

ENVIRONMENTAL APPRAISAL TAT-14

Segment K

BT Group Plc

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1 Introduction

1.1 PURPOSE OF THIS DOCUMENT

The purpose of this Environmental Appraisal is to support the Marine License applications that will be made by British Telecommunication plc (BT) to Marine Scotland for the removal of an obsolete decommissioned submarine telecommunication cables, called TAT-14 Segment K. This cable has reached the end of its functional life. This report considers the removal of part of TAT 14 Segment K only, out to the 12 nautical mile limit of UK Territorial Waters (TW).

2 Project Description

2.1 TAT-14 SEGMENT K BACKGROUND

2.1.1 HISTORY

The cable system has been in operation since 2001 and was retired on the 15th December 2020.

TAT-14 itself is comprised of two transatlantic links crossing the Atlantic Ocean. One link lands from the US (Manasquan) to Blaabyerg (Denmark) (Segment K) and further link crossings are between Blaabyerg to Norden (Germany), Norden to Katwijk (Netherlands), Katwijk to Saint-Valery-en-Caux (France), Saint-Valery-en-Caux to Mevagissey (UK) (Segment H). The other transatlantic link (Segment G) extends from Bude in the UK, across the Atlantic Ocean to land in Tuckerton in the USA.

2.1.2 LOCATION OF PART OF CABLE UNDER CONSIDERATION FOR REMOVAL: TERRITORIAL WATERS

The part of the TAT14 Segment K cable to be removed within the limit of territorial waters (12 nautical miles) is 32km long and runs between the islands of Fair Isle and the Shetland Islands in Scottish territorial waters. The location of this part is shown in Figure 2.

The environment where the cable/laid is in a variable energy, with very deep water and tidal forces. Due to this environment, the amount and type of sediments for laying are varied, so the cable may be in part buried and surface laid on exposed bedrock, with very little sediment veneer on top. This is described further in Sections 6.1 Physical Processes.

2.1.3 CABLE TYPE AND COMPOSITION

Modern subsea telecommunication cables range from around 1.5 to 5 cm in diameter depending on the level of protection required. The cross-sectional profile includes the central optical fibres, used to transfer digital data, surrounded by a copper or aluminium conductor and polycarbonate sheath (dielectric). Where additional protection is required, either one or two layers of stranded steel wire armouring can be included. At less than 5 kg/m, subsea telecommunication cables are a much lighter (and smaller) product compared to subsea power cables (typically over 100 kg/m).

The majority of the TAT14 Segment K cable is armoured fibreoptic cable, varying from single armour to rock armour.

2.1.4 METHODS OF REMOVAL TAT-14 SEGMENT K

2.1.4.1 GENERAL APPROACH TO CABLE REMOVAL

The proposed works are outlined in this Section and further details are provided in the "Recovery Operations Offshore Scotland" document attached in Appendix I .

As the cable does not make landfall in Scottish waters, the cable will be cut on the border of territorial waters in the Economic Exclusive Zone (EEZ). This method doesn't rely on using a grapnel to find the cable in territorial waters and uses marine recovery vessels offshore. This method is explained in detail in the paragraph below. The use of grapnels (hooks), typically used to recover decommissioned cables by snaring the cable and lifting to a recovery vessel, is also described below, as grapnels may be required to locate a section of cable in the marine environment, if the cable can't be recovered in one complete section.

There is a wide range of grapnels available, each with tailored characteristics to support cable recovery in different seabed environments (e.g. see Figure 1). A rennie grapnel (10s of kg in weight) is used to recover surface laid cables, while a sand grapnel (100 – 250 kg) or a wheeled detrenching grapnel (2-3 tonnes) can be used to penetrate the seabed to recover buried cables (among many other designs).

The grapnel is deployed on a weighted line and dragged in a perpendicular orientation towards the cable route. Depending on confidence in the exact position of the subsea telecommunication cable on/in the seabed, the grapnel lines may commence up to around 800 m prior to the actual position of the cable, although typically these are much shorter distances (approximately 50 m). A series of grapnel lines are run until recovery is successful, noting that a subsea telecommunication cable may have been surface laid but buried over time (e.g. several decades). The tension on the grapnel line is monitored and, once the cable is caught, it is slowly lifted to the water surface.

Clearance works along the cable route may be required to remove additional protection that was installed (e.g. concrete mats, rock protection) before the subsea telecommunication cable can be recovered using a reeling method and/or use of a grapnel. It should be noted that there is no additional external protection, such as rock or mattresses, along the part of the TAT14 cable under consideration for removal.

The recovery of decommissioned subsea telecommunication cables is a controlled activity. Once lifted to the recovery vessel, the cable is cut, with one half returned to the seabed (weighted down). The recovery vessel then begins to gently reel in the other section of cable, moving along the cable route at approximately 1-2 m/s. Engineers onboard the vessel ensure the catenary (hanging angle) of the cable is



Figure 1: Example Images of Grapnels. rennie grapnel(left), sand grapnel(centre) and wheeled detrenching grapnel (left)

maintained to minimise additional disturbance to the seabed, particularly where the cable was buried, and the recovery activity is peeling it out from the sediment.

A cable may be recovered in full or partly recovered if environmental or operational conditions result in a preference for leaving the cable in situ.

2.1.4.2 REMOVAL OF TAT14 SEGMENT K

A non-DP vessel, such as the MV Rebecca (Table 1), with the capacity to handle large quantities of cable will recover the cable in Scottish waters. This ship will grapnel the cable using industry standard methods outside territorial waters (to the west of the territorial boundary), cut it and bring it onboard. Once the cable end is onboard, the cable will be attached to a recovery winch which will then peel the cable out of its buried position on the sea floor, bring the cable onboard the ship and then store the recovered cable in purpose-built cable tanks in the ship. The section where the SHEFA2 crossing occurs will be cut, clump weighted and returned to the seabed in line with ICPC guidance. Once complete the MV Rebecca which will transit to a local port for the various cable sections to be offloaded and scrapped by an accredited specialist disposal company.

Table 1: Example of Vessels for use in telecommunications decommissioning

| Feature | MV Rebecca |
|---------------------------|--|
| Picture |  |
| Class | DNV GL |
| Length | 99m |
| Breadth | 14m |
| Speed | 10.0 knots (average) |
| Storage | 2,900m ³ |
| Additional Item/Equipment | 5 portable LCEs 5 portable cable cutters Full set grapnels and ropes (6km depth) Hydrostatic release hook |

2.1.4.3 TIMING OF CABLE REMOVAL

It is currently proposed duration for the proposed works of 8-10 days, dependant on weather. Cable recovery in the sea would be planned for the summer period to take advantage of the better weather conditions. However, the timings may be subject to change depending on receipt of permits and operational constraints.

2.2 NOTIFICATIONS PROCESS

Prior to the proposed works commencing and once completed, notifications will have to be sent to third parties/mariners' users in the area that the proposed works might affect.

2.2.1 PRIOR TO WORKS COMMENCEMENT

Prior to the works commencing, notifications will be sent to the following parties:

- Local Fishermen
- Other Telecommunication providers in the area of the cable removal up to 4 weeks prior to proposed works commencing.
- KIS-ORCA of works in the area
- Navigational warnings will be broadcast on an as required basis by UKHO.

2.2.2 AFTER WORK COMPLETION

After the works have been completed, notifications will be sent to the following parties:

- Local Fishermen
- KIS-ORCA notification of completion of works
- Other Telecommunication providers in the area of the cable removal.
- UK Hydrographic Office (Update the existing infrastructure on maps)

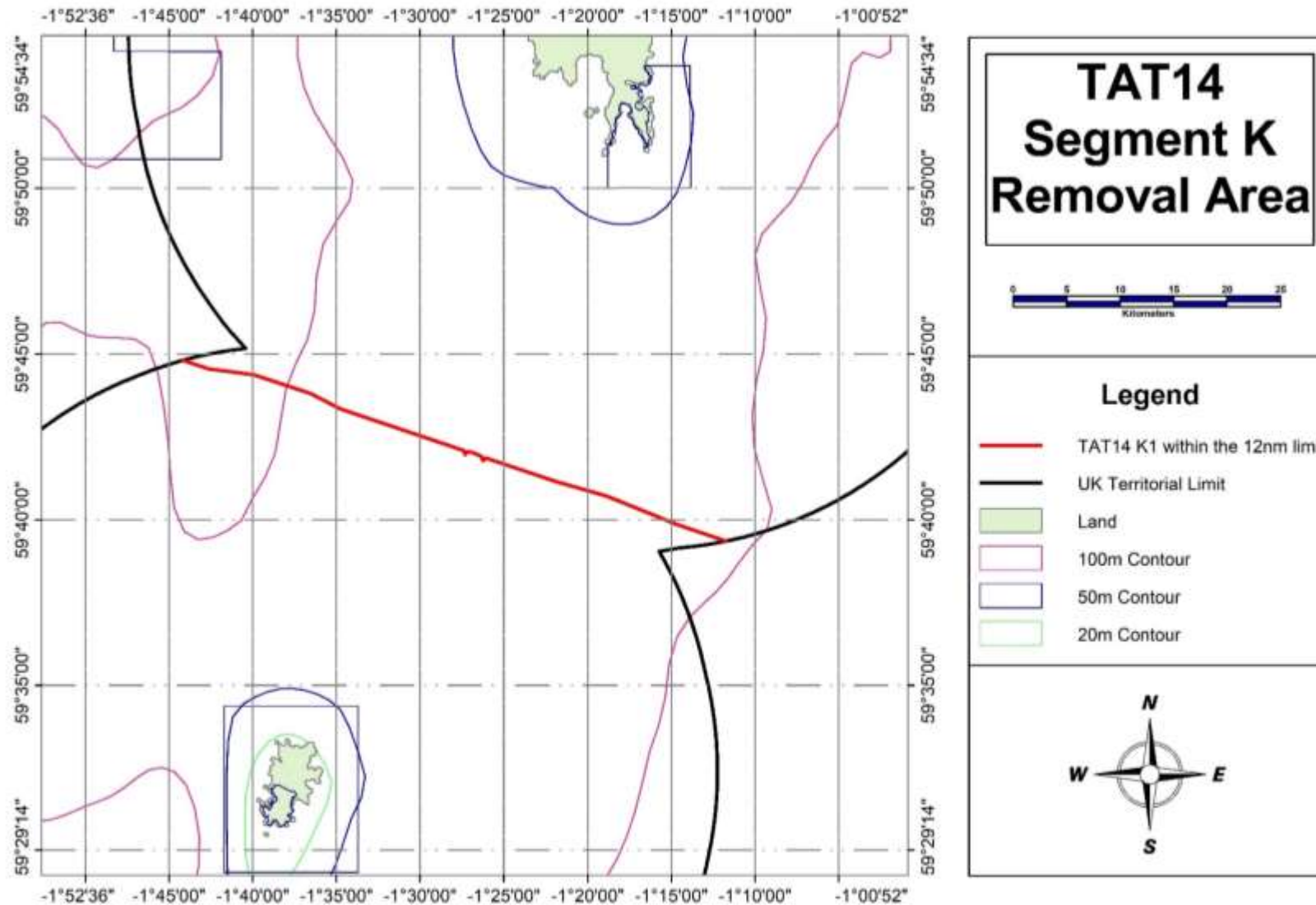


Figure 2: The proposed works. TAT 14 Segment K between the 12 nautical mile limit

3 Legislation

A more detailed outline of all legislation relevant to decommissioning telecommunications is provided in the document "Decommissioning of Subsea Telecommunication Cables in UK Waters" (ABPmer, 2020) Appendix H .

4 Environmental Appraisal Methodology

The environmental appraisal is based on the "Guidance for Environmental Impacts" in the "Decommissioning of Subsea Telecommunication Cables in UK Waters" report by ABPmer commissioned by BT (ABPmer, 2020), attached in Appendix H .

4.1 APPRAISAL METHODOLOGY

This section describes the approach to environmental assessment for the removal of subsea telecommunication cables. The approach is also outlined in detail in the report in the ABPmer report (Appendix H). The generic risk matrix on potential impacts to receptors in different habitat types from decommissioning of subsea telecommunication cables, prepared by ABPmer, has been used as a basis for this appraisal.

The following main receptors are assessed in this review:

- Physical processes;
- Water and sediment quality;
- Benthic ecology;
- Fish and shellfish;
- Marine mammals;
- Marine ornithology;
- Protected Areas;
- Commercial fisheries and shellfish production;
- Commercial and recreational navigation;
- Marine archaeology;
- Leisure and recreation; and
- Other cables, pipelines and structures.

The above receptors focus on those likely to be most relevant to subsea telecommunication cable decommissioning, thus reflecting the receptors for which environmental appraisal may be required.

In combination with the above receptors, the following habitat types are assessed to form a specific risk matrix for the TAT14 Segment K decommissioning project:

- Exposed bedrock;
- Gravel;
- Coarse sand;

The Project matrix has been prepared by collating information on the potential impacts to receptors in relation to the different seabed habitat types, presented using the following standard considerations:

- Example impact pathway(s);
- Summary of evidence;
- Key considerations;
- Data sources;
- Scale of effects – spatial/temporal;
- Significance;
- Decommissioning recommendation.

4.2 POTENTIAL IMPACT PATHWAY(S)

Potential impact pathways which could result from the decommissioning of subsea telecommunication cables are provided for each receptor. These have been based on the generic impact pathways identified in the ABPmer report.

4.3 SUMMARY OF EVIDENCE

Based on the impact pathways identified, evidence is provided to outline the effects relating to decommissioning of subsea telecommunication cable in each habitat type along the Segment for the respective receptors. The evidence aims to provide an indication of the likely scale of effects for decommissioning of the TAT14 Segment K telecommunication cable. While the risk matrix considers general issues in accordance with habitat type, it is noted that general issues will be largely the same regardless of habitat type (e.g. marine archaeology, leisure and recreation and other cables, pipelines and structures).

4.4 SCALE OF EFFECTS

The scale of an effect on a receptor can vary in terms of spatial and temporal change, leading to an adverse or positive (beneficial) impact.

4.4.1 SPATIAL

The spatial scale of effects is considered using the following general descriptions:

- Immediate – Effects are small scale and limited to the immediate vicinity of the activity;
- Local – Effects are small-to-medium scale, with potential to be observed in the wider locality of the activity footprint (i.e. indirect effects);
- Regional – Effects are medium-to-large scale, resulting in changes that are observed over a large area (e.g. entire estuary, WFD water body, marine plan area); or
- National – Effects are observed over a very large spatial extent, both direct and indirect (e.g. physical damage to another subsea cable resulting in loss of power/communication).

