

DNO North Sea (ROGB) Limited 2021 OSPAR Public Statement

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Schooner & Ketch Decommissioning Project

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Security Classification			
Open	No consequence		
	Information that has already been published (e.g. on Internet or in brochures) or released for publication by competent unit shall be classed 'Open'		
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Confidential	Severe, major or catastrophic consequence		
	Information to which only employees identified by name in a distribution list may have access shall be classed Confidential		



Content

1	Intro	luction	.4
2	DNO	s UKC Operations	.4
3	DNO	s Health, Safety, Security and Environmental (HSSE) Policy	.7
4	DNO	s Management System	.9
5	2021	Environmental Performance	.9
	5.1	2021 UKCS Offshore Operations	.9
	5.2	2021 Summary of Operations and Reportable Incidents	10
	5.3	2021 Chemical Use and Discharge	
	5.4	2021 Waste	
	5.5	2021 Atmospherics	13
	5.6	2021 Unplanned Releases	
	5.7	2021 Other Reportables	14
6	2021	Key Performance Indicators (KPIs)	15



1 Introduction

Under the OSPAR Recommendation 2003/5, the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) requires that all existing United Kingdom Continental Shelf (UKCS) oil and gas operators undertaking offshore operations prepare an annual statement of their environmental performance, covering the calendar year, and make that statement available to the public. This document represents DNO North Sea (ROGB) Limited's annual public environmental statement for 2021 in relation to UKCS OSPAR reporting.

2 DNOs UKC Operations

DNO is an independent oil and gas group focused on exploration, appraisal and production in Norway, the Atlantic Margin and the UKCS. In January 2019, DNO successfully acquired Faroe Petroleum (ROGB) Limited (Faroe). Faroe had historically operated the two producing assets (Schooner and Ketch), located within the UK Southern North Sea gas basin. The Schooner and Ketch fields are located within Block 44/26a, and Blocks 44/28b respectively, approximately 150 kilometres from the Theddlethorpe Gas Terminal (TGT) on the Lincolnshire coast (Figure 2-1). The Schooner and Ketch Fields ceased production in 2018 in line with TGT's cessation of operations and were subsequently granted formal Cessation of Production (COP) in November of the same year. DNO is the former licensee for the Schooner and Ketch fields and is ultimately accountable for the safe and responsible decommissioning of both fields.

In 2021 the duty holdership for the Schooner and Ketch installations was successfully transitioned from Petrofac to Three60 Energy. The environmental performance related to the operation and maintenance of these installations will be reported between the Petrofac and Three60 Energy Public Statements for 2021. DNO is the Well Operator for Schooner and Ketch, as well as Pipeline Operator. This public statement specially relates to Schooner and Ketch wells and pipelines operations.



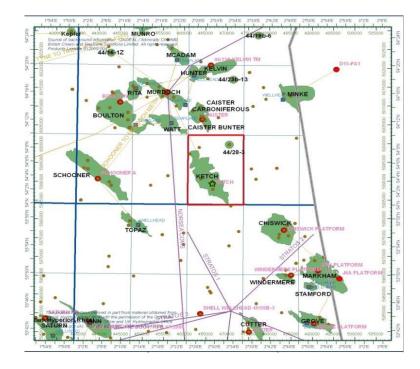


Figure 2-1. Location of the Schooner and Ketch Fields.

Both the Schooner and Ketch installations (Figure 2-2) are four-legged, twelve-slot Normally Unmanned Installations (NUI). When the platform wells were producing, they were remotely controlled from the Murdoch Field platform. Gas and condensate were exported to Murdoch, where separation and compression occurred before the gas was transported via the (then) ConocoPhillips-operated Caister Murdoch System (CMS) infrastructure to TGT for processing.





Figure 2-2. Schooner and Ketch NUIs.

