ENHANCING PROTECTION OF UNDERWATER HERITAGE ASSETS

Project Design
(Project 7146)

Prepared by: The School of Law, Criminology & Government, Plymouth University

Prepared for: Historic England

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Project Summary

This Project seeks to investigate what existing maritime and aerial resources utilised by government departments and agencies or their contractors are present in the English Inshore Marine Plan area, the legislative framework under which they operate and the extent to which they could lawfully be utilised in part to facilitate the enforcement of statutory protection for Underwater Heritage Assets (UHA) which are protected by legislation or otherwise. Such legislative arrangements may be affected by the current Department of Culture Media and Sport (DCMS) commitment to review the UK’s position in respect of the UNESCO Convention on the Protection of Underwater Cultural Heritage 2001. Furthermore, identification of such resources and the scope for their utilisation would facilitate the drive for cross party working and the streamlining of limited resources, the need for which has been identified across government departments and agencies in recent years. This is seen as an important step towards cost-effective working and sustainable use of government time and resources, which is especially important when considering the complexity of enforcement in the marine environment.

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1 The term ‘enforcement’ is used here in its widest sense to encompass not just the detection and prosecution of maritime heritage crime but also the deterring thereof and the acquisition of evidence relating thereto.

2 A Heritage Asset can be defined as: ‘a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing). See, National Planning Policy Framework (2012) Department for Communities and Local Government, London, pp. 52; and the UK Marine Policy Statement (2011) HM Government, NI Executive, Scottish Government, Welsh Assembly Government paragraph 2.6.6.1.


Background

The UK’s UHA is unusually extensive and diverse, with an archaeological record spanning millennia up to the 21st century. While there is statutory protection for some of this UHA, the enforcement of such protection is somewhat challenging. UHA is often situated in remote locations, far less populated by law enforcement agencies than the terrestrial environment. The marine archaeological and diving communities consequently play an important role in the detection and reporting of marine heritage crimes, but the location of many sites limits the potential for crimes to be observed. Furthermore, Historic England, who are responsible for the administration of such protection, lacks any marine or aerial assets and the regional coastal Police authorities, who are responsible for the investigation and prosecution of maritime heritage crime, either lack or have very limited marine and aerial assets, although this position may be subject to change over time as the development and availability of drone (aerial and subsea) technology become more refined and economic. Consequently, there is little or no intelligence available as to the extent to which the statutory protection of UHA is breached, little or no deterrent effect present and the enforcement mechanism is inevitably retrospective and confined to post event terrestrial investigation. Indeed, the lack of any marine or aerial assets focused even partly on the prevention and detecting of maritime heritage crime has led to the perception within both the marine archaeological and the wider diving community that such statutory protection is relatively ineffective and unattainable.

There is however, a marine and aerial presence by other government departments and agencies, including the Royal Navy (RN) and Inshore Fisheries and Conservation Authorities (IFCA), in the English Inshore Marine Planning area. These operate under the specific legislative framework relating to their specific functions. The exact nature and quantity of this presence has not, to the authors’ knowledge, ever been collated. Nor has, they believe, the potential for this presence ever been examined with a view to utilising it, presumably at a marginal cost to the public purse, to enhance protection of the UHA in the English Inshore Marine Planning area. While it is highly probable that the various legislative frameworks that these marine and aerial assets operate under preclude their ability to directly enforce the legislative provisions relating to the protection of UHA, they may permit their utilisation for the purposes of monitoring activity and providing evidence of possible infringements, as well as providing a highly visible and deterring presence.

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6 See further https://historicengland.org.uk/advice/heritage-at-risk/archaeology/protected-wreck-sites-at-risk/

7 Marginal cost as defined below in Appendix 1, is assumed as vessels are already at sea and therefore any additional costs arising from detection and reporting of marine heritage crimes would be marginal as the running costs of the vessel would be covered under their statutory duties. Please refer to Appendix 1 which contains a worked definition of the term as it is understood and used in this document.
Project Aims

The aim of the project is to facilitate the provision of a cost effective solution, which gives value to government in relation to the enforcement of statutory protection for UHA.

The specific objectives that this project will address in order to meet its aim are:

Objective 1 – To identify marine enforcement lacunae in the existing legislative framework for the protection of UHA under the Protection of Wrecks Act 1973 (the 1973 Act) and Ancient Monuments and Archaeological Areas Act 1979 (the 1979 Act). The same lacunae are believed to apply to a similar but not identical extent to the Protection of Military Remains Act 1986 and the Marine and Coastal Access Act 2009.

