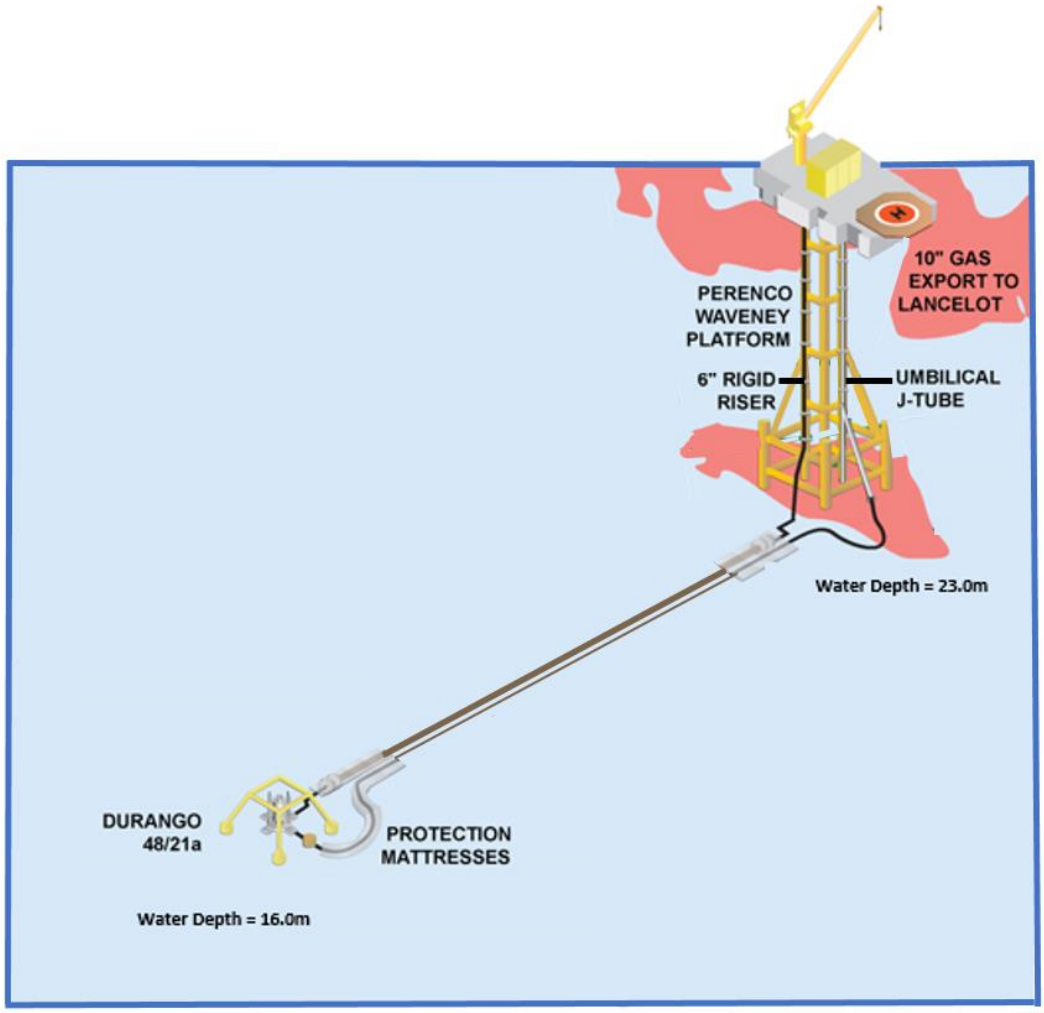

PERENCO NORTH SEA LIMITED

Durango Installation
Decommissioning Programme

April 2024

Consultation Draft

Document Control

Approvals

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Northern Ireland Fish Producers' Organisation (NIFPO)	1
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Terms and Abbreviations

Abbreviation	Explanation
“	Inch
>	Great than
£	British Pound
%	Percentage
AB1	Abandonment Phase 1 (The reservoir has been permanently isolated)
AWMP	Active Waste Management Plan
DP	Decommissioning Programme
EA	Environmental Appraisal
EU	European Union
EUNIS	European Nature Information System
HSEx	Health and Safety Executive
ICES	International Council for the Exploration of the Seas
km	Kilometre
km^2	Square Kilometre
LAPS	Lancelot Area Pipeline System
LSA	Low Specific Activity
m	Metre
m^3	Cubic Metre
MARPOL	The International Convention for the Prevention of Pollution from Ships
MAT	Master Application Template
MODU	Mobile Offshore Drilling Unit
NORM	Naturally Occurring Radioactive Materials
NSTA	North Sea Transition Authority
N/A	Not Applicable
NFFO	National Federation of Fishermen’s Organisations
NIFPO	Northern Ireland Fish Producers’ Organisation
OEUK	Offshore Energies United Kingdom
OPEP	Oil Pollution Emergency Plan
OPOL	Offshore Pollution Liability Agreement
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning

Abbreviation	Explanation
OSPAR	The Convention for the Protection of the Marine Environment of the North-East Atlantic
P&A	Plug and Abandonment
Perenco	Perenco North Sea Limited
PETS	Portal Environmental Tracking System
PICK A	Pickerill Alpha
PICK B	Pickerill Bravo
PL	Pipeline
PLU	Umbilical Pipeline
SAC	Special Area of Conservation
SAT	Subsidiary Application Template
SCOS	The Natural Environment Research Council Special Committee on Seals
SFF	The Scottish Fishermen's Federation
SPA	Special Protection Area
Te	Tonnes
UK	United Kingdom
UKCS	United Kingdom Continental Shelf
UKHO	United Kingdom Hydrographic Office
WHPS	Wellhead Protection Structure
Xtree	Christmas Tree Valves

1. EXECUTIVE SUMMARY

1.1 Decommissioning Programme

This document contains a Decommissioning Programme (DP) for the Durango subsea installation. The owner of the installation is Perenco North Sea Limited registered number SC293676 (Perenco, the operator).

1.2 Requirement for Decommissioning Programme

Installations:

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

In conjunction with public, stakeholder and regulatory consultation, the DP is submitted in compliance with national and international regulations and OPRED guidelines. The schedule outlined in this document is for a 3 year decommissioning project plan due to begin in Q4 2023.

1.3 Introduction

The Durango field is located in the Southern Basin of the United Kingdom Continental Shelf (UKCS), in licence block 48/21a, approximately 37 kilometre (km) north of nearest landfall at Blakeney in East Anglia.