In association with COP, DNO have submitted Decommissioning Programmes (DPs), coupled with the supporting Environmental Appraisal and Comparative Assessment reports, for Schooner and Ketch. Final approval of both DPs was received from OPRED in July 2019. The pipelines from the Schooner NUI (16" wet gas export pipeline (PL1222) and 3" piggy-back methanol pipeline (PL1223)) and the Ketch NUI (18" wet gas export pipeline (PL1612) and 3" piggy-back methanol pipeline (PL1613)) to the Murdoch Field have been successfully cleaned, flushed, flooded with seawater and remain in situ until they are decommissioned at a later stage in accordance with the of the DPs. It is noted that in 2021, both Schooner and Ketch pipelines were disconnected from Murdoch. Disused Pipeline Notifications for the Schooner and Ketch pipelines have been submitted accordingly. The 15.2 km 6" gas export pipeline from Topaz (operated by Ineos) to Schooner has also been cleaned, flushed and flooded with seawater. The scope of the Schooner and Ketch decommissioning project is:

- The plug and abandonment (P&A) of 20 platform wells (9 at Ketch and 11 at Schooner) and one sub-sea well at North West Schooner;
- The burial of the Schooner pipelines at the Schooner and Murdoch ends and the cut and recovery of the Ketch pipeline;
- The recovery of miscellaneous grout bags and concrete mattresses at various points along the pipelines; and
- The removal of topsides and jackets from both the Schooner and Ketch installations.

All items recovered shall be safely transported to suitable, permitted and licensed onshore facilities for recycling and disposal. Upon completion of the decommissioning scope, any debris shall be removed. In accordance with approved DPs, periodic surveys will also be conducted to monitor any infrastructure that has been left in-situ.

In 2020 DNO temporarily suspended all offshore decommissioning activities due to the onset of the COVID-19 global pandemic, although P&A operations re-commenced at Ketch May 2021. In addition to the Ketch P&A campaign, operations for 2021 focused on the Duty Holder



transition from Petrofac to Three60, planning for the Ketch heavy lift removal operations, the Schooner P&A campaign, and pipeline decommissioning operations.

3 DNOs Health, Safety, Security and Environmental (HSSE) Policy

DNOs is committed to managing the integrity of its operations and business activities responsibly. Our HSSE Policy (Figure 3-1) is a public commitment to this which supports our core values and focuses DNOs Management Systems on robust risk management and incident prevention.



Figure 3-1. DNO's HSSE Policy.

DNO				
Title:	Health, Safety, Security and Environmental (HSSE) Policy Statement	Pages:	2	
Rev.:	3	BU / Function:	Corporate / HSE	
Accountable:	Bjørn Dale	Published:	28/04/2022	
Owner:	Chris Spencer	Valid from	25/04/2022	
Author:	Hossein Safaei	Nest Revision:	11/05/2023	
Rel. docs.:	[RelatedDocsTxt]			

Health, Safety, Security and Environmental (HSSE) Policy Statement

DNO is committed to managing the integrity of its operations and business activities responsibly. Consideration of the health, safety and security of our personnel, our other stakeholders and the environment is central to how we conduct our business.

We strive to create a rewarding working environment for our employees, contractors and the communities in which we operate. We are committed to the HSSE goals of:

- Avoiding harm to all personnel involved in, or affected by, our operations;
- Preventing pollution and minimizing the impact of our operations on the environment and biodiversity;
- Complying with the applicable legal and regulatory requirements where we operate as well as relevant industry standards; and
- Achieving continuous improvement in our HSSE performance

This Policy Statement shall be implemented through the Company's business management system, "the DNO Way", to ensure:

- A work environment characterized by respect, trust, cooperation, and a shared understanding of DNO's values where concerns can be freely raised;
- HSSE is integral to the roles and responsibilities of everybody who works for and with DNO;
 HSSE risks are identified, understood, assessed and controlled;
- Delivery of continuous improvement by setting clear HSSE goals at the business unit and individual levels, achieving these goals through rigorous planning and execution of work and a trained and competent workforce and learning from our successes and failures; and
- Engagement with our suppliers and contractors to ensure alignment with our values and goals.

Our commitment to health and wellbeing:

- Prevention of work-related illness;
- Active health promotion to reduce health risks associated with the work environment;
- Allowing freedom of association and expression; and
- Maintain a diverse workforce free from discrimination.