Objective 2 – To identify which government departments and agencies, including the extent of the RN and IFCA role have a maritime presence in the Inshore English Inshore Marine Planning area.

Objective 3 – To identify the nature and quantity of any maritime and aerial resources utilised by these government departments and agencies, including those available to RN and IFCA, to achieve their presence in the English Inshore Marine Planning area.

Objective 4 – To examine the legislative frameworks under which the RN, IFCA and identified government departments and agencies operate these maritime and aerial resources within the English Inshore Marine Planning area.

Objective 5 – To evaluate whether these government departments and agencies, including here the RN and IFCA, have any potential under their statutory frameworks to facilitate more effective enforcement of the statutory protection of UHA within the English Inshore Marine Planning area.

Objective 6 – In relation to their potential utilisation for enhancing the protection of the UHA, to identify relevant competencies, powers, duties and insufficiencies within the statutory frameworks under which the various marine and aerial assets operate.

Objective 7 - To make recommendations, if applicable, for legislative amendment, further research and/or negotiations within government in order to drive the development of indicators of best practice and/or a ‘toolkit’ able to be deployed as required dependent upon situation.

Objective 8– If deemed appropriate to disseminate the results of this research by conference paper and/or peer reviewed publication.
Business Case

The justification for undertaking this project includes a number of factors, outlined below. More generally, if existing marine and aerial assets can be utilised to some extent to enhance the protection of the UHA, albeit at a marginal cost, then there will be value added to government through a more effective utilisation of existing resources and a potential achievement of a more effective enforcement environment. This aligns with the drive for government departments and agencies to work together, reducing the pressure on already limited resources. Examples of this cross-department working are already emerging, for example an analogous scheme non-specifically targeted towards the protection of UHA can be seen in the National Crime Agency (NCA), Border Force (UKBF) and Association of Chief Police Officers’ (ACPO) ‘Project Kraken’. This is described as ‘an initiative to increase vigilance along the UK’s coastline and maritime environment’8. It is principally targeted towards terrorism and serious and organised crime, and seeks to encourage the reporting of suspicious or unusual activity by the community of maritime users and stakeholders. Equally, activities with the UKBF and the MCA represent a UK-wide view reflected in the UK Marine Policy Statement9 for the generalised protection and enhancement of heritage assets.

The proposed project aligns directly with the stated values contained within Historic England’s current corporate plan10 of standing up for the historic environment; the ability to act authoritatively; and to act constructively to protect the historic environment in the long term. In addition, the project will contribute to the attainment of a number of specific aims expressed within the plan to include:

- Assisting the Engagement Group in fulfilling aims 1 (Championing England’s historic environment); 2 (Identifying and protecting England’s special historic buildings and places; 5 (Community engagement); and 7 (Working effectively, efficiently and transparently) – specifically in this connection by supporting a constructive approach to risk.
- Additionally, the project will contribute to the Listing Groups’ ability to meet aim 2 in the identification and saving of ‘at risk’ heritage; and 4 (helping those who care for historic places, including owners, local authorities, communities and volunteers) and specifically in relation to assisting in the work of protected wreck management and augmentation of policy formulation for the protection of maritime and coastal sites. In particular, the project is perfectly placed to assist in the delivery of the outcome that marine heritage protection is well maintained and better understood – both by statutory agencies and the wider stakeholder community

Additional ancillary benefits, specifically related to the Planning Group are likely in relation to the management of Heritage Action Zones, increasing the involvement of local communities in relation to Heritage at Risk; and the increasing of capacity – in this sense relating specifically to detection and enforcement of heritage offences in the marine environment. The project also has the potential to inform

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8 See further http://www.nationalcrimeagency.gov.uk/publications/313-project-kraken-leaflet/file
10 https://historicengland.org.uk/about/what-we-do/corporate-strategy/
the forthcoming review by the Department of Culture, Media & Sport (DCMS), which will commence in late Spring or early Summer 2017 as to whether the UK should ratify the UNESCO Convention on the Protection of Underwater Cultural Heritage 2001. Should the UK ratify the 2001 Convention then all relevant government departments will be charged with its implementation in respect of their functions, and the project will help to identify how such implementation across government departments and agencies could be achieved in a cost effective manner.

Otherwise, following the referendum decision for the UK to leave the European Union, there remains uncertainty around issues such as the continued involvement in bodies such as Interpol; and the continued application of devices such as the European Arrest Warrant, which may also negatively impact marine heritage protection through the loss, or diminution of established and working intelligence-led networking. While the proposed project would not directly tackle this issue, identifying potential and workable domestic networks for heritage protection enforcement would potentially make a contribution to lost opportunity. Of course, at the time of writing the precise form of any Brexit arrangement is unknown. Contingency options may be useful.