The wellhead installation is not situated within an environmentally sensitive area, the nearest Special Area of Conservation (SAC) is The Inner Dowsing, Race Bank and North Ridge SAC which is 6 km west of Durango.

The Durango field was formed in 2005, with the subsea installation installed by Bridge North Sea Limited, and subsequent first gas produced in October 2008. The Durango installation is tied back to the Waveney platform via an 8 inch (”) pipeline. Perenco purchased and became operator of Durango in 2011.

Durango is located approximately 14.7 km south west of the Waveney Platform. Production used to flow from the single Durango subsea development, well 48/21a-4z, which was side-tracked from well 48/21a-4, to the Waveney Platform via the 8” inch export line Pipeline (PL) 2555. Control of the Durango subsea well was via a control umbilical pipeline (PLU) 2556 that tied back to the Waveney platform.

At Waveney production from the Durango well entered the production header where the product was separated into gas, condensate, and water by means of the production separator to allow metering of the individual flow streams. Gas, condensate, and water were then recombined and flowed from Waveney under its own pressure into the Lancelot Area Pipeline System (LAPS) export pipeline and then onto the Bacton Gas Terminal. Durango was shut-in during 2018 and is no longer producing.

The Durango field subsea infrastructure comprises of the following:

- One subsea production well and Christmas Tree Valve (Xtree) and associated Wellhead Protection Structure (WHPS)
- Two rigid tie-in spool pieces at the well location
- One gas 8 ” export PL (PL2555)
- One control umbilical (PLU2556)

Pipelines PL2555 and PLU2566 will be covered in a future DP.

1.4 Overview of Installation Being Decommissioned

1.4.1 Installation(s)

Table 1.1: Installations Being Decommissioned			
Fields	Durango	**Production Type (Oil/Gas/Condensate)**	Gas
Water Depth metre (m)	16	**UKCS Block**	48/21a
Distance to median (km)	129	**Distance from nearest United Kingdom (UK) coastline (km)**	37
Subsea Installations		**Number of Wells**	
Number	Type	Platform	Subsea
1	WHPS	Not Applicable (N/A)	1
Drill Cuttings Piles			
Number of Piles	N/A	Total Estimated Volume (m^3)	N/A

Table 1.2: Installations Section 29 Notice Holders Details		
Section 29 Notice Holders	**Registration Number**	**Equity Interest (%)**
Perenco North Sea Limited	SC293676	100
Perenco UK Limited	04653066	0

1.5 Summary of Proposed Decommissioning Programme

Table 1.3: Summary of Decommissioning Programme	
Proposed Decommissioning Solution	**Reason for Selection**
Subsea Installations	
The subsea Xtree, wellhead and associated WHPS frame will be removed.	To remove all seabed structures and leave a clean seabed. To comply with The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) requirements. Wellheads, Xmas Trees and protection structures will be removed to shore for reuse, recycling or disposal.
Wells	
Permanent abandonment of the Durango subsea well	Meets Health and Safety Executive (HSEx) regulatory requirements and is in accordance with Offshore Energies United Kingdom (OEUK) and North Sea Transition Authority (NSTA) guidelines.
Drill Cuttings	
Left undisturbed on seabed	Cuttings were widely dispersed and fall below OSPAR 2006/5 thresholds.
Interdependencies	
Durango is connected to the Waveney Platform via PL2555 and PLU2566. The Waveney platform will remain operational and is not covered under this DP. However, prior to the decommissioning of the Durango installation the pipeline shall be flushed clean and isolated from Waveney process at Waveney platform end. At the Durango end, the pipelines will be cut and left in situ; no pipelines will be removed during the installation removal. The Durango pipelines will be covered in a future DP.	