Our commitment to safety:

- Provision of a safe workplace, free from injuries and accidents;
- Maintenance of asset integrity through sound design, maintenance, inspection, operations and management of change procedures; and
- Ensure an open reporting culture for incidents and near misses from which we learn to avoid recurrent incidents.

Our commitment to the environment and communities:

- Minimize undesirable effects on the environment and biodiversity resulting from our activities:
- Promote the reduction of emissions and pollution from our operations; and
- · Contribute to the sustainable development of the regions where we operate.

Our commitment to security:

- Provide a secure work environment for all personnel involved in our activities and
- Abide by the Voluntary Principles on Security and Human Rights.

The responsibility for compliance with this policy lies with everybody who works for and with DNO. It is the role of the Managing Director of DNO ASA to ensure compliance with this Policy and the DNO Way through line management combined with regular reviews and audits.

4 DNOs Management System

DNO has implemented a Business Management System (BMS) that fully integrates Health, Safety, and Environment (HSE) policies, standards, procedures, and work instructions. The general purpose of the BMS is to prevent DNO activities from putting people, the environment, property or the reputation of the company at risk and aims to:

- Achieve full compliance with the OSPAR Recommendation 2003/5 to promote the use and implementation of Environmental Management Systems by the offshore industry;
- Achieve the general objectives of the OSPAR offshore strategy;
- Achieve the environmental goals of the prevention and elimination of pollution from offshore sources and of the protection and conservation of the maritime area against other adverse effects of offshore activities; and
- Maintain continual improvement in environmental performance.

The environmental elements of the BMS:

- Have been implemented at a strategic level and integrated into corporate plans and policies;
- Identify the organisation's impacts on the environment and set clear objectives and targets to improve its management of these aspects and the organisation's overall environmental performance;
- Ensure preventative actions are incorporated to avoid negative impact to the environment;
- Are designed to deliver and manage compliance with environmental regulations on an ongoing basis, and to quickly initiate corrective action where potential cases of legal non-compliance are identified;
- Identify DNO's significant resource use and aim to deliver good resource management; and
- Incorporate assured requirements and performance metrics that demonstrate the above and can be communicated in a transparent manner.

5 2021 Environmental Performance

5.1 2021 UKCS Offshore Operations

DNO aims to minimise its environmental impact from operational and business activities undertaken annually. Offshore operations that were conducted by DNO as Wells and Pipelines Operator in the UKCS in 2021, are outlined in Section 5.2.



5.2 2021 Summary of Operations and Reportable Incidents

Table 5-1. provides a summary of the Schooner and Ketch operations undertaken during May to December 2021. No wells operations took place between January and April 2021 due to COVID suspension and focus on the Duty Holder transition from Petrofac to Three60 Energy.

Please note that reportable emissions relating to the Schooner and Ketch installations for 2021 are presented in Petrofac and Three60 Energy's Public Statements for 2021 as Installation Operators (Duty Holders).

Drilling & Well Related Activities	Unit	Schooner Platform	Ketch Platform
Wells Drilled	No. of Wells	0	0
Well Operations (includes P&A)	No. of Operations	0	9 P&A'd
Pipeline Related Activities			
Pipeline Operations	No. of Operations	Disconnect from Murdoch end (undertaken by Harbour Energy)	Disconnect from Murdoch end (undertaken by Harbour Energy)

Table 5-1. DNO's 2021 UKCS Operations

5.3 2021 Chemical Use and Discharge

During 2021, a total of 1,817,273 kg of chemicals were used throughout P&A operations. A total of 37,259 kg of chemicals were discharged to sea (Figure 5-1). All chemicals used and discharged during operations were in accordance with the Offshore Chemical Regulations (OCR) and were fully permitted. There were no instances of chemical permit non-compliance in 2021.



