

# **Historic Seascape Characterisation (HSC)**



## **Hastings to Purbeck and Adjacent Waters**

### **Section 2: Applications Review**

**March 2011**

**In partnership with**



**MARITIME ARCHAEOLOGY**

# **HSC: Hastings to Purbeck and Adjacent Waters**

## **Section 2: Applications Review**

**Version 1**

**March 2011**

**Submitted by:** Maritime Archaeology Ltd  
**In partnership with:** SeaZone Group/HR Wallingford

**On behalf of** English Heritage

## **Report Structure**

The Project Report for 'Historic Seascape Characterisation: Hastings to Purbeck and Adjacent Waters' is divided into three sections for ease of use. The first section outlines the project's method implementation, this second section outlines the application review and case studies, and the third section contains printed versions of the Character Type text descriptions.

**This document comprises Section 2: 'Historic Seascape Characterisation: Hastings to Purbeck and Adjacent Waters': Applications Review.**

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## I. DOCUMENT CONTROL

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## 1. Introduction

This Application Review is designed to identify and demonstrate some of the capabilities of Historic Seascape Characterisation (HSC) and its potential for application within the context of marine planning. The review seeks to illustrate how HSC can enable the historic character of the present coastal and marine seascape to play its full part in shaping culturally distinctive and legible seascapes for the future, using two case study scenarios located in Southern England to support the discussion.

Historic Seascape Characterisation (HSC) is designed to inform the management of change affecting the seascape by providing an archaeological perspective of the character of the historic dimension of the overall coastal and marine landscape. It uses the principles underpinning historic characterisation more generally and complements the application of Historic Landscape Characterisation (HLC) to terrestrial landscapes. The expressions of historic characterisation principles in HSC were consolidated in a methodology published in 2008, further revised in 2010 (Tapper et al. 2008, 2010).

The two case studies that will be examined in this Application Review are as follows: 1) the Marine and Coastal Access Act 2009 within the context of Southern England; and 2) the discussion of the C-Scope Dorset Coast Landscape and Seascape Character Assessment (C-Scope 2010). Through these two case studies, an analysis of how HSC might inform these initiatives is undertaken.

The discussions within this review will mainly consider how HSC can:

- Inform the sustainable management of change, spatial planning, research planning and prioritisation affecting the historic landscape and seascape in coastal and marine zones.
- Produce a HSC GIS-database that can inform and address the marine planning implications of the Marine and Coastal Access Act 2009 (HM Government 2009a).
- Document the close inter-relationships between the character of the historic and natural environments.
- Inform and stimulate future research, outreach and educational programmes and agendas relating to the coastal and marine historic environment.

### 1.1 AIMS AND OBJECTIVES

Following discussions with the English Heritage Characterisation Team, this project's review of HSC applications has selected two case studies with particular relevance to the Southern England region:

- Examine the relationships between HSC and the Marine and Coastal Access Act 2009 (HM Government 2009a) with reference to the Act's application to the coasts and seas of Southern England.

- Review the relationship of HSC to Landscape and Seascape Character Assessment with particular reference to the recently completed C-Scope Dorset Coast Landscape and Seascape Character Assessment (C-Scope 2010).

## 2. Background

### 2.1 UK LEGISLATION

Since the 1990s, EU and UK Governments have sought to gain a better understanding of coastal and marine environments and their processes to provide the necessary information base for prospective strategic planning and long term management of the marine environment (Hooley 2011).

Responding to the review of policy relating to the historic environment, *Power of Place, The Future of the Historic Environment (2000)*, the UK government produced a statement on the historic environment, *A Force for Our Future (2001)*. The report contains a number of recommendations, for the UK Government itself, for the heritage sector, and for local authorities. The document recognises that, '*Historic landscapes or iconic buildings can become a focus of community identity and pride*' demonstrating the value of understanding character as an intricate part of the historic environment. The report also discusses the need to expand the knowledge base for policy making, giving exemplars of mapping marine archaeological features using Geographical Information Systems (GIS). It also recognises the value of HLC, identifying '*management implications and opportunities for change and development, using the historic landscape character to enrich the future landscape*' (Dcms 2001: 31). It '*commends character assessment to local authorities both as a useful tool in itself and as a way of encouraging greater involvement by local communities in conservation issues*' (Dcms 2001: 31).

The trend of European and UK policy-making for the management of coastal and marine environmental resources has increasingly promoted an integrated spatial approach to marine planning.

In 2002, DEFRA produced a report entitled "*Safeguarding Our Seas: A Strategy for the Conservation and Sustainable Development of our Marine Environment*". (Defra 2002) This report suggested that the future vision for the marine environment should be 'clean, healthy, safe, productive and biologically diverse', noting that advances towards that would involve the integration and development of coastal and marine databases to encourage a more integrated approach to marine planning. In implementing *Safeguarding our Seas*, the UK Government consulted long and widely in its preparation for the Marine and Coastal Access Act, enacted in 2009 (HM Government 2009a). The Act seeks to implement a new strategic, plan-led system of marine planning to deliver economic, social and environmental objectives within an integrated approach to the sustainable

management of the marine area around the UK. Throughout England's territorial sea, the Act's provisions are administered by the Marine Management Organisation (MMO). Further discussion of the Marine and Coastal Access Act 2009 is presented in **Section 3** within this report.