Stakeholders and interfaces

This proposal interfaces with a number of cultural heritage policies and initiatives, which have already been established by Historic England and research which has either been conducted for Historic England or has been identified as being desirable.

The importance of managing and conserving Protected Wreck sites for future generations has been acknowledged by Historic England and this importance is reflected in the provisions of the UK Marine Policy Statement, which recognise that heritages assets are a “... finite and often irreplaceable resource which can be vulnerable to a wide range of human activities ...”14. Unfortunately, despite this importance and vulnerability, it is recognised that because they are often in remote locations, their management can be challenging15. The need to provide effective protection for such heritage assets forms a priority under the National Heritage Protection Plan Framework. This priority was also reflected in the establishment

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12 In particular the UK will, in the context of enforcement, need to implement Article 7 (regulation of activities directed at UCH), Article 14 (control of entry of UCH) and Article 18 (seizure of UCH not recovered in conformity with the Convention).
13 See further https://historicengland.org.uk/advice/heritage-at-risk/archaeology/protected-wreck-sites-at-risk/
14 Para 2.6.6.2
16 Measure 5A4 ‘Supporting Local Communities in Protecting Significant Heritage Assets’ and Measure 5B3 ‘Developing Marine Heritage Management Structures’ at pp.22 and 23 respectively.
of the Alliance to Reduce Crime against Heritage (ARCH)\textsuperscript{17}. This is a co-operative alliance between Historic England and voluntary parties to tackle heritage crime.

In 2012 research conducted on behalf of Historic England into the extent of crime and anti-social behaviour facing designated heritage assets noted that this remoteness allows marine heritage crime to occur unobserved\textsuperscript{18}. The study was unable to gain much evidence on heritage crime in the marine environment and concluded that existing datasets might have substantially under reported the “whole sector of heritage crime in a marine environment”\textsuperscript{19}. The study also concluded that heritage crime in the marine environment can only be adequately researched by a separate dedicated study\textsuperscript{20}. While the proposed project would not be intended to quantify the extent of such crime it would examine the potential for enhancing/formalising evidentiary gathering frameworks through co-ordinated and concerted efforts between Historic England and other marine regulatory bodies. Such frameworks, if implemented, could then provide quantitive evidence, as well as an evidentiary base for enforcement. Historic England has previously stated that financial constraints mean that it can only, by itself, resolve a small fraction of the problems involved in providing effective protection for marine heritage assets and that a strategy of such co-ordination has the capacity to make a “real difference” to effective protection for marine heritage assets\textsuperscript{21}.

The potential of such frameworks for delivering cost effective protection of UHA has recently been demonstrated by the successful prosecution of salvors for recovering UHA without a Marine Licence. This enforcement operation was a co-ordinated effort by the Marine Management Organisation, which is responsible for marine licensing in the UK marine area, the Royal Navy Fisheries Protection Squadron and Historic England\textsuperscript{22}. This mirrors ad hoc co-operation arrangements on a local level between licensed avocational diving groups, the National Coast Watch, the MCA regional centres and the local Constabulary in respect of designated historic wreck sites\textsuperscript{23}. At a strategic level, there is an embryo network in the form of the National Maritime Information Centre\textsuperscript{24}. However, such co-ordination does not appear to extend to maritime heritage crime nor to a tactical level and conversations with the MCA have confirmed the view that this project could be of value in expanding this embryo network\textsuperscript{25}.

The proposed research into the quantification of available marine regulatory assets, their potential for utilisation in establishing supporting evidentiary frameworks and the extent to which they could be

\textsuperscript{17} https://www.historicengland.org.uk/advice/hpg/uwandhc/HCP/
\textsuperscript{18} ‘The extent of crime and anti-social behaviour facing designated heritage assets’ Final Report Bradley et al English Heritage March 2012 pp 8-9
\textsuperscript{21}https://historicengland.org.uk/advice/heritage-at-risk/archaeology/protected-wreck-sites-at-risk/
\textsuperscript{23} Such an example can be found in relation to the two designated historic wreck sites off Prawle Point in Devon; see further http://www.swmag.org/images/reports/2013eos%20-%20draft%20final%20131112.pdf at p.17.
\textsuperscript{24}http://www.recaap.org/Portals/0/docs/NMIC-information-booklet.pdf
\textsuperscript{25} Pers.com. Simon May MCA 23/1/2017
utilised in part to facilitate the enforcement of statutory protection for UHA would be a preliminary step towards achieving such co-ordination.

