

UNCLASSIFIED

SUBMARINE DISMANTLING PROJECT

Draft Habitats Regulations Assessment

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Issue 1.0 – October 2011



MINISTRY OF DEFENCE

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- personal information.

This HRA is subject to consultation with Statutory Consultees but responses are not being sought, specifically on this HRA, from the public. Public comments on wildlife and habitats or any other aspect of the Submarine Dismantling Project may be submitted in response to the main Consultation Document or the Non-Technical Summary of the Strategic Environmental Assessment available at www.mod.uk/submarinedismantling.

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Document Information

Project Name: Submarine Dismantling Project	
Document Title: Habitats Regulations Assessment (Draft)	
Issue Status:	Issue 1.0
Deliverable Reference:	
Produced By:	Professional and Technical Services, Defence Infrastructure Organisation
Level of Control:	This Document is controlled to Level 1/2/3/4 in accordance with SDP PMP Document Quality Management Procedure.

Document Authorisation

Owner:		Peer Reviewer	If applicable
Author:		Committee Endorsement:	If applicable
Editorial Checker:		Technical Checker:	If applicable
Document Approver:		Approver's Signature:	
Document Authoriser:		Authoriser's Signature:	

Document Revisions

Version No.	Details	Date
1.0	First public issue	12.10.11

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MOD Form 2223 (Revised)

Habitats Regulations Assessment (HRA)¹

Consideration of Plan/ Project (PP) Judgement of Likely Significant Effect (JLSE) and/ or Appropriate Assessment (AA)

Copies of all completed Habitats Regulations Assessment forms should be submitted to:

Post: [REDACTED]

Email: [REDACTED]

This Decision Form should be completed in conjunction with guidance provided in Section 5 of the Sustainability and Environmental Appraisal Tools (SEAT) Handbook for the MOD Estate, and the DIO Practitioner Guidance – Designated Sites. For an explanation of the terms used see the Practitioner Guidance.

Plan / Project: MOD Submarine Dismantling Project (SDP)

Name of Natura 2000 and Ramsar site(s):

The following Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites have been identified as potentially affected by the SDP Integrated Options:

Devonport Royal Dockyard (Plymouth)	Tamar Estuaries Complex SPA
	Plymouth Sound and Estuaries SAC
	South Dartmoor Woods SAC
	Blackstone Point SAC
	Dartmoor SAC
Rosyth Dockyard (Fife)	Loch Leven SPA & Ramsar Site
	Forth Islands SPA
	Firth of Forth SPA & Ramsar Site
	Imperial Dock Lock, Leith SPA
	River Teith SAC
	Isle of May SAC

¹ The 'Habitats Regulations' differ between UK nations: England and Wales - The Conservation of Habitats and Species Regulations 2010 SI 2010/490; Scotland - The Conservation (Nature Habitats, etc.) Regulations 1995 (as amended in Scotland); Northern Ireland - The Conservation (Nature Habitats, etc.). Regulations (Northern Ireland) 1995 SI 95/380

Other Competent Authority Consents, Permissions and Authorisations:

The Habitats Regulations (Reg. 65 in England and Wales; Reg 52 in Scotland & NI) state that a competent authority is not required to assess the implications of a plan or project, which would be more appropriately assessed by another competent authority. Where more than one competent authority is involved there should be agreement as to which will act as the lead competent authority. This form should only be used if MOD is agreed as the lead competent authority and regard must be given to the views of the other competent authorities involved.

The Submarine Dismantling Project (SDP) is a national programme which consists of seven broad stages of work, some of which involve (or will involve in the future) a number of site options across the UK. The MOD will take the decision on whether to proceed with the SDP as a whole, and will act as the Competent Authority for this HRA. A wide range of other Competent Authorities and Statutory Bodies have been consulted through the SDP Strategic Environmental Assessment (SEA)²

Each stage of the SDP may require the permission of a number of Competent Authorities, and depending on the nature and location of works may be subject to 'Project-level HRA'.

Are there any other designated sites which may be affected by this PP, or are there any other relevant nature conservation issues?

This is not required as part of the Habitats Regulations Assessment process, but identification of any other biodiversity conservation issues supports MOD's statutory biodiversity obligations.

The SDP SEA identifies other designated sites and relevant nature conservation issues in the geographical areas that may be affected by the SDP. These issues are not considered further in this HRA.

² Strategic Environmental Assessment for the MOD Submarine Dismantling Project. Available from www.mod.uk/submarinedismantling

Summary of the Project

Full details of the plan/project should be referenced or Annexed. This section provides summary details.

References:

- A. Defence Equipment and Support Submarine Dismantling Project – Strategic Environmental Assessment, October 2011. Available at www.mod.uk/submarinedismantling
- B. MOD SDP Draft HRA Screening and Scoping to Accompany SEA Scoping Document, December 2010. Available at www.mod.uk/submarinedismantling

Annexes:

- A1 Map of SPAs, SACs & Ramsar Sites near Devonport Royal Dockyard, Plymouth
- A2 Map of SPAs, SACs & Ramsar Sites near Rosyth Royal Dockyard, Fife
- B1 Summary of Draft HRA: Devonport Royal Dockyard, Plymouth
- B2 Summary of Draft HRA: Rosyth Royal Dockyard, Fife
- C Summary of Proposed MOD SDP Avoidance and Mitigation Measures

1. Introduction

- 1.1 This is a Draft HRA, prepared by Defence Infrastructure Organisation (DIO), on behalf of the Ministry of Defence in respect of the above plan/ project, in accordance with the EC Habitats Directive (92/43/EEC) and transposing Regulations. The Habitats Regulations (Reg. 61 in England and Wales; Reg 48 in Scotland & NI) require that a Competent Authority carries out an Appropriate Assessment (AA) before deciding to undertake, or give any consent, permission or other authorisation for a plan or project which is likely to have a significant effect on a European site.
- 1.2 Prior to 2008, the MOD divided HRAs into an initial Judgment of Likely Significant Effects (JLSE) to screen whether proposals were likely to have a significant detrimental effect on a Natura 2000 site, and if necessary a more detailed Appropriate Assessment. Following recent case law in England³ a JLSE should take account of all proposed avoidance and mitigation measures integral to a proposal, and may involve the same breadth of factors and depth of analysis as an Appropriate Assessment would. The MOD's approach, applied consistently throughout the UK, is to where possible undertake a single stage assessment and call the entire process a 'Habitats Regulations Assessment'. It is Government policy to also apply Habitats Regulations Assessment processes to the special features of Ramsar Sites.
- 1.3 This Plan-Level HRA uses the MOD's standard HRA Form, which was primarily developed for Project-Level HRAs. The annexed tables have been adapted to follow guidance⁴ and examples of Plan-Level HRAs for Regional Spatial Strategies⁵.

SDP HRA Question 1: Consultees are invited to comment on the HRA's approach and structure.

³ http://www.epr.uk.com/eprnews/Dilly_Lane_files/Dilly%20Lane%20Judgement.pdf

⁴ Assessing Development Plans in Terms of the Need for Appropriate Assessment, Scottish Executive, May 2006; Planning for the Protection of European Sites: Appropriate assessment, DCLG August 2006; Appropriate Assessment of Plans, Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants and Land Use Consultants, September 2006

⁵ e.g. Appropriate Assessment of the Draft South East Plan Implementation Plan, 2006; Appropriate Assessment of the Draft South East Plan, 2006; Habitats Regulations Assessment of the Draft Regional Spatial Strategy for the South West, 2007; Habitats Regulations Assessment of the North West Regional Spatial Strategy, 2008

