

Annex H4 Approach for assessing impacts on archaeological heritage

Contents

1	Baseline description	2
1.1	Summary of the existing marine licensing framework	2
1.2	Assumptions about licensing in the baseline	3
2	Management scenario.....	5
2.1	Assumptions about the assessment of environmental impact	5
2.2	Assumptions about mitigation of impact on rMCZ features	6
3	Assessment of the impact	7
4	Limitations.....	8
	References	8

H4.1 This annex outlines the method taken to assess the impacts of recommended Marine Conservation Zones (rMCZs) on archaeological activities. Archaeological activities are assumed to comprise diver trails, recreational/educational visits, surveys (intrusive including sediment sampling and non-intrusive), surface recovery of artefacts and full site excavations. The method is presented under the following sections: (1) baseline description; (2) management scenario; (3) assessment of impacts; and (4) limitations. One management scenario has been developed for this sector.

1 Baseline description

H4.2 The baseline comprises a site-specific description of the existing known archaeology in each rMCZ, the number of protected wrecks in each rMCZ, and the number of licences issued each year under the Protection of Wrecks Act 1973 for the protected wrecks in each rMCZ between 2003 and 2010 (inclusive). The baseline descriptions are based on data provided by English Heritage (pers. comm. 2010) in GIS data layers for World Heritage Sites (2009), Scheduled Monuments (2009), Archives Monuments Information for England (2009) and locations of wrecks (2010). Data for palaeolandscapes and general maritime archaeology were sourced from Lee, Stelzenmüller and Rogers (2010). The baseline descriptions have been quality-checked by English Heritage.

H4.3 Baseline descriptions are only provided for rMCZs which, for the purposes of the IA, are assumed to impact upon archaeological activity. This applies to all rMCZs for which archaeological evidence is recorded. For rMCZs where there is currently no evidence of archaeology in the site, it is assumed that archaeological activity will not be impacted by the designation of these MCZs. The assumptions are described below.

H4.4 It should be noted that the data available for use in the Impact Assessment (IA) indicate where archaeological features are thought to be present, or may have been present, at the time they were reported. The evidence does not necessarily indicate that the archaeological feature is still present in the rMCZ or what condition it is in.

1.1 Summary of the existing marine licensing framework

H4.5 Proposed archaeological activities in and around each protected historic shipwreck or scheduled monument are licensed by the following legislation (English Heritage, pers. comm., 2011):

- the Protection of Wrecks Act 1973, administered by English Heritage (designated historic wreck sites);
- the Ancient Monuments and Archaeological Areas Act 1979, administered by English Heritage (scheduled monument consent); and
- the Protection of Military Remains Act 1986, administered by the Ministry of Defence.

The Protection of Wrecks Act 1973

H4.6 The Protection of Wrecks Act 1973 provides protection for shipwrecks of historical, archaeological or artistic importance. 61 shipwrecks are presently designated under the Act, of

which 50 are located within three of the four regional Marine Conservation Zone (MCZ) project areas.¹ There are currently no protected shipwrecks in the Irish Sea Conservation Zones regional MCZ project area.

H4.7 Under the Protection of Wrecks Act 1973, 'it is an offence to tamper with, damage or remove any objects or part of the vessel; to carry out any diving or salvage operation within the exclusion zone around the designated wreck site; or to deposit anything including anchors and fishing gear which, if it were to fall on the site, would obliterate, obstruct access to, or damage any part of the site'.² Any such activities around protected wrecks require a licence from English Heritage, administered on behalf of the Secretary of State (enabled under the National Heritage Act 2002) (MMO, 2011).

H4.8 The Protection of Wrecks Act 1973 also provides protection for wrecks that are designated as dangerous by virtue of their contents. Diving on these wrecks is strictly prohibited. This section of the Act is administered by the Maritime and Coastguard Agency through the Receiver of Wreck (MMO, 2011).

The Ancient Monuments and Archaeological Areas Act 1979

H4.9 The Ancient Monuments and Archaeological Areas Act 1979 provides for the protection of 'monuments', which covers buildings, structures or work, cave or excavation, vehicle, vessel, aircraft or other movable structure. Under this Act it is an offence to demolish, destroy, alter or repair a scheduled monument without consent. This is administered by English Heritage on behalf of the Secretary of State (enabled under the National Heritage Act 2002) (MMO, 2011).

The Protection of Military Remains Act 1986

H4.10 Under the Protection of Military Remains Act 1986, it is an offence to interfere with the wreckage of any crashed, sunken or stranded military aircraft or designated vessel without a licence. All crashed military aircraft receive automatic protection, but vessels must be individually designated. There are approximately 21 vessels protected under this Act, both in UK waters and abroad, and it is likely that the Ministry of Defence will designate more vessels in the future (MMO, 2011). This Act is administered by the Ministry of Defence.

