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Marine Invasive Non-native Species Biosecurity Risk Assessment and Management Plan

A Marine Biosecurity Risk Assessment and Management Plan enables marine operators and contractors to understand and minimise the risk of introducing or spreading marine invasive non-native species (INNS). Management of marine INNS is extremely challenging once they are introduced to a new area. Effective biosecurity measures that minimise the risk of introduction or spread are therefore key to effective management.

Filling in this form:

To help you fill in this form, see accompanying document “Guidance for completing NRW’s Biosecurity Risk Assessment and Management Plan”. The accompanying document contains clarification of many key terms and also provides guidance on potential pathways of introduction for INNS (Table 1) and level of risk associated with each pathway (Table 2).

Structure of this form:

You will need to fill in Sections A and C. Fill in sections B1 to B5 when relevant to your activity. For further information on what is included in each section see the accompanying guidance document.

Section A: Activity overview

You should complete this section.

Section B: Risk Assessment

B.1 Assessing the pathway risks associated with vessels

If you are using a vessel (or vessels) as part of your licensed activity you should complete this section. Information on any equipment to be used which can be separated from the vessel should be provided in Section B.4.

B.2 Assessing the pathway risks associated with non-biological materials and water

If your activity involves the use or transfer of non-biological materials (e.g. water, sediment, construction material) you should complete this section.

B.3 Assessing the pathway risks associated with biological material

If your activity involves the use or transfer of biological material (including aquaculture) you should complete this section.

B.4 Assessing the pathway risks associated with equipment

If your activity involves use of equipment which can be separated from their vessel you should complete this section.

B.5 Assessing other pathway risks

This should be filled in if previous sections do not capture aspects of your activity.

Section C: Management Measures

You should complete this section.

Section D: Recommendations

You should consider this section.

Section A: Activity overview

Please fill out the activity details below:

Applicant name:	Apollo Submarine Cable System Limited
Short description of activity: *(please provide enough detail for NRW to understand the location and the different elements of the project. Links to other documents which describe the project can be provided)*	The Beaufort cable project is to provide and install a high capacity fibreoptic telecommunications (telecoms) submarine cable between Newgale, Pembrokeshire in the United Kingdom (UK) and Kilmore Quay, Wexford, in the Republic of Ireland (ROI). The estimated timescales for the installation of the submarine cable are between April and June 2027, although these dates are still to be absolutely confirmed. This installation window has been included in Section 5 of this application.
Estimated timings of proposed licensed activities:	1st March 2027 – 31st December 2027

Section B: Risk Assessment

B.1 Assessing the pathway risks associated with vessels

B.1.1. Please list all ports within the UK or overseas that all vessel(s) to be used (both during construction and maintenance) have visited over the 12 months prior to this licensed activity, or since the last out of water period (whichever is most recent).

Please state **N/A** if vessels have not entered any port since the last out of water period.

If you do not yet have the information to complete this section, please state **Unknown.** NRW may ask for this section to be updated when these details are known. The risk should be set as High.

Vessel name	**Port / location visited over last 12 months** (listed chronologically with dates if known)	**Which marine invasive non-native species known to be present at this port(s) / location(s)?**	**Has the vessel had antifouling?** 12 months prior to activity for biocidal coatings, 24 months for biocide-free coatings
MV Cecon Vigor MMSI (259211000)	• Port of Yalova (Turkey) at approximately 40.6628° N, 29.258° E. • Eydehavn port, located in southern Norway near Arendal, at approximately Longitude, 8.88060°. Latitude, 58.49661°. • The Port of Borg, located in southeastern Norway at the mouth of the Oslofjord, approximate Latitude: 59.2000° N (59° 12.00′ N), Longitude: 10.9500° E (010° 57.00′ E) • Bremerhaven port, Germany, coordinates 53.5396° N, 8.5809° E	• Port of Yalova: Orange striped anemone (Diadumene lineata) & Leathery seasquirt (*Styela clava*) • Eydehavn Port: American slipper limpet (*Crepidula fornicata)* & American jack knife clam (*Ensis leei*) & Leathery seasquirt (*Styela clava*) • The Port of Borg: Bonnemaison's hook weed *(Bonnemaisonia hamifera*) & Leathery seasquirt (*Styela clava*) • Bremerhaven Port: American slipper limpet (*Crepidula fornicata) &* Chinese mitten crab *(Eriocheir sinensis)* & Devil's tongue weed *(Grateloupia turuturu*) & Bonnemaison's hook weed (*Bonnemaisonia hamifera)* & Japanese skeleton shrimp (*Caprella*	No