Following enactment of the Marine and Coastal Access Act, the UK Government is developing marine planning in two stages. The first relates to the development, publication and consultation of an over-arching Marine Policy Statement (MPS). This will provide the high level policy context to set the general direction of policy making. The MPS is likely to have a major impact upon the approaches adopted to managing the coastal and marine zone during the foreseeable future. The second stage relates to the development of Marine Plans which will underpin the application of the MPS at a national, regional and area specific level. In October 2010, the MMO announced that the first two English Marine Plan areas, to be developed from April 2011, will extend from the coast between Flamborough Head in the East Riding of Yorkshire to Felixstowe in Suffolk (known formally as East Inshore and East Offshore) (<http://www.marinemangement.org.uk/news/press/101028.htm>).

A pre-consultation discussion paper relating to the MPS was published in March 2010 (HM Government 2010b) and sets out the purpose and scope of the draft MPS, the main policy content and objectives and initial consideration and guidance for the relevant authorities. In relation to underwater cultural heritage, it is notable that the fourth aim of the draft MPS includes the protection of the UK's most important marine heritage assets (HM Government 2010b). Likewise, one of the high-level objectives of the MPS in promoting good governance notes that "The use of the marine environment is spatially planned where appropriate and based on an ecosystems approach which takes account of climate change and recognises the protection and management needs of marine cultural heritage according to its significance." (HM Government 2010b: 7).

The historic environment is also covered in relation to the development of Marine Plans in the draft (HM Government 2010b: 23-24). This coverage is expressed in broad terms, in keeping with the nature of the document as a whole.

HSC is designed to inform the objectives of long term and sustainable management of the marine environment within the framework provided by the Marine and Coastal Access Act (HM Government 2009a) and the MPS (HM Government 2010a, b). HSC provides strategic level mapping of the dominant character of historic cultural processes that have shaped the present seascape across English and adjacent UK Controlled Waters. The results can be applied to marine planning contexts beyond merely heritage management, encouraging a holistic understanding of the marine environment as a whole, informing a broad range of applications relevant to planning distinctive future seascapes and coastal landscapes.



English Heritage is responsible for advising the UK Government on matters relating to the coastal and marine historic environment of England. This includes the development of sustainable approaches to the strategic management of the coastal and marine historic environment through the implementation of initiatives such as integrated coastal zone management, the development of shoreline management plans and the long term management of coastal change. As part of its curatorial duties, English Heritage also advises the UK Government on meeting the requirements of managing the direct impacts of climate change on the historic environment while ensuring that the development of mitigation measures minimise potential impacts on the historic landscape.

## **2.2 EUROPEAN FRAMEWORKS AND REGULATIONS**

European marine planning policy closely mirrors the UK approach to seeking greater sustainable management of the seas (European Commission 2007a, b, 2008) further highlighting the need for holistic, area based GIS databases to convey historic cultural character at a strategic level (Hooley 2011).

The key policy frameworks which reflect EU marine planning priorities include the EC Integrated Maritime Policy (European Commission 2007a) and the Marine Strategy Framework Directive (European Commission, 2008 #1989}European Commission 2008) which provides the environmental pillar in support of the Policy.

The Action Plan for the EU Integrated Maritime Policy (European Commission, 2007 #1988), seeks to coordinate the management of maritime activity using common principles for marine spatial planning and ICZM to achieve an integrated approach to meeting economic, social and environmental commitments. This approach is fundamental to achieving sustainable development and meeting the aims of the Marine Strategy Framework Directive.

EU Maritime Policy (European Commission 2007a, 3.2.3), recognises the need for comprehensive and interoperable mapped information to optimise the effectiveness of marine spatial planning (steps and timetable for implementation are detailed in European Communities 2008). The outputs from the HSC programme are fully in accord with that. It is also recognised the need for integration and involvement of coastal communities in the sustainable management of the marine and coastal environment (European Commission 2007a, 4.3). The HSC text descriptions provide a flexible and accessible resource for education and outreach in initiatives developed to engage coastal communities in this regard.

The Marine Strategy Framework Directive aims to provide the framework for achieving good environmental status for Europe's marine environment (European Commission 2008), tackling the deterioration of Europe's marine environment,

the poor knowledge base about that environment and the institutional barriers to addressing these problems that exist at European level.