4.4.2 TEMPORAL

The temporal scale of effects is considered using the following general descriptions:

- Duration – Consideration of effects duration (e.g. in days, weeks or months);
- Frequency – Consideration of the observed impact within the duration of an activity (e.g. infrequent, frequent or continuous occurrence); and
- Reversibility – Potential of impact(s) to be reversed over time (e.g. temporary, long-term or permanent).

4.5 SIGNIFICANCE

The spatial and temporal scale of effects, as well as the anticipated magnitude of effects, are reviewed as a basis for assessing the level of the impact and its significance. The key significance levels for either beneficial or adverse impacts are described as follows:

- High – Effects are highest in magnitude, over a regional/national scale, with potential to result in permanent/long-term changes, reflecting the high vulnerability and importance of a receptor (e.g. to nature conservation);
- Medium – Effects are anticipated to be local/regional in scale, with potential to recover over the medium-term;

- Low – Localised effects are expected, typically over the short-term. The effects tend to be discernible but tolerable; or
- Negligible – Insignificant change not having a discernible effect.

4.6 HIGH-LEVEL DECOMMISSIONING RECOMMENDATION

Guidelines prepared by the European Subsea Cables Association (ESCA, 2016) provide a general recommendation to remove subsea telecommunication cables from beach areas (i.e. between the high and low water mark) and seaward to the territorial sea limit (i.e. 12 nm).

To support the consideration of environmental issues/potential impacts, the risk matrix provides a recommendation on decommissioning the TAT14 Segment K telecommunication cable referring to the following options:

- Remove;
- Leave in place; or
- No preference.

These three options were reviewed on the general assumption that returning the seabed to pre-installation condition would be preferential from an environmental perspective (albeit, this is not always the case), thus removing the subsea telecommunication cable. Where the evidence indicates that removal activities could cause a significant impact, including permanent/irreversible impacts, it may be preferable to leave

| | Location | Guideline |
|---|---|---|
| 1 | Beach, area between land and Low Water Mark | Generally Recover cable to leave beach clear from potential exposed cables in the future. Please refer to section 4.1.1 |
| 2 | Low Water Mark to 12 Nautical Mile Limit (or Median Line if less than 12 miles) | Investigate on a case by case basis. Generally Recover cable if it is on seabed surface, burial is marginal or the cable presents a hazard to other seabed users. Cable may be left if it is well buried in a stable seabed. Reference shall be made to the terms of the Crown Estate licence. |
| 3 | 12 Nautical Mile Limit to Median Line or EEZ or Continental Shelf Edge | Reference should be made to ICPC Recommendation No 1. Investigate on a case by case basis. Generally Leave cable, but can recover if cable on seabed surface, burial marginal or presents a hazard to other seabed users. |
| 4 | Deep water, beyond Median, EEZ or Continental Shelf Edge | Please refer to ICPC Recommendation No 1 |

Figure 3: General guidelines for cable recovery (ESCA, 2016)

the decommissioned subsea telecommunication cable in place (i.e. remaining in/on the seabed indefinitely). However, it must be stressed that these high-level recommendations are based on generic project impacts only, and as such a specific assessment and recommendation for decommissioning of the TAT14 Segment K cable is made in this report.

5 Consultations

Consultation responses will be noted in the Table 2 below, noting any comments and suggestions that required in this report. No consultations have been undertaken at the time of writing of this appraisal with Marine Scotland or Nature Scot.

Table 2: Consultation and scoping responses.

| Stakeholder | Comment |
|-----------------------|--|
| Crown Estate Scotland | Crown Estate Scotland have been briefed of BT's Plans for TAT14. |

6 Segment K

6.1 Physical Processes

6.1.1 INTRODUCTION

This Section describes the baseline physical environment along the TAT-14 Segment K, identifying the potential impacts associated with the cable decommissioning and presents the findings of the environmental appraisal.

6.1.2 DATA SOURCES

The assessment has been established by undertaking a desktop review of published information. The data sources used to inform the baseline description and subsequent assessment include but are not limited to the following:

- GeoIndex British Geological Survey (http://mapapps2.bgs.ac.uk/geoindex_offshore/home.html?)

6.1.3 IMPACT PATHWAYS/POTENTIAL PRESSURES

The following pressures/impact pathways have been considered in the following section, in relation to decommissioning of subsea cables:

- Changes to seabed bathymetry
- Changes to hydrodynamics
- Changes to sediment transport regime
- Alteration of seabed form and features

6.1.4 EVIDENCE SUMMARY

BATHYMETRY, SEABED FEATURES AND GEOLOGICAL PROFILES

The route of TAT14 Segment K is primarily near an area noted as “The Hole” in Figure 5, where the water depth reaches up to 114 metres. For the entire route of the cable, the water depth varies between 75-120 metres.

COMPOSITION OF SEABED/LAND

Deposits are less than 5 metres thick consisting of sandy gravel and gravelly sand throughout the proposed works as per Figure 5 and in the RPL document (Appendix A-E). The RPL documents of section 57 and 58 include beds of fine sands, as well as coarse sediment and gravels (Appendix A and B).

LOCATION OF THE CABLE

The sections of TAT 14 Segment K in the project area, either partially or fully in territorial waters are sections 57-61 as outlined in Figure 4.

The cable was not buried in sections 59 and 60 (Appendix C and D) due to rocky outcrops being present. Sections 57, 58 and 61 had burial up to 1 metre (Appendix A, B and E).

6.1.4.1 SUMMARY OF TYPES OF ENVIRONMENT PRESENT

In summary the types of sediment environment present, as per the as laid profile of TAT-14 Segment K are:

- Exposed Bedrock
- Gravel
- Coarse Sand
- Fine Sand

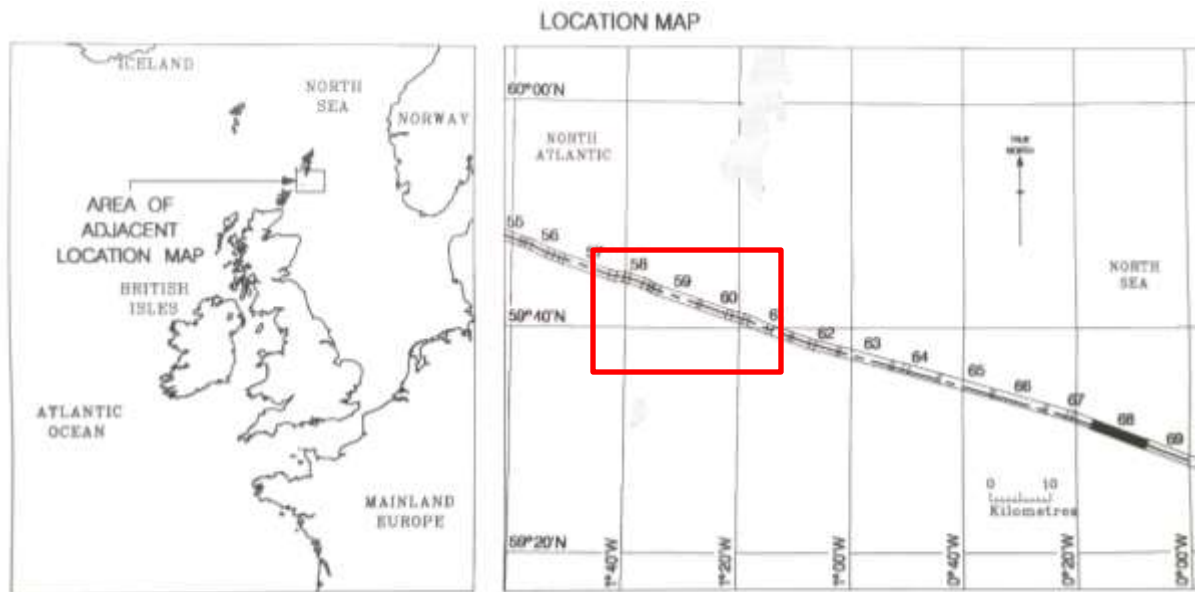


Figure 4: Sections to be removed in TAT14 Segment K as outlined by the Red outline.

6.1.5 ANALYSIS OF SCALE OF EFFECTS

6.1.5.1 AQUATIC WORKS

6.1.5.1.1 REMOVAL WITHOUT GRAPNEL

If the cable were to be removed without using a grapnel, sediment disturbance should be localized and likely be resolved in hours, depending on the sediment types and hydrodynamic environment.

6.1.5.1.2 FRAGMENTED CABLE REMOVAL USING GRAPNEL

In the sections where the cable is primarily laid on bedrock, the use of a grapnel the impact could include scratching/scarring of the rock surface, with effects potentially being more pronounced on softer bedrocks (e.g. limestone, sandstone). The persistence of scratching/scarring on exposed bedrock habitats will depend upon the seabed conditions, including the rate of local sediment fluxes/transport regime.

In the sections where the cable is buried in gravels and coarse sands, the use of a grapnel to support cable recovery will penetrate the substrate to below the burial depth. The persistence of any shallow depressions in the coarse sand habitats will depend upon the seabed conditions, including the rate of local sediment fluxes/transport regime. However, the typically high flux conditions observed will leave no trace of any shallow depressions resulting from the use of a grapnel within a few tides.

HYDRODYNAMIC AND SEDIMENT TRANSPORT

The use of the grapnel and lifting of the decommissioned telecommunications cable are unlikely to lead to significant changes in hydrodynamic regime, with only marginal alterations (e.g. current speed) likely in the immediate vicinity of the grapnel line(s) and cable route. No changes in wave regime would be anticipated and bathymetric changes would be minimal.

CABLE SECTIONS LEFT INSITU

If sections are buried sufficiently, it would be suitable to leave the cable.

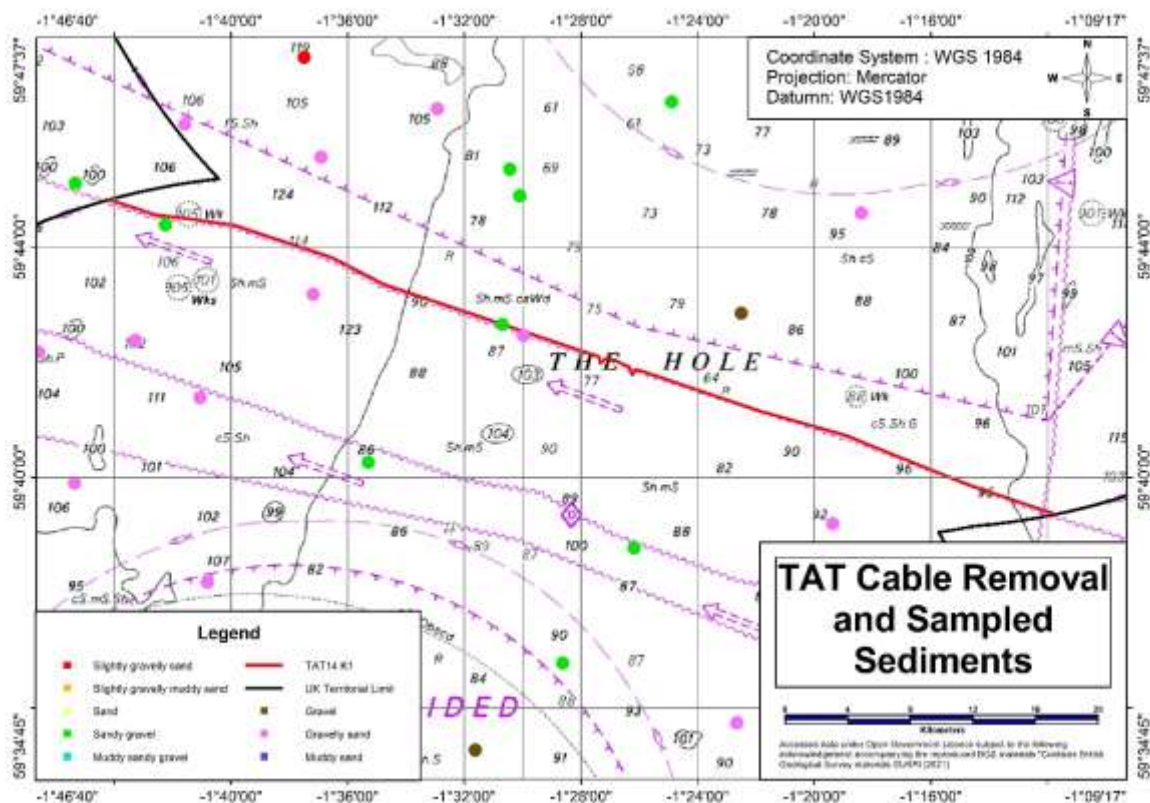


Figure 5: TAT14 Segment K with sediment data taken from (British Geological Survey, 2020), showing the project area is mostly gravelly sand or sandy gravel.

6.1.6 CONCLUSION

In summary, given the various deposits present, with high certainty the impact would be negligible, immediate to the area and not cause any permanent changes to physical processes. If any changes in physical processes should occur, they should be resolved within hours/days for veneers for coarse sands and gravels and there is no reason to suggest not to remove the cable on this basis. The persistence of scratching/scarring on exposed bedrock habitats will depend upon the seabed conditions, including the rate of local sediment fluxes/transport regime.

6.1.7 RECOMMENDATION

BT's recommendation based on the potential impacts to physical processes, that all sections to be removed.

6.2 WATER AND SEDIMENT QUALITY

6.2.1 INTRODUCTION

This Section describes the baseline water and sediment environment along the TAT-14 Segment K cable route out to the 12 nautical miles, identifying the potential impacts associated with the cable decommissioning and presents the findings of the environmental appraisal.

A specific Water Framework Directive (WFD) section is present in this appraisal (see Section 6.3 Water Framework Directive Assessment) that addresses the WFD requirements.

6.2.2 DATA SOURCES

The data sources used to inform the evidence summary and subsequent assessment include but are not limited to the following:

- SEPA Water Classification Hub (SEPA, 2020)

6.2.3 IMPACT PATHWAYS/POTENTIAL PRESSURES

The following impact pathways have been considered in, in relation to the proposed works:

- Toxic Contamination (e.g. release or redistribution of sediment-bound contaminants)
- Non-toxic contamination (e.g. changes in suspended sediment concentration, turbidity and dissolved oxygen)

6.2.4 EVIDENCE SUMMARY

The receptor environment along this part of the Shetland water is high energy with existing habitats and species recorded common for areas with mobile sediments (see Section 6.4 Benthic Ecology and 6.7 Marine Ornithology). The sediments in the area mostly consist of coarse sands, gravel and exposed bedrock.

WATER QUALITY

There are no catchment areas in the vicinity of the TAT14 Segment K, as such no monitoring points are present. The catchment areas in closest proximity are:

- Fair Isle (200245)
- Sumburgh Head to Kettla Ness (200508)
- Isle of Noss to Sumburgh Head (200256)

All of which have good status and are approximately 15km away.

