# CORMORANT ALPHA TOPSIDE

Decommissioning Programme

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# **ABBREVIATIONS**

	ABBREVIATIONS			
Abbreviation	Explanation			
ALQ	Additional Living Quarters			
ALARP	As Low As Reasonably Practicable			
BAT	Best Available Technology			
bbls	Barrels			
COA	Cormorant Alpha			
CON	North Cormorant			
CoP	Cessation of Production			
DP	Decommissioning Programme			
EA	Environmental Appraisal			
EDC	Engineer Down & Clean			
EL	Elevation			
EMS	Environmental Management System			
ERRV	Emergency Response and Rescue Vessel			
EUNIS	European Nature Information System			
CGBS	Concrete Gravity Based Structure			
GJ	Gigajoule			
HLV	Heavy Lift Vessel			
HSE	Health and Safety Executive			
HVAC	Heating, Ventilation and Air Conditioning			
IPR	Interim Pipeline Regime			
JV	Joint Venture (Partner)			
km	Kilometres			
km <sup>2</sup>	Kilometres Squared			
Kw	Kilowatt			
LAT	Lowest Astronomical Tide			
LSA	Low Specific Activity Scale			



ABBREVIATIONS (CONT.)			
Abbreviation	Explanation		
m	Metres		
m <sup>3</sup>	Metres Cubed		
MM	Million		
MSF	Module Support Frame		
N/A	Not Applicable		
NFFO	National Federation of Fishermen's Organisations		
NIFPO	Northern Ireland Fish Producers Organisation Ltd		
NLB	Northern Lighthouse Board		
NNS	Northern North Sea		
NOF	Business Development Organisation		
NORM	Naturally Occurring Radioactive Material		
OGA	Oil and Gas Authority		
OGTC	Oil and Gas Technology Centre		
OGUK	Oil & Gas UK		
ONE	Opportunity North East		
OPEP	Oil Pollution Emergency Plan		
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning		
OSPAR	Oslo Paris Convention		
P&A	Plug & Abandon		
PETS	Portal Environmental Tracking System		
PON	Petroleum Operations Notice		
Rol	Reverse of Installation		
SCOL	Self-Contained Offshore Lighthouse		
SFF	Scottish Fishermen's Federation		
SLV	Single Lift Vessel		
SL	Single Lift		
STOIIP	Stock Tank Oil Initially In Place		
SPE	Society of Petroleum Engineers		



ABBREVIATIONS (CONT.)		
Abbreviation	Explanation	
SVT	Sullom Voe Terminal	
TAQA	TAQA Bratani Limited	
Те	Tonnes	
TFS	Transfrontier Shipment (of Waste)	
UKCS	United Kingdom Continental Shelf	
UKHO	United Kingdom Hydrographic Office	
UMC	Underwater Manifold Centre	
WONS	Well Operations and Notifications System	

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# **1. EXECUTIVE SUMMARY**

#### 1.1 Decommissioning Programme

This decommissioning programme is for the Cormorant Alpha topside installation.

Cormorant Alpha is a fixed installation with a concrete gravity-based structure located in the South Cormorant field in the East Shetland basin of the Northern North Sea Block 211/26a. The field was discovered in 1972 with the platform installed in 1978 and production starting in December 1979.

A CoP (Cessation of Production) applications for the South Cormorant and Pelican (including Cormorant Alpha and the UMC manifold) fields have been prepared and have been submitted to the Oil & Gas Authority (OGA) in Q3 2020. The CoP date for Cormorant Alpha is currently anticipated to be Q4 2023.

This Cormorant Alpha Topside Decommissioning Programme (DP) is supported by an Environmental Assessment which is a separate document and summarised in Section 4.

TAQA recognises that execution of topside removals can allow decommissioning to be executed cost effectively, to the benefit of the taxpayer and without prejudice or compromise to the feasible decommissioning options for the remaining substructure. As such, OPRED has agreed that our proposals for decommissioning the Cormorant Alpha topside can form this separate, topside-only DP. This is discussed further in Section 1.3.

Isolation of the Rundown Lines and Vent Lines within the platform substructure, to facilitate safe execution of topside removal, is also included within the scope of this Decommissioning Programme.

A phased P&A programme, commencing in advance of CoP will minimise the period

between cessation of production and the removal of the topsides as there will only be a small number of wells left to P&A at the time of CoP. This has safety and environmental benefits, as it reduces the length of time that people and equipment are mobilised to the platform to perform maintenance of the topsides to ensure they are in a safe condition for dismantling.

Early planning has commenced and the execution window of 2026 as the earliest possible start date through to project completion in 2028.

It should be noted that this does not include the drilling derrick structure as this has already been covered by a separate decommissioning programme (Ref:1) The modular drilling rig that will be used to P&A the Cormorant Alpha platform wells will be removed prior to topside removal and is therefore not part of the scope of this decommissioning programme.

### <u>1.2 Requirement for</u> Decommissioning Programme

In accordance with the Petroleum Act 1998, the Section 29 notice holders of the Cormorant Alpha installation (see Table 1.2) are applying to the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) to obtain approval for decommissioning the Cormorant Alpha topside detailed in Section 2.1 of this programme.

In conjunction with stakeholder and regulatory consultation, the decommissioning programme is submitted in compliance with national and international regulations and OPRED guidelines. This decommissioning programme is for an anticipated 11-year schedule, planning for which began in 2019.



### 1.3 Introduction

The Cormorant Alpha installation lies within the East Shetland Basin of the UKCS in licence block 211/26a in 150m water depth. The Cormorant Alpha Installation consists of a fourleg concrete gravity base structure, weighing 294,655Te. with a steel box girder Module Support Frame (MSF) supporting two levels of modules with a total topsides weight of 25,546.45Te. For a graphical representation of the platform in its entirety, please see Figure 1.1. This illustrates the key structural elements of the platform, as well as a brief description of the key areas and their extent.

The platform serves as a manned drilling, production and metering facility for the UMC and Pelican subsea tie-backs. Cormorant Alpha also serves as the entry point into Brent System for TAQA and other third-party production. This production is then transported through the Brent pipeline to Sullom Voe Terminal (SVT). Cormorant Alpha is also a centre for telecommunications in the area.

Connected to the installation is the Pelican subsea template located on the Pelican field and the Underwater Manifold Centre (UMC) located on the South Cormorant field. The Pelican and UMC subsea developments will both be subject to their own separate Decommissioning programmes. The concrete gravity base substructure (CGBS) of the Cormorant Alpha platform will be subject to a separate Decommissioning Programme, as will the Brent Pipeline between Cormorant Alpha and SVT.

The South Cormorant fields (Blocks I & II) have now produced 189MMbbls from the latest STOIIP view of 372MMbbls. The ability for Cormorant Alpha to continue producing to the limit of economic viability will be largely influenced by the performance of aging critical equipment, which in some instances would face obsolescence issues in the event of failure. Artificial lift is required to support production from the native Cormorant Alpha platform wells and is reliant on the availability of a single gas compressor and power generator and the availability of an export route through Cormorant Alpha to the Sullom Voe Terminal (SVT).

The Cormorant fields cover a large area, and a decision was made in the original field development plans to install two platforms at the North (North Cormorant) and South of the areas (Cormorant Alpha). The Underwater Manifold Centre (UMC) was installed to act as a template structure for nine wells and pipelines back to Cormorant Alpha. The installation was originally designed to utilise its large concrete gravity base structure with storage cells capable of holding 1MMbbls of oil, although that functionality is now disused following the 2017 Direct Export Project. The new export configuration allows native field and Brent System Partner's production to tie into a new collection manifold prior to flowing to SVT.

Third party fields who currently utilise the Brent System transportation service via the Cormorant Alpha facilities include Hudson, Brent Charlie & Alwyn North. This is in addition to the TAQA operated Tern and Cormorant North area fields. Of these only one (Alwyn North) is expected to still be in production at the time of Cormorant Alpha's cessation of production. The Alwyn North Operator has been engaged to advise of the decommissioning timeline. They have identified two potential alternative export routes and have initiated a project to identify the optimum solution. Both initial options are feasible to be implemented in advance of Cormorant Alpha CoP. Therefore, the removal of the Cormorant Alpha topsides will not strand any upstream reserves.



TAQA has carried out a review of the Cormorant Alpha asset to determine the feasibility of asset reuse (Ref 4). The alternatives for reuse included: an offshore renewable energy generation station (wind, wave or tidal), a marine research station, a training centre, fish farming site, carbon capture and storage site and reuse of the facilities at an alternative location. However, after a thorough review TAQA concluded that reuse was not a credible option because of the age of the infrastructure, its distance from shore and lack of demand for and the capital outlay combined with the annual operational and maintenance costs of the converted facility making it economically unviable. Therefore, the asset must be decommissioned.

Separate Decommissioning Programmes covering the remainder of the Cormorant Alpha substructure, currently planned for submission in 2022+, the associated pipelines and subsea developments are currently planned for 2021+. Activities including well P&A and DFPV (Drain, Flush, Purge & Vent) for pipelines and topsides will be covered by individual activity procedures and permit applications and are therefore not discussed in detail in this document.

The removal of the Cormorant Alpha Topside will not prejudice the future decommissioning solutions covering the remaining Cormorant Alpha area infrastructure not dealt with in this document. For further details please refer to sections 3.1.3 and 3.1.6.



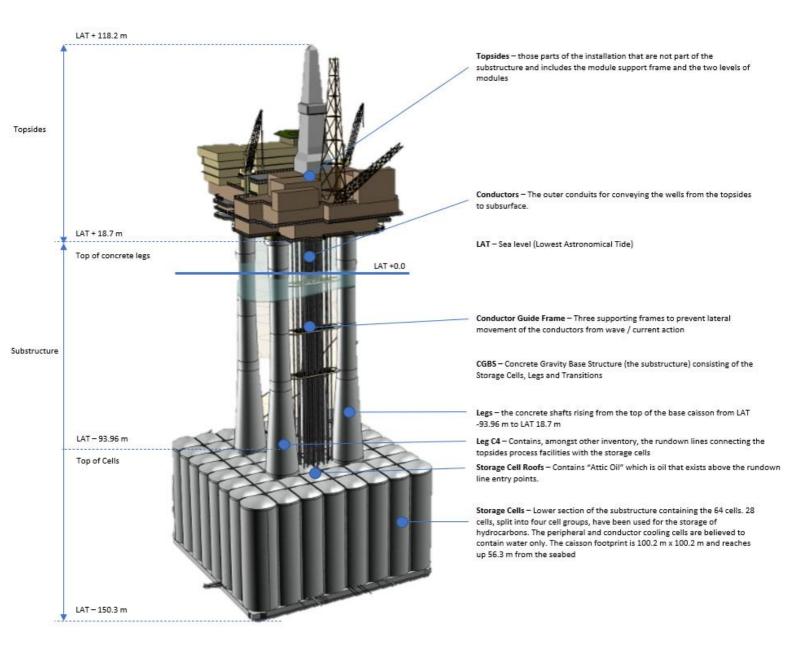


Figure 1.1: Cormorant Alpha Platform



### 1.4 Overview of Installation Being Decommissioned

#### 1.4.1 Installation

	TABLE 1.1 INSTALLATION TO BE DECOMMISSIONED				
Platform:	Cormorant Alpha	<b>Production Type</b> (Oil/Gas/Condensate):	Oil / Gas		
Water Depth:	150 m	UKCS Block:	211/26a		
Distance to Median (km):	41 km	Distance from Nearest UK Coastline (km):	103km NE from Unst		
	Surface Installation				
Number:	Туре:	Topsides Weight (Te):	Jacket Weight (Te):		
1	Cormorant Alpha Topside	25,546.45	N/A		
Number of Wells					
Platform: 25					