**Project team**

Plymouth University has an internationally successful record in world-class marine and maritime research. The University houses Europe's largest Marine Institute, with a dedicated world-class marine building which includes state-of-the-art research facilities. The Research Excellence Framework (REF) 2014 result graded two-thirds of Plymouth’s research as world-leading or internationally excellent, according to the nationwide review of research standards across the higher education sector, in the marine sciences this figure was 85%. In 2011 Plymouth University was awarded the Queen’s Anniversary Prize for Higher and Further Education in recognition of its world class marine and maritime research, teaching and training.

**Jason Lowther (Principal Investigator)**

Jason Lowther is an Associate Professor in Law and Associate Head of School at Plymouth University. His interests and expertise are in relation to UK and EU environmental law and procedure. Jason has worked on research projects establishing the National Wildlife Crime Unit and in relation to difficulties in enforcing ‘wildlife crime’. He has also delivered related research for the WWF and for the International Fund for Animal Welfare. Additionally he has contributed a chapter, concerning offshore environmental assessment, to English Heritage’s Marine Archaeology Legislation Project,\(^\text{26}\) which was commissioned to explore the range of legislative options available to EH in seeking to protect underwater cultural heritage. Jason has assisted in the drafting of advice to the MMO (licensing exemptions) and the JNAPC. He is currently involved in research in relation to the marine licensing, planning and MCZ components of the Marine and Coastal Access Act 2009 and has a growing research interest in fisheries regulation.

**Dr Sarah Gall (Project Officer)**

Sarah Gall is an interdisciplinary research scientist with expertise in applied marine ecology and socioeconomics, specifically focusing on the protection and management of the marine environment. Her principal interests are in ecosystem based management, assessment and mitigation of human impacts on the marine environment, the use of management tools such as marine protected areas, and how their benefits can be maximised both for the environment and society. Sarah has recently completed her PhD which incorporated ecological, economic and social research methodologies to determine marine protected area effectiveness, allowing her to take a holistic approach to understanding the socio-ecological system. Her career to date has involved working closely with a diverse range of stakeholders, including management bodies and local fishers and she has undertaken contract work for governmental,
non-governmental and international organisations. Her research aims to strengthen capacity to effectively manage and conserve marine resources and incorporate science into policy.

Michael Williams (Expert Consultant)

Mike Williams is a Visiting Research Fellow at Plymouth University Law School, a member of the University’s Marine Conservation & Policy Research Centre and a former Honorary Professor at the Institute of Archaeology, UCL. He has published extensively on the law relating to the foreshore and seabed and underwater cultural heritage. He has advised government departments and agencies, both in the UK and abroad and was retained as an advisor to the Crown Estate (Marine Division) on foreshore and seabed law. Mike sits on the UK’s Joint Nautical Archaeological Policy Committee, is a member of the Ministry of Defence’s Expert Panel on HMS Victory 1744, is a Deputy Chair of the Devon & Severn Inshore Fisheries and Conservation Authority, is the Honorary Secretary of the Nautical Archaeology Society (a UK registered charity), is a Harbour Commissioner and is a member of the Expert Network for UNESCO’s UK National Commission. Mike is a qualified commercial and recreational diver and as a member of the South West Maritime Archaeology Group has conducted archaeological operations on several protected wreck sites. Mike has successfully conducted previous projects for English Heritage, including the Marine Archaeology Legislation Project\(^{27}\).

Methods and Scope

Initially the project is limited to an assessment and analysis of measures available to augment the enforcement and evidence/information gathering/sharing of activities relating to inshore waters of England i.e. English waters comprising part of the UK territorial waters. In respect of the offshore zone i.e. from the limit of territorial waters to the boundary of the UK marine area\(^{28}\), depending upon the conclusions reached by this project it may be appropriate to consider further development of the concept offshore to encompass the UK marine area. The project will consider all potential heritage assets, not just those specially protected. This reflects the current policy position in the UK Marine Policy Statement that undesignated heritage assets may be of equal heritage significance to those that are designated\(^{29}\). The focus of the project will necessarily be placed on designated assets in the first instance as a means of concept testing. The potential for augmented enforcement practices and other outcomes of the research may then be used to inform working arrangements which might apply equally to the security and protection of non-designated assets. Such a wide consideration would also embrace the possibility that the UK will ratify the UNESCO Convention 2001, which defines UCH as all traces of human existence having a cultural, historical or archaeological character, which have been partially or totally underwater for at

\(^{27}\) Ibid.