LOCATION OF CABLE

The cable is not in proximity to any bathing waters protected areas in Scotland.

The proposed works do not pass through any disposal or historic dumping sites and are present from typical sources of contamination, such as industrialized estuaries and ports.

6.2.5 ANALYSIS OF SCALE OF EFFECTS

6.2.5.1 INCREASED SUSPENDED SEDIMENT CONCENTRATION AND WATER QUALITY

Any elevated suspended sediment concentrations occurring from cable removal or grapneling would be temporary and highly short term in duration and would be expected to absorb into background sediment concentrations over a few tidal cycles.

There are no known dumping/disposal sites in the vicinity of TAT14 Segment K and sediment-bound contaminants are primarily associated with fine (silt/mud) as opposed to coarse (sand, gravel and rock) material. It is therefore considered unlikely that the sediments remobilised into the water column from the proposed works will harbour pockets of contaminants, which could affect water quality.

The potential impact on water quality has been assessed as negligible due to the lack of contaminants identified along the cable corridor and short timeframe in which sediments will be disturbed.

On the assumption of full removal, outlined in Section 2.1.4.2, the disturbance to sediment should be limited to immediate area, and should be temporary at hours in duration. If any compounds in the sediments are mobilized the change to water quality should be temporary (hours) and limited to the localized areas.

6.2.5.2 ACCIDENTAL CONTAMINATION

The likelihood of a large oil spill occurring from a project vessel is extremely low and the risk is no greater than that for any other vessel in the project area. The risk will be as low as reasonably possible (ALARP) due to careful environmental management through best practice pollution prevention guidelines and adherence to MARPOL Annex I requirements and shipboard oil pollution emergency plans (SOPEP) in place.

6.2.6 CONCLUSION

Cable removal activities would not result in a deterioration in water or sediment quality status due to the localised and short-term nature of the proposed works (~8 days). Overall, the impact on water and sediment quality as a single receptor is considered to be negligible.

Best practice pollution prevention guidelines will be followed to minimise the risk of accidental spillages to ALARP.

6.2.7 RECOMMENDATION

In view of potentially impacting the water quality/sediment quality, BT recommends removal the cable, as the impact on water and sediment quality should be negligible.

6.3 WATER FRAMEWORK DIRECTIVE ASSESSMENT

6.3.1 INTRODUCTION

This section of the Environmental Appraisal presents the results of the Water Framework Directive (WFD) assessment for the project. The assessment follows the Environment Agency guidance Clearing the Waters for All (Environment Agency, 2016). A WFD assessment may have up to three stages, although all three stages may not be required to be completed, depending on the results at each stage. The stages are:

- screening – excludes any activities that do not need to go through the scoping or impact assessment stages;
- scoping – identifies the receptors that are potentially at risk from the activity and need impact assessment; and
- impact assessment – considers the potential impacts of the activity, identifies ways to avoid or minimize impacts, and shows if the activity may cause deterioration or jeopardise the water body achieving good status.

6.3.1.1 HIGHER SENSITIVITY HABITATS

There are no higher sensitive habitats in the vicinity of the proposed works under the Water environment-controlled activities regulations Scotland (2011).

The proposed project falls outside of the activities deemed to be of risk under the “Clearing the Waters for All” screening criteria. The results of the screening are attached in Appendix F. As TAT14 Segment K within territorial waters does not intersect, or is in proximity to any coastal waters, scoping has therefore has not been carried out.

6.4 BENTHIC ECOLOGY

6.4.1 INTRODUCTION

This Section describes the baseline benthic ecology along the TAT-14 Segment K segment within UK territorial waters, identifying potential impacts associated with the cable decommissioning and presents the findings of the environmental appraisal.

6.4.2 DATA SOURCES

The data sources used to inform the evidence summary and subsequent assessment include but are not limited to the following:

- Marine Life Information Network (MarLIN) (MarLIN, 2020)
- EMODnet broad-scale seabed habitat mapping outputs (EMODnet, 2020)

6.4.3 IMPACT PATHWAYS/POTENTIAL PRESSURES

The following pressures/impact pathways have been considered in the following section, in relation to decommissioning of subsea cables:

- Physical disturbance causing damage to habitats or species;
- Deposition of mobilised sediment causing smothering effects to habitats or species; and
- Changes in water quality resulting from remobilised sediment.

6.4.4 EVIDENCE SUMMARY

Upon review of the habitats in the vicinity of the TAT-14 cable, 2 main classes of habitat are present as shown in Figure 6:

- Circalittoral coarse sediment (Offshore)
- Circalittoral rock and biogenic reef (Offshore)

6.4.4.1.1 Circalittoral Coarse Sediment

This benthic habitat is known to contain populations of polychaetes *Glycera lapidum* and *Amythasides macroglossus* and the bivalves *Thyasira succisa* (MarLIN, 2020), however this is not a definitive list. This habitat is noted as having medium sensitivity to smothering and low sensitivity to disturbance to substratum or the seabed.

6.4.4.1.2 Circalittoral rock and biogenic reef

This benthic habitats is classified as Faunal communities on deep moderate energy circalittoral rock with no characteristic species present (MarLIN, 2020). No information regarding sensitivity or resilience is available on MarLin.

6.4.5 ANALYSIS OF SCALE OF EFFECTS

With the removal of the cables from rock, the impact to benthic communities would be negligible and highly localized as a result of the small area of 0.191km and short timescale for recovery (duration of days or months dependent on recolonization).

Regarding species present on the seabed in the circalittoral coarse sediments, the recovery following cable removal could take weeks or months for species to recolonise but impacts would be temporary and localised be limited to a small area. The fast-growing species should recolonize very quickly within several weeks and any slower growing species should recover and recolonize within months.

6.4.5.1 GRAPNEL

The risk of damage to benthic communities increases slightly with the use of a grapnel, as the area of disturbance area widens in line with the grapnel used (see dimensions in 2.1.4.1 General Approach to Cable Removal). However, in summary the potential area of disturbance is still a small area of the habitat present.

6.4.6 CONCLUSION

Several benthic species have been found in the areas surrounding the TAT-14 segment K cables, including a number of polychaete species and bivalves. However, the area of the proposed works in comparison to the areas benthic habitat is very small and the benthic species should recolonise the area of removal in a few weeks/months.

6.4.7 RECOMMENDATION

It is recommended that the TAT14 Segment K cable is removed in relation to the negligible impact to benthic communities.

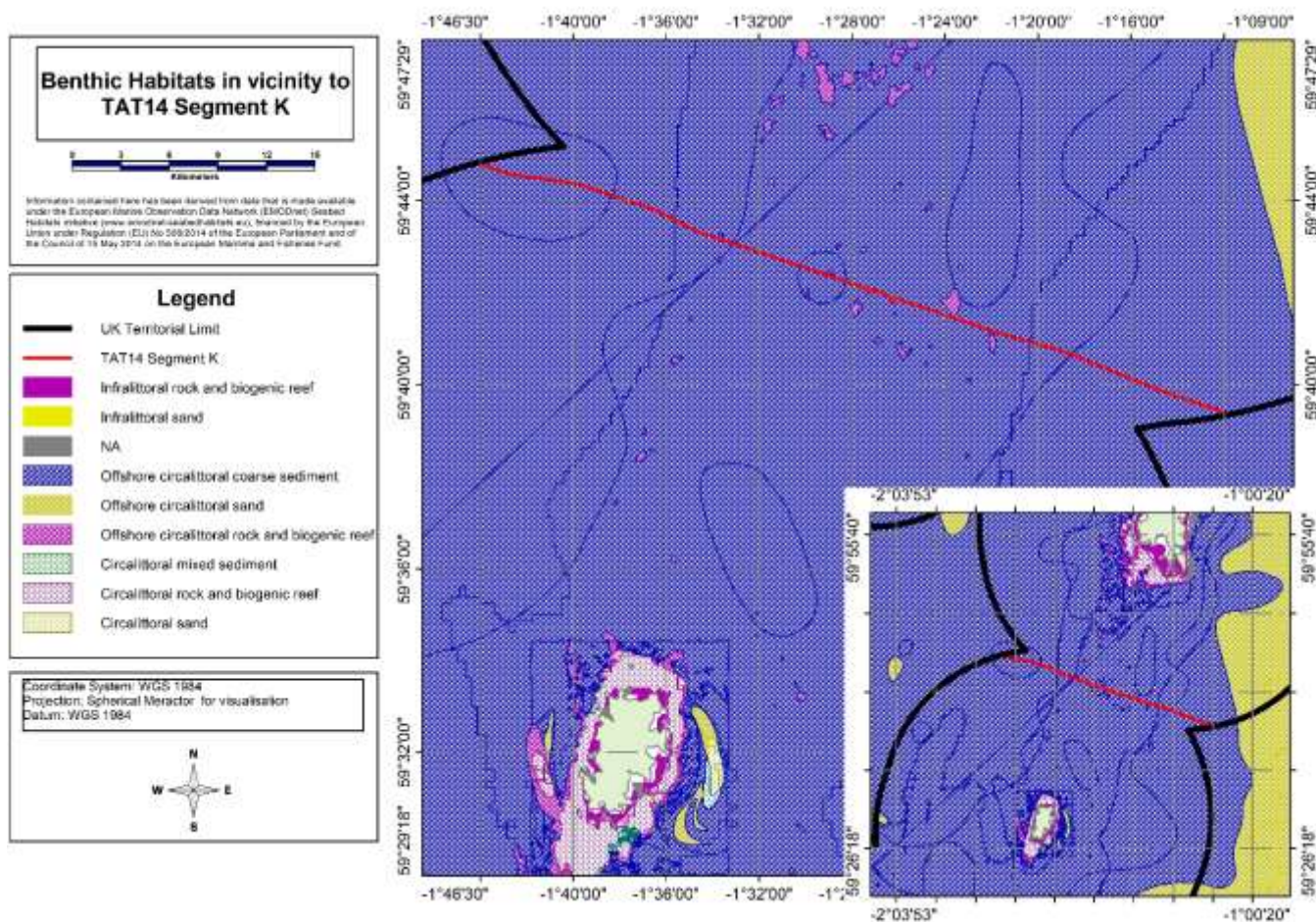


Figure 6: Map showing the Benthic Broad Habitat Types around TAT14 Segment K taken from EMODnet (EMODnet, 2020)

6.5 FISH AND SHELLFISH

6.5.1 INTRODUCTION

This Section describes the fish and shellfish species present in the vicinity of the TAT-14 Segment K removal corridors, identifies potential effects associated with the removal and presents the findings of the environmental assessment.

6.5.2 DATA SOURCES

The data sources used to inform the evidence summary and subsequent assessment include but are not limited to the following:

- Spawning and nursery grounds of selected fish species in UK waters (Ellis, et al., 2012)
- Fishbase (www.fishbase.org)
- Information on fish ecology and the sensitivity of shellfish species via the Marine Life Information Network (<https://www.marlin.ac.uk>)

6.5.3 IMPACT PATHWAYS/POTENTIAL PRESSURES

The following pressures/impact pathways have been considered in the following section, in relation to decommissioning of subsea cables:

- Physical disturbance causing damage to habitats (such as feeding, spawning or nursery areas) or species
- Deposition of mobilised sediment causing smothering effects to habitats or species; and
- Changes in water quality resulting from remobilised sediment.

6.5.4 EVIDENCE SUMMARY

6.5.4.1 SPAWNING/NURSERY GROUNDS

There are number of commercially significant species noted that spawn/have nurseries in the area, they are split into low density spawning grounds and high density (Ellis, et al., 2012).

HIGH DENSITY SPAWNING GROUNDS

- Herring (*Clupea hengus*)

LOW DENSITY SPAWNING GROUNDS

- Sandeels (*Ammodytidae*)
- Cod (*Gadus morhua*)
- Whiting (*Merlangius merlangus*)

HIGH INTENSITY NURSEY GROUNDS

- Anglerfish (*Lophius piscatorius*)
- Horse mackerel (*Trachurus trachurus*)
- Blue whiting (*Micromesistius poutassou*)

LOW INTENSITY NURSERY GROUNDS

- Spurdog (*Squalus acanthias*)
- Spotted Ray (*Raja montagui*)
- Herring (*Clupea hengus*)
- Cod (*Gadus morhua*)
- Ling (*Molva molva*)
- European Hake (*Merluccius merluccius*)
- Whiting (*Merlangius merlangus*)
- Sandeels (*Ammodytidae*)
- Mackerel (*Scomber scombrus*)

Benthic spawning species present in the Project Area that could be temporally affected by cable removal include herring (high density spawning grounds) and sandeels (low density spawning grounds).

Herring are demersal spawners into gravel habitats with fast currents and spawning occurs during the months August to September (INCH CAPE OFFSHORE LIMITED, n.d.). The area of spawning habitat potentially affected is less than 0.0016 km².

During spawning, Sandeels release a large batch of sticky eggs which attach to the seabed. Disturbance of the seabed could disturb a very small area of seabed potentially used for sandeels spawning if the proposed works were undertaken in winter and spring. However, the area disturbed is less than 0.0016 km² so any disturbance would be small as such no impact on sandeel spawning is expected.

6.5.4.2 PROTECTED SPECIES

Upon review of the more threatened species in the area, one of them is the basking shark (*Cetorhinus maximus*). Although a migratory species and extremely rare and endangered under the IUCN (MarLIN, 2020), it is known to be present surface feeding on zooplankton in the summer in the area, as such it is a collision risk for any vessels due to its size and slow speeds of ~1 metres per second (Sims, 2000).

6.5.4.3 SHELLFISH

Common mussels (*Mytilus edulis*) could be present, given the circalittoral rock present outlined in the Benthic Ecology section, however, they have a high tolerance to sediment burial and removal (NBNAtlas, 2020).

6.5.5 ANALYSIS OF SCALE OF EFFECTS

The impact to individual fish species will be negligible as the impact will be immediate and limited to the surrounding local area. Any seabed disturbance is unlikely to constitute a >>0.1% area of suitable nursery, spawning and foraging areas for various species that inhabit the area.

Similarly, the impact to the shellfish in the vicinity of the cable removal would be negligible as the effects would be largely localized to the vicinity around the cable and given the total area of the areas of the habitats, the impact would be very small in relation to this.

Collision risk to basking sharks is extremely unlikely to occur, given the slow speeds of the vessels in conjunction with the slow movement of basking sharks. The possibility of an impact to this species in this area is negligible as a result.

6.5.6 CONCLUSION AND RECOMMENDATION

Impacts of cable removal to fish species and their spawning and nursery grounds will be negligible and the TAT14 Segment K cable should be removed.