1.6 Field Location Including Field Layout and Adjacent Facilities

Figure 1.1: Field Location in UKCS

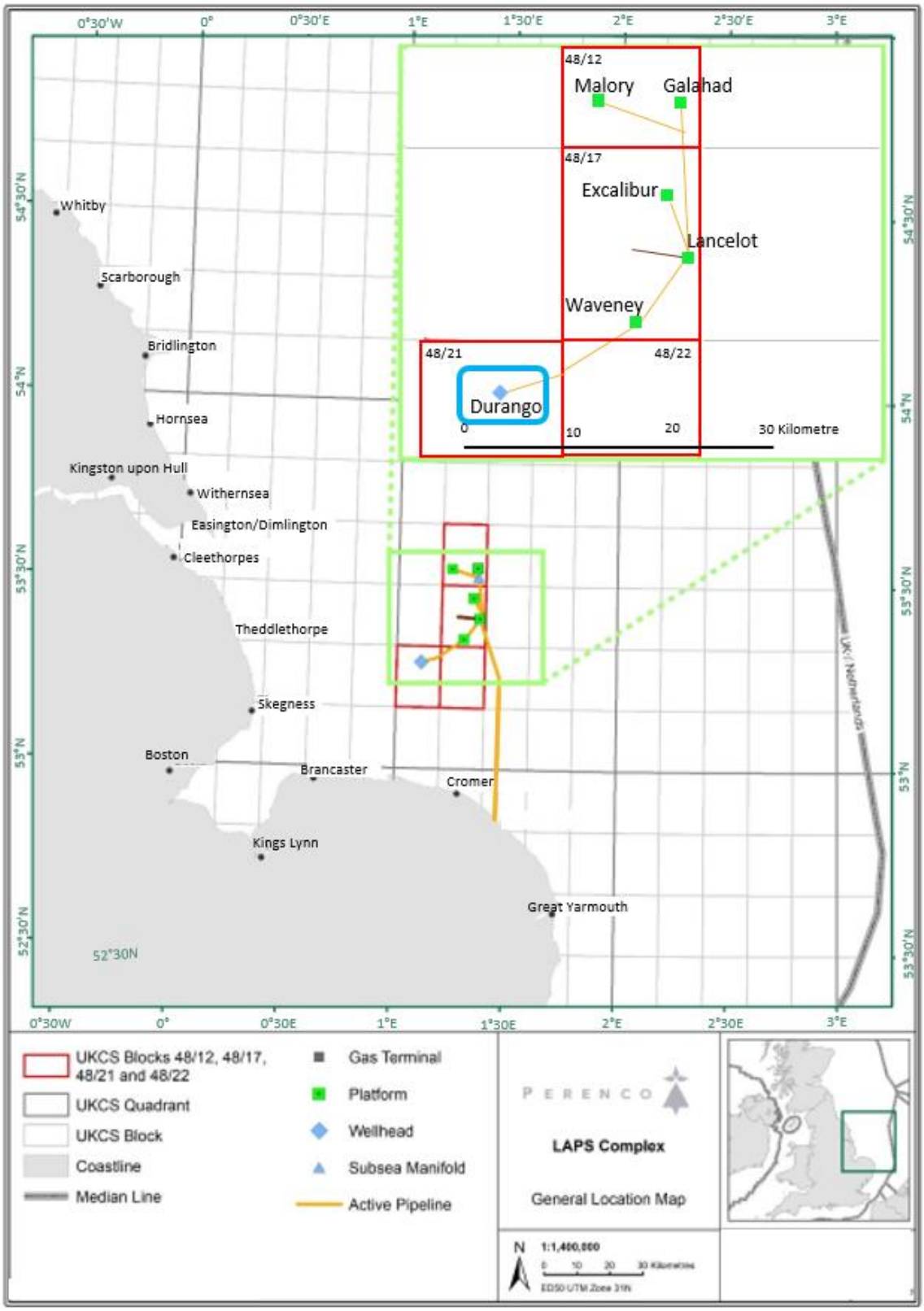


Figure 1.2: Field Layout

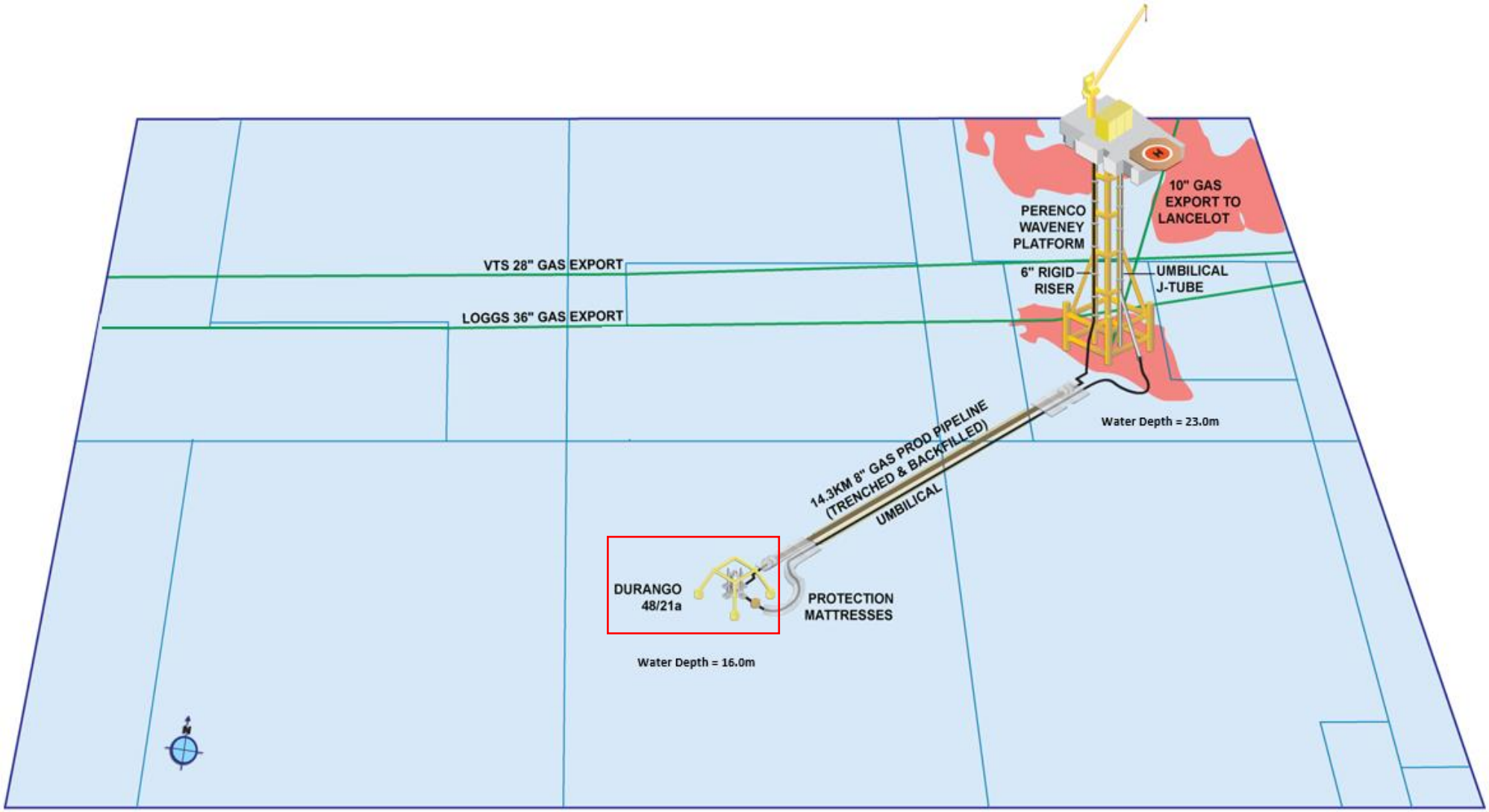
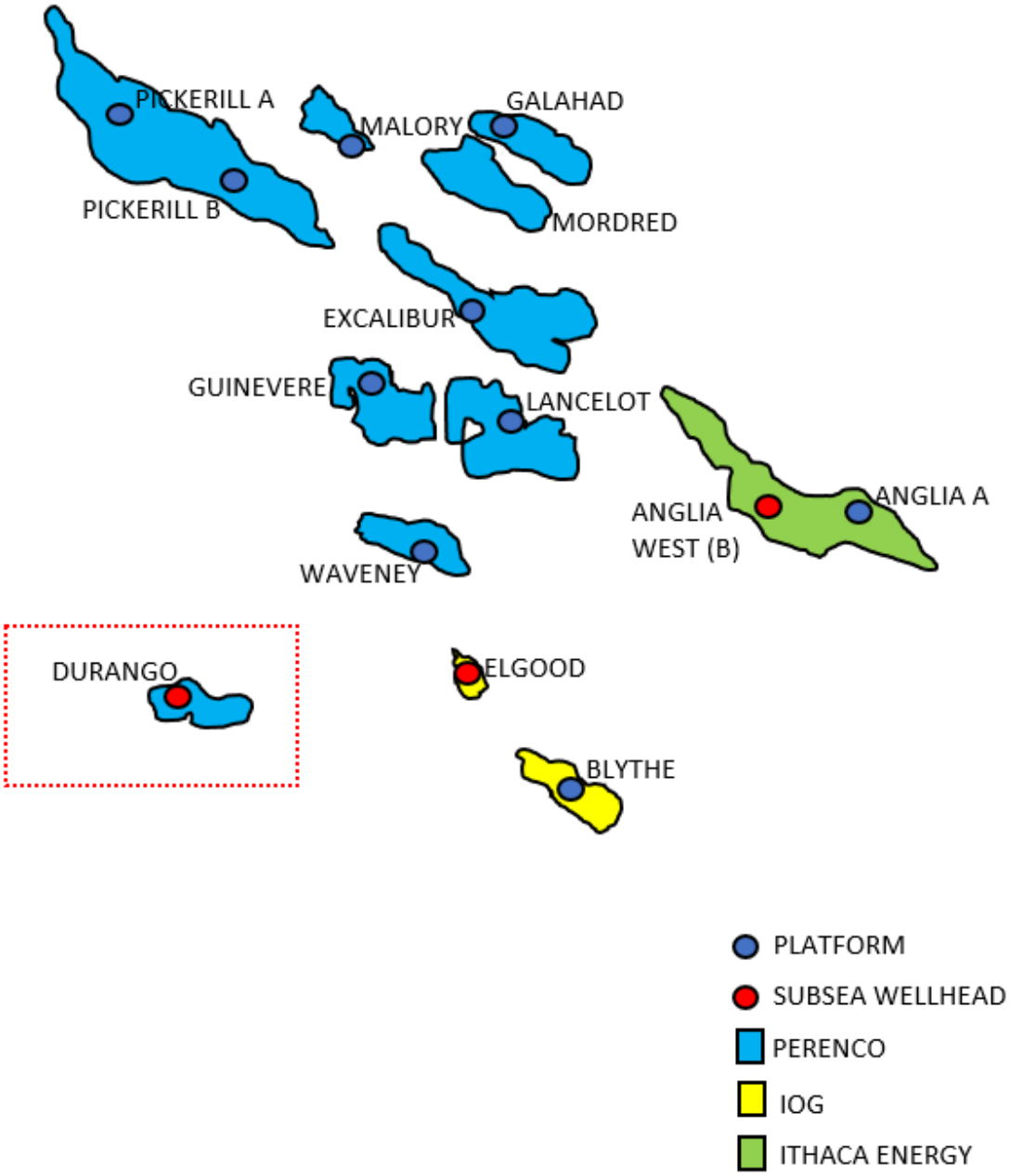