1.2 Assumptions about licensing in the baseline

Circumstances in which licences for archaeological activities are required

H4.11 The Protection of Wrecks Act 1973 and the Ancient Monuments and Archaeological Areas Act 1979 only legislate for archaeological activities proposed in the vicinity of designated archaeological features. English Heritage (pers. comm. 2011) has highlighted that this legislation applies to very few objects of archaeological interest within the marine environment compared with tens of thousands of archaeological objects that have been recorded in UK waters.

¹ Wreck data has been sourced from English Heritage (pers. comm. 2010). A map of designated wreck sites can be found at www.english-heritage.org.uk/discover/maritime/map/.

² See information provided at www.english-heritage.org.uk/professional/advice/our-planning-role/consent/protected-wreck-sites/

H4.12 Some wreck sites have restrictions placed on them for non-archaeological purposes (e.g. safe navigation), for example by harbour authorities or by directives issued by the Secretary of State's Representative for Maritime Salvage and Intervention (MMO, 2011). However, due to a lack of information these are not considered in the IA.

H4.13 The Marine Management Organisation (MMO) has stated that it will only issue a marine licence for archaeological activities where the intended activity falls under the definition provided at Section 66(8) of the Marine and Coastal Access Act 2009 (MCAA) (MMO, pers. comm., 2011). Section 66(8) of the MCAA states that a marine licence is required for any 'use of a vehicle, vessel, aircraft, marine structure or floating container to remove any substance or object from the sea bed within the UK marine licensing area'.

H4.14 The MMO has advised that this is likely to apply to all archaeological activities with the exception of diver trails, visits and non-intrusive surveys (MMO, pers. comm., 2011). Therefore, for the purposes of the IA, it is assumed that a MMO licence will be required for archaeological activities that are proposed to take place anywhere in the UK marine licensing area (seaward of the Mean High Water Springs) with the exception of diver trails, visits and non-intrusive surveys (MMO, pers. comm., 2011). This is because the exempted activities are unlikely to require 'removal' of any substance or object from the seabed other than by hand (MMO, pers. comm., 2011). It is likely that the MMO will issue licences for activities proposed in the vicinity of protected wrecks also, particularly if, for example, the proposed activity involves the use of a vessel to remove artefacts from the seabed.

Assumptions about the assessment of environmental impact

H4.15 English Heritage has advised that, as part of the process of issuing licences under the Protection of Wrecks Act 1973 and the Ancient Monuments and Archaeological Areas Act 1979, the licence applicant is required to do a desktop study, including a health, environment and safety assessment and a consideration of historical environmental records. In some cases, particularly with regard to designated sites (e.g. a Special Area of Conservation or a Special Protection Area), the applicant will be advised to contact Natural England to enquire if any assessment of environmental impact is required (English Heritage, pers. comm., 2011).

H4.16 The MMO has advised that when it receives a licence, the application is allocated to a tier depending on what the proposed activity comprises. Licences for activities that fall within the Tier 1 category require a minimum level of information to be submitted with them. If the activity is proposed to take place inside a designated site (e.g. a Special Area of Conservation or a Special Protection Area), additional information may be required to identify any likely significant effect in support of the licence application. Licences for activities that fall within the Tier 2 and Tier 3 categories require more information in support of their application, and this depends on what the proposed works are. In some cases, a habitats regulation assessment, an environmental IA or a Water Framework Directive assessment may be required. In summary, where it is deemed to be required (based on the scale and type of archaeological activity proposed), an assessment of environmental impact may be necessary (MMO, pers. comm., 2011).

2 Management scenario

H4.17 It is assumed that the potential impact of archaeological activities on features protected by MCZs will be managed under the existing marine licensing framework, as provided for under the MCAA and administered by the MMO. Every public authority must exercise its functions in the manner that best furthers (or least hinders) the conservation objectives of the MCZ features (MCAA, Section 125(2)).

H4.18 The management scenario is based on the advice of Natural England (pers. comm., 2011), the MMO (pers. comm., 2011) and English Heritage (pers. comm., 2011). The purpose of the management scenario is to ensure that the potential costs of rMCZs to archaeological activities and to society as a whole are realistically represented in the IA. However, the assumptions do not prejudge any licensing decisions made with regard to future applications for archaeological activities within or near rMCZs. After MCZ designation, the management of activities in MCZs will be decided on a site-by-site basis and may differ from the IA assumptions.