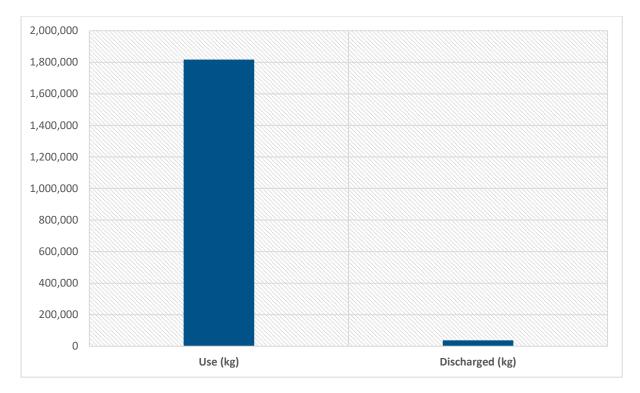


Figure 5-1. 2021 Chemical Use and Discharge Summary

5.4 2021 Waste

Throughout the 2021 P&A Operations, a total of 4,044.66 tonnes of waste was generated. Of this 655.23 tonnes (16.20 %) was reused, 721.37 tonnes (17.84 %) was recycled, 31.53 tonnes (0.78 %) went for waste to energy, 2,635.34 tonnes (65.16 %) was treated and 1.19 tonnes (0.03 %) was incinerated. Please note that the vast majority of treated waste was well fluids that were unable to be injected into designated donor wells. No waste went to landfill. Please see Figure 5-2 for an annual summary of 2021 waste and Figure 5-3 for a monthly breakdown of the waste.



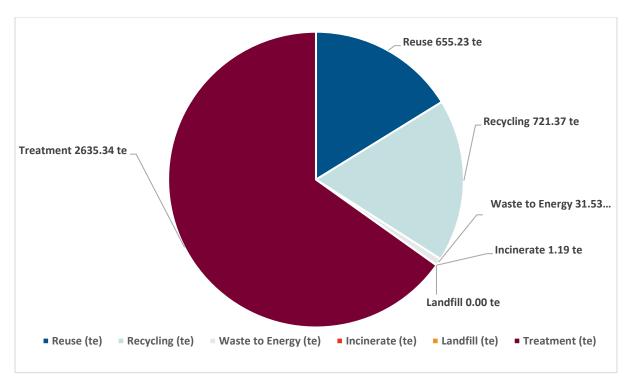
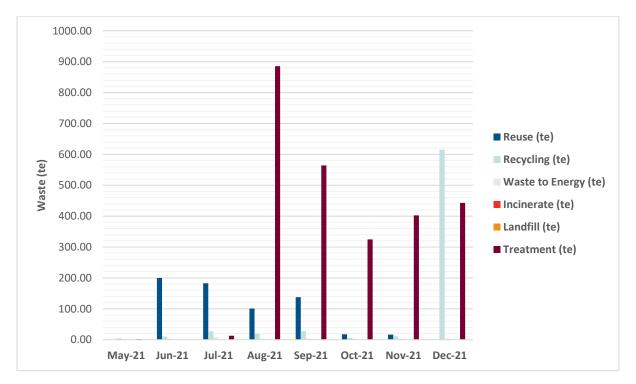


Figure 5-2. 2021 Waste Treatments - Annual Breakdown

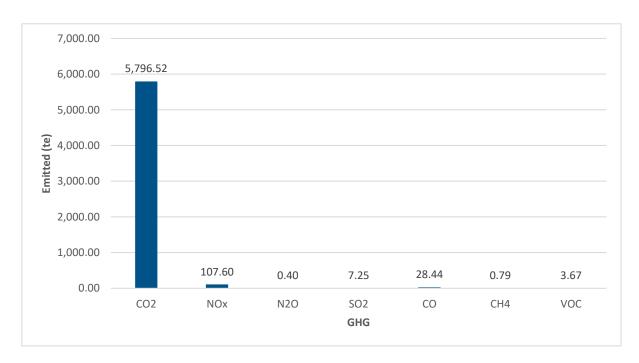
Figure 5-3. 2021 Waste Treatments - Monthly Breakdown

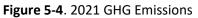


DNO North Sea (ROGB) Limited 2021 OSPAR Public Statement SCKE-FPROGB-S-RA-0057 Rev 01

5.5 2021 Atmospherics

Rig diesel usage during 2021 P&A operations totalled 1,811 tonnes, equating to approximately 5,797 tonnes of CO2 (Figure 5-4). Furthermore, approximately 0.52 tonnes of natural gas was vented unignited to the atmosphere during P&A operations. This is included within the CH₄ and VOC emissions illustrated in Figure 5-4.