#### **TABLE 1.2** INSTALLATION SECTION 29 NOTICE HOLDERS DETAILS

Section 29 Notice Holders	Registration Number
TAQA Bratani Limited	05975475
A/S Norske Shell	914 807 077
Amoco (U.K.) Exploration Company, LLC	SF000790
Apache Beryl I Limited	FC005975
Britoil Limited	SC077750
Neo Energy (UKCS) Limited	02669936
NEO Energy Natural Resources Limited	13018823
CNR International (U.K.) Limited	00813187
Chrysaor Production (U.K.) Limited	00524868
ConocoPhillips Skandinavia AS	918 110 127
Dana Petroleum (E&P) Limited	02294746
EnQuest Heather Limited	02748866
EnQuest Thistle Limited	04487223
Enterprise Oil Norge Limited	01682049
Enterprise Oil U.K. Limited	02290358
Esso Exploration and Production UK Limited	00207426
ExxonMobil Exploration and Production Norway AS	914 048 990
Fairfield Betula Limited	04465204
Fairfield Fagus Limited	05461823
TotalEnergies E&P North Sea UK Limited	03682299

CORMORANT ALPHA TOPSIDE DECOMMISSIONING PROGRAMME



<b>TABLE 1.2</b> INSTALLATION SECTION 29 NOTICE HOLDERS DETAILS		
Section 29 Notice Holders	Registration Number	
MCX Dunlin (UK) Limited	06451712	
MCX Osprey (UK) Limited	06451720	
MOL UK Facilities Ltd	08824520	
Siccar Point Energy E&P Limited	01504603	
Shell U.K. Limited	00140141	
Equinor UK Limited	01285743	
Equinor ASA	923609016	
Wintershall DEA Norge AS	985224323	

The Cormorant Alpha installation is owned jointly between the Cormorant Alpha Field Owners (TAQA) and the Brent System Owners.



### 1.5 Summary of Proposed Decommissioning Programme

Proposed Decommissioning Solution	Reason for Selection	
Topsides		
Cormorant Alpha Platform: complete removal of topsides for re- use, recycling or appropriate disposal by a method to be determined as appropriate. This does not include the drilling derrick structure as this has		
already been covered by a separate approved decommissioning programme. This was due to the need to have a serviceable rig with which to execute platform well P&A and the uneconomic proposition of returning the original facilities to service. The modular drill rig which will be used for the P&A campaign will be removed prior to topside removal.	Meets regulatory requirements	
The cut height for the topside removal is to be determined, but OPRED will be advised once detailed engineering has been completed. Cleaned equipment refurbished for re-use where possible. Equipment which cannot be re-used will be recycled or other disposal routes as appropriate.		
Wells		
Abandoned in accordance with Oil & Gas UK Guidelines for the suspension and abandonment of wells. A PON5 / Portal Environmental Tracking System (PETS) / Marine Licence application under the relevant regulations will be submitted in support of the works planned to be carried out. Currently planned to take place in the window between 2021 & 2025. For information, conductors will be cut above the top of the concrete storage cells at a height to avoid disturbance of the drill cuttings pile. The removed sections will be transported to shore for recycling. OPRED will be advised of the elevations of the conductor cut heights once determined.	Meets OGA and HSE regulatory requirements	
Interdependencies		
Separate decommissioning programmes will be submitted for substructure and the remainder of the wider field infrastructure to be		
Cormorant Alpha serves as the entry point to Brent System and as such is the Hub for this area of the East Shetland Basin. At present incoming pipelines from North Cormorant, Brent Charlie and Alwyn North utilise the 'up and over' service to SVT via Cormorant Alpha and the Brent System Pipeline. However, production through Brent System will have ceased at the point the Cormorant Alpha Topsides are to be removed (refer to Table 1.4 for further detail).		



### 1.6 Field Location Including Field Layout and Adjacent Facilities

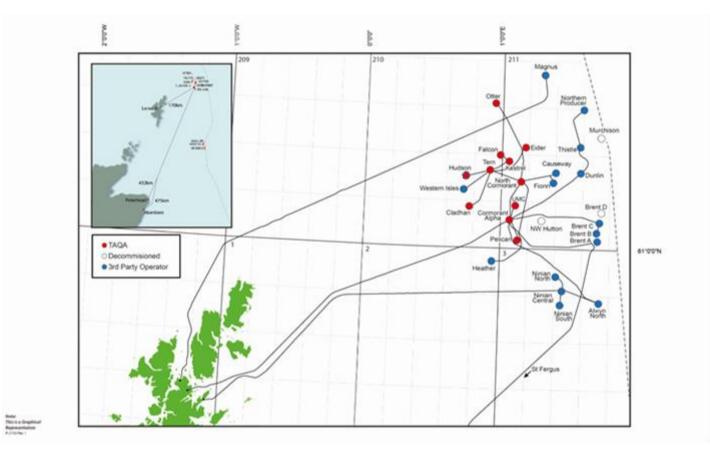
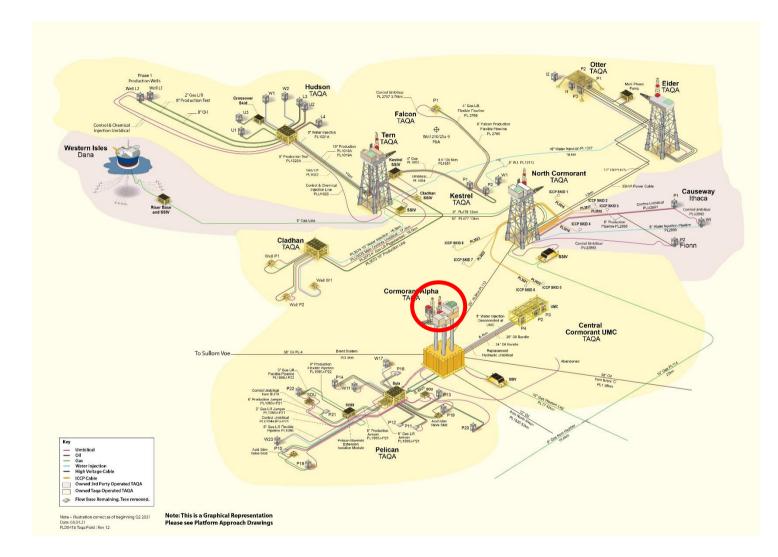


Figure 1.2: Field Location in UKCS





CORMORANT ALPHA TOPSIDE DECOMMISSIONING PROGRAMME



TABLE 1.4 ADJACENT FACILITIES					
Owner	Name	Туре	Distance / Direction	Information	Status
TAQA Bratani Limited	Eider	Platform	28.8km N of COA		Utility Mode
TAQA Bratani Limited	Otter	Subsea Wells (Template)	46 km NW of COA	Water Injection / Production	Operational
TAQA Bratani Limited	Otter	Subsea Structure	46 km NW of COA	Multiphase Pump	Operational
TAQA Bratani Limited	Tern Alpha	Platform	21 km WNW of COA	Adjacent Platform	Operational
Dana Petroleum (E&P) Ltd	Western Isles FPSO	Production Facility	12 km West of COA	Adjacent production Facility	Operational
TAQA Bratani Limited	Hudson	Subsea Structures	32 km WNW of COA	Water injection / Production	Operational
TAQA Bratani Limited	Falcon	Subsea Structures	23.1 km NW of COA	Production	Operational
TAQA Bratani Limited	Kestrel	Subsea Structures	23.1 km NW of COA	Water Injection / Production	Operational
TAQA Bratani Limited	Kestrel	Umbilical PLU1854	7 km Kestrel to Tern	Control Umbilical	Operational
TAQA Bratani Limited	Cladhan	Subsea Structures	22 km SW of COA	Water Injection / Production	Operational
TAQA Bratani Limited	Cormorant North	Platform	15.8 km N of COA		Operational
TAQA Bratani Limited	Cormorant North	20" Pipeline PL113	17.5 km CON to COA	Oil Export Line	Operational
Ithaca Energy Ltd	Causeway	Subsea Structures	15.6 km East of CON	Water Injection / Production	Shut in pending Decom
Ithaca Energy Ltd	Fionn	Subsea Structure	11.9 km E of COA	Production	Shut in pending Decom



TABLE 1.4 ADJACENT FACILITIES (Cont.)					
Owner	Name	Туре	Distance / Direction	Information	Status
Fairfield Energy	Dunlin A	Platform	33 km ENE of COA		Shut in pending Decom
Fairfield Energy	Dunlin	24" Pipeline PL5	36.4 km DUN to COA	Oil Export Line	Decommissioned
Shell UK Ltd	Brent	20" Pipeline PL1	36 km Brent C to COA	Oil Export	Operational
BP UK	NW Hutton	20" Pipeline PL148	Decommissioned	Oil Export	Decommissioned
TotalEnergies	North Alwyn	12" Pipeline PL1526	52 km Alwyn North to COA	Oil Export	Operational
TAQA Bratani Limited	Brent System Pipeline	36" Pipeline PL4A	Within COA GBS	Platform Bypass	Isolated and Out of Use
TAQA Bratani Limited	Brent System Pipeline	36" Pipeline PL4	153.293 km COA to Sullom Voe	Oil Export	Operational
TAQA Bratani Limited	Underwater Manifold Centre	Subsea Installation	8 km NNW of COA	Water Injection / Production	Operational
TAQA Bratani Limited	Underwater Manifold Centre	8" Pipeline PL167	7 km UMC to COA	Production	Operational
TAQA Bratani Limited	Underwater Manifold Centre	Dual 3" TFL Pipeline Bundle PL168	7 km UMC to COA	Service Line	Out of Use
TAQA Bratani Limited	Underwater Manifold Centre	8" Pipeline PL210	7 km UMC to COA	Production	Operational
TAQA Bratani Limited	Underwater Manifold Centre	Umbilical PL169	7 km UMC to COA	Control Umbilical (Hydraulics)	Operational
TAQA Bratani Limited	Underwater Manifold Centre	8" Pipeline PL184	7 km UMC to COA	Water Injection	Out of Use
TAQA Bratani Limited	Underwater Manifold Centre	Umbilical PL1165	7 km UMC to COA	Control Umbilical	Operational
TAQA Bratani Limited	Satellite Well P1	Umbilical PL118	6 km P1 to COA	Control Umbilical (Power)	Operational
TAQA Bratani Limited	Pelican	Subsea Installation	8 km S of COA	Water Injection / Production	Operational
TAQA Bratani Limited	Pelican	8" Pipeline PL1084	8 km Pelican to COA	Production	Operational



TABLE 1.4 ADJACENT FACILITIES (Cont.)					
Owner	Name	Туре	Distance / Direction	Information	Status
TAQA Bratani Limited	Pelican	8" Pipeline PL1085	8 km Pelican to COA	Production	Operational
TAQA Bratani Limited	Pelican	8" Pipeline PL1086	8 km Pelican to COA	Water Injection	Operational
TAQA Bratani Limited	Pelican	6" Pipeline PL1087	8 km Pelican to COA	Gas Lift	Operational
TAQA Bratani Limited	Pelican	Umbilical PLU1944	8 km Pelican to COA	Control Umbilical	Operational
TAQA Bratani Limited	Pelican	3/8" Chemical Line PL1088	8 km Pelican to COA	Control Umbilical	Operational
TAQA Bratani Limited	Pelican	3/8" Chemical Line PL1089	8 km Pelican to COA	Control Umbilical	Operational
TAQA Bratani Limited	Pelican	3/8" Chemical Line PL1090	8 km Pelican to COA	Control Umbilical	Operational
TAQA Bratani Limited	Underwater Manifold Centre	6" Pipeline PL1558	3.5 km W4 well to UMC	Water Injection	Out of Use
TAQA Bratani Limited	Pelican	Power Cable PL3136	25m Pelican SDU to Well P22	Control Umbilical	Operational
Shell UK Ltd	Western Leg Gas Pipeline	16" Pipeline PL17	COA Gas Export / Import to Brent Bypass tie-in	Gas Export	Operational



#### **TABLE 1.4** ADJACENT FACILITIES (Cont.)

#### Impacts of Decommissioning

The base of the incoming risers on Cormorant Alpha serves as the entry points into Brent System, with the Cormorant Alpha Platform and connection to Brent Pipeline to SVT all jointly owned by TAQA and its JV Partners.

