

OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic

Report on the Special Consultative Meeting according to OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations

The United Kingdom's intention to issue a permit under Paragraph 3(a) and 3(b) of OSPAR Decision 98/3 for leaving in-situ the footings of the Brent Alpha steel jacket and each of the gravity based concrete installations of Brent Bravo, Brent Charlie and Brent Delta

This report reflects the views expressed and the conclusions reached at the Special Consultative Meeting held on 18 October 2019 in London on United Kingdom's intention to issue derogation for leaving in-situ the footings of the Brent Alpha steel jacket and each of the gravity based concrete installations of Brent Bravo, Brent Charlie and Brent Delta.

Introduction

A special consultative meeting in accordance with OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations was held on 18 October 2019 in London to discuss the UK's intention to issue derogation for leaving in-situ the footings of the Brent Alpha steel jacket and each of the gravity based concrete installations of Brent Bravo, Brent Charlie and Brent Delta. The Decision prohibits the dumping, and leaving wholly or partly in place, of disused offshore installations within the maritime area but sets out a process for considering derogations to this prohibition.

The meeting was attended by Belgium, Denmark, the European Union, Finland, Germany, Ireland, the Netherlands, Norway, Sweden, Spain and the United Kingdom along with the observers Greenpeace, Seas at Risk and International Organisation of Oil and Gas Producers (IOGP). The operator, Shell UK Limited was also present at the meeting. The Chair thanked all participants for attending the meeting, reminding them that the marine environment did not respect international borders. All participants committed to holding constructive discussions for a successful outcome and to make the best of the meeting as a precedent for future derogations consultation processes.

The Secretariat summarised the on-going formal consultation process in accordance with Annex 3 of Decision 98/3 recalling the steps in the consultation process to date.

Proposal from the United Kingdom

The United Kingdom presented the derogation proposal in accordance with Decision 98/3 for leaving in situ the footings of the Brent Alpha steel jacket and each of the gravity based concrete installations of Brent Bravo, Brent Charlie and Brent Delta.

The United Kingdom referred to their 12 CGBS¹ offshore installations, 3 of which had been subject to a derogation; another 3 were the Brent field installations, and the remaining 6 would be considered

¹ Concrete Gravity Based Structure

on a case by case basis. The United Kingdom confirmed that OSPAR legislation as well as other applicable regulations were taken seriously when dealing with possible derogations.

The United Kingdom clarified that the Brent field case had been considered after more than 13 years of close work with the operator including a programme of stakeholder engagement, the establishment of an Independent Review Group (IRG) and a Cell Management Stakeholder Task Group (CMSTG) and a 60-day public consultation for the Decommissioning Programme.

The operator, Shell UK Limited described the Brent field situated 180km north-east of Shetland. The CGBS platforms were described as being as tall as the Eiffel Tower at 300 metres and weighing 300,000 tonnes each. There were 64 cells across the three Brent CGBS each being 60 metres tall and 20-metre-wide with wall thickness of almost 1 metre. 42 of the cells had been used for oil storage during operations.

The operator stated that it had explored potential reuse options including carbon dioxide storage and wind farms but did not consider these options viable due to the age of the installations and the distance to shore.

Their Comparative Assessment recommended leaving in place the footings of the Brent Alpha Steel Jacket and Brent Bravo, Brent Charlie and Brent Delta gravity based concrete installations including the legs penetrating the sea surface, the sediments and oily water in the storage cells and the contaminating material in the legs. The study concluded that the environmental and safety legacy risks were minimal. Their planned decommissioning activities included the sealing of the 154 wells on Brent field, the removal of platform's topsides, the removal of the attic oil and viscous fluid on the top of the storage cells and the cutting of the upper portion of Brent Alpha steel jacket. The United Kingdom made clear that the operator would be liable in perpetuity and would not be able to walk away from its obligations.

Objection from Germany

Germany presented their objections to the derogation proposal. The main concerns of the German government were the comparative assessment methodology used by the operator, the likely long-term risk to the marine environment due to hazardous substances and oil residues left in the cell tank structures, and the risk of the CGBS legs to shipping and fishing, also being a legacy environmental hazard.

Germany informed that the Special Consultative Meeting was requested in June 2019 in accordance with Annex 3 of OSPAR Decision 98/3 as the objections had not been solved during the mutual consultation process but thanked the United Kingdom for the information provided. Germany also thanked the support received by Belgium, the European Union, the Netherlands and Sweden.

The independent report "Review of the Shell/Exxon Brent Decommissioning Derogation Assessment and of the corresponding proposal by UK BEIS" prepared by Scientia et Sagacitas Ltd supported the objections and highlighted the uncertainties on long term environmental projections. Germany questioned the operator's liability in 200 years' time.