Table 1.4: Adjacent Facilities					
Owner	**Name**	**Type**	**Distance/Direction**	**Information**	**Status**
Ithaca Energy UK Limited	Anglia A	Platform	37 km northeast of Durango	Adjacent Platform	Out-of-use
Ithaca Energy UK Limited	Anglia West (B)	Subsea Well	33 km northeast of Durango	Adjacent Subsea Well	Out-of-use
IOG North Sea Limited	Blythe	Platform	23 km southeast of Durango	Adjacent Platform	Operational
IOG North Sea Limited	Elgood	Subsea Well	15 km east of Durango	Adjacent Subsea Well	Operational
Perenco Gas (UK) Limited	Excalibur	Platform	25 km northeast of Durango	Adjacent Platform	Operational
Perenco Gas (UK) Limited	Galahad & Mordred	Platform	33 km north east of Durango	Adjacent Platform	Out-of-use
Perenco Gas (UK) Limited	Guinevere	Former Platform	17 km northeast of Durango	500m Safety Zone	Out-of-use
Perenco Gas (UK) Limited	Lancelot	Platform	22 km northeast of Durango	Adjacent Platform	Operational
Perenco Gas (UK) Limited	Malory	Platform	29 km north east of Durango	Adjacent Platform	Operational
Perenco Gas (UK) Limited	Pickerill Alpha (PICK A)	Platform	26 km north of Durango	Adjacent Platform	Out-of-use
Perenco Gas (UK) Limited	Pickerill Bravo (PICK B)	Platform	27 km north of Durango	Adjacent Platform	Out-of-use
Perenco North Sea Limited	Waveney	Platform	15 km northeast of Durango	Adjacent Platform	Operational
Impacts of Decommissioning Proposals					
Decommissioning of Durango installation will have no impact on Waveney or any adjacent facilities.					

Figure 1.3: Adjacent Facilities



1.7 Industrial Implications

Perenco's contract strategy and Supply Chain Action Plan will result in an efficient and cost-effective execution of the decommissioning works.

The Durango Installation DP is managed by Perenco to ensure safe, efficient, and legally compliant delivery of the various elements of the 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. Where appropriate existing framework agreements may be used for decommissioning activities.

2. DESCRIPTION OF ITEMS TO BE DECOMMISSIONED

2.1 Installations: Subsea

Table 2.1: Subsea installations					
Subsea Installation	**Number**	**Size/Weight Tonnes (Te)**		**Location**	**Comments/Status**
Wellhead and Xtree	1	17	ED50	53° 17' 24.0967" N	The Well is abandonment phase 1 (AB1) status. WHPS surrounds Xtree.
WHPS	1	23		01° 06' 38.201" E	

2.2 Wells

Table 2.2: Well Information			
Platform Wells	**Designation**	**Status**	**Category of Well**
48/21a-4	Gas Production	AB1	SS-3-0-3
48/21a-4z	Gas Production	Completed (Shut in)	

2.3 Inventory Estimates

Figure 2.1: Pie Chart of Estimated Inventories (Installations)