6.6 MARINE MAMMALS

6.6.1 INTRODUCTION

This Section describes the marine mammals present in the vicinity of the TAT-14 Segment K removal corridors, identifies potential effects associated with the removal and presents the findings of the environmental assessment.

6.6.2 DATA SOURCES

The data sources used to inform the evidence summary and subsequent assessment include but are not limited to the following:

- Management Units for Marine Mammals in UK waters (IAMMWG, 2015)
- Joint Nature Conservation Committee (JNCC) website (<https://jncc.gov.uk>)
- Special Committee on Seals (SCOS) Annual Report (Sea Mammal Research Unit, 2019)
- Towards Marine Protected Areas for Cetaceans in Scotland, England and Wales (Clark, 2010)

6.6.3 IMPACT PATHWAYS/POTENTIAL PRESSURES

The following pressures/impact pathways have been considered in the following section, in relation to decommissioning of subsea cables:

- Physical disturbance causing damage to habitats;
- Effects of changes in water quality on marine mammals;
- Visual and noise disturbance of seal haul-out sites; and
- Collision risks due to vessel movements.

6.6.4 EVIDENCE SUMMARY

SEALS

The nearest grey seal (*Halichoerus grypus*) breeding colonies are on the Shetland islands near TAT14 Segment K (Sea Mammal Research Unit, 2019). Harbour seals (*Phoca vitulina*) are also noted having a significant distribution of breeding colonies across the Shetland islands (Sea Mammal Research Unit, 2019) and seals can frequently travel over 100km. The closest designated seal haul out is 18.41km away from TAT14 and is located at Horse Island in the Shetland Islands/.

CETACEANS

There are two main species of cetacean noted in the territorial waters near TAT14 Segment K:

- Harbour Porpoise (*Phocoena phocoena*)
- Killer Whales (*Orcinus orca*)

Other species notes around Shetland Islands and Fair Isle:

- Risso's dolphin (*Grampus griseus*)
- Atlantic White-sided dolphin (*Lagenorhynchus acutus*)
- White beaked dolphin (*Lagenorhynchus albirostris*)
- Short-beaked Common dolphin (*Delphinus delphis*)

The Harbour porpoise is present throughout most of the UK continental shelf waters, and as such can be disturbed by human activities in these areas, particularly acoustic disturbance (IAMMWG; Camphuysen, C.J.; Siemensma M.L., 2015).

Killer Whales (*Orcinus orca*) have been confirmed in the summer months (June and July) around the Shetland islands (Clark, 2010).

6.6.5 ANALYSIS OF SCALE OF EFFECTS

The potential impact on water quality from the proposed works is negligible and therefore there is no impact pathway for water quality on marine mammals.

As in noted in the 6.10 Commercial Navigation and 6.12 Leisure and Recreation (including Navigation), vessels are present in the area and the presence of an additional vessel for the proposed works would not increase the levels of noise in the water significantly and any effect on the background noise would be negligible. During the removal of the cable no acoustic equipment will be used in cable recovery.

The proposed works are not in proximity to seal haul out/breeding sites so there will be no impact to seal species from visual or noise disturbance.

6.6.6 CONCLUSION

In summary, the impact is assessed as being negligible and temporary, although marine mammals have a sensitivity to sounds in marine environments the presence of an additional vessel for the proposed works will not significantly increase the noise from normal, ambient levels.

6.6.7 RECOMMENDATION

BT's recommendation based on potential impacts to marine mammals is that all sections should be removed as the impact to Marine mammals should be negligible.

6.7 MARINE ORNITHOLOGY

6.7.1 INTRODUCTION

This Section describes bird species present in the vicinity of the TAT-14 Segment K removal corridors, identifies potential effects associated with the removal and presents the findings of the environmental assessment.

6.7.2 DATA SOURCES

The data sources used to inform the subsequent assessment include but are not limited to the following:

- Wetland Bird Survey (WeBS) monitoring data
- BirdLife International online seabird foraging range database (<http://seabird.wikispaces.com>)
- JNCC Seabird Monitoring Programme Online Database

6.7.3 IMPACT PATHWAYS/POTENTIAL PRESSURES

The following pressures/impact pathways have been considered in the following section, in relation to decommissioning of subsea cables:

- Changes to intertidal and subtidal habitats on water birds
- Effects of changes in water/sediment quality
- Visual and noise disturbance

6.7.4 EVIDENCE SUMMARY

There are no wetlands present in the area of TAT14 Segment K. There are two protected areas, Special Protection Areas within 30km of TAT14 Segment K, which have protections in place for specific bird species(see Section 6.8 Protected Areas). The two SPAs are:

- Sea of Foula (23.7 km away)
- Fair Isle (29.5 km away)

The designated bird features in these SPAs are as follows:

Fair Isle Breeding populations:

- Arctic skua (*Stercorarius parasiticus*) (April – September)
- Fair Isle Wren (*Troglodytes troglodytes fridariensis*) (April – June)
- Arctic Tern (*Sterna paradisaea*) (April – September)
- Fulmar (*Fulmarus glacialis*) (April – September)
- Gannet (*Morus bassanus*) (January – August)
- Great Skua (*Stercorarius skua*) (April – July)
- Guillemot (*Uria aalge*) (April – August)
- Kittiwake (*Rissa tridactyla*) (April – August)
- Puffin (*Fratercula arctica*) (April – June)
- Razorbill (*Alca torda*) (March – September)
- Shag (*Phalacrocorax aristotelis*) (February – August)

Seas of Foula Breeding Birds

- Arctic skua (*Stercorarius parasiticus*) (April – September)
- Puffin (*Fratercula arctica*) (April – June)

Seas of Foula Non-Breeding Birds

- Gannet (*Morus bassanus*) (January – August)
- Fulmar (*Fulmarus glacialis*) (April – September)
- Great skua (*Stercorarius skua*) (April – July)
- Guillemot (*Uria aalge*) (April – August)

6.7.5 ANALYSIS OF SCALE OF EFFECTS

No intertidal habitats will be affected by cable removal. A small area of deep-water sub tidal habitats will be disturbed during cable removal and potential impacts on benthic habitats have been assessed as negligible. As such there is no impact pathway for potential effects on ornithology.

Visual and noise disturbance to bird species, would be negligible and temporary whilst the cable removal is underway, given the environments they occupy and the distance from the cable removal.

Potential effects of changes in water/sediment quality have been assessed as negligible and as such there is no impact pathway for effects on ornithology.

6.7.6 CONCLUSION AND RECOMMENDATION

Impacts to bird species would be negligible. BT recommends that all the cable sections to be removed based on the ornithological features outlined above.

6.8 PROTECTED AREAS

6.8.1 INTRODUCTION

This Section provides details of the protected sites and species that may be present or have the potential to be present within the vicinity of the TAT-14 Segment K removal corridor within UK territorial waters. A full assessment of the potential effects of the proposed removal activities on protected sites has been undertaken and is provided within Appendix G Protected Sites Screening Report.

6.8.2 DATA SOURCES

The data sources used to inform the subsequent assessment include but are not limited to the following:

- Joint Nature Conservation Committee (JNCC) website (<https://jncc.gov.uk>)
- Nature Scot Designated Sites View: <https://sitelink.nature.scot/map>
- Defra's MAGIC Interactive Map: <https://magic.defra.gov.uk>

6.8.3 PROTECTED SITES

The protected sites and species have been screened for effects from cable removal (Appendix G). Table 4 describes the different protected sites found within 55km of the TAT-14 Segment K and considered within the Appendix G Protected Sites Screening Report.

Table 3: Protected Sites Descriptions

| Designation | Description |
|---|---|
| Special Areas of Conservation (SAC) | Special Areas of Conservation (SACs) are protected areas in the UK designated under the Conservation (Natural Habitats &c.) Regulations 1994 (as amended) in England and Wales (including the adjacent territorial sea) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended) in the UK offshore area. The objective is to protect, and conserve habitats and species listed on Annex I and II of the EC Habitats Directive. Habitats and species listed under these Annexes need conservation at a European level. |
| Nature Conservation Marine Protected Areas (NCMPAs) | Marine Protected Areas are protected areas in Scotland designated under the Marine and Coastal Access Act 2009. The objective is to protect nationally important marine wildlife, habitats, geology and geomorphology. |
| Special Protection Areas (SPAs) | Special Protection Areas (SPAs) are protected areas for birds in the UK classified under the Wildlife & Countryside Act 1981 (as amended) and the Conservation (Natural Habitats, & c.) Regulations 2010 (as amended) in Scotland. The objective is to protect and conserve Annex I or migratory breeding and non-breeding birds as listed on the EC Birds Directive. |
| Sites of Special Scientific Interest (SSSI) | SSSI are the finest sites for wildlife and natural features in England, supporting many characteristic, rare and endangered species, habitats and natural features. They are notified under the Nature Conservation (Scotland) Act 2004 |
| Demonstration and Research Marine Protected Areas (DRMPAs) | Demonstration and Research Marine Protected Areas (MPAs) are designated by Scottish Ministers under the Marine (Scotland) Act 2010. Sites can be established for the purpose of demonstrating, or carrying out research on sustainable methods of marine management or exploitation in Scottish territorial waters. Their application is not restricted to nature conservation. |

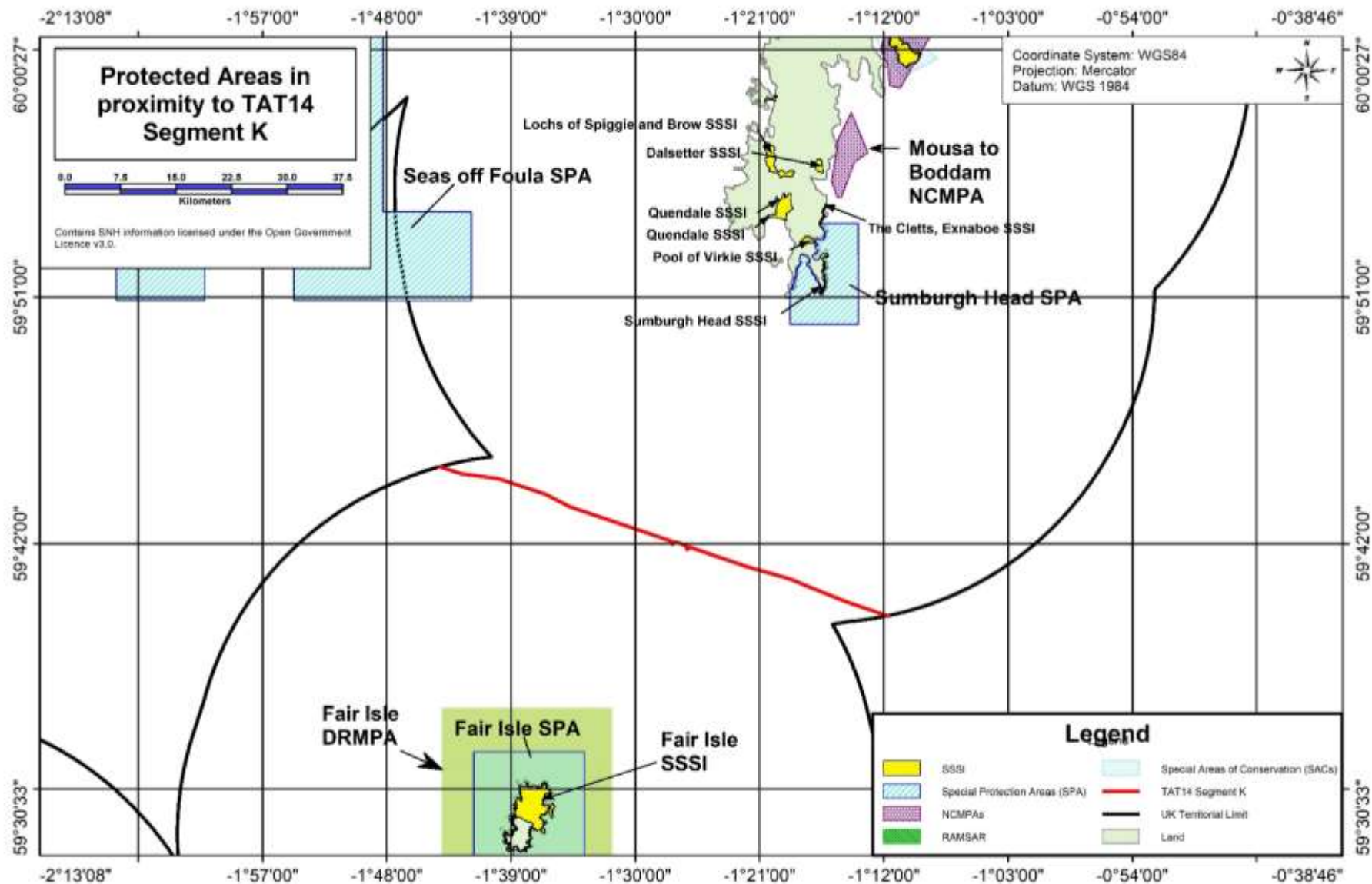


Figure 7: TAT-14 Segment K Aerial View with all Protected Areas outlined.

6.8.4 EVIDENCE SUMMARY

There are no specific conservation zones that TAT14 Seg K in UK territorial waters intersects (Figure 7), all areas are listed in Table 4. The closest protected site is the Sumburg Head which is 16.6km.