Germany recalled the environmental responsibility of Contracting Parties to ensure consistency with the commitment to UN SDGs in managing this legacy towards future generation.

Input from Contracting Parties and Observers

Belgium thanked all concerned parties for the meeting aiming to find a constructive and satisfactory solution. Belgium considered that the operator's interests biased the actual proposal and requested the United Kingdom to consider in situ remediation and new removal techniques still under development.

Denmark generally shared the concerns raised by Germany. Denmark expressed their concern on leaving the cell contents in place and requested the United Kingdom to update the Comparative Assessment using the Best Available Techniques and the Best Environmental Practice. Denmark considered of great relevance the work addressed by the Offshore Industry Committee and welcomed decisions based on the precautionary principle.

The European Union supported the objections raised by Germany and welcomed the effort made by the United Kingdom in assessing all possible technical solutions. The European Union highlighted the United Kingdom's environmental responsibility when issuing the permit as an OSPAR Contracting Party and as an EU Member State and referred to the meeting held on 9 October 2019 between the European Union and the United Kingdom to tackle the compliance with the EU requirements as regards the Offshore Safety Directive and Waste Framework Directive.

The Netherlands highlighted that the issue of healthy and sustainable oceans had the attention of the public and the Dutch Parliament and stated that OSPAR was committed to managing disused offshore installations responsibly. The Netherlands presented an independent experts review of the proposal. This report concluded that the available documents did not adequately support that leaving in situ part of the foundations with storage cells containing contaminated material as being the best option from an environmental and safety point of view.

Norway expressed their confidence in the United Kingdom's position, backed up by many years of close work with the operator, several studies and many consultations. Norway considered all possible options had been correctly assessed and had no comments on the Comparative Assessment nor on the permit to leave in situ the footings of the Brent Alpha steel jacket and each of the gravity based concrete installations of Brent Bravo, Brent Charlie and Brent Delta.

Sweden supported Germany and expressed their concern on the risk of leaving in situ disused offshore platforms for future generations.

IOGP informed the meeting that 80 offshore installation among the 1740 existing in the OSPAR Region were candidates for derogation, 27 of them being CGBS. Of these 27, only 17 had storage cells. The remaining installed CGBS installations included 10 in Norway, 9 in the United Kingdom, 2 in the Netherlands and 1 in Denmark. IOGP considered all assessments needed to be sound and robust with stakeholder's involvement and informed that industry was investing in new decommissioning technologies, including vessels for off-shore projects.

KIMO International's position was presented. KIMO International welcomed the action of the United Kingdom in seeking input from national OSPAR stakeholders and considered that the assessment should address adequately the long term environmental and navigational risks instead of prioritising the operator's economic interests.

Greenpeace supported KIMO's position and believed that removing the cell contents was technically possible to avoid leaving important quantities of hazardous substances at sea. Greenpeace expressed

concerns about the toxicity of the cell contents and the fact that oil had been considered as a biodegradable substance.

Seas at Risk also considered the conclusions of the Comparative Assessment prioritised the operator's economic interests.

Discussion of the unresolved issues

Comparative Assessment

The operator highlighted the robustness of the Comparative Assessment. The five criteria (environmental, technical, safety, societal and economic) had been split in twelve sub criteria equally weighted to be considered in the decision-making process.

Germany disagreed on the sub criteria and the weightings used on the Comparative Assessment and stated that the methodology introduced high level of mathematical bias towards "leave in situ" as the preferred option. The European Union mentioned that only one of the environmental sub criteria was long term. Greenpeace highlighted that a different outcome was expected when more appropriate weightings were used.

The operator clarified that the methodology used in the Comparative Assessment was consistent with the 2018 BEIS² Guidance, which didn't estimate weightings. The assignation of equal weight had been a starting point before talking to stakeholders. The Independent Review Group had concluded that the scientific, engineering and other evidence used, and the rationale developed, appeared adequate to make decisions.

The meeting concluded that the Comparative Assessment was a useful decision support tool to assist in the selection of a final recommended option, although there remained different views on the methodology. A workshop planned for December 2019 under the Offshore Industry Committee of OSPAR was considered as a first step to look further into a methodology for Comparative Assessments and bring transparency to the implementation of OSPAR Decision 98/3.

Cell content

The operator described the 64 cells across the three Brent CGBS, 42 of which had been used for oil storage. The operator referred to the cell contents (from top to bottom) as clear oil (attic oil), viscous fluid (interface liquid), oily water and cell sediment.

The United Kingdom explained that the Comparative Assessment concluded that the preferred option regarding the cell contents was to leave in place the oily water and cell sediments due to technical challenges and safety risks.

