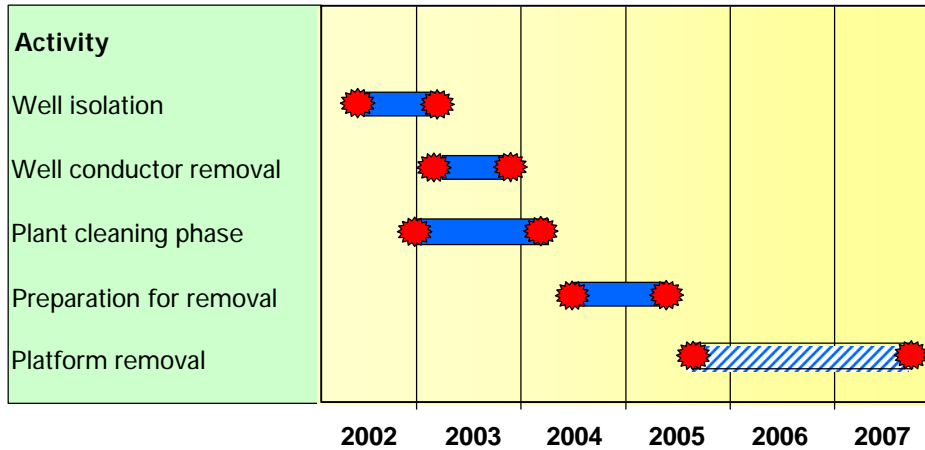
- The jacket weighs 17,000 tonnes and was built at Ardersier in the North of Scotland

## In perspective...jacket



- The jacket was launched from the barge and fixed to the seabed by a total of 24 steel piles, each of 48 inch diameter

## Decommissioning schedule



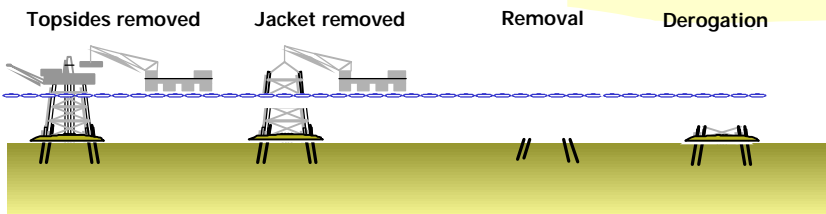
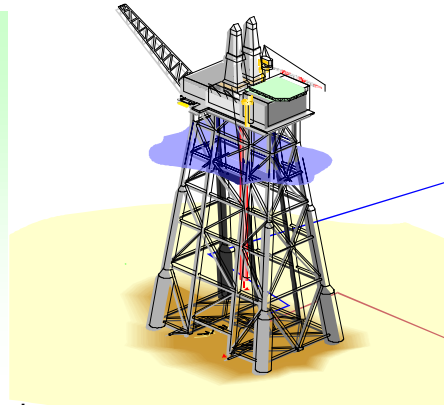
- The exact timing of platform removal can not be determined until other decisions have been made.
- We do not expect any major removal activity to start before 2005 at the earliest.
- The bar chart shows the possible window when removal might take place.
- This is likely to happen over a couple of 'seasons' as much of the activity is weather dependent.



## Regulation of decommissioning activity...

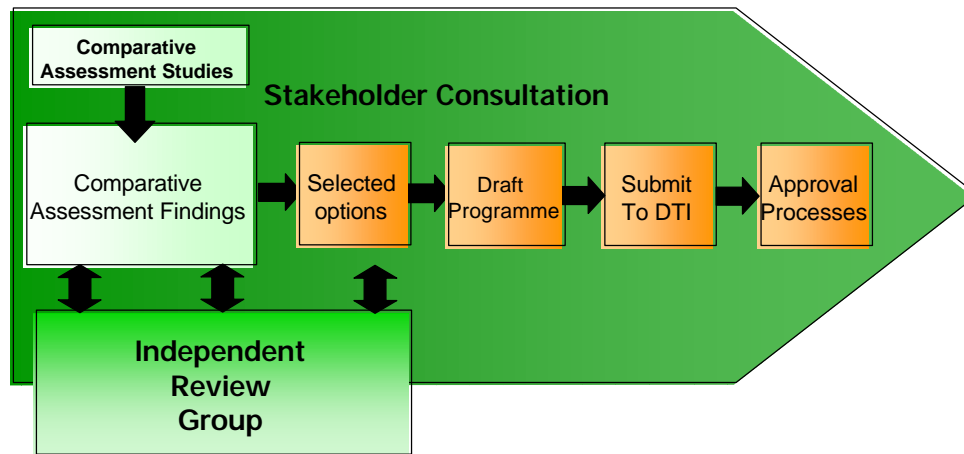


- Department of Trade and Industry (DTI)
  - Regulates the overall process for the UK North Sea.
  - Takes account of Oslo & Paris commission (OSPAR) policies and guidelines.



- The current regulatory position on the decommissioning of redundant offshore installations is based on the presumption that all of the structure should be removed.
- The DTI guidelines require a 'comparative assessment' to be carried out for certain components of the facility.
- If it is necessary to leave the footings of a steel jacket over 10,000 tonnes or a concrete gravity based structure in situ, the OSPAR process known as 'derogation' will be followed.