5.6 2021 Unplanned Releases

Unplanned releases to sea can have a negative impact on the marine environment, and DNO strive to minimise this risk with a focus on prevention. DNO ensure regulatory-approved Oil Pollution Emergency Plans (OPEPs) are put in place for all relevant operations. During 2021, there were zero unplanned chemical release and zero unplanned oil releases, as shown in Table 5-2.



Operation	0	il	Chemical	
P&A	Total Number of Notifications	Total Quantity (tonnes)	Total Number of Notifications	Total Quantity (kg)
	0	0	0	0

 Table 5-2.
 2021 Unplanned Releases.

5.7 2021 Other Reportables

There were a number of reportable incidents that occurred in 2021; one General NC, two PON2(s), one PON10, one Reportable Oil and Gas Incident (ROGI) and two RIDDOR (Reporting of Injuries, Diseases, Dangerous Occurrences Regulations) events were submitted to the regulators in 2021.

- The General NC was a result of the overuse of garnet utilised during well conductor cut activities at the end of the Ketch P&A campaign.
- A PON2 was submitted following identification that the debris cap on the NW Schooner subsea well was missing. It is thought it may have been snagged and removed by a trawler/fishing net. A 200 m x 200 m area centred on the well was searched, with no sight of the cap.
- A second PON2 was submitted when a lifting sling dropped into the sea during Ketch P&A operations.
- The PON10 was submitted when the Nav Aid lights between the Ketch NUI and the Valaris Gorilla V rig failed to sychronise.
- One ROGI was submitted for the lifting sling that was dropped into the sea.
- Two RIDDORS were submitted for COVID outbreaks that took place on Valaris Gorilla V rig in September and October 2021.



6 2021 Key Performance Indicators (KPIs)

DNO have set Corporate HSE KPIs for the business to meet during 2021. These are presented in Table 6-1, as well as KPIs specific to the Schooner and Ketch Decommissioning project as presented in Table 6-2.

Defined KPI	Status
Zero fatalities or permanent disabilities.	
Zero high potential incidents (HIPOS) from operated activities.	One ROGI
No unplanned significant reportable discharges from operated activities.	
One Winning Team.	
Working Environment – 100% close-out of actions from mapping.	
Zero serious incidents or serious harm to the environment from unplanned discharges/emissions.	
Business Unit to establish emissions and energy reduction accounting and promote reduction in emissions.	
Plans and controls to handle pandemic in place.	
Ensure technical integrity.	
Ensure quality.	
Ensure compliance/reputation.	

Table 6-1. DNO's North Sea Business Unit HSEQ NS KPIs for 2021 (including status).



Defined KPI	Status
90% compliance with 2021 ARV Plan for Schooner & Ketch Decommissioning Project.	86 %
90% compliance with 2021 Schooner & Ketch decommissioning Project PLANC.	
Emergency response exercises and drills (including those with major contractors) completed as planned.	
90 % on-time close-out of non-conformances arising from audits and incident investigations.	
Total Recordable Incident Frequency < 0.35	
No reportable spills.	
No reportable HIPOs.	One ROGI
No regulatory non-compliance.	- One General NC - Two PON2s - One PON10
Minimum of 98 % SECE maintenance completed (<2 % backlog) for S&K operations and P&A operations	
8 Senior Management purposeful visits to the project per year	
Ensure tubulars from P&A operations are re-used	
> 75 % recycled monthly	17.8 % ⁽¹⁾

(1) The recycling figure has been negatively affected due to inability of the designated donor wells to accept injected well fluids. Subsequently, these fluids (containing very low levels of residual hydrocarbons) were sent onshore for treatment and disposal/discharge.