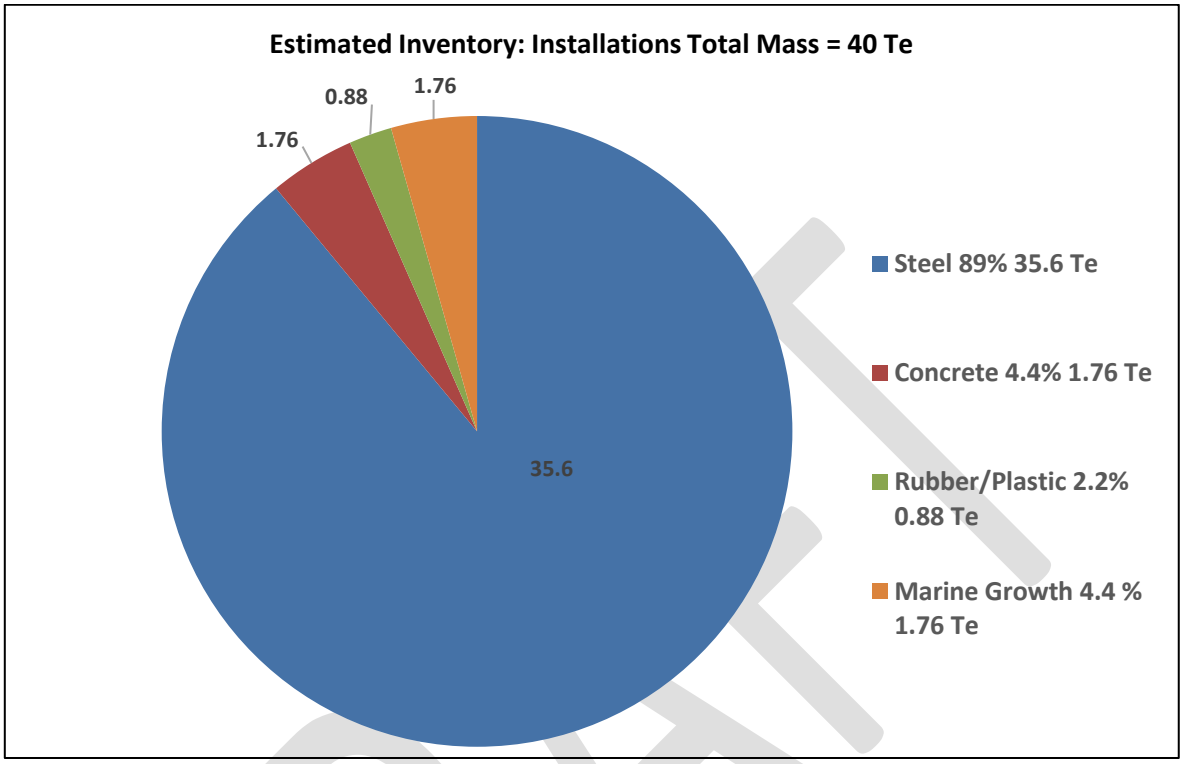


Table 2.3: Estimated Inventory Breakdown		
Estimated Inventory	**Percentage**	**Tonnage**
Steel	89	35.6
Concrete	4.4	1.76
Rubber/Plastic	2.2	0.88
Marine Growth	4.4	1.76

3. REMOVAL AND DISPOSAL METHODS

In line with the waste hierarchy, the re-use of an installation (or parts thereof) was first in the order of preferred decommissioning options for assessment.

The Perenco Section 29 Notice Holders assessed options for extending the producing life of the subsea installation, but none proved commercially viable.

The Perenco Section 29 Notice Holders then considered options for the relocation of the subsea infrastructure but concluded that there was no feasible use. However, the Perenco Section 29 Notice Holders have reviewed, and will continue to review, the subsea installation's equipment inventories to assess the potential for adding to their existing asset portfolio spares inventory or for resale to the open market.

Recovered material will be landed ashore for disposal by a contractor. It is not possible to forecast the wider reuse market with any accuracy or confidence this far forward. The Perenco Section 29 Notice Holders will continue to track reuse market trends in order to seize reuse opportunities at the appropriate time.

In the event that a Transfrontier Shipment of Waste (TFSW) permit is required, Perenco will liaise with the relevant Waste Authority and ensure that all relevant permits and consents are in place in accordance with the International Waste Shipments (Amendment) (European Union (EU) Exit) Regulation 2018, approved by UK parliament on 27th February 2019.

3.1 Subsea Installations

The subsea Xtree, wellhead and associated WHPS frame will be removed from its current location.

This will be achieved by cutting PL2555 in two locations using a diamond wire saw, once to disconnect from the Xtree and additionally to remove potential snagging associated with the pipeline end. PLU2556 will be cut to separate it from the subsea Xtree.

Once free from PL2555 and PLU2556, the subsea Xtree, wellhead and associated WHPS frame will be lifted from the seabed and recovered to deck for transport onshore. If any practical difficulties are encountered Perenco will consult OPRED.

The pipeline will remain on the seabed for future decommissioning. This shall be covered under a separate decommissioning programme.

The Durango pipeline (PL2555), umbilical (PLU2556) and the associated stabilisation features will be addressed in a separate Pipeline DP.

Table 3.1: Subsea Installations Decommissioning Options

Subsea Installations	Number	Option	Disposal Route (if applicable)
Wellhead	1	Remove	Transport ashore for disposal
WHPS	1	Remove	Transport ashore for disposal

3.2 Wells

Table 3.2: Well Plug and Abandonment (P&A)
The subsea well will be shut in and abandoned to AB3. The well casings/conductor will be cut at 3m below seabed. All wells, as listed in Section 2.3 (Table 2.4), will be P&A in accordance with OEUK Guidelines for the suspension and abandonment of wells. A Master Application Template (MAT) and the supporting Subsidiary Application Template (SAT) application within the Portal Environmental Tracking System (PETS) will be submitted in support of any activities that will be carried out.

3.3 Waste Streams

Table 3.3: Waste Stream Management Methods	
Waste Stream	**Removal and Disposal Method**
Bulk Liquids	N/A.
Marine Growth	Removed offshore /onshore. Disposed of according to guidelines.
Naturally Occurring Radioactive Materials (NORM)/ Low Specific Activity (LSA) Scale	Tests for NORM/LSA will occur offshore and will be dealt/disposed with according to guidelines and company policies.
Asbestos	N/A
Other Hazardous Wastes	None identified
Onshore Dismantling Sites	An appropriate licensed site will be selected. The chosen facility must demonstrate proven disposal track record and waste stream management throughout the deconstruction process and demonstrate their ability to deliver innovative recycling options.

Table 3.4: Inventory Disposition			
	Total Inventory (Te)	**Planned (Te) to Shore**	**Planned Left in Situ**
Installations	40	40	0

4. ENVIRONMENTAL APPRAISAL OVERVIEW

4.1 Environmental Sensitivities (Summary)

Table 4.1 summarises the environmental receptors assessed within the Durango field; further details are provided in the supporting Environmental Appraisal (EA) [Ref 8].