2. What are the Plan/ Project proposals?

- 2.1 The overall aim of the SDP is to define, develop, procure and implement a timely solution for the dismantling and disposal of the UK's redundant, defueled nuclear powered submarines. The project (which was set up in 2000 as Project ISOLUS) will provide an alternative to the continued afloat storage of the defueled submarines, which will include the eventual disposal of Intermediate Level Waste (ILW) to the proposed Geological Disposal Facility (GDF).
- 2.2 The scope of the SDP, which extends over a 60 year period, encompasses the following:
- provision of facilities and expertise to dismantle 27 Royal Navy nuclear submarines once defuelled, re-using and recycling as much non-radiological material as possible;
 - provision of interim, land-based storage for the resulting ILW until at least 2040, pending the availability of the proposed GDF; and
 - the eventual decommissioning of the dismantling and storage facilities used in this process.
- 2.3 The key stages of the SDP are described in detail in the SEA (Reference A) and are summarised in **Box 1** overleaf. The submarine and reactor compartment dismantling process, and the main technical options are summarised in **Figure 1**.
- 2.4 Following assessment against operational criteria derived from the project's Key User Requirements, the MOD concluded that there are only three credible options site for initial dismantling (the removal of the radioactive materials from the defuelled submarines). These are Devonport Dockyard in Devon, Rosyth Dockyard in Fife, or a combination of both sites⁶.
- 2.5 The SEA firstly considers the potentially significant environmental affects associated with generic stages I-VII listed above. These are not site-specific. The SEA then considers fifteen Integrated Options, which are the credible combinations of the following:
- Three technical options for removing the radioactive materials from the submarines:- Reactor Compartment separation, Reactor Pressure Vessel removal or Reactor Pressure Vessel removal with size reduction to Packaged Waste
 - Three initial Dismantling Site combinations: Comparison of undertaking initial dismantling (removal of the ILW) at Devonport Dockyard, Rosyth Dockyard, or at both.
 - Four types of ILW Storage site: Comparison of storing submarine ILW at the Point of Waste Generation, and at 'remote' sites elsewhere in the UK (owned by MOD, the Nuclear Decommissioning Authority (NDA) or Commercial operators).
- 2.6 The integrated options that the SEA has assessed are shown in **Box 2**. Each of the five broad groupings has three variants, denoting the initial dismantling site(s).

⁶ The SEA also considers the possible effects of undertaking submarine dismantling at new (generic) sites on undeveloped, 'green-field' land and previously-developed, 'brown-field' land; however this is not a requirement for the HRA process.

Box 1 Key Stages, Activities and Options of the SDP

At this stage, the SDP is a National programme consisting of a number of broadly sequential stages, which may, however, overlap or coincide:

Stage I: Design and develop the initial submarine dismantling facilities - This involves providing the means (essentially the facilities, processes and personnel) to safely dock the defuelled submarines and remove the radioactive materials.

Stage II: Design and develop the interim ILW storage facilities - This involves providing the means (facilities, processes and personnel) to safely store the arising ILW, until such time as the proposed GDF becomes available to the SDP.

Stage III: Dock submarines and remove the radioactive material- This involves docking the defuelled submarines into the dismantling facility before removing and processing the radioactive material, in accordance with industry good practice.

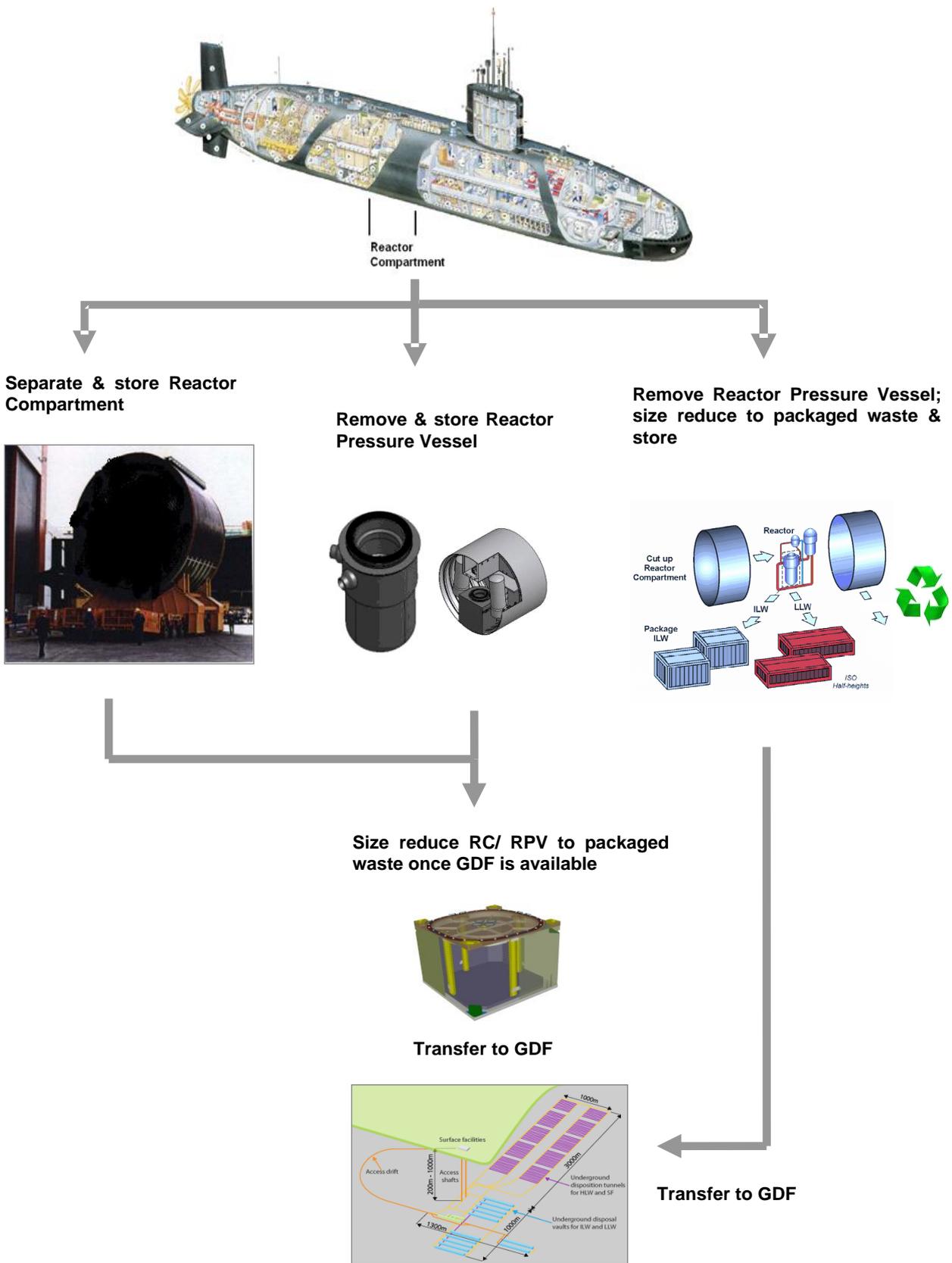
Stage IV: Dismantle the residual submarine hulls and process wastes- This involves recovering re-useable components and then taking the rest of each submarine apart in accordance with appropriate industry good practice, producing recyclable and non-recyclable waste streams. To make the best use of existing skills and to maximise value for money, the residual submarine hulls would be transported to an established commercial ship recycling facility in the UK, since (unlike the radioactive materials) these sections do not need to be processed at a Nuclear Licensed or Authorised site. Low Level Waste would be taken away to a Licensed disposal facility, and very Low Level Waste would, once cleared, be handled in conventional waste streams.

Stage V: Transport Reactor Compartment (RC) / Reactor Pressure Vessel (RPV) / Packaged Waste (PW) to interim storage- This involves transporting the ILW from the dismantling facility/ies to interim storage. The types of transport used to move the ILW will depend upon the size of the packages, the location(s) of the dismantling and storage facilities and the availability of suitable transport infrastructure.

Stage VI: Size reduce the RC / RPV (if required); transfer PW to the proposed GDF- If the RPV is cut apart ('size reduced') to packaged waste at Stage III, this stage will solely involve transporting the containers to the proposed GDF. If, however, initial dismantling at Stage III involves separation of the RC or removal of the RPV, this Stage will see these components being size reduced to Packaged Waste before being transported to the proposed GDF.

Stage VII: Decommission the SDP facilities- This involves safely decommissioning the dismantling and interim storage facilities, and returning them to a condition that is consistent with any proposed future use. It is assumed that this would be back to their original condition.