Further information on the impact on protected species and the suggested works within these sites are outlined in the following sections:

- Benthic Ecology
- Fish and Shellfish
- Marine Mammals
- Marine Ornithology

Table 4: Protected areas and designated features with marine components that are around TAT14 Segment K.

| Site Name | Site Code | Type | Distance to Site (km) | Protected/Designated Feature | Area of Protected Site (km ²) |
|------------------------|-----------|-------|-----------------------|--|---|
| Mousa to Boddam | 555560470 | NCMPA | 50.9 | Marine Geomorphology of the Scottish Shelf Seabed Sand eels (<i>Ammodytes marinus</i> / <i>Ammodytes tobianus</i>) | 13 |
| Fair Isle | UK9002091 | SPA | 29.5 | Breeding Birds Arctic skua (<i>Stercorarius parasiticus</i>) (April – September) Arctic tern (<i>Sterna paradisaea</i>) (April – September) Fair Isle wren (<i>Troglodytes troglodytes fridariensis</i>) (April – June) Fulmar (<i>Fulmarus glacialis</i>) (April – September) Gannet (<i>Morus bassanus</i>) (January – August) Great skua (<i>Stercorarius skua</i>) (April – July) Guillemot (<i>Uria aalge</i>) (April – August) Kittiwake (<i>Rissa tridactyla</i>) (April – August) Puffin (<i>Fratercula arctica</i>) (April – June) Razorbill (<i>Alca torda</i>) (March – September) Shag (<i>Phalacrocorax aristotelis</i>) (February – August) Seabird assemblage (breeding) | 68.251 |
| Seas off Foula | UK9020331 | SPA | 23.7 | Breeding Birds Arctic skua (<i>Stercorarius parasiticus</i>) (April – September) Puffin (<i>Fratercula arctica</i>) (April – June) Seabird assemblage – non-breeding Non-Breeding Birds Gannet (<i>Morus bassanus</i>) (January – August) Fulmar (<i>Fulmarus glacialis</i>) (April – September) Great skua (<i>Stercorarius skua</i>) (April – July) Guillemot (<i>Uria aalge</i>) (April – August) Seabird assemblage (breeding) | 3412.145 |

| | | | | | |
|-----------------------|---------------|-------|------|--|---------|
| Sumburgh Head | UK900251 1 | SPA | 16.6 | Breeding Birds Arctic tern (<i>Sterna paradisaea</i>) (April – September) Fulmar (<i>Fulmarus glacialis</i>) (April – September) Guillemot (<i>Uria aalge</i>) (April – August) Kittiwake (<i>Rissa tridactyla</i>) (April – August) Seabird assemblage – breeding | 24.7891 |
| Fair Isle | UK003014 9 | SAC | 36.2 | Vegetated sea cliffs of the Atlantic and Baltic Coasts European dry heaths | 5.6105 |
| Fair Isle | 555595672 | DRMPA | 23.6 | Investigate factors affecting seabird population and demonstrate the socio-economic benefits from protecting the marine environment | 156.84 |
| Pool of Virkie | 1302 | SSSI | 22.1 | Mudflats | 0.22 |

6.8.5 ANALYSIS OF SCALE OF EFFECTS

The Protected Sites Screening Report (Appendix L), in the Habitats Regulations Screening found no potential impact pressures to protected features, so Likely Significant effects are unlikely.

The NCMPA assessment found no potential impact pressures to protected features, so Likely Significant effects are unlikely.

6.8.6 CONCLUSION AND RECOMMENDATION

The Protected Sites Screening Report (Appendix G), that focused on the Habitats Regulations Screening and Marine Protected Areas Screening concluded no pressure-receptor pathway exists between the removal of TAT14 Segment K cables within the UK territorial waters and the qualifying features of any of the protected sites in the vicinity. As there are no Likely Significant Effects (LSE), taking into consideration the sites conservation objectives it is concluded that there is no potential for an LSE on any MPA or SAC from the removal of TAT14. As such, Appropriate Assessment/Stage 2 Assessment is not required. Therefore, cable removal is recommended.

6.9 COMMERCIAL FISHERIES AND SHELLFISH PRODUCTION

6.9.1 INTRODUCTION

This Section provides details of commercial fishing/shellfish production activity that may be present in the vicinity of the TAT-14 as laid plan and identifies potential impacts associated with the removal.

6.9.2 DATA SOURCES

The key data sources used to inform the commercial fishing baseline description and assessment includes but is not limited to the following:

- Aquaculture Scotland – Designation Shellfish Production Areas (England)
- Admiralty Charts

6.9.3 CONSULTATION

No consultations have been undertaken at the time of writing. However, it is planned to engage with the local fisherman prior to works commencing.

6.9.4 EVIDENCE SUMMARY

SHELLFISH PRODUCTION

There are no shellfish protected waters in the vicinity of TAT14 Segment K. The closest shellfish harvesting areas/shellfish protected areas are Cliff Sounds (Scotland's Aquaculture, 2021), 42 kilometres away from the proposed works.

FISHERIES

Fishing is present in the area as previous cable breaks being caused by fishing trawlers. The fishing density maps in Figure 8 demonstrates there are less than 20 transits of fishing vessels per week in the area.

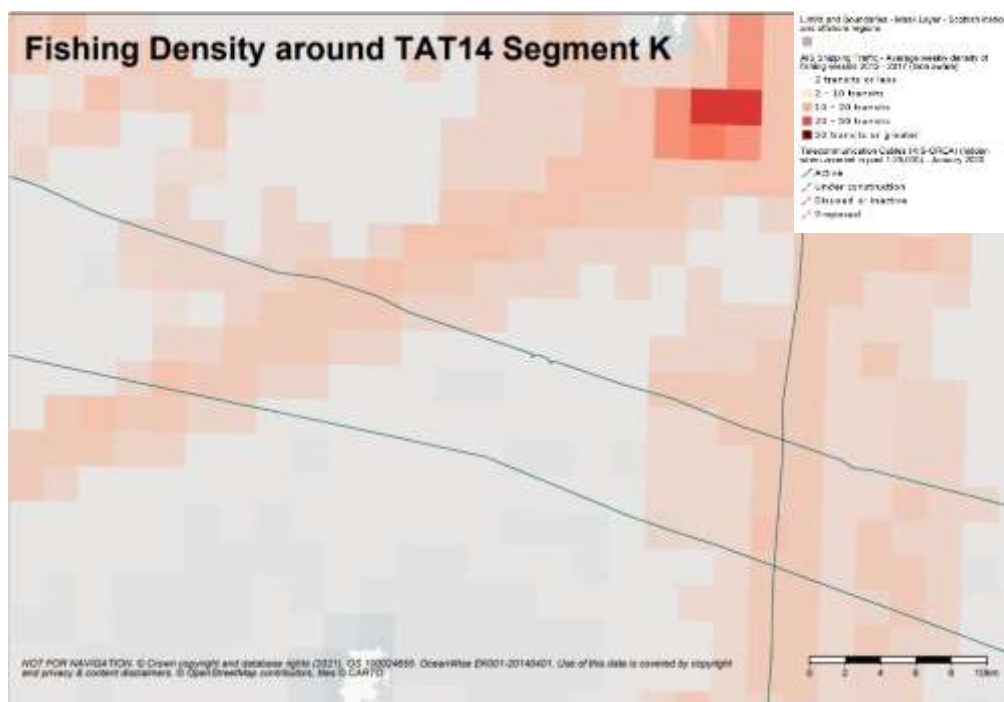


Figure 8: Weekly density AIS shipping traffic of fishing vessels between 2012-2017 (MMO, 2017)

6.9.5 ANALYSIS OF SCALE OF EFFECTS

The initial removal of the cable may cause temporary disruption to any harvesting/fishing vessels in the area of the cable removal. The proposed works will only take the duration of a number of days dependant on weather so any disruption will be temporary and short term. However, once the cable is removed there will be a benefit to any fisheries, as a snagging hazard will have been removed from the area. Assessment of contamination of Shellfish production areas is outlined in Water and Sediment Quality section of this document.

6.9.6 CONCLUSION

There are no shellfish farms in the area. Any disruption to fisheries would be short term and temporary and potential impacts would be negligible.

6.9.7 RECOMMENDATION

BT's recommendation is to remove the cable on the basis that the following best practice recommendations would be adopted by the Project during cable recovery to minimise any potential disruption to fishing vessels.

1. Circulation of information via Notices to Mariners, Radio Navigational Warnings (channel 14), Navigational Telex (NAVTEX), and/or broadcast warnings in advance of and during the proposed works. Information will also be circulated to local ports in the area and notices will include a description of the work being carried out.
2. Fisheries vessels will be requested to provide a safe passing distance from cable removal vessel restricted in manoeuvrability of at least 1NM.

6.10 COMMERCIAL NAVIGATION

6.10.1 INTRODUCTION

This Section summarises the findings of a high-level desktop survey undertaken for the Project and outlines the likely significant effects from cable removal on shipping and navigation.

6.10.2 DATA SOURCES

The source of the data included are the following:

- Royal Yachting Association (RYA), 2019.
- Asset Monitor UltraMap

6.10.3 EVIDENCE SUMMARY

There are multiple commercial navigation routes that intersect the location of TAT14 Segment K, a number are listed below:

- Grutness to Fair Isle
- Lerwick to Fair Isle (summer only)

Shipping traffic is present in near the proposed works, as per Figure 9, with a large increase in traffic beyond the 12 nautical mile limit of territorial waters. However, some of the traffic lines noted in this figure are source from fishing and recreational vessel.

There are also areas to be avoided around the Shetland and Fair Isle for vessels over 5000GT carrying oil and other liquid hazardous cargo, to prevent pollution risk to the islands.

6.10.4 ANALYSIS OF SCALE OF EFFECTS

The cable recovery vessel will be moving at approximately 1-5 knots, the works will be transitory and short term, lasting several days (dependant on weather and restrictions). Notice to Mariners will be published to inform sea users via Notices to Mariners, Kingfisher Bulletins and MCA and the UKHO. Vessels will be requested to remain at least 1NM away from cable vessels during installation operations.

6.10.5 CONCLUSION AND RECOMMENDATIONS

The commercial navigation is highly likely to be unaffected by the presence of cable removal activities, due to the short work times involved.

The following best practice recommendations would be adopted by the Project during cable recovery.

1. Circulation of information via Notices to Mariners, Radio Navigational Warnings (channel 14), Navigational Telex (NAVTEX), and/or broadcast warnings in advance of and during the proposed works. Information will also be circulated to local ports in the area and notices will include a description of the work being carried out.
2. Cable removal vessels will be fully compliant with COLREGS (IMO, 1972) and SOLAS (IMO, 1974).
3. Passing vessels will be requested to provide a safe passing distance from cable removal vessel restricted in manoeuvrability of at least 1NM.

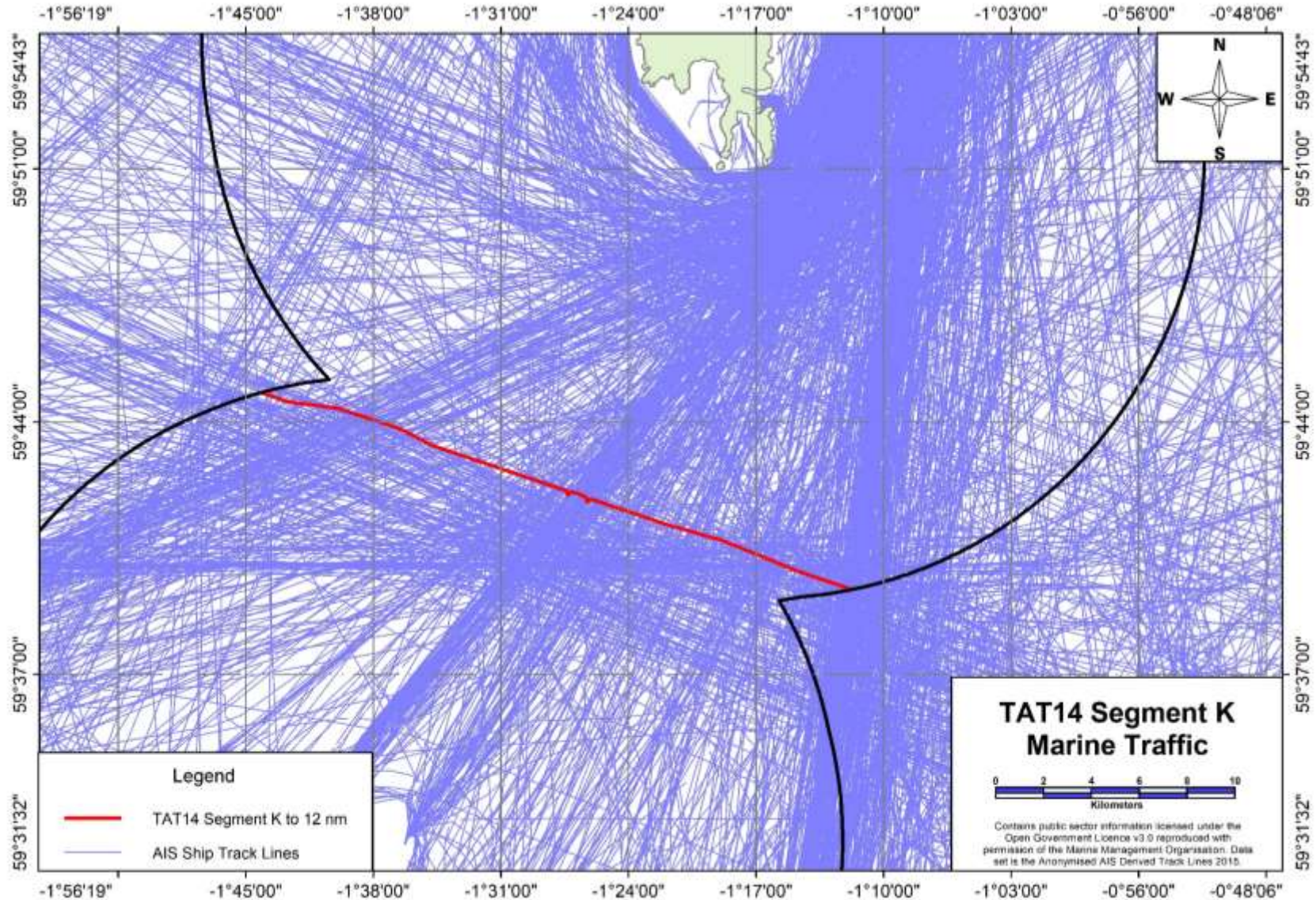


Figure 9: Marine Traffic in the area of TAT 14 Segment K. The traffic taken from the MMO (MMO, 2017), above includes Unknown Vessels, Non-Port service craft, Port service craft Vessels engaged in dredging or underwater operations, High Speed Craft, Military or Law enforcement, passenger, cargo, tankers, fishing vessels and recreational vessels.

6.11 MARINE ARCHAEOLOGY

6.11.1 INTRODUCTION

This section provides details of the marine archaeology assets that may be present within the vicinity of the TAT-14 Segment K and identifies potential effects associated with the cable removal.

6.11.2 DATA SOURCES

The data sources used to inform the baseline description:

- Admiralty Charts

6.11.3 EVIDENCE SUMMARY

Upon review of the Admiralty maps (Figure 10), there are three wreck sites in proximity (~200 metres away) to the TAT-14 Segment K. However, there are no historical wreck sites of note less than 100 metres away.

6.11.4 ANALYSIS OF SCALE OF EFFECTS

TAT14 Segment K is a significant distance away from any historical sites and wrecks and as such the potential impact of cable removal on any wrecks will be negligible.

6.11.4.1 CABLE REMOVAL WITHOUT THE USE OF A GRAPNEL

There will be no direct or indirect impact from cable removal on the two identified wrecks as they are over 200m away from the proposed works.

6.11.4.2 CABLE REMOVAL USING GRAPNEL

With regards to the two wrecks known, the impact of a grapnel hitting the site could damage any remaining structures present, ruining the remains. The impact would be deemed high as a result. Nonetheless, the risk could be mitigated to negligible by ensuring no grapnel is used in these areas and the cable is peeled from the seabed at these sites.