All upstream fields, except for the Alwyn Area, have profiles which show a CoP date before, or in alignment with, the cessation of Brent System throughput. Engagement with Alwyn Area Operator has been undertaken to share the high-level decommissioning timeline to allow an alternative export route to be in place in advance of Brent System CoP.

Flushing of the relevant substructure pipework, upstream pipelines, connecting subsea infrastructure and export pipeline to SVT will have been completed prior to the removal of the Cormorant Alpha Topside.

TAQA has engaged with the Western Leg Gas Pipeline Operator to discuss disconnection arrangements. TAQA has also engaged with Western Isles Operator regards the requirements for future fuel gas access via the Western Leg post CoP of Cormorant Alpha and North Cormorant. These discussions remain ongoing.

Cormorant Alpha also serves as a communications hub for the East Shetland Basin. The removal of the Topside will require a re-route of the northern telecommunications ring. Advance notice of decommissioning activities will be provided to Operators of installations served by this service, as well as the Communications Service Provider, to allow them to determine the most appropriate network arrangements following the removal of the Cormorant Alpha Topside.

Cormorant Alpha shares an ERRV with the nearby Heather platform. Consultation will be undertaken with the Heather Operator over the timing of cessation during future contractual discussions.



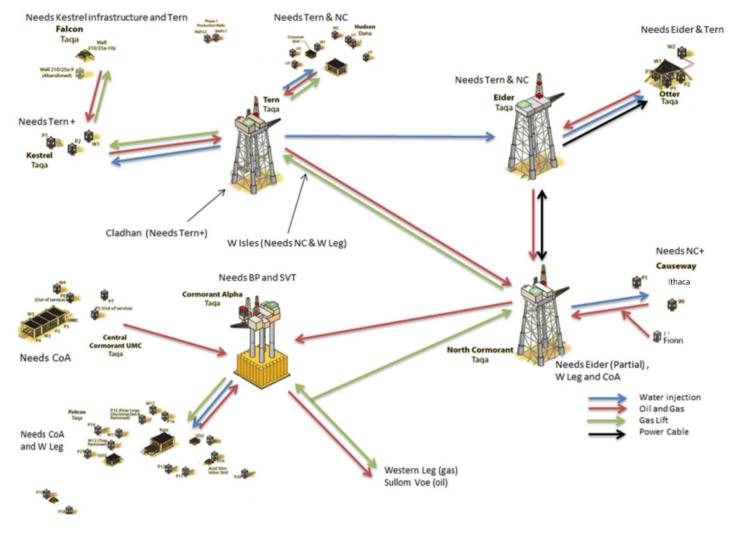


Figure 1.4: Adjacent Facilities Interdependency Overview

Please note that 'BP' refers to the Brent System Pipeline



### **1.7 Industrial Implications**

The Cormorant Alpha Topside Decommissioning Programme will be managed by TAQA's UK business, to ensure safe, efficient and legally compliant delivery of the various elements of TAQA's decommissioning scope. The intention is to make efficient use of the supply chain to generate value through the application of knowledge, innovation and technology, explore collaboration opportunities and to employ best practice in the management of the supply chain to deliver a cost effective and reliable service.

This will be achieved through the following:

- TAQA will treat the supply chain in an ethical, fair and mutually rewarding way
- Drive continuous improvement through collaboration with other Operators and industry stakeholders
- TAQA has and will continue to actively support Regulatory and OGA industry initiatives including Showcase events and as part of the East of Shetland workgroup
- Will stimulate the supply chain and innovation through actively supporting and working with industry representative bodies including the OGTC, ONE, Decom North Sea, SPE and NOF
- Actively explore potential opportunities to drive efficiency through multi-asset, multifield or multi-Operator campaigns
- Conduct detailed market analysis ensuring that not only established removal methodologies are considered, but genuine new market concepts also
- Use of open and transparent decision criteria on Contractor and contract strategy selection

TAQA have explored the possibility of working collaboratively with other Operators in the East of Shetland basin in order to execute our decommissioning strategies in the most efficient way possible. However, at this time, due to the differences in timing of forecast activities, this has not provided any opportunities to take forwards with regards topsides removal. TAQA will continue to collaborate with industry and the supply chain in the future.

TAQA have engaged with the OGA (January 2020) to discuss and agree the contracting strategy and tender approach as well as the supporting SCAP requirements.

Detailed feasibility studies with a number of short-listed removal contractors have commenced to allow the removal contractors to develop a proposal for a removal methodology and schedule with greatly reduced technical uncertainty, has been very well-received by the removal contractors, as a mutually beneficial collaborative approach.



# 2. DESCRIPTION OF ITEMS TO BE DECOMMISSIONED

2.1 Installation: Surface Facilities (Topside)

TABLE 2.1 SURFACE FACILITIES INFORMATION					
Facility				Topsides / Facilities	
Name	Туре	Location		Weight (Te)	No. of Modules
		WGS84	340° 48' 20"		
Cormorant Alpha	Topside	WGS84 Decimal Minute	61° 06' 09.411" N 01° 04'22.272" E	25,546.45	40



Figure 2.1: Cormorant Alpha Topside



### 2.2 Wells

TABLE 2.2 WELL INFORMATION				
Platform Wells	Designation	Status	Category of Well	Date Abandoned
211/26-A1	Never Completed	Abandoned Phase 2	PL-4-3-3	17.01.2017
211/26-A13	Water Injector	Completed (Shut in)	PL-4-3-3	-
211/26-A17	Water Injector	Abandoned Phase 1	PL-3-3-3	14.06.2004
211/26-A18	Water Injector	Completed Operational	PL-3-3-3	-
211/26-A24	Water Injector	Completed (Shut in)	PL-3-3-3	-
211/26-A25J	Junked	Abandoned Phase 1	PL-0-0-3	26.01.1983
211/26-A27Z	Appraisal Well	Completed (Shut in)	PL-3-3	-
211/26-A28Z	Oil Producer	Abandoned Phase 1	PL-2-3-3	09.02.2008
211/26-A32	Oil Producer	Completed Operational	PL-4-3-3	-
211/26-A33Y	Oil Producer	Completed Operational	PL-2-4-3	-
211/26-A34	Oil Producer	Completed (Shut in)	PL-4-3-3	-
211/26-A35	Oil Producer	Completed Operational	PL-3-3-3	-
211/26-A36	Oil Producer	Completed Operational	PL-4-3-3	-
211/26-A37	Oil Producer	Completed Operational	PL-3-4-3	-
211/26-A38	Oil Producer	Completed Operational	PL-4-3-3	-
211/26-A39	Water Injector	Completed Operational	PL-3-4-3	-



	TABLE 2.2 WELL INFORMATION (CONT.)				
Platform Wells	Designation	Status	Category of Well	Date Abandoned	
211/26-A40	Oil Producer	Completed Operational	PL-4-3-3	-	
211/26-A40Z	Oil Producer	Completed Operational	PL-4-3-3	-	
211/26-A41	Oil Producer	Completed Operational	PL-2-3-3	-	
211/26-A42	Oil Producer	Completed Operational	PL-4-3-3	-	
211/26-A42Z	Oil Producer	Completed Operational	PL-4-3-3	-	
211/26-A43	Oil Producer	Completed Operational	PL-2-3-3	-	
211/26-A43Z	Oil Producer	Completed Operational	PL-2-3-3	-	
211/26-A6	Water Injector	Completed (Shut in)	PL-3-3-3	-	
211/26-A8Z	Water Injector	Completed Operational	PL-4-3-3	-	

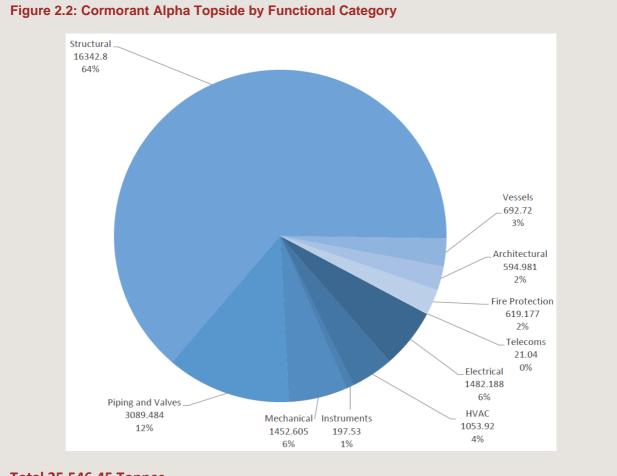
Please note: The slot from which Appraisal Well 211/26-A27Z was drilled was subsequently, hence there are more well listed than platform well slots.

The drilling derrick structure has already been covered by a separate approved decommissioning programme. This was due to the need to have a serviceable rig with which to execute platform well P&A and the uneconomic proposition of returning the original facilities to service. The modular drill rig which will be used for the P&A campaign will be removed prior to topside removal.

Details of Wells categorisation have been taken from OGUK Guidelines: Well Decommissioning Guidelines Issue 6, June 2018. All platform wells will be plugged and abandoned (P&A'd) under the appropriate standards as per the current WONS and Marine Licences legislation.



### 2.3 Inventory Estimates



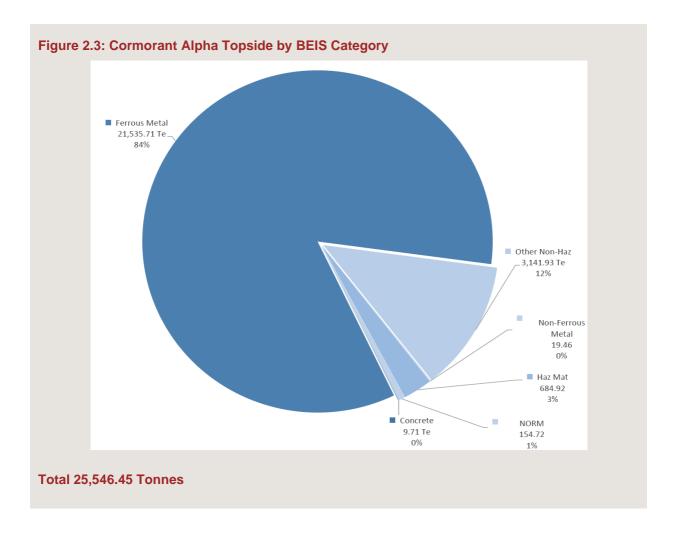
Total 25,546.45 Tonnes

Please refer to Section 2.7 within the Environmental Appraisal for further details on the materials inventory data. The total Topsides weight of 25,546.45 Te is inclusive of an estimated 839.64 Te of hazardous waste such as paint and NORM, as shown in Figure 2.3.

The Cormorant Alpha topside will likely be cut at or around the transition between the top of the concrete legs and the start of the steel footing supporting the cellar deck structure, that is at EL. +18.62m relative to LAT (168.92m above seabed). The final cut height will be determined dependant on the removal method of the appointed contractor. Once the removal methodology is selected OPRED will be informed and whilst some material e.g. pipework, in each of the legs is likely to be removed to facilitate leg cutting, it is also likely that material will require to be added within each leg to support and secure the remaining pipework and / or systems left in place below the cut height. OPRED will be informed about the material removed and added. The final solution will be determined by the cut height of the appointed contractor.