The operator mentioned that samples had been taken from the top of 3 cells of the Delta CGBS. The content of 8 of the cells had been mapped by a 3D sonar device to measure the sediment's surface topography and calculate the volume.

Germany expressed their concern of leaving in situ 640,000 m³ of oily water and 40,000 m³ of sediment containing 11,000 m³ tonnes of crude oil. The effects on the marine environment were unpredictable as the chemicals contained in the sediments were unknown. Germany considered that the volumes and composition of the cells needed further assessment.

² Department for Business, Energy and Industrial Strategy

The United Kingdom acknowledged that sampling data was limited, but that the obtained results confirmed the data estimated from historical operating records and computer modelling studies. Samples had been taken to validate the initial assumptions, which were overestimated to cover measurement uncertainty. All measured data fell under the initial assumptions.

The United Kingdom confirmed that the validation process was still on-going, as cell water sampling and sonar mapping continued.

The Netherlands requested the United Kingdom to carry out further analysis into the exact composition of the material contained in the storage cells and into additional techniques to remove the material from the cells in an environmentally sound manner. Belgium proposed bioremediation as a technique to deal with the cell contents and Sweden suggested to take samples when the attic oil was being removed.

Ireland proposed that the results of any further sampling could be shared with OSPAR Contracting Parties. Greenpeace highlighted the importance of sampling sediments and not only oily water.

IOGP commented that a more comprehensive picture of the cell content implied a better understanding of the consequences of the environmental impact.

The operator confirmed the full content removal was technically feasible, but would take time and carry risks.

The meeting concluded that prior to determining what action if any to take in relation to the cell contents there must first be a common understanding between Parties on the composition and characteristics of the cell contents. More sampling and analysis and the sharing of results was needed in order to reach a common understanding so that the best decision could be made.

Management of the CGBS legs

According to the Comparative Assessment, leaving in place the CGBS legs was a better option than their partial removal. The United Kingdom referred to the maritime collision risk at lower than 1 in 10,000 years and an exclusion zone will be marked on charts, added to the FishSAFE database and that a safety zone would remain in place.

The operator pointed out the technical difficulties and risk associated with Diamond Wire Cutting of the reinforced concrete legs. The operator commented that it was very difficult to predict how and when the structures will collapse and mentioned that studies showed that the parts of the legs above sea level could remain for 150-200 years and the parts below the sea level could last for another 300-500 years.

Germany considered that the leaving in place of the legs of the CGBS installations posed a long-term risk for shipping as maritime traffic was predicted to increase in the future in the North Sea area and that there was a risk of legs collapsing over time in an uncontrolled manner. Germany considered that this risk could be addressed through a controlled placement of the legs on the seabed. The Netherlands supported Germany and requested to conduct further research into the removal of the legs up to 55 meters below sea level.

The meeting concluded that although navigational risks remained low when taking the appropriate security measures, the controlled removal of the legs could be considered after a further evaluation of the cell contents.

Conclusion

The Chair recognised the good use that Contracting Parties had made of the cooperation mechanism under Decision 98/3 and thanked them for the collaborative spirit throughout the meeting. He highlighted the willingness of all participants to engage in dialogue as a reflection of their individual and collective commitment to the UN framework and to their compliance with the OSPAR Convention, UNCLOS and European legislation.

The Chair, looking to the coming 80 potential derogations of installations based in four OSPAR Contracting Parties, emphasised the need for cooperation respecting the competence of the authorities as well as considering the ecosystem-based approach, the precautionary principle and the evolving BAT and BEP.

The meeting concluded that the Comparative Assessment was a useful decision support tool to assist in the selection of a final recommended option, although there remained different views on the methodology. A workshop planned for December 2019 under the Offshore Industry Committee of OSPAR was considered as a first step to look further into a methodology for Comparative Assessments and bring transparency to the implementation of OSPAR Decision 98/3.

With regard to the cell content and the CGBS leg management, two interlinked issues, the meeting concluded that prior to determining what action if any to take in relation to the cell contents there must first be a common understanding between Parties on the composition and characteristics of the cell contents. More sampling and analysis and the sharing of results was needed in order to reach a common understanding so that the best decision could be made. The meeting concluded that although navigational risks remained low when taking the appropriate security measures, the controlled removal of the legs could be considered after the evaluation of the cell contents.

The United Kingdom would consider all views expressed at the meeting and would further engage in discussions with parties before taking a decision on whether to issue the permit for derogation. Germany declared its full support and willingness to further consult both bilaterally and within an OSPAR context in order to seek a viable and agreeable solution to the questions discussed.

The meeting was considered by the Chair and all participants as a step forward in agreeing common OSPAR standards for comparable challenging decommissioning cases.