Figure 1. SDP Submarine Dismantling Technical Options



Box 2. SDP Integrated Option Groupings and Variants	
SEA Integrated Option Grouping	Variants
<p>Option 0: Do Minimum</p>	None
<p>Option 1: Reactor Compartment (RC) separation with storage at the point of waste generation</p>	<p>Variant 1D: Devonport Dockyard Variant 1R: Rosyth Dockyard Variant 1B: Devonport & Rosyth Dockyards</p>
<p>Option 2: Reactor Pressure Vessel (RPV) removal with storage at the point of waste generation</p>	<p>Variant 2D: Devonport Dockyard Variant 2R: Rosyth Dockyard Variant 2B: Devonport & Rosyth Dockyards</p>
<p>Option 3/4: Reactor Pressure Vessel (RPV) removal with storage at a 'remote' site</p>	<p>Variant 3/4D: Devonport Dockyard Variant 3/4R: Rosyth Dockyard Variant 3/4B: Devonport & Rosyth Dockyards</p>
<p>Option 5: RPV removal and size reduction with interim storage of Packaged Waste (PW) at the point of waste generation</p>	<p>Variant 5D: Devonport Dockyard Variant 5R: Rosyth Dockyard Variant 5B: Devonport & Rosyth Dockyards</p>
<p>Option 6/8: RPV removal and size reduction with interim storage of Packaged Waste (PW) at a 'remote' site.</p>	<p>Variant 6/8D: Devonport Dockyard Variant 6/8R: Rosyth Dockyard Variant 6/8B: Devonport & Rosyth Dockyards</p>

Consideration of Plans and Projects under the Habitats Regulations

3. Is the SDP a Plan or Project?

- 3.1 This is a record of the consideration undertaken by Defence Infrastructure Organisation, on behalf of the Ministry of Defence to determine whether the above proposal is a 'plan or project' in terms of the EC Habitats Directive (92/43/EEC) and transposing regulations, and to determine whether the PP is directly connected with or necessary to the [conservation] management of the site.
- 3.2 All of the relevant government departments and regulatory bodies for England, Scotland and Wales have been consulted on the requirement for SEA and HRA. The conclusions of this consideration are in accordance with their advice and recommendations.
- a) Is the proposal a 'plan or project' in terms of the EC Habitats Directive (92/43/EEC) and transposing regulations? **YES**
- b) Is the PP directly connected with or necessary to the [conservation] management of the site concerned? **NO**

Judgement of Likely Significant Effects (JLSE)

This section should consider the implications of the Plan or Project on the conservation objectives of the sites concerned. It should outline any avoidance or mitigation measures that have already been integrated into the P/P, and any remaining residual effects, both alone and in combination with any other relevant plans and projects that are likely to have residual effects on the site. The technical consideration may be presented in an accompanying report or Environmental Statement, but should be summarised in Annexed Tables. The technical consideration should refer to favourable condition tables for each feature, and for European Marine sites to relevant “Regulation 33 advice”. Impacts may include for example, physical habitat loss, physical habitat damage, non-toxic contamination, toxic contamination, noise disturbance, visual disturbance (not exhaustive)

Preliminary Considerations

4. What International Designations may be affected by this Plan or Project?

4.1 The SDP SEA (Reference A) and HRA screening and scoping processes (Reference B) identified the following SPAs, SACs and Ramsar Sites as within 20km⁷ or otherwise potentially affected by the SDP Integrated Option sites:

Devonport Dockyard, Plymouth (see map at Annex A.1)	Tamar Estuaries Complex SPA
	Plymouth Sound and Estuaries SAC
	South Dartmoor Woods SAC
	Blackstone Point SAC
	Dartmoor SAC
Rosyth Dockyard, Fife (see map at Annex A.2)	Loch Leven SPA
	Forth Islands SPA
	Firth of Forth SPA
	Imperial Dock Lock, Leith SPA
	Firth of Forth Ramsar Site
	Loch Leven Ramsar Site
	River Teith SAC
Isle of May SAC	

5. What are the qualifying interest features of the SPA/SAC/Ramsar Sites and their associated conservation objectives?

5.1 The qualifying interest features are set out in the Tables at **Annex B**.

6. What are the possible impacts of the Plan/Project?

6.1 At the screening and scoping stage, the full range of possible impacts was considered without reference to the potential imposition of mitigating conditions or restrictions on the way the SDP is to be carried out. The MOD’s screening and scoping assessment of possible impacts is summarised in the tables at **Annex B**.

⁷ This 20km study area was recommended in previous rounds of consultation with Statutory Bodies and Other Government Departments

SDP HRA Q2: Consultees are invited to comment on the screening and scoping assessment presented in the Tables at Annex B.

Further Considerations

7. What mitigation measures have been identified to avoid any likely significant effects of the P/P on the SPA/SAC/Ramsar Sites?

7.1 For each of the possible effects on the SPAs, SACs and Ramsar Sites identified at the HRA screening and scoping stage, the parallel SEA and HRA processes have identified measures to avoid and mitigate impacts. Full details of possible effects and proposed avoidance and mitigation measures are given in Annex A of the SEA (Ref A). The MOD's Technical Consideration is summarised at Annex C and the Mitigation Measures are summarised at Annex D. The mitigation measures will be secured through subsequent project-level Planning Permissions, Marine License and Discharge License processes and associated project-level HRAs, and by the MOD's commercial processes for commissioning the works required at each stage.

8. After mitigation, what are the likely residual effects of the proposal on the international nature conservation interests for which the site(s) is designated?

8.1 With the implementation of the recommended avoidance and mitigation measures, the residual effects are likely to be minor and temporary, and not likely to have a significant effect on the conservation objectives of the sites.

SDP HRA Q3: Consultees are invited to comment on the Technical Considerations and Avoidance/ Mitigation Measures presented in the Tables at Annexes C and D.

JLSE Conclusion & MOD Decision

If the judgement is that the effects will not be significant or that the Plan or Project (P/P) has integrated sufficient measures to effectively avoid significant residual effects, the formal record of decision should be completed and signed off by the Authorising Officer.

If additional information is required to make a fuller assessment to enable the competent authority to decide whether the proposed P/P would adversely affect the integrity of the site, Appropriate Assessment (AA) will need to be completed

9. Is further Appropriate Assessment Required?

9.1 The MOD's decision is that because, significant effects will be avoided, Appropriate Assessment is not required for this project.

MOD Formal Record of HRA Decision

Consultation: Have Relevant Statutory Bodies (NE, CCW, SNH, NIEA), and any other bodies, been consulted? Briefly explain why and describe any comments received, etc.

A wide range of Statutory Bodies and Government Departments have been consulted throughout the development of the SDP.

SEA Scoping consultation took place in June & July 2010 and was repeated in December 2010-January 2011. The feedback received is summarised in the SEA Environmental Report, published for public consultation in October 2011; detailed comments can be found in the 'A1' and 'A2' Scoping Reports, available on the SDP website (www.mod.uk/submarinedismantling).

Draft HRA Screening and Scoping was undertaken alongside the second SEA Scoping Consultation in December 2010. The responses received have been taken into account in this Draft HRA.

This Draft HRA will be formally consulted upon with the relevant Statutory Bodies during the period of Public Consultation on the SDP. It will also be available to view by other SEA Consultees, including the public, via the SDP website (address as above).

Once the public consultation has concluded, this Draft HRA will be finalised and published.

MOD Decision

The SDP, as proposed, will only have localised, minor, short term negative effects, which can be minimised by detailed avoidance and mitigation measures.

MOD judgement is that the MOD SDP, as proposed, will not significantly affect the conservation objectives of any SAC/ SPA/ Ramsar Sites.

MOD Environmental Adviser Authorisation

This HRA Decision Form may be prepared by estates or environmental advisers or consultants, but must be authorised by an MOD competent individual (refer to List of Competent Individuals in the SEAT Handbook for details of those authorised to approve JLSE and AA).