To date there has been no evidence of marine growth extending up to the level of transition and therefore it is extremely unlikely that any trace of marine growth will be removed with the topsides.





Please refer to Section 2.7 within the Environmental Appraisal for further details on the materials inventory data.



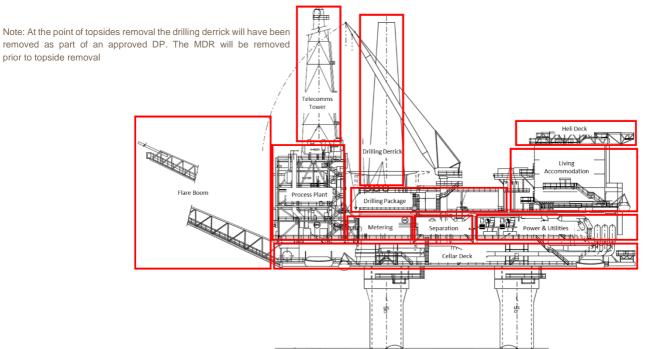
### **3. REMOVAL AND DISPOSAL METHODS**

#### 3.1 Topsides

#### 3.1.1 Topsides Decommissioning Overview

During the decommissioning of the Cormorant Alpha topside there will be a wide range of materials that will need to be processed and, where possible, either reused or recycled.

Preventing waste is ultimately the most preferential option, achieved through reducing consumption and using resources more efficiently. TAQA will comply with the Duty of Care requirements under the UK Waste Regulations and The Environmental Protection (Duty of Care) (Scotland) Regulations 2014. The hierarchy of waste management will also be followed at all stages of disposal and industry best practice will be applied. The Cormorant Alpha topside will be removed and returned to shore for reuse, recycling or disposal. TAQA will select a recycling and disposal facility considering the factors of safety, environmental, socio-economic and cost, UK, European and other international facilities may be considered. Once a facility is selected TAQA will advise OPRED. The successful facility along with the chosen removal contractor will be required to have a proven track record and clearly documented and legislatively compliant procedures including the handling of transfrontier shipment of waste in the event that required. Regulations governing is the transfrontier shipment of waste (TFS) as implemented in the UK by the "Transfrontier Shipment of Waste Regulations 2007" details the UK required procedures in order for compliance with the legislation. All waste material will be handled in accordance with UK and relevant international legislation. TAQA and the selected contractor(s) will address any transfrontier shipment of waste to ensure that



# Figure 3.1: Cormorant Alpha Topside East Elevation

For illustrative purposes: red boxes show main function of the topside models



the associated issues are appropriately managed.

TAQA's Duty of Care requirements are documented within the topside removal Materials Management Strategy, and this shall form the basis of the successful tenders' materials and waste management requirements. Furthermore, Active Waste Management Plan(s) will be established once a successful tenderer is awarded a contract. TAQA's intention would be to share each AWMP with respective waste management competent authorities.

The Cormorant Alpha Topside Structure comprises 40 modules (see figure 3.2) with a total weight of 25,546.45 tonnes.

The Installation consists of a four-leg concrete gravity base structure with a steel box girder module support frame (Cellar Deck) supporting two levels of modules (Module Deck and Drilling Deck).

The cellar deck comprises a compartmentalised box girder assembly comprising 2 principal girders running North-South connecting leg C1 to C4 and C2 to C3. Transverse box girders running East-West connect leg C1 to Leg C2 and C3 to C4 complete the main support assembly. The areas between the box girders are infilled with a series of compartments. The conductor slots are located in the Box Girder assembly between legs C3 and C4. The Module Deck comprises 11 modules supported from the superstructure roof. The modules are of similar trussed frame assembly comprising a plated deck, plated roof and clad walls. The exception is module RM4E which is open truss construction and comprises 5 deck levels.

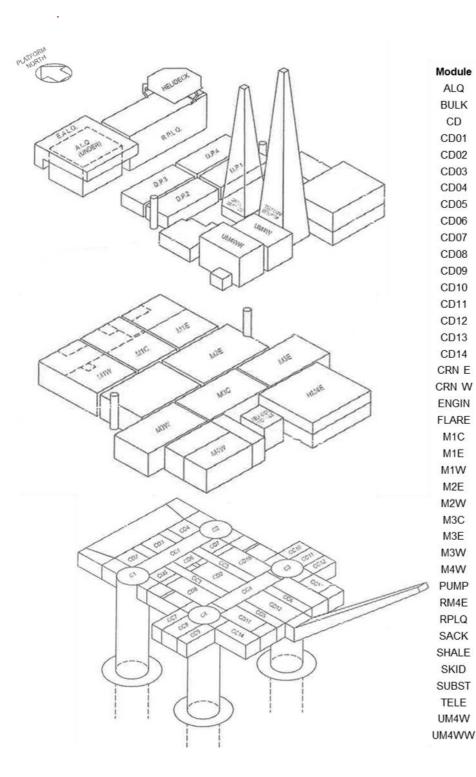
The Drilling Deck comprises 4 drilling package modules supported from the roof of modules M2E and M2W below. The modules are of similar trussed frame assembly comprising a plated deck, plated roof and stiffened plate clad walls. UM3E, UM3W, UM4W and UM4WW are open clad pallets located above the roofs of corresponding modules below.

The removal methodology for the Cormorant Alpha topside has not been finalised yet, as this will be subject to a commercial tendering process.

However, TAQA have instructed a vendor to conduct a study (Ref 2) which looked at removal options that are deemed technically feasable. Options studied were single lift (SL) and reverse of installation (Rol). These methodologies were reviewed against a common and consistant set of assumptions. This is discussed in detail in section 2 of the Environmental Appraisal (EA).

For an overview of the Cormorant Alpha topsides see figures 3.2 and 3.3





ADDITIONAL LIVING QUARTERS BULK STORAGE MODULE CELLAR DECK BOX STRUCTURE CELLAR DECK PALLET CD01 CELLAR DECK PALLET CD02 CELLAR DECK PALLET CD03 CELLAR DECK PALLET CD04 CELLAR DECK PALLET CD05 CELLAR DECK PALLET CD06 CELLAR DECK PALLET CD07 CELLAR DECK PALLET CD08 CELLAR DECK PALLET CD09 CELLAR DECK PALLET CD10 CELLAR DECK PALLET CD11 CELLAR DECK PALLET CD12 CELLAR DECK PALLET CD13 FLARE BOOM SUPPORT EAST CRANE WEST CRANE ENGINE MODULE FLARE BOOM UTILITIES SWITCHGEAR & POWER GENERATION SWITCHGEAR & POWER GENERATION SEPARATION WATER INJECTION WELLHEADS METERING **PUMPING & METERING** PUMPING MUD PUMP MODULE DP1 PELICAN PROCESS MODULE REPLACEMENT LIVING QUARTERS SACK STORAGE MODULE DP2 SHALE SHAKER SKIDBASE SUBSTRUCTURE & DERRICK **TELECOMMUNICATIONS** POWER GENERATION PELICAN GAS/TREATMENT

#### Figure 3.2: Cormorant Alpha Topside Modular Construction





Figure 3.3: Cormorant Alpha Topside Overview



### 3.1.2 Preparation and Cleaning

	TABLE 3.1 CLEANING OF TOPSIDES FOR REMOVAL				
Waste Type	Composition of Waste	Disposal Route			
Onboard Hydrocarbons	Process fluids, fuels, and lubricants	Flushing of bulk process hydrocarbons will be conducted offshore, and residual fluids disposed of under appropriate permits. Fuels and lubricants will be drained and transported onshore for re-use / disposal within in UK* As per the waste hierarchy, export quality crude trapped in the oil storage cell attic spaces will be removed to ALARP utilising BAT. This will ensure that the produced oil will not be considered as waste as this will be exported to SVT via the Brent Pipeline. TAQA have developed a DFPV strategy for decommissioning. The topsides and pipeline systems will be flushed to reduce the hydrocarbon inventory to BAT, TAQA plan to complete this by a 2 phased approach. Phase 1 – Gross Liquid Removal, this phase shall include the flushing of subsea satellites, interconnecting pipelines and export pipelines. Phase 2 – Detailed Flushing, this phase shall include a detailed flush of all topsides process plant to remove pockets of trapped hydrocarbons. Seawater shall be used as a flushing medium, existing process equipment shall be used and fluid disposed of via existing drains systems. Chemicals and/or gels may be used during both phases to improve flushing performance.			
Other Hazardous Materials	Chemicals for cleaning topsides. Hazardous waste such as NORM radioactive material, instruments containing heavy metals & batteries	Discharge of cleaning chemicals offshore will be managed under relevant permits. Waste chemicals, bulk NORM solids and other hazardous materials will be transported ashore for re-use / disposal within the UK*			
Original Paint Coating	Lead-based paint. Further survey work will be undertaken to identify other components that may be present	During preparation works to enable topside removal either by SL or Rol activities may generate toxic fumes / dust if flame-cutting or grinding / blasting is used, so appropriate safety measures will be taken. All remaining material will be dealt with onshore			
Asbestos and Ceramic Fibre	Asbestos has been identified in surveys. Additional surveys will be undertaken.	During preparation works to enable topside removal either by SL or Rol activities may generate a requirement for appropriate control and management methods to be enforced. All remaining material will be dealt with onshore			



\* Some waste types may be removed with the topsides and depending on the location of the onshore disposal facility, this may be out with the UK.

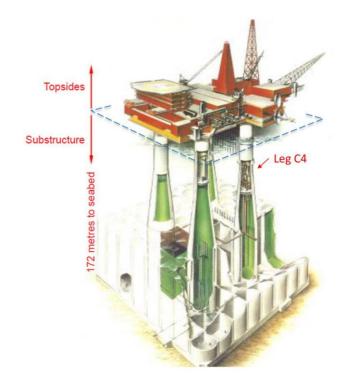
The sampling of lead-based paint was included within the scope of a specialist material inventory and waste characterisation consultant who visited Cormorant Alpha in 2019. During this visit lead-based paint was sampled and analysed to determine its composition. However, asbestos was not sampled as it is recorded in the TAQA asbestos register and is actively managed in line with TAQA procedures. A demolition survey will be required to be carried out by a specialist prior to the planned removal of the topsides. The method for the disposal of asbestos and ceramic fibre will be determined by the onshore facility who will be selected to dismantle the Cormorant Alpha topsides and will be in line with their policies and procedures and will be compliant with all relevant legislation.

Pipelines to and from the installation will have been flushed, as appropriate and feasible and under the appropriate permits before the topside is removed.

# 3.1.3 Rundown Line & Vent Line Isolation

As referenced in Section 1.3 the completion of the Direct Export Project in 2017 saw the end of the active use of the CGBS storage cells for their original purpose. (See figure 3.4) A last export run, utilising the existing export pumps was carried out from the storage cells. However, due to the large capacity of the export pumps it was not feasible to export all remaining hydrocarbons from the storage cells as when the majority of oil had been exported the pumps would "cone" water up through the remaining thin layer of hydrocarbons, at which point pumping had to cease. These hydrocarbons are known as "hydrodynamically trapped oil".

A subsequent project was tasked undertaking a trial to remove this hydrodynamically trapped oil from three of the four cells groups using a low flow rate pump arrangement to prevent the "coning" issue observed using the large capacity export pumps. This project concluded in April 2020 having exported around 655m<sup>3</sup> of oil. It is estimated that a maximum of 10,856 m<sup>3</sup> of oil remain in the cells following this most recent recovery. This figure estimates the remaining export quality crude and does not include any emulsions.



#### Figure 3.4 Cormorant Alpha Platform: Topside & CGBS

It is planned to remove the residual hydrocarbon inventory contained in the platform substructure cells after topside removal. This scope will be executed utilising cell top drilling, similar to the technology deployed within the Brent Field. A feasibility study into utilising this technology was completed in late 2020. This study concluded that, subject to some modifications to existing tooling, it would be feasible to deploy the technology at Cormorant Alpha to access the cells.