6.11.5 CONCLUSION

At sea, there are only three wrecks noted, however the risk to these sites could be mitigated to negligible by adjusting grapnel practice, to ensure that this section follows the methods of removal outlined in Section 2.1.4.2 Removal.

6.11.6 RECOMMENDATION

BT's recommendation based on archaeological sites is to remove the cables.

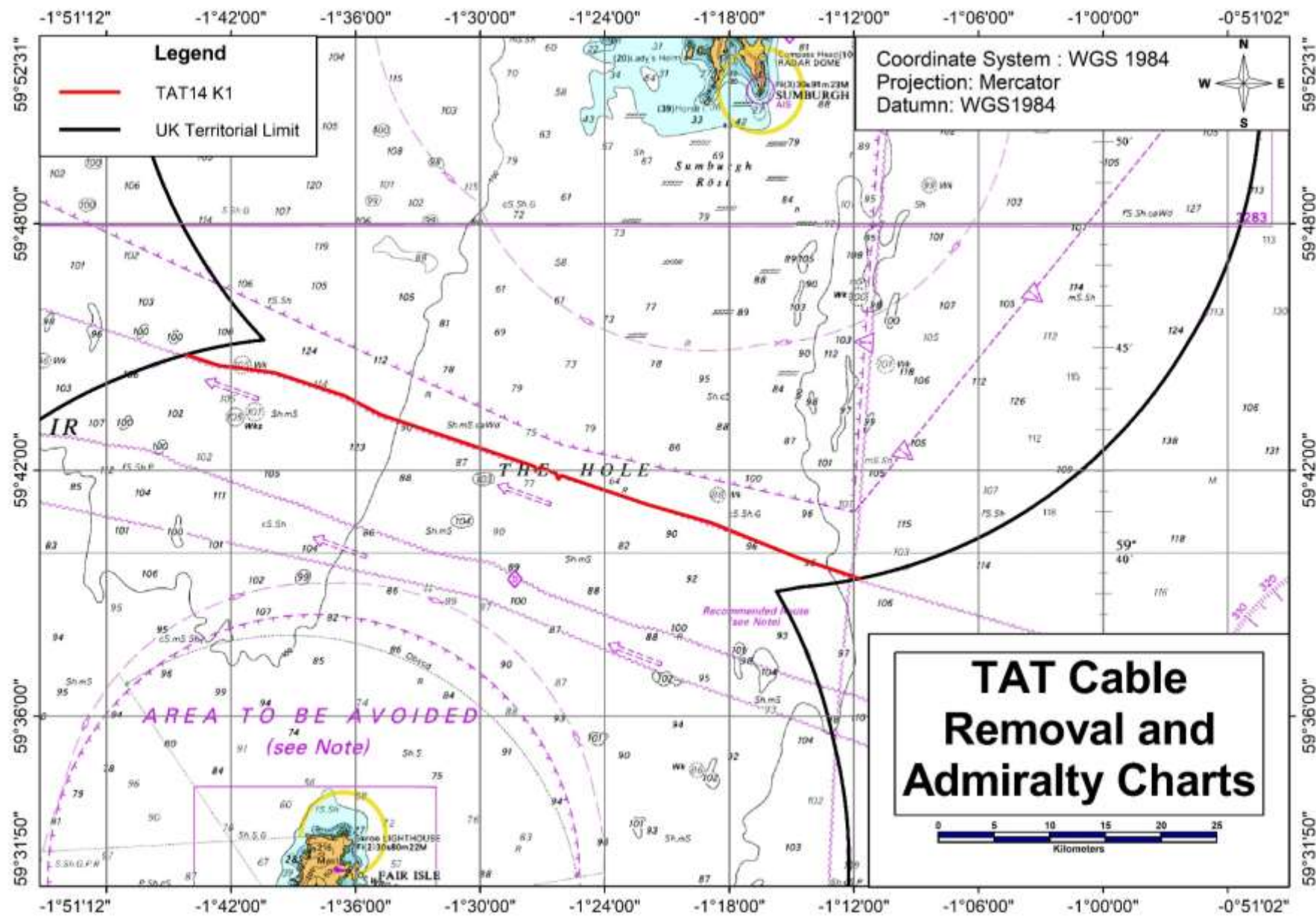


Figure 10: Map taken from GeoCable outlining all wrecks in proximity to the TAT-14 Cable (red line).

6.12 LEISURE AND RECREATION (INCLUDING NAVIGATION)

6.12.1 INTRODUCTION

This Section describes the leisure and recreational activities present in the vicinity of the TAT-14 Segment K removal corridor within UK territorial waters, and identifies potential effects associated with the removal.

6.12.2 EVIDENCE SUMMARY

TAT14 Segment K does not make landfall anywhere and is 30km away from land as such the leisure and recreational activities are limited. However, some sailing tourism, angling trips and whale watching does occur within the area (Shetland Islands of Opportunity, 2021).

6.12.3 ANALYSIS OF SCALE OF EFFECTS

The spatial scale of effects on leisure and recreation would be limited to the direct footprint of cable route and any exclusion zone applied to any nearby vessels.

1.1.1 CONCLUSION AND RECOMMENDATION

Any effects on leisure and recreation activities will be short term and temporary and impacts will be negligible.

6.12.4 CONCLUSION

The effects of cable removal will also be short term and temporary in the marine environment and impacts negligible, so cable removal is recommended.

6.13 OTHER CABLES, PIPELINE AND STRUCTURES

6.13.1 INTRODUCTION

This Section describes any other structures present in the vicinity of the TAT-14 Segment K removal corridors, identifies potential effects associated with the removal and presents their findings.

6.13.2 EVIDENCE SUMMARY

There are 3 telecommunications cables present in the vicinity of TAT-14 Segment K (Figure 11). The cables are outlined below:

- Atlantic crossing 1 segment A (6.66 kilometres away)
- Havfrue (4.6 kilometres away)
- SHEFA-2 (crosses the TAT14 Segment K in territorial waters)

6.13.3 ANALYSIS OF SCALE OF EFFECTS

There is one crossing present between SHEFA-2 and TAT14 Segment K, as such a full consultation with the owner will be required prior to works.

With regards to the other cables present around the proposed works, as best practice, BT will be contacting all other cable owners in proximity to make them fully aware of the work and ensure they are happy with the works being in proximity to their property, as well as to assess liability.

6.13.4 CONCLUSION AND RECOMMENDATION

The areas where there are no crossings the cable removal should have no impact to any adjacent infrastructure and cable removal is recommended.

However, the section 61 of TAT14 where the SHEFA-2 crossing occurs, as outlined in Appendix I Plan of works in line with ICPC recommendations the TAT14 cable will be returned to the seafloor by being clump weighted and distanced 500 metres away from SHEFA 2. The remaining 0.535km of TAT14 Segment K in territorial water to the East of SHEFA 2 are not recommended to be recovered due to the risk to the third-party cable.

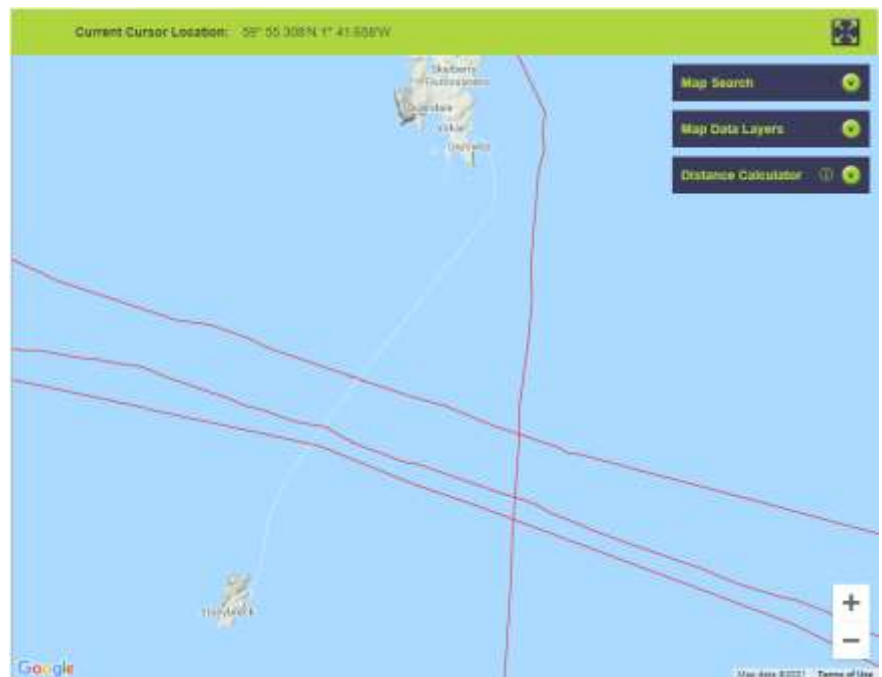


Figure 11: Overview of all structures present in area of TAT14 Segment K, includes the layout for TAT-14 Segment K (KIS-ORCA, 2019)

7 Executive Summary

7.1 RISK MATRIX

This matrix is a summary of findings in relation to their impact based on the available data.

| Section | Habitat Type | | | Recommendation |
|---|-----------------|------------|-------------|--|
| | Exposed Bedrock | Gravel | Coarse Sand | |
| Physical Processes | Negligible | Negligible | Negligible | Remove |
| Water and Sediment Quality | Negligible | Negligible | Negligible | Remove |
| Benthic Ecology | Negligible | Negligible | Negligible | Remove |
| Fish and Shellfish | Negligible | | | Remove |
| Marine Mammals Marine Mammals | Negligible | | | Remove |
| Marine Ornithology | Negligible | | | Remove |
| Protected Areas | NO LSE | | | Remove |
| Commercial Fisheries and Shellfish Production | Negligible | | | Remove |
| Commercial Navigation | Negligible | | | Remove |
| Marine Archaeology | Negligible | | | Remove |
| Leisure and Recreation | Negligible | | | Remove |
| Other Cables, Pipeline and Structures | No Impact | | | Remove up to Shefa 2 Crossing Leave in Situ East of Shefa 2 |

7.2 RECOMMENDATIONS

BT's recommendation based on the summary table above, is for all sections of the TAT14 Segment K telecommunication cable with UK territorial waters, to be removed based on the low risk/impact to the physical pressures in the area. There is one exception where cable removal is not recommended. This is the SHEFA 2 cable crossing. Consultation will be carried out with cable owner; however, the

recommendation is to leave the cable in situ at this location. Furthermore, assessment of protected sites is noted in the assessment recommendations provided below.

7.3 ASSESSMENT RECOMMENDATIONS

7.3.1 WATER FRAMEWORK DIRECTIVE

Upon review of the activities performed in this assessment in section, the proposed works are outside of coastal waters there are unlikely to be any significant effects to the water quality or water framework protected areas, so no further assessment is required.

7.3.2 HABITATS REGULATION ASSESSEMENT

Initial screening concluded that it was considered there were no pressure-receptor pathways between the Project and the Qualifying features of protected sites. As such no further analysis of the LSEs taking into consideration the sites conservation Objectives were performed. As such, Appropriate Assessment (AA) is not required. In addition, the Project will not hinder the conservation objectives of the NCMPAs or SSSIs assessed and Stage 1 Assessment or Notification is not required.

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APPENDIX A SECTION K-57 ROUTE AND ROUTE CLEARANCE SURVEYS

Please refer to Appendix A – Section 57.pdf

APPENDIX B SECTION K-58 ROUTE AND ROUTE CLEARANCE SURVEYS

Please refer to Appendix B – Section 58.pdf

APPENDIX C SECTION K-59 ROUTE AND ROUTE CLEARANCE SURVEYS

Please refer to Appendix C – Section 59.pdf

APPENDIX D SECTION K-60 ROUTE AND ROUTE CLEARANCE SURVEYS

Please refer to Appendix D – Section 60.pdf

APPENDIX E SECTION K-61 ROUTE AND ROUTE CLEARANCE SURVEYS

Please refer to Appendix E – Section 61.pdf

APPENDIX F WATER FRAMEWORK DIRECTIVE SCOPING

a) Screening

Please refer to the Project Description for further detail on the works to be undergone.

The TAT14 Segment K cable within UK territorial waters is 25km away from designated coastal waters.

b) Scoping

I) HYDROMORPHOLOGY

Please refer to the 6.1 Physical Processes and 6.2 Water and Sediment Quality for further details. The table below summaries all findings:

| Consider if your activity: | Yes | No | Hydromorphology risk issue(s) |
|---|----------------------------|--------------------------------|--------------------------------|
| Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status | Requires impact assessment | Impact assessment not required | Not within Coastal Waters body |
| Could significantly impact the hydromorphology of any water body | Requires impact assessment | Impact assessment not required | Not within Coastal Waters body |
| Is in a water body that is heavily modified for the same use as your activity | Requires impact assessment | Impact assessment not required | Not within Coastal Waters body |

II) BIOLOGY

(1) HABITATS

| Consider if the footprint of your activity if: | Yes | No | Biology Habitats Risk issue(s) |
|--|---|--|---|
| 0.5km ² or larger | Yes to one or more – requires impact assessment | No to all – impact assessment not required | No. The footprint is less than 0.001km ² |
| 1% or more of the water body's area | | | No. TAT14 Segment K does not occupy the Water body |
| 500m of any higher sensitivity habitat | | | No. TAT14 Segment K does not occupy the Water body |
| 1% or more of any lower sensitivity habitat | | | No. |

(2) FISH

| Consider if your activity: | Yes | No | Biology fish risk issue(s) |
|---|----------------------------|--------------------------------|--|
| Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary | Continue with questions | Impact assessment not required | Not located in or near an estuary and the project will not delay or prevent fish from entering an estuary or migrating through an estuary. |
| Could impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow) | Requires impact assessment | Impact assessment not required | Activities would not impact movement, migration or spawning. |
| Could cause entrainment or impingement of fish | Requires impact assessment | Impact assessment not required | Cable removal in the seabed will not lead to entrainment or impingement. |

III) WATER QUALITY

| Consider if your activity: | Yes | No | Water quality risk issue(s) |
|--|----------------------------|--------------------------------|---|
| Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days) | Requires impact assessment | Impact assessment not required | The primary method of removal is peeling the cable of the surface of the seabed. If buried, the primary action or removal will result in temporary and localised suspension of sediments. Taking into account the relative predominance of coarser materials in sedimentary habitats within the project area, strength of tidal and other currents, it is not expected that suspended sediment mobilisation and smothering will result in more than a negligible magnitude effect. No impacts on oxygen levels, nutrients or microbial patterns are predicted. |
| Is in a water body with a phytoplankton status of moderate, poor or bad | Requires impact assessment | Impact assessment not required | The phytoplankton status is high |
| Is in a water body with a history of harmful algae | Requires impact assessment | Impact assessment not required | The status is not monitored |

Consider if water quality is at risk from your activity through the use, release or disturbance of chemicals.

| If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if: | Yes | No | Water quality risk issue(s) |
|---|----------------------------|--------------------------------|---|
| The chemicals are on the Environmental Quality Standards Directive (EQSD) list | Requires impact assessment | Impact assessment not required | Chemicals used during cable removal are limited to routine substances such as fuel for vessels, hydraulic fluid and lubricating oils. Any chemicals used will be approved under the Offshore Chemicals Regulations 2002 and operations will be compliant with MARPOL. No release of chemicals is planned as part of the works. |
| It disturbs sediment with contaminants above Cefas Action Level 1 | Requires impact assessment | Impact assessment not required | Marine sediment contamination is linked to sources such as industrialised estuaries, shipping, active and closed disposal sites and oil and gas operations. The proposed TAT-14 Segment K route does not pass through, or in close proximity to any such potential sources. In addition, there are no known sites of other contamination (e.g. from spills) in the vicinity of the proposed route and no obvious sediment sink areas such as deposits of fine sediment in deeper waters. The waters are exposed, high energy environment. Therefore, it is not anticipated that the route will pass through any areas of elevated sediment contamination. The substrate is largely sand and gravel, which is unlikely to retain levels of contamination higher than CEFAS Action level 1. |

| If your activity has a mixing zone (like a discharge pipeline or outfall) consider if: | Yes | No | Water quality risk issue(s) |
|---|---|--------------------------------|--|
| The chemicals released are on the Environmental Quality Standards Directive (EQSD) list | Requires impact assessment ⁵ | Impact assessment not required | No release of chemicals is planned as part of the works. |

⁵ Carry out your impact assessment using the Environment Agency's surface water pollution risk assessment guidance, part of Environmental Permitting Regulations guidance.