	• Port of Rognan in Nordland, Norway, is located at approximately 67°06′N 15°24′E (67.106°N, 15.425°E). • Port Fourchon, LA, USA. Latitude and longitude coordinates are: 29.105560°N, -90.194443°E • Corpus Christi, TX, USA coordinates of 27° 48' 2.0988" N and 97° 23' 46.9608" W • Port of Rio de Janeiro; 22°53′31″S 43°11′43″W / 22.89194°S 43.19528°W	*mutica)* & Orange striped anemone (*Diadumene lineata)* & American jack knife clam (*Ensis leei*) & Japanese wireweed *(Sargassum muticum*) & Leathery seasquirt (*Styela clava)* • Port of Rognan: Leathery seasquirt (Styela clava) • Port Fourchon: Orange striped anemone (*Diadumene lineata*) & Polychaete tubeworm (*Ficopomatus enigmaticus*) • Port Corpus Christi: American slipper limpet (*Crepidula fornicata)* & Orange striped anemone (*Diadumene lineata*) & Polychaete tubeworm (*Ficopomatus enigmaticus*) • Pacific oyster (*Magallana gigas)* & Orange striped anemone (*Diadumene lineata*)	

Please add more rows if necessary

Please indicate the INNS risk level and justification of the risk below, separately for each vessel based on the locations visited in last 12 months. This should take into account the probability of biofouling and vessel antifouling regime. **Note:** Examples of risk levels are given in Table 2 of the accompanying guidance document and there is further information about this section in the accompanying guidance document.

Vessel name / type	Risk Level (High, Medium, Low)	Justification of risk level
MV Cecon Vigor MMSI (259211000)	Medium to Medium/High	The vessel is still under construction and sea trials, thus the ports listed in the table in Section B1.1 are best estimates of the forecasted ports scheduled to be visited by the vessel ahead of the licenced activity in 2027. An assessment of the invasive species in the forecasted ports is that of the seventeen

		species identified, only three are not already present in the licensable area. The vessel is anticipated to visit a small number of ports across Europe, USA and South America. The antifouling coating (biocidal) has been applied to the vessel in 2025 and by operations in 2027, will exceed the 12-24 months required. It is worth noting that the coating added to the vessel is not due another coat of antifouling until 2030, whether antifouling properties significantly decrease in the 5 years should be investigated. The vessel may be exposed to an INNS species at a few of the ports, see table above. The vessel will not be dry stored during the period leading up to the project.

B.1.2 Please provide details of the vessels (identified in Table B.1.1), which have not had antifouling (within the 12 months prior to the licensed activity for biocidal coatings, or 24 months for biocide-free coatings) and if there is an alternative antifouling management regime.

If there are not additional measures or an alternative biofouling management regime, then please put **None**, and the risk level would not change.

Vessel	**Alternative biofouling management regime** (e.g. different timeframes for antifouling treatment, vessel storage on land etc.)	**Risk Level (High, Medium, low)**
MV Cecon Vigor MMSI (259211000)	The antifouling of Cecon Vigor is International Intercept 7000 and is a biocidal anti fouling. This was applied in 2025 and is not scheduled to be reapplied until 2030 The product does not contain organotin compounds acting as biocides and as such is in compliance with the International Convention on the Control of Harmful Anti-fouling Systems on ships as adopted by IMO in October 2001	Medium

B.2 Assessing the pathway risks associated with non-biological materials and water

B.2.1: Please provide information about the source and receiving environments for non-biological materials and water transferred through the licensed activity from different pathways (for example hopper water, dredge material, construction material).

Pathway	**Location (including Coordinates, WGS84)**		**Relevant Environmental Conditions for INNS species** (e.g. salinity and depth differences between source and receiving environments)	**List of INNS known to be present**	**Risk Level (High, Medium or Low)**	**Justification of risk level**
N/A	Source					
	Receiving					
N/A	Source					
	Receiving					
N/A	Source					
	Receiving					

Please add more rows if necessary

B.3 Assessing the pathway risks associated with biological material

B.3.1 Please provide information about the species that will be used or transferred through the licensed activity and the potential for INNS to be contained in the biological material.