Management of residual hydrocarbons within the storage cells will be covered under the Cormorant Alpha Substructure

CORMORANT ALPHA TOPSIDE DECOMMISSIONING PROGRAMME



Decommissioning Programme which will be submitted in 2022+.

To ensure safety of those onboard through until disembarkation, and to facilitate the safe leg separation and finally topside removal, it is planned to isolate the Rundown Lines and Vent Lines within the platform substructure. This "Facilities Make Safe" activity is included within the scope of the Cormorant Alpha Topside Removal DP.

Execution of the Vent Line and Rundown Line scopes is currently anticipated within a Q4 2021

#### 3.1.4 Removal Methods

Possible methods are outlined in Table 3.2 and studied (Ref 2) The final decision on the decommissioning method of the topsides will be made following a commercial tendering process. Once a decision has been made TAQA will advise OPRED.

Two possible methods of topsides removal are under consideration; single lift and modular removal. At this stage, the specific method by which the removal activity will take place has not been determined. Both are potentially suitable. These decisions will depend to some degree on the proposals made by the eventual contractor. The approaches are summarised in Table 1, and all will involve the following steps for the preparation for removal: to Q4 2022 window, subject to satisfactory completion of project engineering activity.

- Removal of under deck objects and cutting of risers, J-tubes and caissons
- Cutting for topsides separation using diamond wire cutting tools
- Cellar deck strengthening
- Equipment and loose items sea fastening/removal
- Installation of clamps and/or beams to provide lifting points; and
- Installation of an above-water guiding system mounted on the CGBS



TABLE 3.2 TOPSIDE REMOVAL METHODS         1) HLV (Semi-submersible crane vessel) 2 2) SLV 2			
Method	Description		
Single lift removal by HLV / SLV	Removal of topsides as a complete unit and transportation to shore for re-use of selected equipment, recycling, break up, and / or disposal. All methodologies are being carried forward into competitive tendering. A final decision on decommissioning method will be made following a commercial tendering process		
Modular removal and re-use / recycle by HLV	Removal of parts / modules of topsides for transportation and re- use in alternate location(s) and / or recycling / disposal. All methodologies are being carried forward into competitive tendering. A final decision on decommissioning method will be made following a commercial tendering process		

#### 3.1.5 Post Removal Considerations

Once the topside is removed, it is planned that the legs of CGBS will be capped and an AtoN installed on one leg of the CGBS. If for whatever reason this cannot be done before the vessel leaves the Field, we will discuss appropriate action with OPRED. In such circumstances a likely temporary solution would be to station a guard vessel close to the platform to warn shipping. Notices to mariners will be issued and the UK Hydrographic Office (UKHO) and Maritime and Coastguard Agency (MCA) informed of the changed status of the platform. The new status of the structure will be entered into the FishSAFE programme of electronic warning.

#### 3.1.6 Substructure Management

Please note that decommissioning of the Cormorant Alpha substructure is not within the scope of this document. However, it is discussed here to demonstrate that the removal of the Cormorant Alpha topside will not prejudice these activities.

There several elements required to be addressed to decommission the Cormorant Alpha substructure, these include attic oil removal, cell sampling and ongoing cell monitoring, as well as drill cutting pile sampling.

As detailed in Section 3.1.3 attic oil removal is scheduled to take place after topside removal. This scope will be executed using existing, proven remote access technology after the



topside has been removed, so does not rely on the ongoing presence of the platform topside.

Additionally, cell water sampling activities are due to take place after attic oil removal, using existing proven technology which will be deployed to execute this scope. Should ongoing cell access be required this can be achieved using the same technology and does not require the topside to remain in place. Consideration has been given to the presence of drill cuttings on and around the CGBS and TAQA has already carried out a subsea sampling and analysis campaign to characterise these cuttings. The topside facilities were not utilised as part of this vessel-based campaign. Therefore, the removal of the topside does not preclude future drill cutting piles survey and sampling, if required.

## 3.2 Wells

## TABLE 3.3 WELL PLUG AND ABANDONMENT

At the time of writing 4 of the platform Wells for Cormorant Alpha have been abandoned, with the remaining 21 Wells still to be abandoned. All Wells will be fully decommissioned in accordance with the Oil and Gas UK (OGUK) "Well Decommissioning Guidelines" (issue 6, June 2018.)



## 3.3 Waste Streams

TABLE 3.4 WASTE STREAM MANAGEMENT METHODS		
Method	Removal and Disposal Method	
Bulk Liquids	During the EDC phase, flushing of bulk liquids will be undertaken offshore under appropriate oily discharge and chemical permits. Vessels, pipework and sumps will be drained prior to removal to shore and shipped in accordance with maritime transportation guidelines. Further cleaning and decontamination will take place onshore prior to recycling / re-use at a fully permitted onshore disposal facility. Please also see Table 3.1	
Marine Growth	It is not anticipated that any marine growth will be recovered as part of this topside decommissioning scope. However, if it is encountered it will be taken ashore for disposal under appropriate permits. Some marine growth maybe encountered during well plugging and abandonment works including removal of conductors. The marine growth is likely to be present in localised areas on the conductors around the wave zone and upon removal to the topside, most marine growth is likely to fall to sea. Where applicable, the discharge of marine growth during removal will be covered under relevant permits (Marine Licence) and onshore disposal sites will prepare for additional cleaning.	
NORM / LSA Scale	To facilitate topside separation and subsequent removal NORM will be partially removed offshore under appropriate radiation and oily discharge permits. Any residual NORM contamination will be treated and disposed onshore via approved NORM decontamination specialists. TAQA will conduct Phase 3 radiation surveys to ensure that NORM contaminated waste and radioactive sources are identified prior to decommissioning. Based on the findings of these surveys waste management options will be identified including specialist cleaning and use of disposal contractors that hold necessary radioactive management/disposal permits.	
Asbestos	An intrusive demolition survey will be conducted prior to decommissioning activities and asbestos contaminated waste will be disposed onshore via licensed waste contractors.	
Other Hazardous Wastes	Will be recovered to shore and disposed of under appropriate permits.	



## **TABLE 3.4** WASTE STREAM MANAGEMENT METHODS (Continued)

Method	Removal and Disposal Method
Onshore Dismantling Sites	Appropriate licenced sites will be selected. TAQA will ensure that the removal contractor has a proven track record and waste stream management throughout the deconstruction process and demonstrate their ability to deliver innovative recycling options. TAQA will carry out audits on disposal yards to provide assurance that they are compliant with legislation.

TABLE 3.5 INVENTORY DISPOSITION			
	Total Inventory Tonnage	Planned Tonnage to Shore	Planned Left in situ
Installations	Topsides: 25,546.45 Te	Topsides: 25,546.45 Te	Topsides: Zero

The topside will be landed ashore in the window of 2026 to 2028. It is not possible to forecast the reuse market with any accuracy or confidence this far forward, so the following is a statement of re-use / recycling aspirations. Percentages shown relate to the weight of material which is expected to be recovered to shore. Refer to Sections 2.8 and 2.9 of the EA for further detail.

TABLE 3.6 REUSE, RECYCLE & DISPOSAL ASPIRATIONS FOR RECOVERED MATERIAL		
Reuse	Recycle	Disposal
< 10%	90-97%	< 3%



## 4 ENVIRONMENTAL APPRAISAL OVERVIEW

## 4.1 Environmental Sensitivities (Summary)

The Key environmental and social sensitivities in the Cormorant Alpha area have been summarised below in Table 4.1.

TABLE 4.1 ENVIRONMENTAL SENSITIVITIES		
Environmental Receptor	Main Feature	
	There are no Nature Conservation Marine Protected Areas, Special Protection Areas, Special Areas of Conservation, or Demonstration and Research Marine Protected Areas within 40 km of the Cormorant Alpha platform.	
Conservation interests	The ocean quahog ( <i>Arctica islandica</i> ) is listed by OSPAR as a threatened and/or declining species and is also listed as a Scottish Priority Marine Feature; records of this species occur over large areas of the central and northern North Sea. A benthic survey in 2019 recorded a single (and juvenile) <i>Arctica islandica</i> individual.	
	Lophelia pertusa may be present in the Cormorant Alpha platform area, but the majority of <i>L. pertusa</i> communities are located in water depths below 200 metres and as such it unlikely to be present in significant numbers. No other features of conservation interest have been recorded in the vicinity of the Cormorant Alpha platform.	
	The Cormorant Alpha platform is located at a water depth of 150 m. Wave energy at the seabed is moderate, the annual mean wave height within the South Cormorant field ranges from 2.71 m $-$ 3.00 m and the annual mean wave power is 39.35 kW/m.	
Seabed	Sediments in the area show little variation and were dominated by sands. A small cuttings pile was detected around the south-east jacket which had a high proportion of sedimentary fines with some evidence of coarser sediments related to the presence of relic <i>Mytilus edulis</i> shells. The seabed around the Cormorant Alpha Platform was classified as the EUNIS broadscale habitat A5.26 'Circalittoral Muddy Sand'	



	The Cormorant Alpha platform sits within known spawning grounds for cod, haddock, Norway pout, saithe and whiting. Norway pour have high concentration spawning grounds in the vicinity of the Cormorant Alpha platform.		
Fish	The area is also a potential nursery ground for haddock, Norway pout, whiting, blue whiting, hake, herring, ling, mackerel and spurdog. The area is known to be a high intensity nursery ground for blue whiting. Published sensitivity maps indicate that the probability of aggregations of juvenile blue whiting and hake are medium. All other species are low.		
	The Cormorant Alpha platform is located in an area targeted primarily for demersal species in terms of both landed weights and value.		
Fisheries	Fishing intensity is considered moderate for demersal fisheries and low for pelagic and shellfish fisheries in comparison with other areas of the North Sea. According to fisheries statistics for the UK provided by Marine Scotland, fishing effort has increased in 2018 in comparison to the two preceding years. Both fishing effort and landings have been low over the last five years of statistics since 2014. Summer months are generally busiest.		
Marine Mammals	Harbour porpoise ( <i>Phocoena phocoena</i> ), white-beaked dolphin ( <i>Lagenorhynchus albirostris</i> ), white-sided dolphin ( <i>Lagenorhynchus acutus</i> ) and minke whale ( <i>Balaenoptera acutorostrata</i> ) are the most abundant species recorded in the survey block covering the Cormorant Alpha platform area. Harbour porpoise and minke whale are the most frequently recorded cetacean in the vicinity of the Cormorant Alpha platform. Harbour porpoise is the most abundant and widely distributed cetaceans in the North Sea.		
	Both grey and harbour seal densities are known to be low 103 km offshore, and around the Cormorant Alpha platform densities are predicted to be between 0 and 1 seals per 25 km <sup>2</sup> for both species, which is considered low.		
Birds	Offshore in the NNS, the most numerous species present are likely to be northern fulmar, black-legged kittiwake and common guillemot. The Cormorant Alpha decommissioning area is located within or close to hotspots for northern fulmar, European storm-petrel, northern gannet, Arctic skua, long-tailed skua, great skua, black- legged kittiwake, great black-backed gull, common guillemot, and Atlantic puffin during their breeding season.		
Birdo	Adults of these species can be seen foraging far from their coastal breeding colonies. In addition, after the breeding season ends in June, large numbers of moulting auks (common guillemot, razorbill and Atlantic puffin) disperse from their coastal colonies and into the offshore waters from July onwards. At this time these high numbers of birds are particularly vulnerable to oil pollution.		