IV) PROTECTED AREAS

Consider if WFD protected areas are at risk from your activity. These include:

- special areas of conservation (SAC)
- bathing waters

- special protection areas (SPA)
- nutrient sensitive areas
- shellfish waters

Use Magic maps to find information on the location of protected areas in your water body (and adjacent water bodies) within 2km of your activity.

| • Consider if your activity is: | • Yes | • No | • Protected areas risk issue(s) |
|---|----------------------------|--------------------------------|---|
| Within 2km of any WFD protected area ⁶ | Requires impact assessment | Impact assessment not required | There are no WFD protected areas present within 2km of TAT14 Segment K. |

V) INVASIVE NON-NATIVE SPECIES

Consider if there is a risk your activity could introduce or spread INNS.

Risks of introducing or spreading INNS include:

- materials or equipment that have come from, had use in or travelled through other water bodies
- activities that help spread existing INNS, either within the immediate water body or other water bodies

| Consider if your activity could: | Yes | No | INNS risk issue(s) |
|----------------------------------|----------------------------|--------------------------------|--|
| Introduce or spread INNS | Requires impact assessment | Impact assessment not required | All equipment is used in other waters but are periodically cleaned after use, vessels are used in other parts of the world and periodically cleaned in a dry dock. |

VI) SUMMARY

Summarise the results of scoping here.

| Receptor | Potential risk to receptor? | Note the risk issue(s) for impact assessment |
|-------------------|-----------------------------|--|
| Hydromorphology | No | No - TAT14 Segment K does not interest any WFD bodies or coastal waters. |
| Biology: habitats | No | No risks to habitats present. |
| Biology: fish | No | No risk issues identified for fish. |
| Water quality | No | The primary method of removal is peeling the cable of the surface of the seabed. If buried, the primary action or removal will result in temporary and localised suspension of sediments. Taking into account the relative predominance of coarser materials in sedimentary habitats within the project area, strength of tidal and other currents, it is not expected that suspended sediment mobilisation and smothering will result in more than a negligible magnitude effect. |

| | | |
|-----------------------------|----|--|
| | | No impacts on oxygen levels, nutrients or microbial patterns are predicted. |
| Protected areas | No | No protected areas present within 2km. |
| Invasive non-native species | No | All equipment is used in other waters but are periodically cleaned after use, vessels are used in other parts of the world and periodically cleaned in a dry dock. |

As **no receptors** have been identified at risk during scoping, there is no impact assessment stage present in Section 6.3 Water Framework Directive Assessment of this report.

APPENDIX G PROTECTED SITES SCREENING REPORT

A) INTRODUCTION

When making a marine licensing decision Marine Scotland are required to consider the impacts of the proposed project alone and in combination with other relevant plans or projects on designated sites. To inform this decision-making process the Applicant is required to provide assessment in accordance with specific legislation and guidance.

The purpose of this Protected Sites Screening Report is to inform the 'Screening' stage of these assessments in determining whether the Project, either alone and in combination with other plans or projects, is likely to have a significant effect on any European site, hinder the conservation objectives of any Marine Protected Area and/or effect the integrity of any SSSI.

The protected sites included in this report are:

1. European sites - A collective term for Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites. SACs and SPAs are designated within 12 nautical miles (NM) under the Conservation (Natural Habitats, &c.) Regulations 1994 (CHSR) (as amended). The Scottish government also has a policy to apply the same level of protection for proposed Special Protection Areas (pSPA). A pSPA is a site that has been approved for consultation but is not yet classified. UK Government policy (ODPM Circular 06/2005) states that sites designated under the Convention on Wetlands (Ramsar, Iran 1971) known as the "Ramsar Convention" are also included under the definition European sites.
2. Nature Conservation Marine Protected Areas (NCMPAs) - designated within the Scotland under the Marine (Scotland) Act 2020.
3. Sites of Special Scientific Interest (SSSI) – designated under The Nature Conservation (Scotland) Act 2004, for their species, habitat and/or geological features.

This report refers to the high-level description of the Project in section 6.8 Protected Areas and identifies the protected sites that could be affected by decommissioning of the TAT14 Segment K cable. Potential pressures that could arise from the planned activities on the protected sites are identified. It is then determined if there is any connectivity between the Project and any protected sites and the potential for adverse effects on the conservation objectives and qualifying interests within the affected European site(s); potential for hindrance to the conservation objectives of MPA sites and effects to the integrity of any SSSI sites (Stage 1 AA Screening, and SSSI screening; are considered. This HRA Screening Report concludes in a statement for each European site, NCMPA and SSSI, as relevant, to whether further assessment past Stage 1 Screening is required.

All assessments in this report have been undertaken prior to the implementation of any potential mitigation measures.

(1) CONSULTATION

Table 2 in the main report, summarises the relevant consultation undertaken to date for the decommissioning of TAT14 Segment K, received prior to and during preparation of the Screening Assessment and which are considered in this report.

B) HABITATS REGULATIONS ASSESSMENT (HRA) PROCESS

The Conservation of Habitats and Species Regulations 2017 (as amended) requires that any plan or project which has the potential to adversely affect a European site, no matter how far away from that site, be subject to the Habitats Regulations Assessment (HRA) process in order to determine whether Appropriate Assessment (AA) is required. This legislation was originally derived from the EC 'Habitats' Directive (92/43/EEC)

Whilst the obligation to undertake the AA is derived from Part 6 of the Conservation of Habitats and Species Regulations 2017 on the conservation of natural habitats and of wild fauna and flora. It is the role of the designated competent authority to undertake the HRA process. However, the applicant is required to provide necessary information to inform the process or to enable them to determine whether an AA is required. The competent authority can only agree to the plan or project if, based on the findings of the AA, it has ascertained that it will not have an adverse effect on the integrity of the site concerned. It is important to note that the onus is on demonstrating the absence (rather than the presence) of negative effects.

The proposed decommissioning works European protected sites and as the works are not directly connected with or necessary to the management of these European sites, it is regarded as necessary that the Project should be subject to the HRA process.

The HRA process involves four stages (as outlined in EC 2002 and shown in Figure 12) that need to be applied in sequential order. The outcome at each successive stage determines whether a further stage in the process is required. The results at each stage must be documented so there is transparency of the decisions made.

There is no statutory method for undertaking the HRA process, but Part 6 of the Conservation of Habitats and Species Regulations 2017 guidance outlines the steps to be taken by the applicant at each Stage. Stage 1 - Screening for Appropriate Assessment is the process that addresses and records the reasoning and conclusions in relation to the first two tests of:

- Whether a plan or project is directly connected to or necessary for the management of the site, and
- Whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.

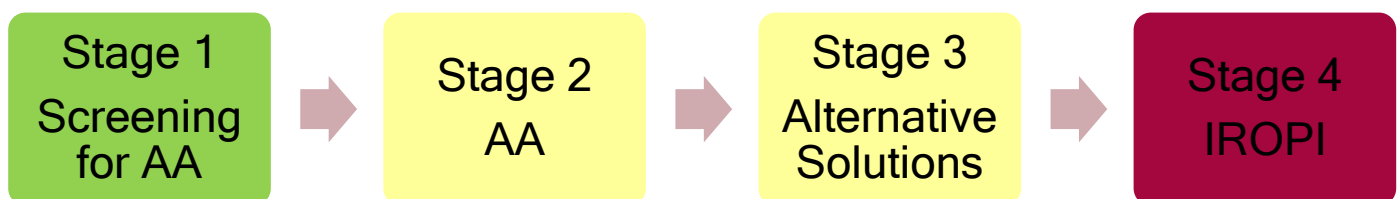


Figure 12: Stages of HRA Process

Where significant effects are likely, uncertain, or unknown at screening stage, the process must proceed to Stage 2 (AA). Screening should be undertaken without the inclusion of mitigation, unless potential effects clearly can be avoided through the modification or redesign of the plan or project, in which case the screening process is repeated on the altered plan. The greatest level of evidence and justification will be needed in circumstances when the process ends at screening stage on grounds of no effect. Where a potential for likely significant effect has been identified the assessment must progress to Stage 2.

In an AA (as Stage 2 of the HRA process), it is necessary to determine whether the project or plan would result in an adverse effect on the integrity (AEOL) of the European/Ramsar site(s) in view of the site's conservation objectives.

Where it cannot be demonstrated that a project will not have an AEOL, or there is insufficient certainty of an avoidance of an adverse effect, the activities can only proceed if it can be demonstrated that there are no more suitable (less damaging) alternatives, and that there are Imperative Reasons of Over-riding Public Interest (IROPI) sufficient to justify the proposed project.

This Protected Sites Screening Report presents the findings of the applicants Stage 1 Screening.

C) NCMPA ASSESSMENT PROCESS

Under the Marine and Coastal Access Act 2009 (MCAA) an applicant must satisfy the public authority with the function of determining applications that there is no significant risk of the proposed act hindering the achievement of the conservation objectives stated for the NCMPA. It is therefore related to the published or draft conservation objectives and designated features of any NCMPA screened for likely significant effect (LSE).

The process for assessing the effects of a plan/project on an MPA follows a three-stepped assessment process. Like the HRA process, the outcome at each successive stage determines whether a further stage in the process is required. The stages of the process are Screening, Stage 1 Assessment and Stage 2 Assessment.

All marine licence applications are screened to determine whether Section 126 of the MCAA should apply. It will apply if it is determined that:

- the licensable activity is taking place within or near an area being put forward or already designated as an MPA; and
- the activity is capable of affecting (other than insignificantly) either:
 - i. the protected features of an MPA; or
 - ii. any ecological or geomorphological process on which the conservation of any protected feature of an MPA is (wholly or in part) dependant.

If during the screening stage it has been determined that Section 126 should apply, it is necessary for the public authority to assess, by proceeding to Stage 1 Assessment, which elements of Section 126 should apply to a marine licence application.

This Protected Sites Screening Report presents the findings of the applicants Screening of Marine Protected Areas.

D) SSSI NOTIFICATION PROCESS

The Nature Conservation (Scotland) Act 2004, provides for the notification and confirmation of SSSIs, by Natural Scot. These sites are identified for their flora, fauna, geological or physiographical features.

The local planning authority, all landowners and occupiers, and the Secretary of State must be notified of any activities or works within or adjacent to SSSI. The Act also contains measures for the protection and management of SSSIs, with attention to the integrity of the site and conservation objectives.

The notified bodies have a specified time-period within which representations and objections may be made. NE must consider these responses and may withdraw or confirm the notification. The assessment of potential effects to SSSIs in this report will inform the notification process as part of the Marine licence application submission to Marine Scotland.

E) SCREENING ASSESSMENT

I) ASSESSMENT APPROACH

The screening assessment has been undertaken according to the guidance and following the process illustrated in Figure 13. It has considered all recent case law relevant to the Habitats Directive summarised in the EC Guidance (November 2018) and has been undertaken prior to the implementation of any potential mitigation measures.

The structure for the remainder of this Section therefore reflects the key steps in this process, as summarised in Figure 13.

II) IDENTIFICATION OF RELEVANT PROTECTED SITES

The potential for a protected site to be significantly affected depends on whether receptors which are designating features of a protected site:

- a. Can come into contact with the Project; and
- b. Are sensitive to the proposed works to the extent that the activity is likely to have an adverse effect on the conservation objectives for the features.

Identifying relevant protected sites has therefore been achieved by applying the following steps:

- Identify which receptors could be sensitive to the removal activities

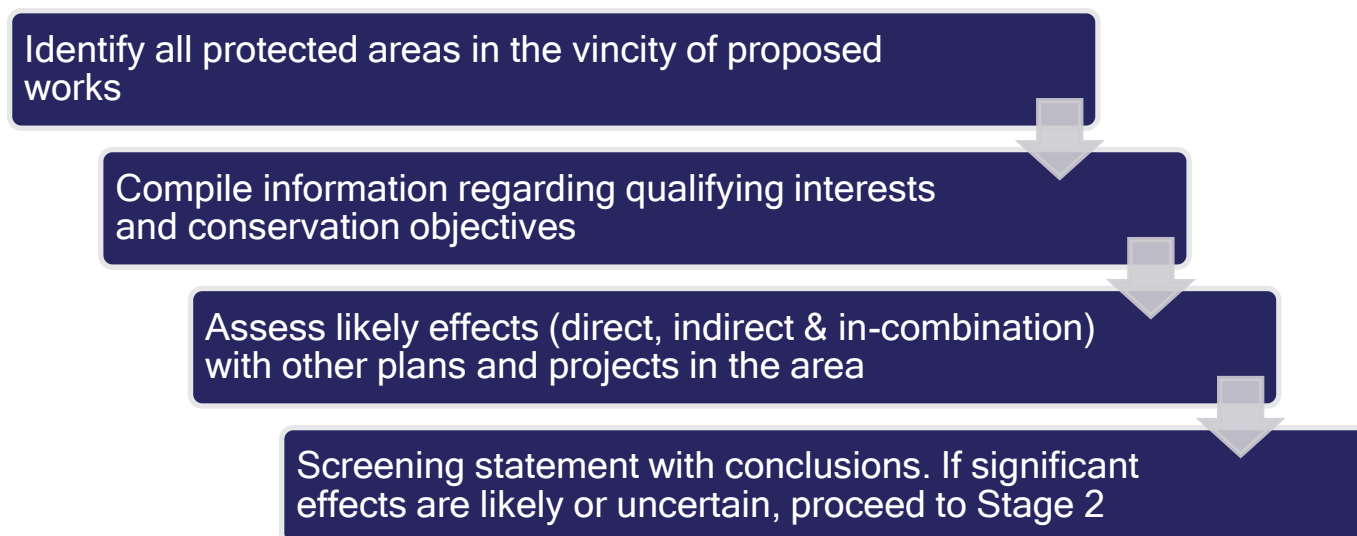


Figure 13: Screening Process

- Identify the potential pressures the proposed decommissioning activities could have on these receptors
- Screen European sites, MPA and SSSI within defined search areas to assess whether interest features of the protected sites could be significantly affected by the Project, or their conservation objectives hindered

The receptors which could potentially be affected by the proposed works and could be the designating interest features of protected sites are:

- Benthic Ecology
- Fish
- Birds
- Marine Mammals

Potential pressures on these receptors have been evaluated in the associated sections in the Appraisal document. They have been repeated here for ease of reference, but please refer to their associated sections for further detail.