2.1 Assumptions about the assessment of environmental impact

H4.19 Based on the advice of English Heritage and the MMO, the IA assumes that all licence applications to English Heritage and the MMO for archaeological activities proposed in MCZs will require additional work to be completed in support of the application. It is assumed that this applies only to licence applications in rMCZs that currently have evidence of archaeology within them. The additional work is to consider the impact of the proposed activity on the conservation objectives of the MCZ features.

H4.20 The impacts of archaeological activities on MCZ broad-scale habitats will need to be assessed in support of the licence applications. This is because although impacts on habitats are currently assessed in the absence of MCZs, impacts are not specifically assessed for the broad-scale habitats protected by MCZs (JNCC and Natural England, 2011a). The additional requirements of the environmental assessment are likely to comprise (Natural England and JNCC, 2011a):

- additional time to obtain information on the MCZ, its boundary, the features it protects and their conservation objectives; and
- additional time to consider the impacts of its proposal on the MCZ broad-scale habitat features.

H4.21 The additional requirements will not be required for MCZ habitats and species of conservation importance, as these are on the Oslo and Paris Convention (OSPAR) List (of Threatened and/or Declining Species and Habitats) and on the UK List of Priority Species and Habitats (the UK Biodiversity Action Plan (BAP)). As such, any potential impacts on these features have to be considered already, irrespective of MCZ designation (JNCC and Natural England, 2011a).

H4.22 It is assumed that the additional work will not need to include an assessment of impact on the overall ecological coherence of the MCZ network, and that this will be undertaken by Natural

England or the Joint Nature Conservation Committee (JNCC) if it is required (JNCC and Natural England, 2011a).

2.2 Assumptions about mitigation of impact on rMCZ features

For rMCZs that are rMCZ Reference Areas

H4.23 Based on the advice of JNCC, the MMO and Natural England, the IA assumes that all archaeological activities proposed in rMCZ Reference Areas will be prohibited, with the exception of diver trails, visitors and non-intrusive surveys, which will be allowed (MMO, pers. comm., 2011). This is because all extractive, depositional, damaging and disturbing activities are prohibited (JNCC and Natural England, 2010). This assumption does not prejudge the licensing decision, which would ultimately be site-specific and based on the MCZ features, their conservation objectives, the MCZ's physical integrity and biological structure, and the intended archaeological investigative techniques (Natural England, pers. comm., 2011).

For rMCZs that are not rMCZ Reference Areas

H4.24 Based on the advice of Natural England and the MMO, it is assumed that no further additional mitigation of impacts will be required for activities in rMCZs that are not rMCZ Reference Areas, compared to what is necessary in the absence of the MCZ (Natural England, pers. comm., 2011; MMO, pers. comm., 2011). This is because it is assumed that:

- impacts on MCZ habitats and species that are on the OSPAR List (of Threatened and/or Declining Species and Habitats) and /or on the UK List of Priority Species and Habitats (UK BAP) and/or in Schedule 5 of the Wildlife and Countryside Act 1981 are already mitigated for; and
- for broad-scale habitats, the footprint of archaeological activities is unlikely to impact significantly on the overall condition of the broad-scale habitat, although this does not prejudge a licensing decision.

H4.25 There are two exceptions to this rule, further details of which are provided in paragraphs H3.28 and H3.29. They concern the mitigation of impacts of archaeological activities on peat and clay exposures that are rMCZ features and mitigation of impacts for rMCZs with management scenarios that include management of anchoring of recreational vessels.

H4.26 This assumption applies only to MCZs that are not MCZ Reference Areas. It is informed by advice on the impacts that these activities could have on MCZ features (Natural England, pers. comm., 2011) compared to the mitigation of impact that is already required in the absence of MCZs for licensed activities.

H4.27 This assumption does not prejudge the licensing decision, which would ultimately be site-specific and based on the MCZ features, their conservation objectives, the MCZ's physical integrity and biological structure, and the intended archaeological investigative techniques. Measures to mitigate the impact of a proposed activity on MCZ features in a site may be required, but in most cases, archaeological activities are anticipated to be compatible with an MCZ (Natural England, pers. comm., 2011).

For all rMCZs

H4.28 For all rMCZs where it is assumed that anchoring of recreational vessels will be prohibited (see Annex H13 for the recreation sector), the IA assumes that all archaeological activities will be prohibited, with the exception of diver trails, visitors and non-intrusive surveys, which will be allowed (Natural England, pers. comm., 2011). Depending on the size of the site, it may be possible for other archaeological activities to continue, but for the purposes of the IA it is assumed that they would be prohibited. This applies to some rMCZs in the Finding Sanctuary Project Area and the Balanced Seas Project Area only.