	Seabird sensitivity to oil pollution in the region of the Cormorant Alpha platform is considered low from January to August and medium from September to December.
	The Cormorant Alpha platform is located approximately 103 km from the north-east coast of the Shetland Isles. Due to this distance, no impacts to onshore communities are expected from offshore operations at the Cormorant Alpha Decommissioning Area.
Onshore Communities	Waste generated from the Decommissioning activities will be transported onshore and managed in line with legislation and TAQA's associated Active Waste Management Plan, which will be developed in collaboration with waste management contractors, SEPA and other regulatory bodies.
Other Users of the Sea	The Cormorant Alpha platform is located in a well-developed area for oil and gas extraction. However, there is little activity from other sea users recorded in the area. Apart from pipelines and cables associated with the Cormorant Alpha platform, there are no other cables or pipelines in the vicinity, no designated military practice and exercise areas, no offshore renewable or wind farm activity. There are two designated wrecks located 9 km south-southwest and 12 km east-southeast of the platform. However, these wreck sites are not protected or dangerous. Shipping density in the NNS in the vicinity of the proposed decommissioning activities is considered moderate. Between 200 – 300 vessels transit through Block 211/26 annually.
Atmosphere	Emissions from short-term decommissioning activities e.g. vessel and platform fuel combustion emissions are considered small compared to those previously arising from the asset over its operational life.



## 4.2 Potential Environmental Impacts and their Management

**Environmental Impact Assessment Summary:** A review of potentially significant environmental and social interactions has been completed and, considering the mitigation measures that will be built into the project activities, there is expected to be no significant impact on receptors from Cormorant Alpha topside decommissioning. Further information and justification statements can be found in the Cormorant Alpha Topside Environmental Appraisal (Ref 3).

Given the remote offshore location of the South Cormorant field, there is no potential for Cormorant Alpha topsides decommissioning to impact any European or nationally designated protected sites. The Environmental Appraisal has considered the Scottish National Marine Plan adopted by the Scottish Government to help ensure sustainable development of the marine area. TAQA considers that the proposed decommissioning activities are in alignment with its objectives and policies.

Therefore, based on the findings of the Environmental Appraisal including the identification and subsequent application of appropriate mitigation measures, and project management according to TAQA's Health, Safety, Security and Environment Policy and Environmental Management System (EMS), it is considered that the proposed Cormorant Alpha topside decommissioning activities do not pose any significant threat of impact to environmental or societal receptors within the UKCS.

TABLE 4.2 ENVIRONMENTAL IMPACT MANAGAMENT		
Activity	Main Impacts	Management
Topsides Removal	The following aspects may be impacted by the decommissioning activities, however, none of these are assessed as significant:	



Activity	Main Impacts	Management
	Emissions to air	Emissions during decommissioning activities, (largely comprising fuel combustion gases) will occur in the context of the cessation of production. As such, emissions from operations and vessels associated with operation of the Cormorant Alpha topsides will cease. Reviewing historical European Union (EU) Emissions Trading Scheme data and comparison with the likely emissions from the proposed operations suggests that emissions relating to decommissioning will be small relative to those during production. The majority of emissions for the Cormorant Alpha topsides decommissioning can be attributed to vessel time or are associated with the recycling of material returned to shore. As the decommissioning activities proposed are of such short duration this aspect is not anticipated to result in significant impact. The latest available total annual CO2 emissions estimate from oil and gas exploration and production is 13,200,000 tonnes (for 2018, Oil and Gas UK, 2019) and the latest (confirmed) total annual CO2 emissions estimate for UK shipping is approximately 7,800,000 tonnes (for 2017, BEIS, 2019), giving a total of 21,000,000 tonnes of CO2 The annual CO2 emissions from the worst-case decommissioning option (Single Lift is estimated to be 25,179 te (Appendix A), which will contribute less than 0.12% of the atmospheric emissions associated with UK offshore shipping and oil and gas activities Considering the above, atmospheric emissions do not warrant further assessment.
	Disturbance to seabed	Currently it is envisaged that all vessels undertaking the decommissioning and remove works would be dynamically positioned vessels. As a result, there will be no anchorin associated with the decommissioning of the topsides. Should this change following the commercial tendering process and an anchor vessel is required, any potential seable impact would be assessed and captured in the Consent to Locate application, Marin Licence application and supporting Environmental Impact Assessment (EIA) justification within the Portal Environmental Tracking System (PETS). On this basis, no further assessment needs to be undertaken.



TABLE 4.2 ENVIRONMENTAL IMPACT MANAGAMENT (Cont.)		
Activity	Main Impacts	Management
Topside Removal	Physical presence of vessels	The presence of a small number of vessels for topsides decommissioning activities will be short-term in the context of the life of the Cormorant Alpha installation. Activity will occur using similar vessels to those currently deployed for oil and gas installation, operation and decommissioning activities. The decommissioning of the Cormorant Alpha topsides is estimated to require up to six vessels, with a maximum of four on site at the platform location at any one time, depending on the selected method of removal. If applicable, Notices to Mariners will be made in advance of activities occurring. This may not be a requirement as decommissioning activities will only take place within the existing 500m safety exclusion zone. Stakeholders will have time to make any necessary alternative arrangements for the very limited period of operations. Considering the above, temporary presence of vessels does not need further assessment.
	Physical presence of infrastructure decommissioned <i>in situ</i>	As topsides will be fully removed and a temporary navigational aid will be installed on the substructure up until its subsequent removal, there will be no mechanism for associated long-term impact through physical presence. Considering the above, no further assessment related to long term presence of infrastructure is justified.
	Discharges to sea (short-term & long-term)	Discharges from vessels associated with the decommissioning work are typically well- controlled activities that are regulated through vessel and machinery design, management and operation procedures. In addition, the topsides will be Drained, Flushed, Purged and Vented (DFPV) using the TAQA DFPV philosophy prior to any decommissioning activities commencing. There would be no planned discharges from the topsides. Any residual remaining material will be in trace levels/volumes following the DFPV regime and therefore would not pose any significant risk.



TABLE 4.2 ENVIRONMENTAL IMPACT MANAGAMENT (Cont.)		
Activity	Main Impacts	Management
Topside Removal		The rundown lines connect the topsides facilities with the (disused) storage cells. Planned hydrocarbon/ chemical discharges during the flushing, cleaning and dewatering of the rundown line pipework within Leg C4 (Figure 2-1) will be covered by oil discharge permits and chemical permits under the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 and the Offshore Chemicals Regulations 2002 (as amended), respectively. The process to break containment of the rundown lines and will be internal to the legs. A small amount of metal waste (<100 kg) may be produced during the breaking of containment. This will be collected and returned to shore along with the topsides waste inventory. Breaking of containment will enable the installation of launcher cans and the environmental isolation of the rundown lines. As the topsides will be fully removed and the rundown lines will be isolated, there will be no potential for any discharges in the longer term from the facilities. The potential for any accidental release is assessed in the 'Accidental Events' section of this Table. Considering the above, discharges to sea from the topsides will not be assessed further.
	Under water noise emissions	Cutting required to remove the topsides will take place above the waterline, and there will be no other noise-generating activities. Vessel presence will be limited in duration. The project is not located within an area protected for marine mammals. With industry-standard mitigation measures and JNCC guidance, EAs for offshore oil and gas decommissioning projects typically show no injury, or significant disturbance associated with these projects. On this basis, underwater noise assessment does not need assessed further.



TABLE 4.2 ENVIRONMENTAL IMPACT MANAGAMENT (Cont.)			
Activity Main Impacts		Management	
	Resource use	Generally, resource use from the proposed activities will require limited raw materials and be largely restricted to fuel use. Such use of resources is not typically an issue of concern in offshore oil and gas. The estimated worst-case (Single Lift option) total energy usage for the project is 284,310 GJ (Appendix A). Material will be returned to shore as a result of project activities, and expectation is to recycle at least 97% of this returned material. There may be instances where infrastructure returned to shore is contaminated and cannot be recycled, but the weight/volume of such material is not expected to result in substantial landfill use. Considering the above, resource use does not warrant further assessment.	
Topside Removal	Onshore activities	The onshore waste management process is likely to have negligible consequences for the human population in terms of an increase in dust, noise, odour and reduced aesthetics. It should be noted that, through TAQA's Waste Management Strategy, only licenced contractors will be considered who can demonstrate they are capable of handling and processing the material to be brought ashore (e.g. permitted capacity to accept the relevant waste streams). This will form part of the commercial tendering process, including duty of care audits and due diligence on the successful contractor. Approval determined through due-diligence assessment comprising site visits, review of permits and consideration of the facilities design and construction has been developed to minimise environmental impact. TAQA understands that dismantling sites will also require consents and approvals from onshore regulators such as the Scottish Environment Protection Agency (SEPA) or the Environment Agency, who apply conditions relating to mitigation, management and who are responsible for the provisio of permits for such work.	



TABLE 4.2 ENVIRONMENTAL IMPACT MANAGAMENT (Cont.)				
Activity	Main Impacts	Management		
Topside Removal	Waste	It is waste management, not generation, that is the issue across DPs, with capacity to handle waste within the UK often cited as a stakeholder concern. The limited waste to be brought to shore, which will be routine in nature, will be managed in line with TAQA Waste Management Strategy as part of the project Active Waste Management Plan, using approved waste contractors. On this basis, no further assessment of waste is necessary.		
	Employment	TAQA will communicate regularly with all crew members throughout. Following the above measures and continued communications further assessment is not warranted for this aspect.		
	Dropped objects, although unlikely, the dropping of a large object (i.e. during heavy lifts) onto the CGBS storage cells could lead to a release of the cell contents (hydrocarbons, water, scale, sediments) to sea.	The impacts, management and mitigation of dropped objects and potential release of the cell contents during decommissioning activities have been documented in Section 5.2 of the Cormorant Alpha Topside Environmental Appraisal (Ref 3).		



## **5 INTERESTED PARTY CONSULTATIONS**

Who	Comment	Response					
	Statutory (	Consultations					
National Federation of Fisherman's Organisations	23 <sup>rd</sup> April 2020 email to provide a high-level summary of the project scope and intent with an invitation for further engagement	No comment received					
Scottish Fisherman's Federation (SFF)	23 <sup>rd</sup> April 2020 email to provide a high-level summary of the project scope and intent with an invitation for further engagement	SFF thanked TAQA for their early engagement and confirmed any further comments would be through the statutory consultation					
Northern Irish Fish Producers Organisation	23 <sup>rd</sup> April 2020 email to provide a high-level summary of the project scope and intent with an invitation for further engagement	No comment received					
Global Marine Systems Limited	15 <sup>th</sup> June 2020 email to provide a high-level summary of the project scope and intent with an invitation for further engagement	No comment received					
	Informal Stakeho	older Consultations					
Public	No comments received	No comments received					



## **6 PROGRAMME MANAGEMENT**

# 6.1 Project Management and Verification

A Project Management team will be appointed to manage suitable sub-contractors for the removal of the installation. Standard procedures for operational control and hazard identification and management will be used. Where possible the work will be coordinated with other decommissioning operations in the NNS. The Management team will monitor and track the progress of consents and the consultations required as part of this process. Any changes in detail to the offshore removal programme will be discussed and agreed with OPRED.

## 6.2 Post Decommissioning Debris Clearance and Verification

During topside decommissioning OPRED will be provided with progress reports and once the Cormorant Alpha topside is removed TAQA will inform OPRED and subsequently provide a close out report.

The existing 500m radius safety zone around the platform will remain in place. The final condition of the CGBS will depend on the decommissioning proposals presented in the substructure DP. Following the completion of decommissioning activities in the wider Cormorant Alpha area verification of the seabed state for other users of the sea will be obtained by over-trawl trials, or alternative methods, to be discussed and agreed with OPRED. Following verification TAQA will notify all relevant governmental departments and non-governmental organisations. The survey results will also be shared with UK Fisheries Offshore Oil and Gas Legacy Trust Fund Ltd for inclusion in their FishSAFE system and to the United Kingdom Hydrographic Office for marking on Admiralty Charts and notices to mariners as required.