III) PROPOSED WORKS

The proposed works are outlined in section 2 Project Description and is further supported by the Offshore Recovery Operations attached in Appendix I .

In summary, the primary method of removal will involve peeling the cable off the floor of the seabed with the use of a vessel. Some grapnelling activities may be required to locate the cable if the cable cannot be recovered in one section.

F) HABITATS REGULATION ASSESSMENT (HRA)

I) PROTECTED AREAS AROUND THE WORKS

There are no protected areas within 15km of the proposed works and the nearest is the Sumburgh Head SPA, which is over 16km away(Figure 14).

II) SCREENING OF SITES AND POTENTIAL PRESSURES

The sites are screened based on the likelihood of a pressure – receptor pathway existing Table 5. The Fair Isle, Seas off Foula and Sumburgh Head SPAs and the Fair Isle SAC have no pressure-receptor pathway found from the proposed works, no further review will be performed for these sites.

Screening Conclusion: No Potential for Likely Significant Effects (LSE) and no Appropriate Assessment is required.

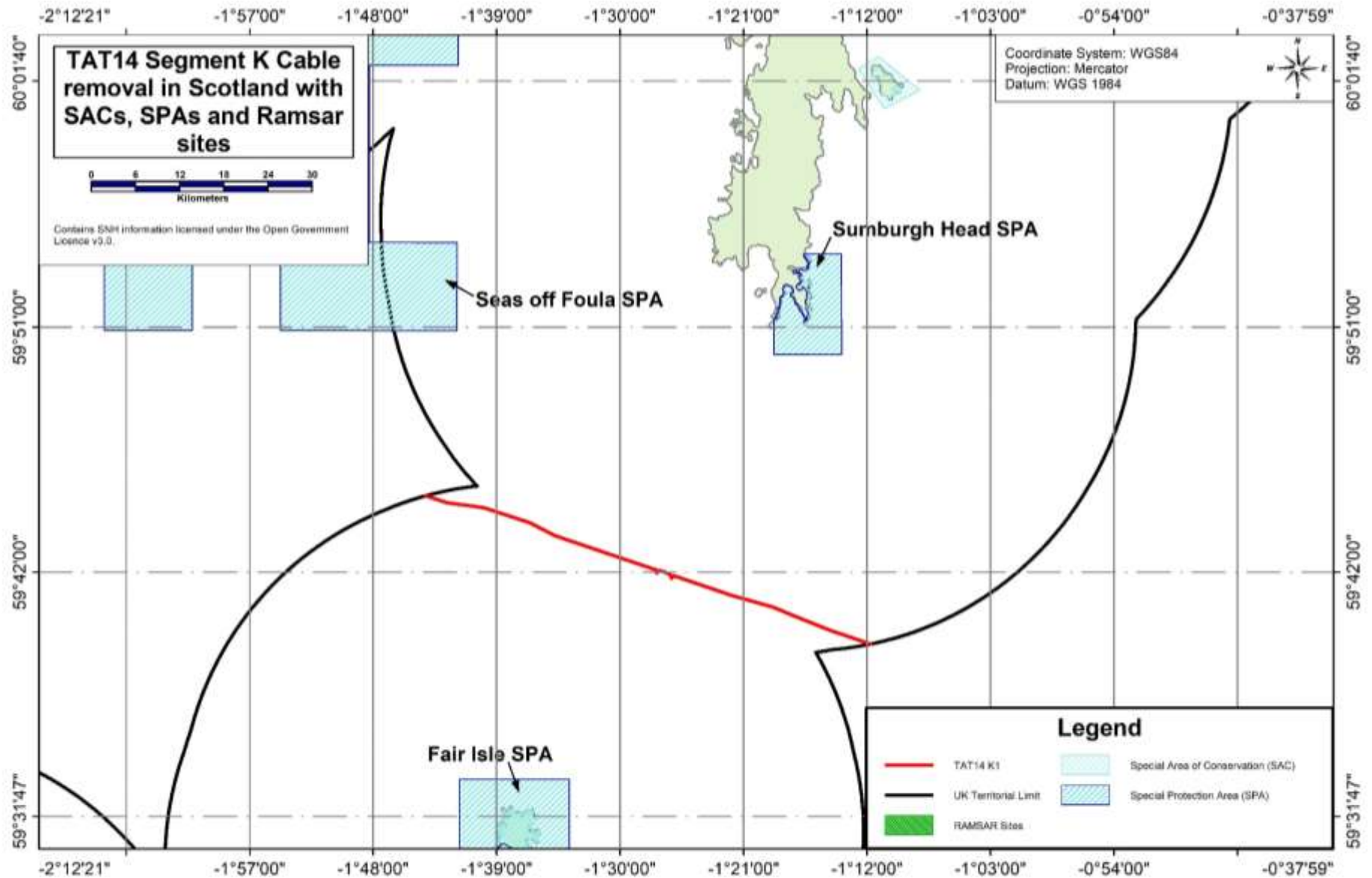


Figure 14: Map of Special Areas of Conservation, Special Protection Areas and RAMSAR sites around TAT14. Note there are no RAMSAR sites or Special Protected Areas around TAT14

Table 5: Screening assessment of protected sites and the likelihood of interaction.

| Site Name and Code | Potential Pressures | Distance (km) | Likelihood for interaction between removal activities and receptor | Screening Conclusion |
|--------------------------------|--------------------------------------|---------------|---|----------------------|
| Fair Isle SPA (UK9002091) | No Pressure - receptor pathway found | 29.5 | No Due to the distance of the TAT14 removal corridor from the Fair Isle SPA, the potential for birds from this site to be found loafing or foraging within the vicinity of the application corridor is minimal. | Screened Out |
| Seas off Foula SPA (UK9020331) | No Pressure - receptor pathway found | 23.7 | No Due to the distance of the TAT14 removal corridor from the Seas off Foula SPA, the potential for birds from this site to be found loafing or foraging within the vicinity of the application corridor is minimal. | Screened Out |
| Sumburgh Head SPA (UK9002511) | No Pressure - receptor pathway found | 16.6 | No Due to the distance of the TAT14 removal corridor from the Sumburgh Head SPA, the potential for birds from this site to be found loafing or foraging within the vicinity of the application corridor is minimal. | Screened Out |
| Fair Isle SPA (UK0030149) | No Pressure - receptor pathway found | 36.2 | No The removal activities will no interact with any designated features. The vessel and cable are a significant distance away | Screened Out |

G) NCMPA SCOPING

I) PROTECTED AREAS AROUND THE WORKS

The assessments assess both the intersection of a protected area as well as any protected areas in proximity to the proposed works. There are no NCMPAs or DR MPAs within 15km of the proposed works (Figure 15) and the nearest MPA is 23km away.

II) SCREENING OF SITES AND POTENTIAL PRESSURES

The sites are screened based on the likelihood of a pressure – receptor pathway existing Table 6. The Mousa to Boddam MPA has no pressure-receptor pathway found from the proposed works, no further review will be performed.

Table 6: Screening assessment of protected sites and the likelihood of interaction.

| Site Name | Potential Pressure | Distance to Site | Likelihood for interaction between removal activities and receptor | Screening Conclusion |
|-----------------|--------------------------------------|------------------|--|----------------------|
| Mousa to Boddam | No Pressure - receptor pathway found | 50.9 | No The removal activities will no interact with any designated features. The vessel and cable are a significant distance away | Screened out |

Screening Conclusion: No Potential for Likely Significant Effects and no Stage 2 Assessment is required.

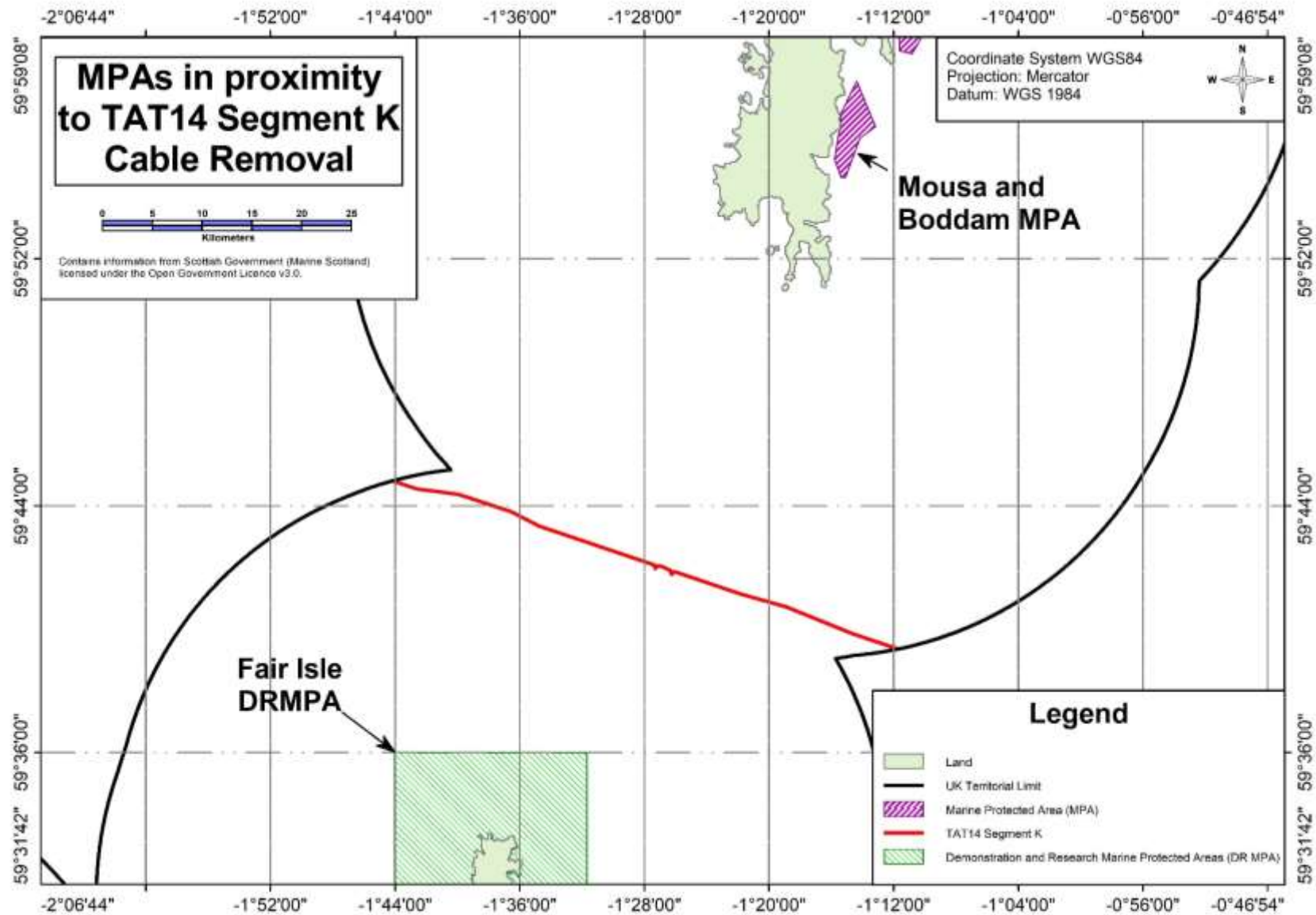


Figure 15: Map of all Marine Protected Areas around TAT14 Segment K

H) SSSI NOTIFICATION ASSESSMENT

There are no Sites of Special Scientific Interest (SSSI) that intersect the proposed works or within 18km.

Screening Conclusion: The proposed activities will not negatively impact the integrity of any SSSI.

I) IN-COMBINATION ASSESSMENT

The HRA process and MPA Assessment process requires that plans or projects are assessed in-combination with other plans or projects. Only plans or projects that would increase the likelihood of significant effects should be considered.

The effects that result from decommissioning of part of the TAT14 Segment K cable will be short term and localised. All effects will be restricted to the zones of influence either side of the proposed works. An initial area of search of 10 km been applied either side of the works area to identify plans and projects for inclusion within this assessment.

There are no protected sites within the vicinity of the application corridor that may be affected by Potential Cumulative Effects (PCE).

J) SCREENING STATEMENT AND CONCLUSION

To determine whether the Project is likely to have a significant effect on any European sites, SSSIs or NCMPAs, either individually or in-combination with other plans or projects, Stage 1 Screening was carried out.

Sites were assessed to determine if there was a potential pressure-receptor pathway between the Project and the Qualifying Feature(s).

Initial screening concluded that it was considered there were no pressure-receptor pathways between the Project and the Qualifying features of the protected sites. As such no further analysis of the LSEs taking into consideration the sites conservation Objectives were performed. As such, AA is not required. In addition, the Project will not hinder the conservation objectives of the NCMPAs or SSSIs assessed and Stage 1 Assessment or Notification is not required.

APPENDIX H TELECOMMUNICATION DECOMMISSIONING GUIDANCE

Please refer to attached document Appendix H - R.3554_Draft_Telecom Decom Guidance_TAT14_02Dec2020.pdf and the risk matrix Appendix H - R.3554_Draft_Telecom Decom Guidance_02Dec2020.xlsx.

APPENDIX I TELECOMMUNICATION PLAN OF WORKS

Please refer to attached document Appendix I - TAT-14 Recovery Operations Offshore Scottish Rev B0.pd