Prepared & Authorised by:

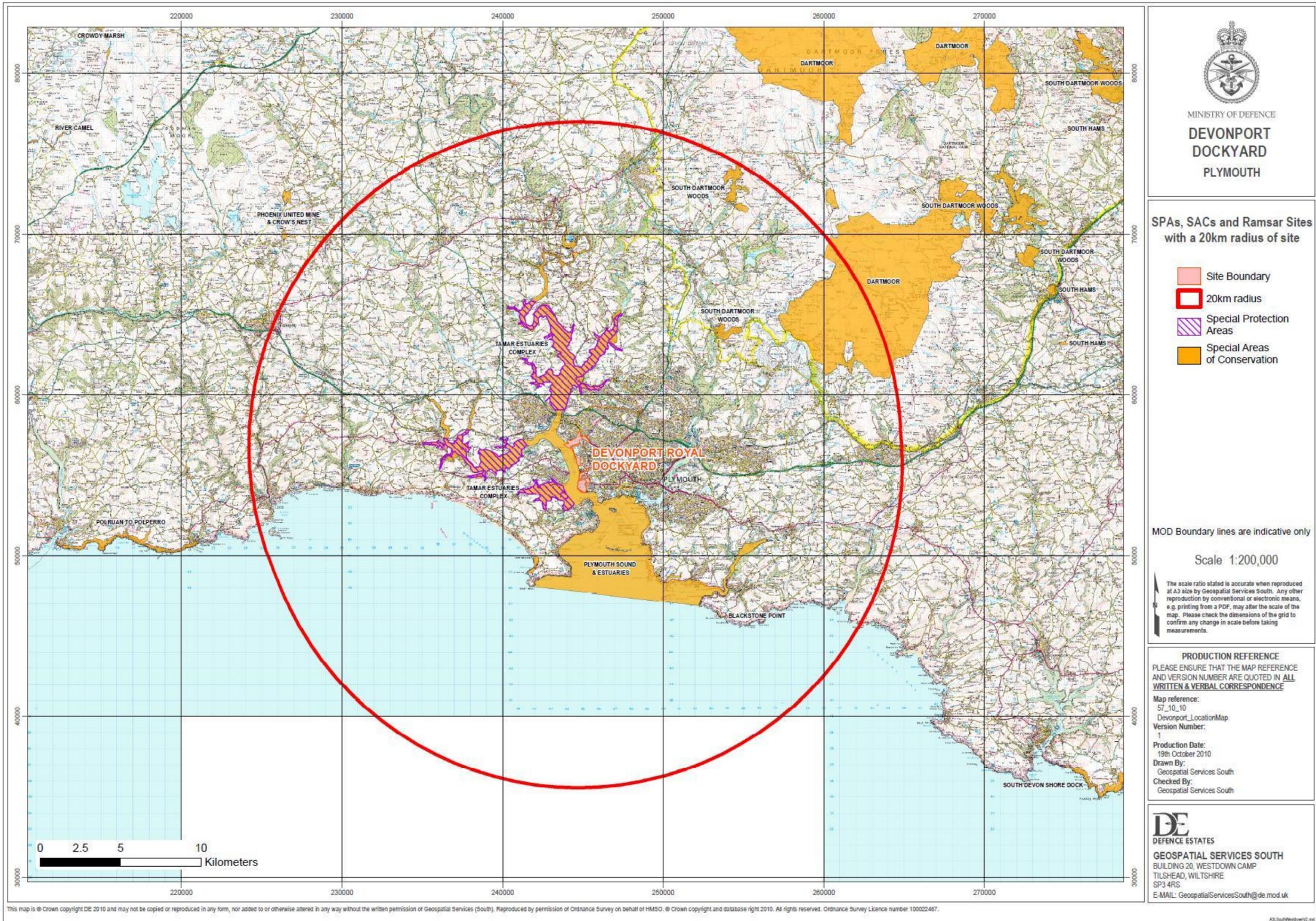
██████████, BSc (hons), MSc, PhD, CEnv, MIEEM
Senior Environmental Adviser
DIO PTS EAS NET

Email: ██████████

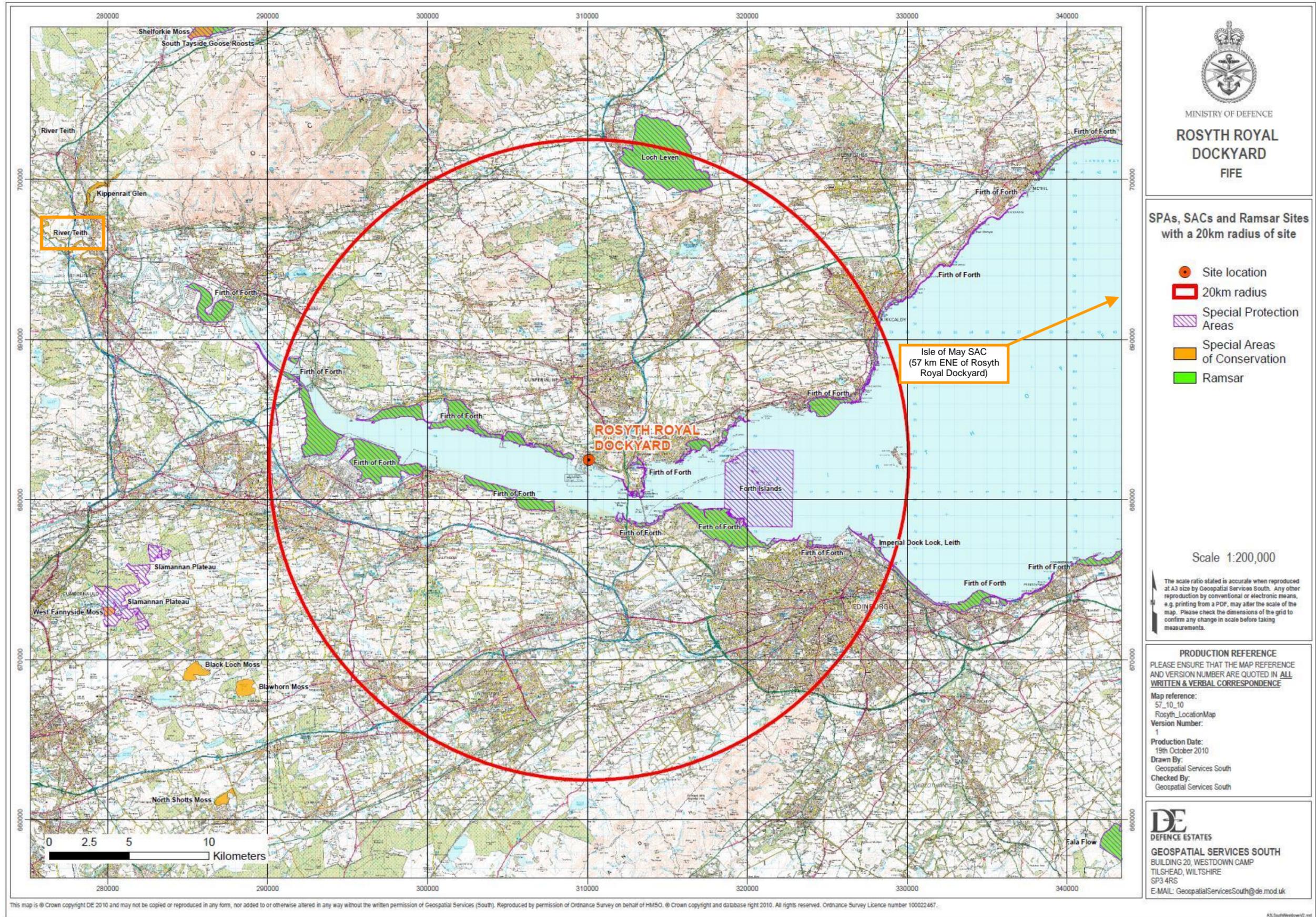
Signature: Stuart Otway (e-signed)

Date: 12th October 2011

Annex A1 Map of SPAs, SACs & Ramsar Sites potentially affected by SDP proposals at Devonport Dockyard, Plymouth



Annex A2 Map of SPAs, SACs & Ramsar Sites potentially affected by SDP proposals at Rosyth Dockyard, Fife