Table 4.1: Environmental Sensitivities	
Environmental Receptor	**Main Features**
Conservation Interests	The following sites are within 40 km from Durango: Inner Dowsing, Race Bank and North Ridge SAC – 7.1 km south west Southern North Sea SAC – 35.7 km north east North Norfolk Sandbanks and Saturn Reef SAC – 35.0 km east The Wash and North Norfolk Coast SAC – 27.4 km south west Haisborough, Hammond and Winterton SAC – 45.0 km south east Greater Wash SPA – 16.8 km North Norfolk Coast SPA - 36.7 km A geophysical survey was conducted in 2008 [Ref 6], with shallow geotechnical sampling and testing prior to installation of the umbilical. The findings confirmed the regional geological setting detailed by British Geological Survey. At this time Perenco were advised that there was no evidence of *Sabellaria spinulosa* reefs, or any other sensitive habitats, as protected under Annex 1 of the European Union (EU) Habitats Directive [Ref 5] within the Durango field. In 2023 a basic multibeam echosounder survey was requested prior to completion of the pre-decommissioning environmental surveys. During this survey the environmental contractor highlighted the potential of *Sabellaria Spinlosa* along the pipeline and noted potential *S. Spinlosa* within the 500m safety zone. The 500m safety zone area was further assessed, and it was concluded that no *S. Spinlosa* were present, [Ref 7]. The full offshore survey report will be provided in due course to support permit requirements. A risk assessment and environmental justification will also be completed for future permits, and all permits will be submitted on the PETS to gain approval prior to any activity taking place.
Seabed	The following European Nature Information System (EUNIS) seabed classifications predicted in the vicinity of the Durango field are predominantly MC321: Faunal communities of Atlantic circalittoral coarse sediment, with patches of MD321: Faunal communities in Atlantic offshore circalittoral coarse sediment, MC521: Faunal communities of Atlantic circalittoral sand, or MD521: Faunal communities in Atlantic offshore circalittoral sand.

Table 4.1: Environmental Sensitivities	
Environmental Receptor	**Main Features**
	MC321: Tide-swept circalittoral coarse sands, gravel, and shingle generally in depths of over 15-20 m. This habitat may be found in tidal channels of marine inlets, along exposed coasts and offshore. This habitat, as with shallower coarse sediments, may be characterised by robust infaunal polychaetes, mobile crustacea and bivalves. Certain species of sea cucumber (e.g. *Neopentadactyla*) may also be prevalent in these areas along with the lancelet (*Branchiostoma lanceolatum)*. MD321: Faunal communities in Atlantic offshore circalittoral coarse sediment: Offshore (deep) circalittoral habitats with coarse sands and gravel or shell. This habitat may cover large areas of the offshore continental shelf although there is relatively little quantitative data available. Such habitats are quite diverse compared to shallower versions of this habitat and generally characterised by robust infaunal polychaete and bivalve species. Animal communities in this habitat are closely related to offshore mixed sediments and in some areas settlement of *Modiolus modiolus* larvae may occur and consequently these habitats may occasionally have large numbers of juvenile *M. modiolus*. In areas where the mussels reach maturity their byssus threads bind the sediment together, increasing stability and allowing an increased deposition of silt leading to the development of the biotope MC2-222. MD521 : Faunal communities in Atlantic offshore circalittoral sand: Offshore (deep) circalittoral habitats with fine sands or non-cohesive muddy sands. Very little data is available on these habitats however they are likely to be more stable than their shallower counterparts and characterised by a diverse range of polychaetes, amphipods, bivalves and echinoderms.
Fish	The migratory fish species that may be present in the North Sea include lampreys, shads, salmonids, European eel (Anguilla Anguilla), and smelt (*Osmerus eperlanus*). These species may utilise both freshwater river systems and saltwater sea areas for spawning before migrating to the sea. Commercially important fish species in the North Sea include Atlantic cod (*Gadus morhua*), European plaice (*Pleuronectes platessa*), Dover sole (*Solea solea*), lemon sole (*Microstomus kitt*), whiting (*Merlangius merlangus*), sprat (*Sprattus sprattus*), thornback ray (*Raja clavate*), blonde ray (*R. brachyura*), Atlantic mackerel (*Scomber scrombrus*), Atlantic herring (*Clupea harengus*), and sandeel species Ammodytidae. The latter 3 are of also high ecological importance, supporting wider populations of fish and other marine predators. Shellfish species of commercial importance that have been recorded in the area, including brown crab *(Cancer pagarus)*, common whelk *(Buccinum undatum)*, European lobster *(Homarus gammarus)*, Norway lobster *(Nephrops norvegicus)*, brown shrimp *(Crangon crangon)*, pink shrimp *(Pandalus montagui)* and velvet swimming crab *(Necora puber)*.

Table 4.1: Environmental Sensitivities	
Environmental Receptor	**Main Features**
	Shellfish species of non-commercial importance includes blue mussel *(Mytilus edulis)*; cockle *(Cerastoderma edule);* razor clam *(Ensis directus)*.
Fisheries	The North Sea is one of the world's most important fishing grounds, and major UK and international fishing fleets operate in the SNS, targeting a mix of demersal, shellfish and pelagic fish stocks. The Durango field is located within ICES Rectangle 35F1. The Durango field has a low fishing intensity compared to the wider North Sea region. Annual fishing effort in ICES Rectangle 35F1 is only available for 2012 and 2013, with an average of 726 days. This annual mean is consistent with large areas of the SNS. Monthly fishing effort is generally low compared to the wider North Sea region but is highest between March and July. The most frequently used gear type is static gears, particularly traps which target shellfish species. This is reflected in the landings data which indicates that shellfish species are the most significant component of the fishery in terms of landed tonnage and value (over 95% for both). The most frequently caught species include the Norway lobster (Nephrops norvegicus), crabs, lobsters, and scallops.
Marine Mammals	The relative abundance and density of cetaceans in the vicinity of the Durango location can be derived from data obtained during the Small Cetacean Abundance of the North Sea (SCANS-IV) aerial surveys as well as data from [Ref 4]. Durango is within Block NS-C, where harbour porpoise (*Phocoena phocoena)*, bottlenose dolphin (*Tursiops truncates)*, white-beaked dolphin (*Lagenorhynchus albirostris)*, common dolphin (*Delphinus delphis)*, and minke whale (*Balaenoptera acutorostrata*) have been recorded. SCANS-IV surveys estimate the abundance of harbour porpoise in Block NS-C to be around 36,286 individuals, with a density of 0.6027 individuals/km² [Ref 4] . The Natural Environment Research Council Special Committee on Seals (SCOS) reports both species of UK seals, grey seals (*Halichoerus grypus*) and harbour seals (*Phoca vitulina*) as being present within the surrounding waters, with haul out sites abundant on the adjacent coastline.