\(^{28}\) As defined by s.42 Marine & Coastal Access Act 2009

least 100 years\textsuperscript{30}. Recognition is also given in these circumstances to the UK Marine Policy Statement\textsuperscript{31}, which recognises that marine plans (and concomitant licencing for related and other licensable activities) should take account of heritage assets not subject to a current designation as a scheduled monument or protected wreck. Additionally in this connection, attention is to be paid to the National Planning Policy Framework\textsuperscript{32} specifically in relation to HA and development issues in the relevant intertidal areas.

1. **Legislation and Literature Review – examine existing literature, if any, on the enforcement of the 1973, 1979 & 1986 Acts (Objective 1)**

The primary method to achieve this objective will be a systematic literature search. This will be undertaken through searching relevant online research databases and catalogues including reference to the HE database of marine heritage crime. Where peer-reviewed materials are unavailable, relevant organisations and networks will be targeted to access relevant ‘grey’ literature, which would not be identified by a conventional database search. In addition, internet searches will be used to identify unpublished and ongoing studies.

The quality of the evidence base will affect the certainty with which conclusions can be drawn. It is acknowledged that there is weak evidence base concerning the enforcement of the Acts. Consequently, given its focus, this study may be sensitive to data quality issues. In order to overcome this, the evidence used in this report will be characterised in order that appropriate phrasing can be used to convey the certainty. Evidence may be to be rated as being high, medium, or low certainty according to source (refereed literature, grey literature and expert opinion). Once the evidence base has been rated, conclusions can be drawn based on the certainty of the evidence base (or reasonable assumptions) about the approaches/tools to identify the social benefits available.

2. **One or more case studies of alleged illegal activity relating to UHA protected under the 1973, 1979 & 1986 Acts (Objective 1)**

The team would seek to provide detailed case studies from at least two locations, identifying the potential for enforcement of UHA and the mechanisms by which this is being successfully applied. Both these areas are noted for their richness and abundance of UHA. These case studies are anticipated to be:

**The Isles of Scilly (IOS):** this will provide a regional case study showing the potential for successful cross-party working to enforce UHA legislation. The IOS provides a unique location where on the water presence is far greater than elsewhere in the UK, with ferries, fishermen, law enforcement agencies and members of the public regularly on the water. Currently, the IOS Police are exploring a project involving the Police

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\textsuperscript{30} Article 1
\textsuperscript{31} Op cit.. at page 22 2.6.6.5.
dive team and their drone, and this, and its potential for use or adaptation elsewhere will be the focus of the case study. Furthermore, the regular on the water presence of vessels and persons is likely to provide a natural deterrent against heritage crime as well as the enhanced potential for individuals to witness any such crime. This will also be reviewed to provide a detailed case study of the scope for UHA enforcement in the IOS in order to understand how enforcement can be achieved and the potential for identifying how it could be adapted for use elsewhere.

**Thanet, Kent:** here, the Maritime Volunteer Service is involved with Operation Kraken (detailed above) which provides another opportunity for successful cross-sectoral working. Their involvement in the project will be reviewed in order to determine the scope for similar agreements to be used for enforcement of UHA protection. The review will also focus on whether and how those agencies already involved in the project might consider incorporating observation to stop heritage crime into their operations, and the feasibility of this occurring at marginal cost.

3. **Survey and desk based evaluation of relevant government departments and agencies as to the nature and capability of the maritime resources they possess (Objectives 2 & 3)**

In the context of maritime capable assets, information will be sought on the use of remote technologies such as the use of drones or AUVs as a means to monitor or collect information. Where appropriate, local authority capabilities will also be determined.

4. **Desk based evaluation of:**

   (a) the statutory frameworks under which these government departments and agencies operate these maritime and aerial resources within the Inshore English Inshore Marine Planning area to identify relevant competencies, powers, duties and insufficiencies within the statutory frameworks under which the various marine and aerial assets operate;

   (b) the potential for each of these government departments and agencies to facilitate protection of UHA by facilitation through utilisation of these maritime and aerial resources within the English Inshore Marine Plan area;

   (c) any applicable recommendations for legislative amendment, further research and/or negotiations within government;

   (d) The identification and development of indicators of best practice.