Annex B1 Summary of HRA Screening and Scoping: Devonport Dockyard, Plymouth

SAC / SPA / Ramsar Site Name, Distance from Indicative Candidate SDP Site	Qualifying features	Key Environmental Conditions to Support Site Integrity ⁸	Possible Impacts Arising from Plan							Is there a risk of a Significant Effect alone or in combination with other projects and plans?
			Stage I Design and develop initial submarine dismantling facilities	Stage II Design and develop interim ILW storage facilities	Stage III Dock submarines and remove radioactive materials	Stage IV Dismantle the residual submarine hulls; process wastes	Stage V Move the RC/ RPV/ packaged waste to interim storage.	Stage VI Size reduce the RC/ RPV (if required); transfer packaged waste to GDF	Stage VII Decommission SDP facilities	
Plymouth Sound and Estuaries SAC <1km	<ul style="list-style-type: none"> ▪ Sandbanks which are slightly covered by sea water all the time ▪ Estuaries ▪ Large shallow inlets and bays ▪ Reefs ▪ Atlantic salt meadows (Glauco-Puccinellietalia maritima) ▪ Mudflats and sandflats not covered by seawater at low tide ▪ Shore dock ▪ Allis shad 	<p>Coastal habitats</p> <ul style="list-style-type: none"> ▪ Retain the current extent and condition of the habitat whilst allowing natural coastal processes to operate along the length of the rocky coast ▪ Maintenance of a broad and integrated approach to coastal management ▪ Avoid inorganic fertilisers and pesticides ▪ Manage the levels of human activities to ensure disturbance stays within acceptable levels, for example, bait digging, dog walking and wildfowling ▪ Maintain water quality <p>Estuaries</p> <ul style="list-style-type: none"> ▪ Maintain sediment flows. ▪ Maintain morphological equilibrium and nutrient status <p>Reefs</p> <ul style="list-style-type: none"> ▪ Maintain existing tidal streams and levels of wave action ▪ Maintain average light attenuation, temperature and salinity <p>Atlantic saltmeadows</p> <ul style="list-style-type: none"> ▪ Maintain grazing patterns ▪ Ensure there is no change in creek density. <p>Sandbanks, Mudflats and Sandflats</p> <ul style="list-style-type: none"> ▪ Maintenance of the sediment budget ▪ Management needs to create space to enable landward roll-back to take place <p>Shore dock</p> <ul style="list-style-type: none"> ▪ Natural erosion of cliffs desirable - coastline should not be over-stabilised, not over-eroded ▪ Requires open vegetation - avoid taller species (eg Phragmites) or scrub ▪ Requires lateral water movement - no culverting and continual presence of freshwater <p>Fish</p> <ul style="list-style-type: none"> ▪ Maintain natural structure and form of rivers within estuary to support a natural flow regime, provide resting pools for fish, conserve the quality of the riverbed for spawning and avoid the creation of artificial barriers to the passage of migratory fish. ▪ Exploitation of fish or other native animals or plants should be at a sustainable level, 	Possible construction and capital dredging impacts on Estuaries Feature from changes to habitat extent and condition, levels of human activities, water quality, sediment flows, morphological equilibrium and nutrient status	Possible construction and capital dredging impacts on Estuaries Feature from changes to habitat extent and condition, levels of human activities, water quality, sediment flows, morphological equilibrium and nutrient status	Possible operation impacts on Estuaries Feature from maintenance dredging, and changes to water quality	No foreseeable impact (these sections will be dismantled at a ship-breaking facility elsewhere in the UK)	Possible operation impacts on Estuaries feature from changes to water quality	Possible operation impacts on Estuaries feature from changes to water quality	Possible construction impacts on Estuaries feature from changes to water quality	Possibly

⁸ Following the Habitats Regulations Assessment of the Draft Regional Spatial Strategy for the South West FINAL REPORT Prepared for the South West Regional Assembly by Land Use Consultants, February 2007

SAC / SPA / Ramsar Site Name, Distance from Indicative Candidate SDP Site	Qualifying features	Key Environmental Conditions to Support Site Integrity ⁸	Possible Impacts Arising from Plan							Is there a risk of a Significant Effect alone or in combination with other projects and plans?
			Stage I Design and develop initial submarine dismantling facilities	Stage II Design and develop interim ILW storage facilities	Stage III Dock submarines and remove radioactive materials	Stage IV Dismantle the residual submarine hulls; process wastes	Stage V Move the RC/ RPV/ packaged waste to interim storage.	Stage VI Size reduce the RC/ RPV (if required); transfer packaged waste to GDF	Stage VII Decommission SDP facilities	
Tamar Estuaries Complex SPA <2km	<ul style="list-style-type: none"> Little Egret Avocet 	Birds <ul style="list-style-type: none"> Maintenance of current extent and distribution of feeding and roosting habitat (see Plymouth Sound and Estuaries SAC below), absence of disturbance, absence of obstructions to view lines, food availability, vegetation characteristics of Atlantic salt meadows (see Plymouth Sound and Estuaries SAC), water quality and quantity, habitat connectivity. 	Possible construction and dredging impacts from off-site disturbance, changes to food availability, water quality and quantity, morphological equilibrium and nutrient status	Possible construction and dredging impacts from off-site disturbance, changes to food availability, water quality and quantity, morphological equilibrium and nutrient status	Possible operation impacts from maintenance dredging, off-site noise disturbance and changes to water quality	No foreseeable impact (these sections will be dismantled at a ship-breaking facility elsewhere in the UK)	Possible operation impacts from changes to water quality	Possible operation impacts from changes to water quality	Possible construction impacts from off-site noise disturbance and changes to water quality	Possibly
South Dartmoor Woods SAC >10km	<ul style="list-style-type: none"> Old sessile oak woods with Holly and hard-fern European dry heaths 	Woodlands: <ul style="list-style-type: none"> Appropriate woodland management is required The woodland habitats and associated moss and lichen communities are sensitive to air pollution. Alluvial woodlands in particular are sensitive to water table levels. Heaths <ul style="list-style-type: none"> Appropriate heathland management is required The control of inappropriate and invasive species is required. Maintaining hydrological conditions as wet heaths require wet soils during winter 	None	None	None	None	None	None	None	No
Blackstone Point SAC >10km	<ul style="list-style-type: none"> Shore dock 	Shore dock <ul style="list-style-type: none"> Natural erosion of cliffs desirable - coastline should not be over-stabilised, not over-eroded Requires open vegetation - avoid taller species (eg Phragmites) or scrub encroachment from agricultural land adjacent to cliff Requires lateral water movement - no culverting of streams and continual presence of freshwater Water quality - no pollution, no excessive algal growth, no sewage outfall 	None	None	None	None	None	None	None	No
Dartmoor SAC >15km	<ul style="list-style-type: none"> Northern Atlantic wet heaths with cross-leaved heath European dry heaths Blanket bogs Old sessile oak woods with Holly and Hard fern in the British Isles Southern damselfly Atlantic salmon Otter 	Salmon [other features not considered due to distance] <ul style="list-style-type: none"> The natural structure and form of rivers should be maintained to support a natural flow regime that will help ensure the provision of resting pools for salmon, conserve the quality of the riverbed as salmon spawning habitat, and avoid the creation of artificial barriers to the passage of migratory salmon and other animals, such as otters. Any exploitation of salmon populations or other native animals or plants should be at a sustainable level, without manipulation of the river's natural capacity to support them or augmentation by excessive stocking Water quality is an important factor in maintaining healthy salmon populations and the management of the site should take this into account. 	Possible construction noise / dredging impacts on water quality affecting migrating salmon	Possible construction noise / dredging impacts on water quality affecting migrating salmon	Possible off-site operation impacts through changes to water quality affecting migrating salmon	No foreseeable impact (these sections will be dismantled at a ship-breaking facility elsewhere in the UK)	Possible operation impacts from changes to water quality	Possible operation impacts from changes to water quality	Possible construction impacts from changes to water quality	Possible