No biological material is being transported under the proposed project and no construction materials are being brought in.

B.3.2: Please provide information about the source and receiving environments for biological material used or transferred through the licensed activity. Pathways include, for example, transfer of seeded ropes with seaweed or shellfish.

Pathway	**Location (coordinates, WGS84) and / or name of culture facility**		**Relevant environmental conditions for INNS species** (e.g. salinity and depth differences between source and receiving environments)	**List of INNS known to be present in the location or culture facility**	**Risk Level (High, Medium or Low)**	**Justification of risk level**
N/A	Source					
	Receiving					
N/A	Source					
	Receiving					

Please add more rows if necessary

B.3.3. If a relevant pathway is identified in Table B.3.2, please outline any relevant biosecurity measures or protocols in place to prevent contamination of material by marine INNS, and introduction or spread of marine INNS.

Not applicable

B.3.4. Does the transfer have the relevant documentation from the Fish Health Inspectorate at CEFAS (Aquaculture Production Business Registration), or follow other relevant codes of conduct for prevention of the introduction or spread of marine INNS? Please place an X in the relevant box.

Yes	No	Don't know	Not relevant
			N/A

B.4 Assessing the pathway risks associated with immersible equipment

B.4.1. Please list the immersible equipment expected to be used in this licensed activity in the box below.

MV Cecon Vigo ROV/Capjet

B.4.2. Will all the immersible equipment used in this licensed activity undergo washing, rinsing and / or drying as part of routine maintenance at the times described below? Please place an X in the relevant box.

	Yes	No
Immediately prior to departing the port of origin to undertake the licensed activity.	Yes	
Immediately prior to leaving the licensed activity area on completion of the licensed activity.	Yes	

B.4.3. Will all the immersible equipment used in this licensed activity undergo washing, rinsing and / or drying between different deployments within the activity area of this licensed activity (e.g. different specific locations of dredging or sampling covered under this marine licence)? Please place an X in the relevant box.

Yes	No (please provide reason)
Yes	

If you answer No to any of the questions in B.4.2 or B.4.3, then please complete B.4.4 below.

B.4.4. Please provide information on the previous location the equipment will have been used prior to the vessel being used for this licensed activity.

Equipment	Location (Coordinates, WGS84)	Risk Level (High, Medium or Low)	Justification of risk level
N/A	N/A	N/A	N/A

B.5 Assessing other pathway risks

B.5.1 Please provide any other information on the licensed activity that may produce a risk of the introduction or spread of marine INNS that is not covered in the sections above.

Pathway	Risk Level (High, Medium or Low)	Justification of risk level
N/A		

Section C: Management Measures

C.1 Management Measures

Enter the management measures for the pathways identified in the sections above.

All **high and medium risk** pathways identified in the previous risk assessment (sections B.1 to B.5) should have some degree of additional control or mitigation measures. Low risk pathways may also need additional control or mitigation measures. You may want to consider keeping a logbook to help demonstrate compliance if this is requested.

Pathway (identified in sections above)	**Risk Level (High, Medium or Low)**	**Risk management measure/s**	**Risk level after management (High, Medium or Low)**
B1	Medium to Medium/High	The antifouling of Cecon Vigor is International Intercept 7000 and is a biocidal anti fouling. This was applied in 2025 and is not scheduled to be reapplied until 2030 The product does not contain organotin compounds acting as biocides and as such is in compliance with the International Convention on the Control of Harmful Anti-fouling Systems on ships as	Low

		adopted by IMO in October 2001 Invasive species that have been identified that are not already present at the licenced area are crustaceans (not including barnacles or limpets) and amphipods which are not anticipated to attach themselves to the vessels hull. In the unlikely event they do the vessels antifouling coating should prevent this. The only other potential method of transportation is through ballast water transfer. The vessel operates a ballast water management plan in line with international standards to mitigate this.	

Please add more rows if necessary

Section D. Recommendations

You may want to consider how compliance with the management measures will be recorded, for example in a log book or via photos.

We also recommend that;

- You identify an individual for monitoring and reporting on biosecurity management plan actions (a biosecurity manager)
- All staff involved in the licensed activity are made fully aware of the possibility that INNS may be encountered and understand what measures will be taken to ensure surveillance / monitoring of INNS during the activity
- All relevant staff are adequately trained in the identification and detection of INNS and to report any instances to the biosecurity manager