   (Objectives 4, 5, 6 & 7)

5. **Dissemination of results through Project Report and possibly a conference paper and/or peer reviewed academic publication (Objective 8)**

In order to maximise impact – discussed further below, the team would anticipate that the results/outcomes of the project would be disseminated, not only through the project deliverables, but also via academic networks. In particular, these would include heritage journals (target journals to include The
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International Journal of Nautical Archaeology, Journal of Maritime Archaeology) legal journals (Journal of Planning and Environmental Law; Environmental Law Review) and marine science/policy journals (Marine Policy). Any such dissemination would be in negotiation with HE in the first instance. The team would also anticipate presenting findings at a relevant conference – potentially also taking the opportunity to present the outline of the project at the Marine and Coastal Policy Forum 2018 (date tbc) at Plymouth University for stakeholder and expert feedback.

Communications, review and evaluation

The team will maintain regular and frequent contact throughout the project. It is anticipated that there will be an inception meeting at the start of the project with HE where the basic timescales and task-setting will be confirmed. Following the inception meeting, a protocol for communication with HE will be established and general oversight will be provided by JL. Ultimate responsibility for the quality assurance of the project lies with JL. Given the size of the team and their close working proximity, it is not envisaged that there would be any difficulties in this regard.

A clear statement of the outputs and timelines for the project is provided within the proposal; outcome referenced, and will be set out in the stages and tasks section below. At each stage there will be the opportunity for review internally, with review by HE also proposed at stages to be identified during the inception meeting.

Stages and tasks

It is currently envisaged that the Project will proceed by way of a Literature Review to examine existing literature, if any, on the enforcement of the 1973, 1979 & 1986 Acts followed by the development of case studies. This will precede a survey and desk based study of relevant government departments and agencies to determine the nature of the statutory frameworks they operate under, the nature and quality of the maritime resources they possess within the English Inshore Marine Plan area and their potential to facilitate protection of UHA. These stages will deliver Objectives 1 – 6. Regular communication will be maintained with the HE lead permitting iterative refinement as necessary.

Building upon these tasks, the Project will formulate written recommendations for legislative amendment, further research and /or negotiations within government to establish a co-ordinated and co-operative framework for evidence gathering and enforcement. Identification and development of indicators of best practice will also output from this stage together thereby delivering Objective 7. Finally, the products of the research will be disseminated both as required by HE and as outlined in the section below relating to dissemination and archiving; and by way of refereed publication(s) in a relevant academic journal and /or a workshop or conference, thereby delivering Objective 8.
In order to facilitate the delivery of these tasks, the project is broken down into a series of key stages, referential to the stated objectives, as indicated in the table below. Against these stages, the involvement of the team members and their time is shown. The details of each stage relates to that described in the methods and scope section above. In addition, specific milestones for each stage are recorded in the Gantt chart below (see Timetable).

It is anticipated that there will be ad hoc meetings with HE at the HE offices in Bristol. The work delivery plan will be agreed with HE, along with key timings such as the dates of milestones and the date for delivery of the final report. It is assumed that this and any day to day project management discussions with HE will take place via teleconference, however, it is expected that in addition to the occasional ad hoc meeting, one additional face-to-face meeting in Bristol would be beneficial following a review of the draft report such that comments may be reviewed and clarified before the final report is produced. Travel costs have been budgeted to cover this.
ENHANCING PROTECTION OF UNDERWATER HERITAGE ASSETS

It is anticipated that members of the project team may also travel to the case study sites, the Isles of Scilly and Thanet, to interview and to witness first-hand the work being conducted in order to inform the development of the case studies and to identify any methods which may be transferable to other locations. Travel to Newcastle to meet with relevant members of the Marine Management Organisation is also envisaged. While it is noted that MSP is devolved to local offices for delivery, a national strategic policy overview might be considered appropriate, and will be potentially useful for a broader focus MSP evaluation particularly with reference to the devolved administrations.

Products, dissemination and archiving

The final output of the project will be a full colour illustrated report produced for the Historic England Research Reports series into a word design template to be provided by HE. The project team will prepare a digital project archive containing copies of the following:

- the Project Brief;
- the contractor’s Project Design;
- the final project report; and
- any other reports, articles and/or publicity material produced as part of the project.

On completion of the project and when its products’ final versions have been agreed with the Project Assurance officer (PAO), the Project Archive shall be deposited with Historic England.

Ownership and copyright

The copyright in the project belongs to Plymouth University, although it is understood that the hard copy and digital documentation produced under this project will be granted to Historic England for its use by way of an in-perpetuity licence. The same arrangement applies to all reports submitted.

The proposers will ensure that copyright permission is obtained for any images used in the report, and are aware that Historic England may wish to make the report available on its website. In addition, the proposers will ensure that all material copied from other sources is fully acknowledged and the relevant copyright conditions pertaining to that data will be observed.