Annex B2 Summary of Draft HRA Screening and Scoping: Rosyth Dockyard, Fife

SAC / SPA / Ramsar Site Name, Distance from Indicative Candidate SDP Site	Qualifying features	Key Environmental Conditions to Support Site Integrity ⁹	Possible Impacts Arising from Plan							Is there a risk of a Significant Effect alone or in combination with other projects and plans?
			Stage I: Design and develop the initial Submarine dismantling capability.	Stage II: Design and develop the interim ILW storage capability.	Stage III: Dock Submarines and process reactor compartments	Stage IV: Dismantle the front and rear Sections of the Submarines and process all wastes except ILW	Stage V: Move the ILW to interim storage	Stage VI: Dismantle RC/Reactor Pressure Vessel (RPV) (if required)	Stage VII: Decommission SDP facilities	
Firth of Forth SPA ~1km	<ul style="list-style-type: none"> ▪ Bar-tailed godwit (<i>Limosa lapponica</i>) ▪ Common scoter (<i>Melanitta nigra</i>)* ▪ Cormorant (<i>Phalacrocorax carbo</i>)* ▪ Curlew (<i>Numenius arquata</i>)* ▪ Dunlin (<i>Calidris alpina alpina</i>)* ▪ Eider (<i>Somateria mollissima</i>)* ▪ Golden plover (<i>Pluvialis apricaria</i>) ▪ Goldeneye (<i>Bucephala clangula</i>)* ▪ Great crested grebe (<i>Podiceps cristatus</i>)* ▪ Grey plover (<i>Pluvialis squatarola</i>)* ▪ Knot (<i>Calidris canutus</i>) ▪ Lapwing (<i>Vanellus vanellus</i>)* ▪ Long-tailed duck (<i>Clangula hyemalis</i>) ▪ Mallard (<i>Anas platyrhynchos</i>)* ▪ Oystercatcher (<i>Haematopus ostralegus</i>)* ▪ Pink-footed goose (<i>Anser brachyrhynchus</i>) ▪ Red-breasted merganser (<i>Mergus serrator</i>)* ▪ Redshank (<i>Tringa totanus</i>) ▪ Red-throated diver (<i>Gavia stellata</i>) ▪ Ringed plover (<i>Charadrius hiaticula</i>) ▪ Sandwich tern (<i>Sterna sandvicensis</i>) ▪ Scaup (<i>Aythya marila</i>) ▪ Shelduck (<i>Tadorna tadorna</i>) ▪ Slavonian grebe (<i>Podiceps auritus</i>) ▪ Turnstone (<i>Arenaria interpres</i>) ▪ Velvet scoter (<i>Melanitta fusca</i>)* ▪ Wigeon (<i>Anas penelope</i>)* ▪ Waterfowl assemblage 	<ul style="list-style-type: none"> ▪ Species populations as viable components of the site ▪ Distribution of the species within site ▪ Distribution and extent of habitats supporting the species ▪ Structure, function and supporting processes of habitats supporting the species ▪ No significant disturbance of the species 	Possible construction and dredging impacts through changes to habitat extent and condition, levels of human activities, water quality, sediment flows, morphological equilibrium and nutrient status	Possible construction impacts through off-site noise disturbance	Possible operation impacts through off-site noise disturbance	No foreseeable impact (these sections will be dismantled at a ship-breaking facility elsewhere in the UK)	Possible operation impacts through changes to water quality	Possible operation impacts through off-site noise disturbance	Possible construction impacts through off-site noise disturbance	Possibly
Firth of Forth Ramsar Site ~1km	<ul style="list-style-type: none"> ▪ Bar-tailed godwit (<i>Limosa lapponica</i>), non-breeding ▪ Goldeneye (<i>Bucephala clangula</i>), non-breeding ▪ Knot (<i>Calidris canutus</i>), non-breeding ▪ Pink-footed goose (<i>Anser brachyrhynchus</i>), non-breeding ▪ Redshank (<i>Tringa totanus</i>), non-breeding ▪ Sandwich tern (<i>Sterna sandvicensis</i>), non-breeding ▪ Shelduck (<i>Tadorna tadorna</i>), non-breeding ▪ Slavonian grebe (<i>Podiceps auritus</i>), non-breeding ▪ Turnstone (<i>Arenaria interpres</i>), non-breeding ▪ Waterfowl assemblage, non-breeding 	<ul style="list-style-type: none"> ▪ Species populations as viable components of the site ▪ Distribution of the species within site ▪ Distribution and extent of habitats supporting the species ▪ Structure, function and supporting processes of habitats supporting the species ▪ No significant disturbance of the species 	Possible construction and dredging impacts on Estuaries Feature through changes to habitat extent and condition, levels of human activities, water quality, sediment flows, morphological equilibrium and nutrient status	Possible construction impacts through off-site noise disturbance	Possible operation impacts through off-site noise disturbance	None (these sections will be dismantled at a ship-breaking facility elsewhere in the UK)	Possible operation impacts through changes to water quality	Possible operation impacts through off-site noise disturbance	Possible construction impacts through off-site noise disturbance	Possibly

⁹ From http://gateway.snh.gov.uk/pls/portal/Sitelink.Show_Site_Document?p_pa_code=8667&p_Doc_Type_ID=29

SAC / SPA / Ramsar Site Name, Distance from Indicative Candidate SDP Site	Qualifying features	Key Environmental Conditions to Support Site Integrity ⁹	Possible Impacts Arising from Plan							Is there a risk of a Significant Effect alone or in combination with other projects and plans?				
			Stage I: Design and develop the initial Submarine dismantling capability.	Stage II: Design and develop the interim ILW storage capability.	Stage III: Dock Submarines and process reactor compartments	Stage IV: Dismantle the front and rear Sections of the Submarines and process all wastes except ILW	Stage V: Move the ILW to interim storage	Stage VI: Dismantle RC/Reactor Pressure Vessel (RPV) (if required)	Stage VII: Decommission SDP facilities					
Forth Islands SPA 3km	<ul style="list-style-type: none"> Arctic tern (<i>Sterna paradisaea</i>) Common tern (<i>Sterna hirundo</i>) Cormorant (<i>Phalacrocorax carbo</i>)* Gannet (<i>Morus bassanus</i>) Guillemot (<i>Uria aalge</i>)* Herring gull (<i>Larus argentatus</i>)* Kittiwake (<i>Rissa tridactyla</i>)* Lesser black-backed gull (<i>Larus fuscus</i>) Puffin (<i>Fratercula arctica</i>) Razorbill (<i>Alca torda</i>)* Roseate tern (<i>Sterna dougallii</i>) Sandwich tern (<i>Sterna sandvicensis</i>) Shag (<i>Phalacrocorax aristotelis</i>) Seabird assemblage 	<ul style="list-style-type: none"> Species populations as viable components of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Possible construction and dredging impacts on Estuaries Feature through changes to habitat extent and condition, levels of human activities, water quality, sediment flows, morphological equilibrium and nutrient status	Possible construction impacts through off-site noise disturbance	Possible construction impacts through changes to water quality	Possible operation impacts through off-site noise disturbance	Possible operation impacts through changes to water quality	None (these sections will be dismantled at a ship-breaking facility elsewhere in the UK)	Possible operation impacts through changes to water quality	Possible operation impacts through off-site noise disturbance	Possible construction impacts through off-site noise disturbance	Possible construction impacts through changes to water quality	Possible construction impacts through changes to water quality	Possibly
Imperial Dock Lock, Leith SPA >17km	<ul style="list-style-type: none"> Common tern (<i>Sterna hirundo</i>) 	<ul style="list-style-type: none"> Species populations as viable components of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	None	None	None	None	None	None	None	None	None	None	No	
Loch Leven SPA >18km	<ul style="list-style-type: none"> Cormorant (<i>Phalacrocorax carbo</i>)* Gadwall (<i>Anas strepera</i>)* Goldeneye (<i>Bucephala clangula</i>)* Pink-footed goose (<i>Anser brachyrhynchus</i>) Pochard (<i>Aythya ferina</i>)* Shoveler (<i>Anas clypeata</i>) Teal (<i>Anas crecca</i>)* Tufted duck (<i>Aythya fuligula</i>)* Whooper swan (<i>Cygnus cygnus</i>) Waterfowl assemblage 	<ul style="list-style-type: none"> Species populations as viable components of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	None	None	None	None	None	None	None	None	None	None	No	
Loch Leven Ramsar Site >18km	<ul style="list-style-type: none"> Eutrophic loch Pink-footed goose (<i>Anser brachyrhynchus</i>), non-breeding Shoveler (<i>Anas clypeata</i>), non-breeding Waterfowl assemblage, non-breeding 	<ul style="list-style-type: none"> Species populations as viable components of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	None	None	None	None	None	None	None	None	None	None	No	
River Teith SAC >32km	<ul style="list-style-type: none"> Atlantic salmon (<i>Salmo salar</i>) Brook lamprey (<i>Lampetra planeri</i>) River lamprey (<i>Lampetra fluviatilis</i>) Sea lamprey (<i>Petromyzon marinus</i>) 	<ul style="list-style-type: none"> Species populations as viable components of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	Possible construction noise / dredging impacts on water quality affecting migrating fish	Possible construction noise / dredging impacts on water quality affecting migrating fish	Possible off-site operation impacts through changes to water quality affecting migrating fish	None	Possible operation impacts from changes to water quality affecting migrating fish	Possible operation impacts from changes to water quality affecting migrating fish	Possible operation impacts from changes to water quality affecting migrating fish	Possible construction impacts from changes to water quality affecting migrating fish	Possible construction impacts from changes to water quality affecting migrating fish	Possible construction impacts from changes to water quality affecting migrating fish	Possible	
Isle of May SAC >57km	<ul style="list-style-type: none"> Grey seal (<i>Halichoerus grypus</i>) Reefs 	<ul style="list-style-type: none"> Species populations as viable components of the site Distribution of the species within site Distribution and extent of habitats supporting the species Structure, function and supporting processes of habitats supporting the species No significant disturbance of the species 	None	None	None	None	None	None	None	None	None	None	No	