## 6.3 Schedule

Project Plan: Please refer to the latest plan below

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Well Plug & Abandonment											
Topsides & Pipelines Clean & Make Safe											
Removal Strategy Contract Tender & Award											
Topsides Removal											
Close Out Report Submission											

KEY:

Potential Activity Window

#### Figure 6.1: Cormorant Alpha Decommissioning Project Schedule



## 6.4 Long Term Facilities Management

This Decommissioning Programme covers a multi-year timescale, during which time the asset will be maintained in line with legislation and TAQA's corporate standards and procedures in order to facilitate the safe execution of the topside removal.

Following the removal of the topsides the existing 500m safety zone will remain in place and the Cormorant Alpha Consent to Locate will be revised to reflect the change in structure.

As the Comparative Assessment process for the Cormorant Alpha Substructure has yet to take place the final decommissioning solution has yet to be determined. TAQA's working assumption is that the interim status is that caps will be installed on the top of each concrete leg and that suitable navigational aids will be fitted by the removal contractor. The final condition of the substructure (CGBS & Legs) will depend on the decommissioning proposals presented in the substructure DP which will be submitted at a future date.

TAQA will consult with the NLB to ensure that the design of the navigational aid unit meets all regulatory requirements. It is anticipated that the unit will be of a self-contained offshore lighthouse (SCOL) design and will be helicopter portable to facilitate maintenance and replacement as required.

Following the topside removal TAQA will confirm this with the United Kingdom Hydrographic Office (UKHO) along with the details of the SCOL e.g. light colour, sequence, and range.

The Cormorant Alpha Safety Case will be revised at the appropriate phases during the decommissioning process to ensure it is reflective of the changing installation status.

TAQA will continue to maintain an Oil Pollution Emergency Plan (OPEP) for the installation.



## 6.5 Costs

TABLE 6.1 PROVISIONAL DECOMMISSIONING PROGRAMME COSTS		
Item	Estimated Cost (£m)	
Operator Project Management		
Facility Running / Owner Costs		
Well Plug & Abandonment		
Facilities Make Safe		
Topside Preparation	Provided to OPRED	
Topsides Removal		
Topside Only Onshore Recycling		
TOTAL	Provided to OPRED	

## 6.6 Close Out

In accordance with the OPRED guidelines, a close out report will be submitted to OPRED within 1 year of the completion of the offshore decommissioning scope. The report will detail the removal of the Cormorant Alpha topside and any major variances from the programme.

## 6.7 Post Decommissioning Monitoring and Evaluation

TAQA will discuss and agree with OPRED a programme of post decommissioning surveys following full field decommissioning.



## **7 SUPPORTING DOCUMENTS**

	TABLE 7.1 SUPPORTING DOCUMENTS
Document Number	Title
1	TB-COADEC01-X-AD-0001-000 Cormorant Alpha Derrick Structure Removal and MDR Installation Decommissioning Programme
2	405686-T04P-HE-MSR-001 Method statement - Cormorant Alpha topsides removal Rev. B
3	Cormorant Alpha Topsides Environmental Assessment (Non-Derogation) 77IFS-167262-H99-0001-000
4	Detailed Feasibility Study – Decommissioning of TAQA NNS Assets 77-DEC00001-X-SW-0003-000
5	Cormorant Alpha Asset Re-Use Study TB-COA-10345-X-SU-0001-000



## **APPENDICES**

## **Public Notice**

PUBLIC NOTICE PETROLEUM ACT 1998

## **Removal of Cormorant Alpha Topsides**

Cormorant Alpha Topsides Decommissioning Programme

TAQA Bratani Limited ("TAQA") has submitted, for the consideration of the Secretary of State for Business, Energy and Industrial Strategy, a draft decommissioning programme for the removal of the Cormorant Alpha topsides, in accordance with the provisions of the Petroleum Act 1998 (The Act). It is a requirement of the Act that interested parties be consulted on such proposals.

The facilities covered by the Cormorant Alpha topsides draft decommissioning programme are in Block 211/26a in the northern North Sea, approximately 103km north-east of Unst. Shetland and 41km from the UK/Norwegian median line. The facilities comprise forty modules split over two levels, these sit upon the cellar deck, which is attached in one piece to the four concrete legs.

TAQA hereby gives notice that the Cormorant Alpha topsides draft decommissioning programme is available, from the following location during office hours (by appointment) or can be requested by email as indicated:

TAQA Bratani Limited TAQA House Prime Four Business Park Kingswells Aberdeen AB15 8PU

If, due to Coronavirus restrictions, visiting TAQA House is not possible please contact the undernoted to obtain a paper copy:

Alastair MacLean, Decommissioning Program Manager 01224 275275 stakeholderdecomuk@tagaglobal.com

Representations regarding the draft decommissioning programme should be submitted in writing to Alastair MacLean using the contact details above (preferably by email) where they must be received by the consultation closing date, 18<sup>th</sup> July 2021, and should state the grounds upon which any representations are being made.



## Letters of Support



Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy and Industrial Strategy 3<sup>rd</sup> Floor, Wing C AB1 Building, 3rd Floor Crimon Place Aberdeen AB10 1BJ Shell U.K. Limited 1 Altens Farm Road Nigg Aberdeen AB12 3FY United Kingdom Tel +44 1224 882000 Email james.blackburn@shell.com Internet http://sww.shell.com

20th January 2022

Dear Sir or Madam,

### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7<sup>th</sup> January 2022 regarding the abandonment programme for the Cormorant Alpha Topside installation.

We, Shell UK Limited, confirm that TAQA Bratani Limited (TAQA) is authorized on our behalf to submit an abandonment programme relating to the abandonment of the Cormorant Alpha Topside as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topside Decommissioning Programme dated January 2022, which is to be submitted by TAQA in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

James Blackburn UK Decommissioning BOM

For and on behalf of Shell UK Limited

Shell U.K. Limited Registered in England number 140141 Registered office Shell Centre London SE1 7NA VAT reg number G8 235 7032 55

CORMORANT ALPHA TOPSIDE DECOMMISSIONING PROGRAMME





Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy and Industrial Strategy 3rd Floor, Wing C AB1 Building, 3rd Floor Crimon Place Aberdeen AB10 1BJ Enterprise Oil UK Limited 1 Altens Farm Road Nigg Aberdeen AB12 3FY United Kingdom Tel +44 (0) 1224 882000 Internet http://www.shell.com

15<sup>th</sup> February 2022

Dear Sir or Madam,

CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7<sup>th</sup> January 2022 regarding the abandonment programme for the Cormorant Alpha Topside installation.

We, Enterprise Oil UK Limited, confirm that TAQA Bratani Limited (TAQA) is authorized on our behalf to submit an abandonment programme relating to the abandonment of the Cormorant Alpha Topside as directed by the Secretary of State on 7<sup>th</sup> January 2022. We confirm that we support the proposals detailed in the Cormorant Alpha Topside

Decommissioning Programme dated January 2022, which is to be submitted by TAQA in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

 $\mathcal{G} \mathcal{A}$  Blackburn

James Blackburn UK Decommissioning BOM For and on behalf of Enterprise Oil UK Limited

Enterprise Oil UK Limited Registered in England number 01082048 Registered office Shell Centre Landan SE1 7NA VAT reg number GB 235 7032 55

1



## MOLGROUP

24 January 2022

+44 1224 608020 | molgroup.hu

Union Plaza, 1 Union Wynd, Abardeen AB10 15L UK

address:

EC3A 6AP UK | Business

London.

our

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

Dear Sir or Madam

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7 January 2022.

We, MOL UK Facilities Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7 January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

Nico Brunsmann

DECOMMISSIONING PROGRAMME

Managing Director

For and on behalf of MOL UK Facilities Ltd

Krisztina Varga

Director





Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

> January 26, 2022 MCXD 22-001

Dear Sir or Madam

CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated January 7, 2022.

We, MCX Dunlin (UK) Limited, confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on January 7, 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

mand

Mitsuhiro Yamasaki Director For and on behalf of MCX Dunlin (UK) Limited





Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

> January 26, 2022 MCXO 22-001

Dear Sir or Madam

## CORMORANT A LPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated January 7, 2022.

We, MCX Osprey (UK) Limited, confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on January 7, 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

mfuli

Mitsuhiro Yamasaki Director For and on behalf of MCX Osprey (UK) Limited





Dana Petroleum (E&P) Limited

King's Close 62 Huntly Street Aberdeen AB10 1RS United Kingdom t: +44 (0) 1224 616 000 f: +44 (0) 1224 616 001 www.dana-petroleum.com

Offshore Petroleum Regulator for Environment & Decommissioning Department for Business, Energy and Industrial Strategy (BEIS) AB1 Building Crimon Place Aberdeen AB10 1BJ

January 26th 2022

Dear Sir or Madam,

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Dana Petroleum (E&P) Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

Eiko van Dalen an Dalen (Jan 26, 2022 13:12 GMT+1)

Dana Petroleum (E&P) Limited Eiko van Dalen Director

> Registered in England and Wales, Company No. 02294746 Registered Office: 78 Cannon Street, London EC4N 6AF





Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ Chrysaor Production (U.K.) Limited Rubislaw House Anderson Drive Aberdeen AB15 6FZ 26<sup>th</sup> January 2022

Dear Sir or Madam

### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

Chrysaor Production (U.K.) Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

**Richard Tocher** 

Decommissioning Manager For and on behalf of Chrysaor Production (U.K.) Limited

Registered in England & Wales, Brettenham House, Lancaster Place, London, WC2E 7EN. Company No. 00524868





Britoil Limited 1 Wellheads Avenue Dyce Aberdeen AB21 7PB

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy and Industrial Strategy AB1 Building (Wing C) Crimon Place Aberdeen AB10 1BJ

Date: 27th January 2022

Dear Sir or Madam,

## CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Britoil Limited, confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully,

Allen Deans

Allen Deans

Brent System Business Manager For and on behalf of Britoil Limited (Company Number SC077750)

> Britoil Limited, Company No. SC077750 Registered Office: 1 Wellheads Avenue, Dyce, Aberdeen, AB21 7PB





Amoco (U.K.) Exploration Company LLC 1209 Orange Street Wilmington Delaware DE 19801 USA

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy and Industrial Strategy AB1 Building (Wing C) Crimon Place Aberdeen AB10 1BJ

Date: 27th January 2022

Dear Sir or Madam,

## CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Amoco (U.K.) Exploration Company LLC, confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully,

Allen Deans

Allen Deans

Brent System Business Manager For and on behalf of Amoco (U.K.) Exploration Company LLC (Company Number SF000790)

> Amoco (U.K.) Exploration Company LLC, Company No. SF000790 Registered Office: 1209 Orange Street Wilmington Delaware DE 19801 USA





Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

Your date 7 Jan 2022 Your reference

<sup>Our date</sup> 31 Jan 2022 Our reference TS

CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7 January 2022.

We, ConocoPhillips Skandinavia AS confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7 January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours sincerely on behalf of ConocoPhillips Skandinavia AS

—Docusioned by: Tanya Smith —78019820870F431

Tanya J Smith COMMERCIAL ADVISOR

Postal address Visiting P.O. Box 3 Ekofisky N-4065 STAVANGER N-40661 NORWAY NORWA E-mail: contact/@conocophillips.com

Visiting address Ekofiskvegen 35 N-4056 Tananger NORWAY Illips.com Telephone +47 52 02 00 00 Telefax +47 52 02 66 00 Business Enterprise No. ConocoPhilips Skandinavia AS

NO 918 110 127

Page 1 of 1





Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

31 January 2022

Dear Sir or Madam,

#### LETTER OF SUPPORT CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Equinor UK Limited and Equinor ASA, confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours sincerely,

Nigel Gamblin (840164)

Nigel Gamblin VP Asset Management

For and on behalf of Equinor UK Limited and Equinor ASA

Equinor UK Limited Registered number 01285743 Registered office address 1 Kingdom Street London, W268D Telephone +44 (0) 20 3204 3200 Page 1 of 1 Internet ww.equinor.com



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Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

31 January 2022

Dear Sir or Madam

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7 January 2022.