Health and Safety

This is primarily a desk-based study, which will involve an initial meeting at the premises of HE. Otherwise H&S concerns would be consequent upon visiting potential stakeholder or information sources (for
ENHANCING PROTECTION OF UNDERWATER HERITAGE ASSETS

example the Marine Management Organisation at Newcastle) relating to travel and site specific concerns. In these circumstances the health and safety policies of the respective institutions will be presumed to govern and will be followed at all times. There are no further health and safety implications of this project within the contemplation of the team.

Budget

The budget is set out below. The project has been costed according to Plymouth University’s financial procedures and approval process; and according to Historic England’s’ Guidance for Grants Projects document. Overall University costings round to the nearest pound and include VAT as applicable. The budgets are spread between two financial years and the tender has been written with an assumption that if successful the work would commence in financial year 2016-2017 and would end in financial year 2018-2019.

Costs 2016-2017

<table>
<thead>
<tr>
<th>Direct Costs: Contractor Staff</th>
<th>Role</th>
<th>Name</th>
<th>Day rate</th>
<th>Days</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Jason Lowther</td>
<td>£328</td>
<td>1</td>
<td>£328</td>
<td></td>
</tr>
<tr>
<td>Project Officer</td>
<td>Sarah Gall</td>
<td>£166</td>
<td>9</td>
<td>£1494</td>
<td></td>
</tr>
<tr>
<td>Consultant</td>
<td>Mike Williams</td>
<td>@ 0 cost</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

£1,822

Costs 2017-2018

<table>
<thead>
<tr>
<th>Direct Costs: Contractor Staff</th>
<th>Role</th>
<th>Name</th>
<th>Day rate</th>
<th>Days</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Jason Lowther</td>
<td>£328</td>
<td>6.3</td>
<td>£2,066</td>
<td></td>
</tr>
<tr>
<td>Project Officer</td>
<td>Sarah Gall</td>
<td>£166</td>
<td>41</td>
<td>£6,086</td>
<td></td>
</tr>
<tr>
<td>Consultant</td>
<td>Mike Williams</td>
<td>@ 0 cost</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

£8,872

| Non-Staff costs | Transport | Return trip to ad hoc meetings with HE (Bristol) and return trips plus subsistence to scale-study locations | £1,363 |

£1,363
Costs 2018-2019

Direct Costs: Contractor Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Day rate</th>
<th>Days</th>
<th>Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator</td>
<td>Jason Lowther</td>
<td>£328</td>
<td>7</td>
<td>£2,296</td>
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<tr>
<td>Project Officer</td>
<td>Sarah Gall</td>
<td>£166</td>
<td>54.5</td>
<td>£9,047</td>
<td></td>
</tr>
<tr>
<td>Consultant</td>
<td>Mike Williams</td>
<td>@ 0 cost</td>
<td>5</td>
<td></td>
<td>£11,343</td>
</tr>
</tbody>
</table>

Non-Staff costs

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>Return trip to review meeting (HE)</td>
<td>£100</td>
</tr>
<tr>
<td>Overheads on direct costs (whole project) @25%</td>
<td></td>
<td>£5,900</td>
</tr>
</tbody>
</table>

Gross total: £29,500

Timetable

The timetable for task completion is set out below. It assumes a start-date of March 13th 2017, although this remains negotiable depending on the preferences of Historic England. Bringing the project forward or delaying its start point would necessitate the milestones and delivery date being brought forward or pushed back accordingly.

See table below for task description
### Task Description and Milestones

<table>
<thead>
<tr>
<th>Task</th>
<th>Description and Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Legislation and literature review</td>
</tr>
<tr>
<td>2</td>
<td>Case study development</td>
</tr>
<tr>
<td>3</td>
<td>Survey and desk based evaluation of relevant government departments and agencies</td>
</tr>
<tr>
<td>4</td>
<td>Desk based evaluations of, operational statutory frameworks (etc.)</td>
</tr>
<tr>
<td>5</td>
<td>Production of draft report for review</td>
</tr>
<tr>
<td>6</td>
<td>Interim meeting for review of draft report</td>
</tr>
<tr>
<td>7</td>
<td>Finalisation and delivery of report for deposit in project archive.</td>
</tr>
</tbody>
</table>