Annex C1 HRA Technical Consideration: Devonport Dockyard, Plymouth

SPA/SAC/ Ramsar Site Feature (only features identified in the screening as possibly affected are considered here)	Conservation Objective / Favourable Condition Attribute (only those attributes identified in the screening process as possibly affected are considered)	Potential Hazards of the plan or project and likely consequences	Avoidance and Mitigation Measures (Further details are given in Annex D (Avoidance and Mitigation Measures) and Reference A (the SDP SEA).	Probability, Magnitude, Likely Duration and Reversibility, of residual adverse impacts on the SAC/SPA conservation objective, including assumptions made	In-Combination Effects (if appropriate)	Conclusion will there be a significant effect and/or adverse impact on the integrity of the site
<p>Stage I - Design & develop the initial submarine dismantling facilities; and Stage II - Design and develop the interim ILW storage facilities</p>						
<p>Plymouth Sound and Estuaries SAC: Estuaries Feature</p>	<p>Retain the current extent and condition of the habitat whilst allowing natural coastal processes to operate along the length of the rocky coast</p> <p>Manage the levels of human activities to ensure disturbance stays within acceptable levels</p> <p>Maintain water quality</p> <p>Maintain sediment flows.</p> <p>Maintain morphological equilibrium and nutrient status</p>	<p>Possible construction and capital dredging impacts on Estuaries Feature from changes to habitat extent and condition, levels of human activities, water quality, sediment flows, morphological equilibrium and nutrient status</p>	<p>Not proceeding with any technical option that would require major new capital dredging</p> <p>If there is likely to be any direct or indirect loss of SAC Estuary habitats through minor new capital dredging, ensuring that this is fully mitigated by reciprocal habitat restoration or recreation elsewhere within the SAC</p> <p>Time any required minor capital dredging to avoid disruption during key breeding, hibernation and migration periods.</p> <p>Seek to limit noise, dust and mobilisation of any contaminants during construction as part of Construction Environmental Management Plan.</p>	<p>Residual effects will be minor, localised and temporary</p>	<p>The MOD does not foresee any significant in-combination effects</p>	<p>No significant effect</p>
<p>Tamar Estuaries Complex SPA: Avocet and little egret features</p>	<p>Maintenance of current extent and distribution of feeding and roosting habitat</p> <p>Manage the levels of human activities to ensure disturbance stays within acceptable levels</p> <p>Food availability, water quality and quantity</p>	<p>Possible construction and dredging impacts resulting in off-site disturbance to SPA birds and Atlantic salmon</p>	<p>Tender specifications for the construction work should request a method statement providing information on how measures would be implemented to mitigate environmental effects.</p> <p>Measures to reduce the risk of pollution incidents and accidental discharges should include impermeable membranes, bunded and tanked fuel storage, double lined settlement lagoons and oil/water interceptors.</p>			
<p>Dartmoor SAC: Atlantic salmon</p>	<p>Natural structure and form of rivers; Water quality</p>					
<p>Stage III: - Dock submarines and remove the radioactive materials; and Stage VI: - Dismantle RC / RPV (if required); transfer packaged waste to proposed GDF</p>						
<p>Plymouth Sound and Estuaries SAC: Estuaries Feature</p>	<p>Maintain water quality</p>	<p>Possible operation impacts from maintenance dredging, and changes to water quality</p>	<p>Use an Environmental Management Plan (EMP) to define, implement and review measures to contain or minimise pollutant emissions to air and water during operation. In addition to meeting permitting requirements, these should follow best practice pollution prevention guidelines. Discharges to surface water or groundwater would require Environment Agency or Scottish Environment Agency licenses.</p>	<p>Residual effects will be minor, localised and temporary</p>	<p>The MOD does not foresee any significant in-combination effects</p>	<p>No significant effect</p>
<p>Tamar Estuaries Complex SPA: Avocet and little egret</p>			<p>Ensure an emergency preparedness plan is in place setting out responses to unplanned events.</p>			
<p>Dartmoor SAC: Atlantic salmon</p>						

SPA/SAC/ Ramsar Site Feature (only features identified in the screening as possibly affected are considered here)	Conservation Objective / Favourable Condition Attribute (only those attributes identified in the screening process as possibly affected are considered)	Potential Hazards of the plan or project and likely consequences	Avoidance and Mitigation Measures (Further details are given in Annex D (Avoidance and Mitigation Measures) and Reference A (the SDP SEA).	Probability, Magnitude, Likely Duration and Reversibility, of residual adverse impacts on the SAC/SPA conservation objective, including assumptions made	In-Combination Effects (if appropriate)	Conclusion will there be a significant effect and/or adverse impact on the integrity of the site
Stage V - Transport RC/ RPV/ packaged waste to interim storage						
Plymouth Sound and Estuaries SAC: Estuaries Feature	Maintain water quality	Possible operation impacts from maintenance dredging, and changes to water quality	Ensure that the transport and interim storage facility have emergency response plans to address any potential unplanned events	Residual effects will be minor, localised and temporary	The MOD does not foresee any significant in-combination effects	No significant effect
Tamar Estuaries Complex SPA: Avocet and little egret						
Dartmoor SAC: Atlantic salmon						
Stage VII - Decommission the SDP facilities						
Plymouth Sound and Estuaries SAC: Estuaries Feature	Manage the levels of human activities to ensure disturbance stays within acceptable levels Maintain water quality	Possible construction impacts on water quality	Seek to limit noise, dust and mobilisation of any contaminants during demolition as part of a Demolition Environmental Management Plan.	Residual effects will be minor, localised and temporary	The MOD does not foresee any significant in-combination effects	No significant effect
Tamar Estuaries Complex SPA: Avocet and little egret		Possible construction impacts resulting in off-site disturbance to SPA birds and Atlantic salmon				
Dartmoor SAC: Atlantic salmon						