## Decommissioning programme process



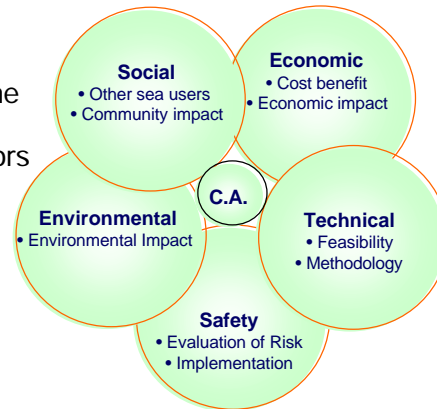
- BP will use the comparative assessment process to identify the best options for the jacket footings, pipelines and drill cuttings pile, in line with requirements of the DTI guidelines
- This will form a key part of our decommissioning programme submission to the DTI which we expect to make by the end of 2003.
- An Independent Review Group is being set up to audit the comparative assessment studies and process.
- Stakeholder consultation will also be a key part of the process

# Comparative assessment process



## Objectives of comparative assessment

- To evaluate the alternative options for footings, cuttings pile and pipeline (total removal + partial removal) against a number of factors
- Outcome: a balanced judgement of the HSE, technical, social, economic factors
- Independent verification



- The comparative assessment process will be a balanced judgement of key factors in five areas – environmental, economic, social, safety and technical.
- A series of wide ranging studies will be used as the input for this comparative assessment work.

# NW Hutton cuttings pile

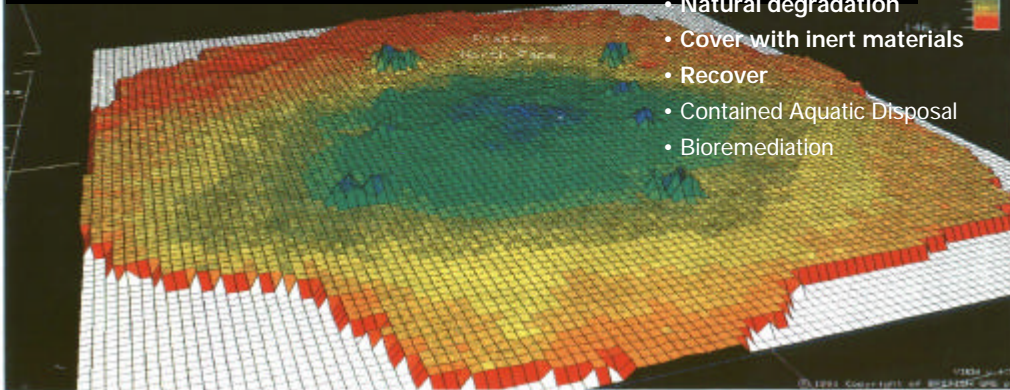


## Background

- Volume 25,000m<sup>3</sup> : 45% water; 48% rock; up to 7% oil and trace components
- Drill Cuttings Initiative
- Environmental Impact ?

## Options

- Natural degradation
- Cover with inert materials
- Recover
- Contained Aquatic Disposal
- Bioremediation



- This image of the NWH cuttings pile shows that the pile is mainly rock and water containing some oil and other components at trace levels.
- Environmental impact and options have been intensively studied by UKOOA including stakeholder consultation
- Five options identified. The last two - contained aquatic disposal and bioremediation - have been ruled out as not practical.

In perspective...jacket



- Context for the next slide

# Platform jacket....

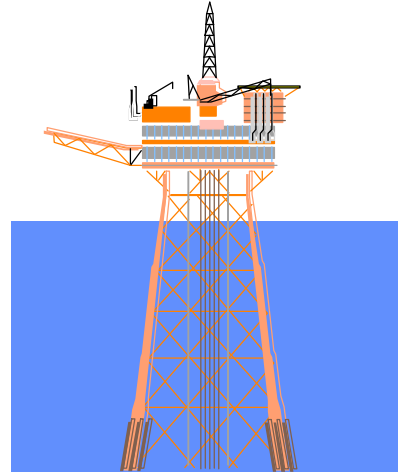


## Background

- Largest fixed jacket removal to date – 17,000 tons
- Water depth of 143 metres
- Sub-sea cutting and lifting of large pieces
- Technical and marine logistics challenge
- No technology to remove in one piece

## Options

- Remove complete jacket
- Footings remain in place (Derogation)



## NW Hutton pipelines



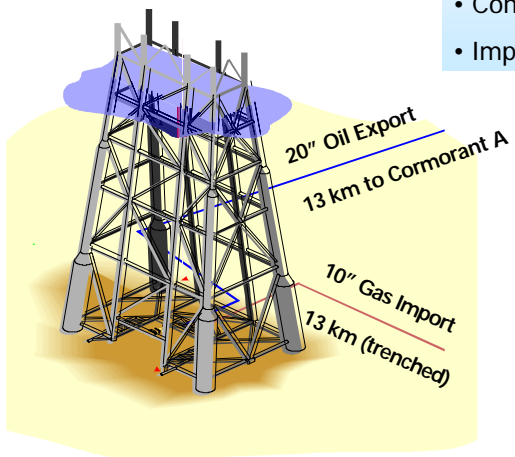
- The oil export line (PL 148) is 20 inch diameter with concrete coating and lies on the sea bed.
- This oil line runs from NWH to Cormorant A, a distance of around 10km.
- The gas line is 10 inch diameter and was trenched at the time of laying.
- This line runs between NWH and the Ninian field and BP is responsible for the first 12 km up to but not including the Ninian Tee.
- The SSIV (Sub Sea Isolation Valve) on the gas line will be removed as part of the decommissioning programme
- The Hutton TLP shown in the schematic has now been removed by the operator but the oil line has been left in place.

# Pipelines



## Background

- Technical challenge of removal
- Condition of the concrete coating
- Impact on environment and other sea users



## Options

- Complete removal
- Lines trenched and buried
- Lines on the seabed