We, NEO Energy Natural Resources Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7 January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully



Paul Harris Chief Operating Officer For and on behalf of NEO Energy Natural Resources Limited

30 St Mary Axe

Level 32, The Gherkin 🦳 9th Floor, The Silver Fin Building 🛛 🐛 +44 (0)203 357 9700 455 Union Street 30 St Mary Axe 455 Union Street London EC3A 8BF Aberdeen AB116DB

Info@neweuropeanoffshore.com

www.neweuropeanoffshore.com

NEO Energy Natural Resources Limited is a company registered under company number 13018823 Registered Office: 30 St Mary Ave, London, United Kingdom, EC3A 88F



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Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

31 January 2022

Dear Sir or Madam

CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7 January 2022.

We, NEO Energy (UKCS) Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7 January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

DocuSigned by Paul Hamis 42790DEA3A/JE4R2

Paul Harris Chief Operating Officer For and on behalf of NEO Energy (UKCS) Limited

> 30 St Mary Axe London EC3A 8BF

Level 32, The Ghenkin 9th Floor, The Silver Fin Building 🐛 +44 (0)203 357 9700 455 Union Street Aberdeen AB116DB

Info@neweuropeanoffshore.com

www.neweuropeanoffshore.com

NED Energy (UKCS) Limited is a company registered in England under company number 2669936 Registered Office: 30 St. Mary Ava, London, United Kingdom, ECJA IBF





TotalEnergies E&P North Sea UK Limited

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

01/02/22

Dear Sir or Madam

## CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, TotalEnergies E&P North Sea UK Limited, confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7th January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

## Jean-Luc Guiziou

Jean-Luc Guiziou Managing Director

For and on behalf of TotalEnergies E&P North Sea UK Limited

Mailing address: TotalEnergies House, Tarland Road, Westhill - AB32 6JZ - UK T: +44 1224 297000

TotalEnergies E&P North Sea UK Limited Registered Office: 18<sup>th</sup> Floor, 10 Upper Bank Street, Canary Wharf, London, E14 5BF, UK Registered in England & Wales Company Number 03682299





Cunard House 5<sup>th</sup> Floor 15 Regent Street London SW1Y 4LR United Kingdom T +44 (0)20 7925 4900 F +44 (0)20 7925 4936 www.enguest.com

Offshore Petroleum Regulator for Environment and Decommissioning AB1 Building (Wing C) Crimon Place Aberdeen AB10 1BJ

Date: 14 Jan 2022

Dear Sir or Madam

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter 07 January 2022.

We, EnQuest Thistle Limited confirm that we authorise TAQA Bratani Limited hereby to submit the abandonment programme relating to Cormorant Alpha topsides removal as directed by the Secretary of State on 07 January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, that is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

RID

Mr Roger Davis Business Manager, EnQuest Thistle Limited For and on behalf of EnQuest Thistle Limited

> EnQuest Thistle Ltd Company No 04487223 Incorporated in England and Wales

Registered office unard House, 5<sup>th</sup> Floor, 15 Regent Street London SW1Y 4LR United Kingdom





Cunard House 5<sup>th</sup> Floor 15 Regent Street London SW1Y 4LR United Kingdom T +44 (0)20 7925 4900 F +44 (0)20 7925 4936 www.enguest.com

Offshore Petroleum Regulator for Environment and Decommissioning AB1 Building (Wing C) Crimon Place Aberdeen AB10 1BJ

Date: 14 Jan 2022

Dear Sir or Madam

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter 07 January 2022.

We, EnQuest Heather Limited confirm that we authorise TAQA Bratani Limited hereby to submit the abandonment programme relating to Cormorant Alpha topsides removal as directed by the Secretary of State on 07 January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, that is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

KIND

Mr Roger Davis Business Manager, EnQuest Heather Limited For and on behalf of EnQuest Heather Limited

> EnQuest Heather Ltd Company No 02748866 Incorporated in England and Wales

Registered office: unard House, 5<sup>th</sup> Floor, 15 Regent Street London SW1Y 4LR United Kinodom





Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

FAO: Ruth Ledingham Senior Decommissioning Manager Offshore Decommissioning Unit

31st January 2022

Dear Sir or Madam,

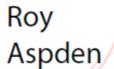
CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, CNR International (U.K.) Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully



Digitally signed by Roy Aspden Date: 2022.02.02 13:30:27 Z

Decommissioning Project Manager For and on behalf of CNR International (U.K.) Limited

#### CNR International (U.K.) Limited

Company Number 00813187 (England and Wales) Switchboard +44(0)1224 303600

Fax

St Magnus House, Guild Street, Aberdeen, AB11 6NJ United Kingdom Registered office: c/o PInsent Masons LLP, 1 Park Row, Leeds, LS1 5AB United Kingdom.

+44(0)1224 303888





Fairfield Fagus Limited 1 Marischal Square (First Floor) Broad Street Aberdeen, AB10 1BL, UK

2<sup>nd</sup> February 2022

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

Dear Sir or Madam

Cormorant Alpha Topsides Decommissioning Programme Petroleum Act 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Fairfield Fagus limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on (date of calling letter).

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully For and on behalf of Fairfield Fagus Limited

Brian Brown Supply Chain & Logistics Manager

Fairfield Fagus Limited Cannon Place, 78 Cannon Street, London, EC4N 6AF T +44 (0)1224 320500 F +44 (0)1224 320501 Registered in England and Wales 5461823

CORMORANT ALPHA TOPSIDE DECOMMISSIONING PROGRAMME





Fairfield Betula Limited 1 Marischal Square (First Floor) Broad Street Aberdeen, AB10 1BL, UK

2<sup>nd</sup> February 2022

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

Dear Sir or Madam

Cormorant Alpha Topsides Decommissioning Programme Petroleum Act 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Fairfield Betula limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on (date of calling letter).

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully For and on behalf of Fairfield Betula Limited

Brian Brown Supply Chain & Logistics Manager

Fairfield Betula Limited Cannon Place, 78 Cannon Street, London, EC4N 6AF T +44 (0)1224 320500 F +44 (0)1224 320501 Registered in England and Wales 4465204





3<sup>rd</sup> Floor, H1 Hill of Rubislaw, Anderson Drive Aberdeen, AB15 6BY Tel: 01224 678008 info@siccarpointenergy.co.uk www.siccarpointenergy.co.uk

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

3rd February 2022

Dear Sir or Madam

### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Siccar Point Energy E&P Limited, confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully,

Sorabh Ry

Jonathan Roger CEO For and on behalf of Siccar Point Energy E&P Limited

Siccar Point Energy E&P Limited Registered in England & Wales, No. 01504603 Registered Office: 1 Park Row, Leeds, LS1 5AB



Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

DATE 31st January 2022

Dear Sir or Madam

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Wintershall Dea Norge AS confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7th January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

SuetLing Suet Yew Asset Manager For and on behalf of Wintershall Norge AS



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Esso Exploration and Production UK Limited Emyn House Emyn Way Leatherhead Surrey KT22 8UX +44 1372 222000 Telephone +44 (0) 1372 222622 Facsimile



Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

31st January 2022

Dear Sir or Madam

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, Esso Exploration and Production UK Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

#### Yours faithfully



Gregor Nicol Business Unit Coordinator – UK and Azerbaijan Joint Interest ExxonMobil International Limited For and on behalf of Esso Exploration and Production UK Limited

> Registered in England Number 00207426 Registered Office: Emyn House, Emyn Way Leatherhead, Surrey KT22 8UX

An ExxonMobil Subsidiary



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ExxonMobil Exploration and Production Norway AS Essovelen 100, 3153 Tolvsrod Tonsberg, Norway P.O. Box 8032, Stavanger, 4068, Norway



Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

31st January 2022

Dear Sir or Madam

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

We, ExxonMobil Exploration and Production Norway AS confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

DoouSigned by: Gregor Nicol

Gregor Nicol Business Unit Coordinator – UK and Azerbaijan Joint Interest ExxonMobil International Limited For and on behalf of ExxonMobil Exploration and Production Norway AS

> Registered in Norway Number: 914048990 Registered Office: Essovelen 100, 3153 Tolvsrod Tonsberg, Norway

An ExxonMobil Subsidiary



9th February 2022

Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy & Industrial Strategy 3rd Floor, Wing C AB1 Building Crimon Place Aberdeen AB10 1BJ

Dear Sir or Madam,

#### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022.

Jillian Owen 2022.02.09 14:45:57 Z

We, Apache Beryl I Limited confirm that we authorise TAQA Bratani Limited to submit on our behalf an abandonment programme relating to the abandonment of the Cormorant Alpha Topsides as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topsides Decommissioning Programme dated January 2022, which is to be submitted by TAQA Bratani Limited in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully,

Jillian Owen Commercial Manager

For and on behalf of Apache Beryl I Limited





biffshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy and Industrial Strategy 3 rd Floor, Wing C AB1 Building, 3rd Floor Crimon Place Aberdeen AB10 1BJ A/S Norske Shell Hovedkontor (Head Office) Tankvegen 1 Postboks 40 N-4098 Tananger Norway Tel: +47 51 69 30 30 Fax: +47 51 69 30 30 Internett: www.shell.no Foretaksnummer NO 914 807 077 MVA

11th February 2022

Dear Sir or Madam,

### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022 regarding the abandonment programme for the Cormorant Alpha Topside installation.

We, A/S Norske Shell, confirm that TAQA Bratani Limited (TAQA) is authorized on our behalf to submit an abandonment programme relating to the abandonment of the Cormorant Alpha Topside as directed by the Secretary of State on 7<sup>th</sup> January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topside Decommissioning Programme dated January 2022, which is to be submitted by TAQA in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully

Recoverable Signature

Nim Themen

Nina Thowsen Asset Manager Signed by: U SNTH2

For and on behalf of A/S Norske Shell





#### Offshore Petroleum Regulator for Environment and Decommissioning Department for Business, Energy and Industrial Strategy 3 rd Floor, Wing C AB1 Building, 3rd Floor Crimon Place Aberdeen AB10 1BJ

A/S Norske Shell Hovedkontor (Head Office) Tankvegen 1 Postboks 40 N-4098 Tananger Norway Tel: +47 51 69 30 30 Internett: www.shell.no Enterprise Oil Norge Limited {Campany number 01682049}

11th February 2022

Dear Sir or Madam,

### CORMORANT ALPHA TOPSIDES DECOMMISSIONING PROGRAMME PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 7th January 2022 regarding the abandonment programme for the Cormorant Alpha Topside installation.

We, Enterprise Oil Norge Limited, confirm that TAQA Bratani Limited (TAQA) is authorized on our behalf to submit an abandonment programme relating to the abandonment of the Cormorant Alpha Topside as directed by the Secretary of State on 7 th January 2022.

We confirm that we support the proposals detailed in the Cormorant Alpha Topside Decommissioning Programme dated January 2022, which is to be submitted by TAQA in so far as they relate to those facilities in respect of which we are required to submit an abandonment programme under section 29 of the Petroleum Act 1998.

Yours faithfully



For and on behalf of Enterprise Oil Norge Limited

## CONTACT

TAQA Bratani Limited TAQA House Prime Four Business Park Kingswells, Aberdeenshire AB15 8PU

Scotland UK

Tel: +44 (0)1224 275275

www.tana.com