Annex C2 HRA Technical Consideration: Rosyth Dockyard, Fife

SPA/SAC/ Ramsar Site Feature (only features identified in the screening as possibly affected are considered here)	Conservation Objective / Favourable Condition Attribute (only those attributes identified in the screening process as possibly affected are considered)	Potential Hazards of the plan or project and likely consequences	Avoidance and Mitigation Measures (Further details are given in Annex D (Avoidance and Mitigation Measures) and Reference A (the SDP SEA).	Probability, Magnitude, Likely Duration and Reversibility, of residual adverse impacts on the SAC/SPA conservation objective, including assumptions made	In-Combination Effects (if appropriate)	Conclusion will there be a significant effect and/or adverse impact on the integrity of the site
Stage I Design & develop the initial submarine dismantling facilities; and Stage II Design and develop the interim ILW storage facilities						
Forth Islands SPA: various species	Manage the levels of human activities to ensure disturbance stays within acceptable levels Maintain water quality	Possible construction impacts on Estuaries Feature from changes to habitat extent and condition, levels of human activities, water quality Possible construction and dredging impacts resulting in off-site disturbance to birds and migrating fish	Seeking to limit noise, dust and mobilisation of any contaminants during construction as part of Construction Environmental Management Plan. Tender specifications for the construction work should request a method statement providing information on how measures would be implemented to mitigate environmental effects. Measures to reduce the risk of pollution incidents and accidental discharges should include impermeable membranes, bunded and tanked fuel storage, double lined settlement lagoons and oil/water interceptors.	Residual effects will be minor, localised and temporary	The MOD does not foresee any significant in-combination effects	No significant effect
Firth of Forth Ramsar Site: various species						
Forth Islands SPA: various species						
River Teith SAC: migrating fish						
Stage III: - Dock submarines and remove the radioactive materials; and Stage VI: - Dismantle RC / RPV (if required); transfer packaged waste to proposed GDF						
Forth Islands SPA: various species	Maintain water quality	Possible operation impacts from changes to water quality	Using an Environmental Management Plan (EMP) to define, implement and review measures to contain or minimise pollutant emissions to air and water during operation. In addition to meeting permitting requirements, these should follow best practice pollution prevention guidelines. All off-site discharges must be agreed with the EA or equivalent body. Discharges to surface water or groundwater would require Environment Agency or Scottish Environment Agency licenses. Ensuring an emergency preparedness plan is in place setting out responses to unplanned events.	Residual effects will be minor, localised and temporary	The MOD does not foresee any significant in-combination effects	No significant effect
Firth of Forth Ramsar Site: various species						
Forth Islands SPA: various species						
River Teith SAC: migrating fish						
Stage V - Transport RC/ RPV/ packaged waste to interim storage						
Firth of Forth SPA: various species	Maintain water quality	Possible operation impacts from changes to water quality	Ensuring that the transport and interim storage facility have emergency response plans to address any potential unplanned events	Residual effects will be minor, localised and temporary	The MOD does not foresee any significant in-combination effects	No significant effect
Firth of Forth Ramsar Site: various species						

SPA/SAC/ Ramsar Site Feature (only features identified in the screening as possibly affected are considered here)	Conservation Objective / Favourable Condition Attribute (only those attributes identified in the screening process as possibly affected are considered)	Potential Hazards of the plan or project and likely consequences	Avoidance and Mitigation Measures (Further details are given in Annex D (Avoidance and Mitigation Measures) and Reference A (the SDP SEA).	Probability, Magnitude, Likely Duration and Reversibility, of residual adverse impacts on the SAC/SPA conservation objective, including assumptions made	In-Combination Effects (if appropriate)	Conclusion will there be a significant effect and/or adverse impact on the integrity of the site
Forth Islands SPA: various species						
River Teith SAC – migrating fish						
Stage VII - Decommission the SDP facilities						
Firth of Forth SPA: various species						
Firth of Forth Ramsar Site: various species	Manage the levels of human activities to ensure disturbance stays within acceptable levels	Possible construction impacts on water quality	Seeking to limit noise, dust and mobilisation of any contaminants during demolition as part of a Demolition Environmental Management Plan.	Residual effects will be minor, localised and temporary	The MOD does not foresee any significant in-combination effects	No significant effect
Forth Islands SPA: various species	Maintain water quality	Possible construction impacts resulting in off-site disturbance to SPA birds and Atlantic salmon				
River Teith SAC: migrating fish						

Annex D Summary of Proposed MOD SDP Avoidance and Mitigation Measures

Avoidance or Mitigation Measures	How will the measure avoid or reduce adverse impacts on the site	How, by whom and when will the measure be secured and implemented	Degree of confidence in likely success	If/how the measures will be monitored, and, should mitigation failure be identified, how that failure will be rectified
Stage I Design & develop the initial submarine dismantling facilities; and Stage II Design and develop the interim ILW storage facilities				
Not proceeding with proposals that, after avoidance and mitigation, would still have a residual adverse impact on the integrity of an SPA, SAC or Ramsar site.	Prevents the possibility of adverse impacts	Through the Ministerial decision on the SDP preferred option.	High	Through project-level HRAs and permissions, eg Planning Permission, Marine License, Discharge License. If adverse impacts are identified after the Ministerial Decision, alternatives will need to be considered.
Not proceeding with technical options where major new capital dredging would be required at Devonport	Prevents the possibility of adverse impacts	Through the Ministerial decision on the SDP preferred option and subsequent project-level HRAs and permissions	High	Through project-level HRAs and permissions. If adverse impacts are identified after the Ministerial Decision, alternatives will need to be considered.
If there is likely to be any direct or indirect loss of SAC Estuary habitats through minor new capital dredging, ensuring that this is fully mitigated by reciprocal habitat restoration or recreation elsewhere within the SAC	Avoids and minimises effects	Through project-level HRAs and permissions	High	Through project-level HRAs and permissions.
Timing any required minor capital dredging at Devonport to avoid disruption during key breeding, hibernation and migration periods and where appropriate deploying measures such as a silt curtain or silt screen to minimise negative effects.	Avoids and minimises effects	Through project-level HRAs and permissions	High	Through project-level HRAs and permissions.
Seeking to limit noise, dust and mobilisation of any contaminants during construction as part of Construction Environmental Management Plan	Avoids and minimises effects	Through project-level HRAs and permissions.	High	Through project-level HRAs and permissions.
Tender specifications for the construction work should request a method statement providing information on	Avoids and minimises effects	Through MOD and contractor tendering	High	MOD Commercial processes will require compliance with all conditions of

Avoidance or Mitigation Measures	How will the measure avoid or reduce adverse impacts on the site	How, by whom and when will the measure be secured and implemented	Degree of confidence in likely success	If/how the measures will be monitored, and, should mitigation failure be identified, how that failure will be rectified
how measures would be implemented to mitigate environmental effects.		processes		Planning Permissions, Marine Licences and Discharge Licenses
Measures to reduce the risk of pollution incidents and accidental discharges should include impermeable membranes, bunded and tanked fuel storage, double-lined settlement lagoons and oil/water interceptors.	Avoids and minimises effects	Through project-level HRAs and permissions.	High	Through project-level HRAs and permissions.
Stage III: - Dock submarines and remove the radioactive materials; and				
Stage VI: - Dismantle RC / RPV (if required); transfer packaged waste to proposed GDF				
Using an Environmental Management Plan to define, implement and review measures to contain or minimise pollutant emissions to air and water during operation. In addition to meeting permitting requirements, these should follow best practice pollution prevention guidelines. Discharges to surface water or groundwater would require Environment Agency or SEPA licenses.	Avoids and minimises effects	Through project-level HRAs and permissions.	High	Through project-level HRAs and permissions
Ensuring an emergency preparedness plan was in place setting out responses to unplanned events.		Through project-level HRAs and permissions.	High	Through project-level HRAs and permissions
Stage V - Transport RC/ RPV/ packaged waste to interim storage				
Ensuring that the transport and interim storage facility have emergency response plans to address any potential unplanned events	Avoids and minimises effects	Through project-level HRAs and permissions.	High	Through project-level HRAs and permissions
Stage VII - Decommission the SDP facilities				
Seeking to limit noise, dust and mobilisation of any contaminants during demolition as part of a Demolition Environmental Management Plan.	Avoids and minimises effects	Through project-level HRAs and permissions.	High	Through project-level HRAs and permissions