Table 4.1: Environmental Sensitivities	
Environmental Receptor	**Main Features**
Birds	The most common species of seabird found in this area of the SNS include Northern fulmar (*Fulmarus glacialis*), Great Skua (*Stercorarius skua*), Black legged kittiwake (*Rissa tridactyla*), Great black backed gull (*Larus marinus*), Common gull (*Larus canus*), Lesser black backed gull (*Larus fuscus*), Herring gull (*Larus argentatus*), Common guillemot (*Uria aalge*), Razorbill (*Alca torda*), Little auk (*Alle alle*) and Atlantic puffin (*Fratercula arctica*). Fulmars are present in highest numbers during the early and late breeding seasons, leading to peak densities in September. Kittiwakes are widely distributed throughout the year. Lesser black-backed gull are mainly summer visitors, while in contrast guillemot numbers are greatest during winter months. In addition, substantial numbers of terns migrate northwards through the offshore North Sea area in April and May, with return passage from July to September. Durango is also approximately 120 km from the Flamborough and Filey Coast Special Protection Area (SPA) where the northern gannet, black-legged kittiwake, northern fulmar, herring gull, Common guillemot, and Atlantic puffin are known to breed.
Onshore Communities	Durango operations will be located 37 km from the nearest coastline.
Other Users of the Sea	Shipping traffic at the Durango installation location within UKCS Block 48/21a is recorded as 'very high'. Recreational vessel usage increases during the summer months. As such, the installation decommissioning area may experience elevated numbers of recreational angling, cruising, and sailing vessels during this period.
Atmosphere	Emissions during proposed decommissioning works will occur following cessation of production, in the form of combustion gasses associated with fuel use. Emissions generated by infrastructure, equipment, and vessels associated with operation of the asset will be replaced by those from vessels and equipment required for decommissioning activities, as well as the recycling of any decommissioned materials. Reviewing historical EU Emissions Trading Scheme data and comparison with the likely emissions from the proposed work scope suggests that emissions relating to decommissioning will be minor relative to those generated during production.

4.2 Potential Environmental Impacts and Their Management

Environmental Impact Assessment Summary:

A detailed review of the potential environmental impacts related to the recovery of the wellheads, Xtree and associated WHPS within the Durango field is provided in the supporting EA [Ref 8]. Following this review, it has been determined that the proposed decommissioning option of the Durango installation will not present any significant impacts.

A summary of the impacts and environmental control measures identified is provided in Table 4.2. The potential environmental impacts of these operations will be further assessed in the MAT environmental assessment justification that will be submitted prior to the works commencing.

Table 4.2: Environmental Impact Management

Main Impacts	Management
	Potential significant impacts scoped in for detailed assessment
Seabed Impacts from infrastructure removal, decommissioning MODU vessel, and dropped objects.	• Vessel orientation will be reviewed and selected to minimise the requirements for rock placement whilst allowing for the safe locating of the MODU. • Site specific assessment will be completed to assess suitable locations for any MODU utilised for decommissioning activities. • Cutting and lifting operations of subsea equipment will be controlled and any impact on seabed sediment will be minimised. • Internal cutting will be used preferentially where access is available to avoid interaction with the sediment adjacent to the installation. • The requirements for excavation will be assessed on a case-by-case basis, with the aim of minimising the area of excavation. • All anchors (where they are used) will be completely removed from the seabed following decommissioning operations. • Post-removal surveys of the seabed will be carried out to identify significant anomalies and dropped objects.

Table 4.2: Environmental Impact Management	
Main Impacts	**Management**
	• A post-decommissioning survey will be undertaken, and any debris identified as resulting from gas activities will be recovered where possible.
Potential non-significant impacts scoped out of detailed assessment	
Underwater Noise from vessel use and underwater cutting.	• Minimal vessel movement and use. • Vessel management. • Vessel sharing (where possible/appropriate); • Cutting activities to be minimised and performed in isolation where possible.
Atmospheric Emissions from vessel and equipment use.	• Minimal vessel movement and use. • Engine maintenance. • Vessel management. • Vessel sharing (where possible/appropriate).
Discharges to Sea from infrastructure and decommissioning vessels.	• Compliance with International Convention for the Prevention of Pollution from Ships (MARPOL); • Bilge management procedures. • Vessel audit procedures. • Contractor management procedures.
Solid Waste from infrastructure and decommissioning vessels.	• Minimal vessel movement and use. • Vessel management. • Vessel sharing (where possible/appropriate); • Waste Management Strategy and active waste tracking. • Communication with Regulator(s); • Adherence to the Waste Hierarchy. • Contractor management.

Table 4.2: Environmental Impact Management	
Main Impacts	**Management**
Accidental Spills and dropped objects.	• OPEP and SOPEP in place. • Provision of spill kits. • Lifting operations management of risk. • Navigational aids/warnings and safety zones. • Vessel audit procedures. • Spill response procedures. • Dropped object recovery and debris clearance surveys. • PON2 submission. • Adherence to International Regulations for the Prevention of Collisions at Sea (COLREGS).

5. INTERESTED PARTY CONSULTATIONS

Consultations Summary:

Perenco as part of the Installation DP consultation process, plan to include the following statutory stakeholders of the DP:

- NFFO
- SFF
- NIFPO
- Global Marine Systems
- Public

Table 5.1: Summary of Stakeholder Comments		
Who	**Comment**	**Response**
Statutory Consultations		
NFFO		
SFF		
NIFPO		
Global Marine Systems		
Other Consultations		
Public		
Informal Stakeholder Consultations		
Joint Nature Conservation Committee		
HSEx		
Environment Agency		
Ministry of Defence		
Centre for Environment, Fisheries and Aquaculture Science		

6. PROGRAMME MANAGEMENT

6.1 Project Management and Verification

A Perenco Project Management team will manage the operations of competent contractors selected for all decommissioning activities. The team will ensure the decommissioning is executed safely, in accordance with legislation and Perenco Policies and Principles.

Perenco 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 southern North Sea. Perenco will monitor and track the process of consents and the consultations required as part of this process.