### Risk log

<table>
<thead>
<tr>
<th>Risk</th>
<th>Likelihood</th>
<th>Impact</th>
<th>Proposed mitigation</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unexpected loss of key staff</td>
<td>Low</td>
<td>Medium</td>
<td>The project team is reflexive, but we would be able to recruit within the School of Law, Criminology &amp; Government or the School of Biological and Marine Sciences were the need to arise</td>
<td>JL</td>
</tr>
<tr>
<td>Lack of involvement of a key stakeholder</td>
<td>Low</td>
<td>Medium</td>
<td>Poor engagement of any stakeholder will be identified through regular communication. If necessary, discussion with HE will take place to assist in addressing the issue.</td>
<td>JL/HE</td>
</tr>
<tr>
<td>Failure to achieve deliverables</td>
<td>Low</td>
<td>Significant</td>
<td>In the course of the project, the project stages will be regularly reviewed by both parties.</td>
<td>JL</td>
</tr>
<tr>
<td>Legislative reform</td>
<td>Low</td>
<td>Low-medium</td>
<td>The project team will be engaged with the applicable legislative schema.</td>
<td>JL</td>
</tr>
</tbody>
</table>

### Impact statement

Impact assessment is a means of measuring the effectiveness of activities and projects and judging the significance of the changes or benefits brought about by these actions. Impact can be gauged in terms of reach (e.g. how many people/organisations were influenced by the work) and significance (e.g. the difference it made to these people/organisations).

Here, ‘impact’ is defined as the broad or longer-term effects of this project. This can include effects on people who are direct users of a project or Historic England’s work, effects on those who are not direct users, or effects on a wider field such as heritage policy. Gathering, assessing and presenting evidence of impact is therefore part of this project under the following three broad headings: Individuals & Communities; Organisations; Practice & Policy.
Impact evaluation will be undertaken using both quantitative and qualitative methods, as appropriate, in order to map out links across different levels of change, from input to impact:

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. Investigate existing marine and aerial resources and governing legislative frameworks</td>
<td>e.g. project report</td>
<td>e.g. recommendations and dissemination of best practice</td>
<td>e.g. enhanced protection of heritage assets securing added value in the context of public expenditure</td>
</tr>
</tbody>
</table>

Anticipated measurable impacts from the project are potentially in evidence in relation to the following specific key areas:

**Policy – impact on policy, law or services:** this would be the primary measurable impact, which could equate to the enforcement requirements of existing legislation and pursuant to the 2001 Convention. A means by which instances of best practice for inter-agency working to benefit heritage assets can be established to ensure that the whole is greater than the sum of the parts. Specifically, those involved in the monitoring and enforcement of specific phenomena for which definite powers of monitoring and enforcement are prescribed by law. The project would hope to secure an appreciation of heritage assets and the threats posed to them within all agencies working in the inshore marine environment. In doing so, effective counter measures would be more easily deployed.

**Practice – impact of working practices:** this would be anticipated to include the development of working practices, which locate heritage asset protection within an holistic concept of marine environment protection.

**Environmental – impact on historic environment quality:** perhaps less defined and presumably more tangential, this impact would be discernible through a better all-round appreciation of heritage assets in the marine environment by the agencies working there. This would lead to a better and more visible deterrent against interference leading to loss or damage of heritage assets.
Bibliography

Legislation:

- Ancient Monuments & Archaeological Areas Act 1979
- Marine and Coastal Access Act 2009
- Protection of Military Remains Act 1986
- Protection of Wrecks Act 1973

Publications:

Enhancing Protection of Underwater Heritage Assets

Websites:

- National Crime Agency – National Strategic Assessment of Serious and Organised crime 2016
Appendix 1: Marginal Costs

‘Marginal Cost’ is defined as the extra cost of making an additional unit of output. Such marginal costs are distinct from ‘Fixed Cost’. Fixed costs are those costs that do not change irrespective of how many units are produced (i.e. output).

In the context of a maritime enforcement scenario fixed costs would be:

- The cost of acquiring a platform (e.g. a vessel)
- Cost of employing crew
- Cost of training crew
- Cost of keeping the platform in an operational state (e.g. equipping it, periodic maintenance etc.)

These costs would be fixed in the sense that they would be incurred irrespective of whether the platform was then actually utilised or remained tied up in port in a state of readiness to be used.

If we look at a scenario where, say, a fisheries patrol vessel saw diving activity on a heritage asset and stopped to investigate for one hour, then the fixed costs would be all the above costs up to that point in time. The marginal costs would be the hour of crew time spent investigating, any extra fuel expended by the vessel and any extra costs incurred by the investigation e.g. administrative time spent producing a report. Clearly these marginal costs i.e. those attributable to the investigation alone, would be quite limited compared to the totality of the fixed costs.