H4.29 Also, based on the advice of English Heritage, the IA assumes that where (for the purposes of the IA) additional management is proposed to protect peat and clay exposures, all archaeological activities will be prohibited. This is because it is an offence under the MCAA to intentionally or recklessly destroy or damage any habitat or feature which is a protected feature of an MCZ (MCAA, Section 140(2d)).

H4.30 For all rMCZs where (for the purposes of the IA) it is assumed that bottom trawling and dredging is restricted, the IA assumes that there will be additional benefits to archaeology. This assumption is based on evidence provided by Kingsley (2009) of the potentially damaging effects of certain types of fishing gear on archaeological features of interest (see also MacMullen 2011; English Heritage (pers. comm., 2012)). It is assumed that where such potentially damaging activities are restricted or prohibited, this will result in greater protection to exposed or shallow-buried archaeology. English Heritage (pers. comm., 2012) is content with this assumption.

H4.31 The costs to society that could arise from the restrictions that MCZs could place on archaeological activities are described in the IA as follows. English Heritage has identified which designated archaeological features in each rMCZ are most likely to be subject to archaeological investigation³ within the 20-year period of the IA. The annual report produced by the former UK Advisory Committee for Historic Wreck Sites provides a generic description of the anticipated benefits to society of investigation of these sites. If archaeological activity is not permitted, the loss of benefits is then described as a cost to society.

3 Assessment of the impact

H4.32 Due to a lack of information about future licence applications, where they will be, what they will comprise and when they will take place it has not been possible to quantify the impacts of MCZs on archaeological activities. The costs will arise through mitigation of impacts of archaeological activities on MCZ features where this is required and increased costs for future licence applications.

H4.33 English Heritage (pers. comm., 2011) provided estimates of the additional costs that would arise as a result of MCZs when operators assess environmental impacts in support of future marine licence applications for archaeological excavations. In the absence of site specific costs, it has estimated that the costs would be in the region of: £500–£1,000 for a small site; £5,000 for a

³ See information provided at <http://www.english-heritage.org.uk/professional/protection/national-heritage-protection-plan/>

medium-sized site; and £10,000 for a large site. However, such costs are likely to be overestimates, as these costs represent the cost of hiring professionally accredited surveyors to survey protected species, which in part is likely to be incurred anyway in the absence of MCZ designation.

H4.34 Therefore, a qualitative assessment has been made in the IA only. It is assumed that these additional costs will be incurred to the licence applicant, the licensing bodies (English Heritage and MMO) and the statutory advisory bodies (Natural England and JNCC).

4 Limitations

H4.35 There are a number of limitations associated with the approach adopted in the IA that derive from the assumptions made for the purposes of the IA.

- It is assumed that people undertaking archaeological activities that fall under the Protection of Wrecks Act 1973, the Ancient Monuments and Archaeological Areas Act 1979 or Section 66(8) of the MCAA will seek a licence prior to commencement of works. In reality, this may not be the case.
- In the absence of information about archaeological activities over the next 20 years, the IA assumptions may wrongly represent the additional costs that will arise in assessing environmental impacts for future licence applications.
- In the absence of information about what licence application decisions will actually be made over the next 20 years, the IA assumptions may wrongly represent the actual additional mitigation put in place in order to protect the MCZ features.

References

JNCC and Natural England. 2010. Marine Conservation Zone Reference Areas: Guidance document for regional MCZ projects. Version 1.1. Peterborough: Natural England.

JNCC and Natural England. 2011a. Draft: Increases in costs for assessing environmental impacts of future plans and projects arising as a result of Marine Conservation Zones (MCZs). 28.11.11. Peterborough: Natural England.

Natural England and JNCC. 2011. Advice on the impacts of MCZs on information provision and decisions in relation to marine licensing proposals. Version 5.0. Peterborough: Natural England.

Kingsley, S.A. 2009. Deep-Sea Fishing Impacts on the Shipwrecks of the English Channel and Western Approaches. Odyssey Marine Exploration. URL: www.shipwreck.net [accessed November 2011]

Lee J, Stelzenmüller V and Rogers S. 2010. Provision of geo-data on inshore fishing activity, renewable energy resources, mariculture, anthropological and archaeological sites to support the selection of MCZ sites. DEFRA contract MB106: Milestone 3.

MacMullen P.H. 2011. *Underwater Cultural Heritage, An assessment of Risks from Commercial Fishing*. Report prepared by SeaFish UK for the Joint Nautical Archaeological Policy Committee.

Annex H4 from Finding Sanctuary, Irish Seas Conservation Zones, Net Gain and Balanced Seas. 2012. *Impact Assessment materials in support of the Regional Marine Conservation Zone Projects' Recommendations*

MMO. 2011. Marine Licensing Guidance 2: Construction (including Renewables) and Removals.