6.2 Pre-Decommissioning Survey

A pre-decommissioning debris and environmental seabed survey, centred around sites of the Durango subsea installation, will be carried out. The survey will support the decommissioning operation permits and will provide chemical and physical benchmarking for comparison with the post-decommissioning survey. Results of the environmental survey and associated comparison with post-decommissioning survey will be included in the close out report that is submitted to OPRED.

6.3 Post-Decommissioning Debris Clearance and Verification

A post decommissioning site survey will be carried out around 500m safety zone of installation site. Oil and gas seabed debris will be recovered for onshore disposal or recycling in line with existing disposal methods. Independent verification of seabed state will be obtained by trawling or other methods for the subsea installation area. This will be followed by a statement of clearance to all relevant governmental departments and non-governmental organisations.

6.4 Schedule

Figure 6.1, below, provides the timeline of all decommissioning actives in relation to this DP.

Figure 6.1: Gantt Chart of Project Plan

Year	2023				2024				2025				2026			
Quarter	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pipeline Decommissioning Programe																
Submission of DP																
Consultation																
Approval of DP																
P&A and Removal Campaign																
Durango P&A & WHPS Removal																
Post Decommissioning Activities and Surveys																
Post Decommissioning Surveys																
Close Out report																

LEGEND	
	Earliest date task could be completed
	Period in which the task expected to be completed
	Latest date task could be completed

6.5 Costs

The decommissioning costs detailed within this Installation DP have been provided to OPRED. The costs provided covered the scope of work associated with decommissioning and closeout of the Durango subsea Installation.

6.6 Close Out

In accordance with the OPRED Guidelines, a Close Out Report will be submitted to OPRED explaining any variations from the DP. An Installation Close Out Report will be submitted within approximately 12 months of the completion of the decommissioning activities.

6.7 Post-Decommissioning Monitoring and Evaluation

A post decommissioning environmental seabed survey, centred around sites of the Durango subsea installation, will be carried out. The survey will focus on chemical and physical disturbances of the decommissioning and compared with the pre-decommissioning survey. Results of this survey will be available once the work is complete, with a copy forwarded to OPRED.

7. SUPPORTING DOCUMENTS

Table 7.1 : Supporting Documents	
Document Number	**Title**
1	Kober, K, Webb, A, Win, I, Lewis, M, Brien, S, Wilson, L and Reid, J, 2010. An Analysis of the Numbers and Distribution of Seabirds within the British Fishery Limit Aimed at Identifying Ares That Qualify as Possible Marine SPAs. JNCC report No. 431. Peterborough: Joint Nature Conservation Committee.
2	MMO, 2022. UK landings into all ports and foreign landings into UK ports by ICES rectangle, EEZ of capture, quota stock and port of landing (2018-22). Annual Sea Fisheries Report.
3	Rouse, S, Kafas, A, Catarino, R, and Hayes, P, 2017. Commercial fisheries interactions with oil and gas pipelines in the North Sea: considerations for decommissioning, ICES Journal of Marine Science, 75(1): 79–286.
4	Waggitt, JJ, Evans, PJH, Andrade, J, Banks, AN, Boisseau, O, Bolton, M, Bradbury, G, Brereton, T, Camphuysen, CJ, Durinck, J, Felce, T, Fijn, RC, Garcia-Baron, I, Garthe, S, Geelhoed, SCV, Gilles, A, Goodall, M, Haelters, J, Hamilton, S, Hartny-Mills, L, Hodgins, N, James, K, Jessopp, M, Kavanagh, AS Leopold, M, Lohrengel, K, Louzao, M, Markones, N, Martinez-Cediera, J, O'Cadhla, O, Perry, SL, Pierce, GJ, Ridoux, V, Robinson, KP, Santos, MB, Saavedra, C, Skov, H, Stienen, EWM, Sveegaard, S, Thompson, Vanermen, PN, Wall, D, Webb, A, Wilson, J, Wanless, S and Hiddink JG, 2019. Distribution maps of cetacean and seabird populations in the North-East Atlantic. Journal of Applied Ecology 57:253-269.
5	European Commission (EC), 2003. Regulation (EC) No 1882/2003 of the European Parliament and of the Council of 29 September 2003 adapting to Council Decision 1999/468/EC the provisions relating to committees which assist the Commission in the exercise of its implementing powers laid down in instruments subject to the procedure referred to in Article 251 of the EC Treaty
6	Gardline 2008. Ref 7550 UKCS 48/21a Durango to UKCS 48/17c Waveney Pipeline Route Survey Report. For ADIL/Bridge North Sea.
7	Ocean Ecology Ltd 2023. Durango Safety Zone Preliminary Environmental Field Report
8	Petrofac 2024. Ref 200605-S-REP-0043 Durango Installation Environmental Appraisal Report

8. APPENDICES

Appendix A: Extracts from Durango Safety Zone Preliminary Environmental Field Report [Ref 7]

Drop Down Camera Imagery

DDC imagery was obtained at 9 stations and along 6 transects within the wellhead area. Initial in field observations showed predominately a mosaic of small cobbles and boulders interspersed within patches of coarse sand, as shown in **Figure 4** and **Figure 5**.

Figure 4 Seabed imagery from DUR004 showing a mosaic of small cobbles and coarse sand.

Figure 5 Seabed imagery from DUR007.

Biological features

There were frequent observations of the bryozoan *Flustra foliacea* in the seabed imagery. This is a colonial organism which can resemble brown seaweed, as shown in **Figure 6** and **Figure 7**.

Figure 6 Seabed imagery from DUR003 showing an example of *Flustra foliacea*.

Figure 7 Seabed imagery from TR005 showing an example of *Flustra foliacea* and a velvet swimming crab *Necora puber*.

There were also observations of dense aggregations of the invasive slipper limpet (*Crepidula fornicata*).

Figure 8 Dense aggregation of *Crepidula fornicata* observed along the DDC transect TR004.

Figure 9 Dense aggregation of *Crepidula fornicata* observed along the DDC transect T007.

Sabellaria spinulosa

There were no observations of any *Sabellaria spinulosa* or evidence of their reefs from any of the DDC stations, transects or grabs.

Conclusions

Based on initial in-field observations, an assumption can be made that the field consists of a mosaic of coarse sediment interspersed with small cobbles. There are few distinctive boundaries between sediment types shown on the SSS. It is thought that what may have been initially suspected to represent *Sabellaria* sp. reef on the bathymetry data is actually areas of rough ground with dense aggregations of the non-native invasive species *Crepidula fornicata*. There was deemed to be no requirement for additional camera transect sampling.