As is widely recognised, historic processes play an important role in shaping our past and present natural environment at both strategic and detailed level. The EU therefore recognises that the implementation of the Strategy by the Directive needs to include an understanding of the environment's historic cultural dimension in the same manner as is recognised by the UK's Marine and Coastal Access Act. The Directive thus proposes that Member States undertake '*an analysis of the predominant pressures and impacts, including human activity, on the environmental status of those (European marine) waters*' (European Commission 2008, Chapter II, Article 8, 1b).

Implementation of the European Landscape Convention (ELC), which came into force in the UK in 2007, also highlights the Council of Europe's recognition of the need to take account of cultural landscape during the development of EU Marine Strategy ([www.coe.int/t/e/Cultural\\_Cooperation/Environment/Landscape/](http://www.coe.int/t/e/Cultural_Cooperation/Environment/Landscape/)). The ELC is underpinned by a requirement 'to recognise landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity' (*ibid*, Article 5). In emphasising the central roles of human perception in defining landscapes and of human activity in creating them, the ELC embodies concepts already at the heart of all historic landscape and seascape characterisation (Clark et al. 2004; Hooley 2007). This is clearly expressed in the ELC definition of landscape: 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. English Heritage defines the term 'seascape' following that ELC definition for 'landscape' exactly, understanding seascape as the subset of 'landscape' that has a distinctly maritime perspective and relates to the coastal and marine zones.

The ELC encourages the understanding and management of dynamic landscapes, recognising their diversity and the complex interplays of cultural and natural forces that influence their perception. The ELC's scope and its obligations under Article 6 require ratifying states to identify and analyse the characteristics of their coastal and marine landscapes. HSC offers an effective tool in meeting those obligations by a comprehensive approach using the same principles as applied on land, and capable of informing and being informed by the perceptions of others. As with the ELC, HSC and HLC recognise that landscape and seascape change is inevitable, often desirable, and needs to be accommodated. English Heritage published an Action Plan for implementing the ELC (English Heritage 2009), seeking more recognition of the historic dimension of landscape in the marine zone, including through the use of HSC and the development of new procedures.

### **3. Case Study One: Marine and Coastal Access Act 2009 within the context of Southern England**

#### **3.1 INTRODUCTION**

This case study briefly reviews the background and aims of the Marine and Coastal Access Act 2009 (HM Government 2009a) within the context of Southern England and how HSC may inform marine planning.

The long term direction of EU and UK marine planning policy, through the development of the UK's Marine and Coastal Access Act 2009 and the EU Integrated Maritime Policy, is to achieve a position where the long-term sustainable management of the seas is driven by a hierarchy of integrated, forward looking, plan-led government legislation and its implementation. To assist in achieving this, the Marine and Coastal Access Act (HM Government 2009a) seeks to implement an integrated approach to the sustainable management of the marine area around the UK (HM Government 2009a), administered by the Marine Management Organisation (MMO).

The Act also allows for the creation of protected Marine Conservation Zones (MCZs) and also introduces a new right of recreational access to coastal land around England.

The MMO is responsible for delivering many of the Marine and Coastal Access Act's objectives around much of the UK's Controlled Waters. That includes the whole of England's territorial sea and UK Controlled Waters beyond it. This new organisation is designed to become centre of marine expertise, providing a consistent and unified approach, delivering improved coordination of information and data and reducing administrative burdens. The MMO is responsible for managing the production of Marine Plans which meet the requirements of the national Marine Planning Statement, considering a broad range of physical, environmental, social, cultural and economic characteristics as well as infrastructure such as communication, energy and transport systems (Defra 2009, 2010).

The High Level Objectives for the marine planning system have now been set by the UK Government, following consultation in 2009 (see HM Government 2009b). The objectives are driven by an overall vision for 'clean, healthy, safe, productive and biologically diverse oceans and seas'. The objectives have been expressed within the context of the UK's five sustainable development principles:

- Achieving a sustainable marine economy
- Ensuring a strong, healthy and just society
- Living within environmental limits
- Promoting good governance
- Using sound science responsibly

### 3.2 HSC ROLES RELATING TO THE MARINE AND COASTAL ACCESS ACT 2009

#### *Strategic Planning*

HSC is designed to inform the long term sustainable management of our marine environment, as sought by the Marine and Coastal Access Act, by providing a strategic level characterisation of historic cultural processes that have shaped the present seascape across England's coasts, territorial sea and adjacent UK Controlled Waters. That characterisation has relevance for marine spatial planning contexts well beyond the more traditional aspects of heritage management.

Marine Conservation Zones (MCZs) and the establishment of 'an ecologically coherent network of Marine Protected Areas (MPAs)' are intended to provide protection for species and habitats considered of national value (<http://www.defra.gov.uk/environment/marine/protected/mpa/index.htm>). It is envisaged that an 'ecologically coherent network' will be delivered by 2012 (<http://www.defra.gov.uk/environment/marine/protected/mpa/index.htm>). Two projects are tasked with designing recommendations for the network of MPAs and MCZs in Southern England: 'Balanced Seas' (<http://www.balancedseas.org/>) extends from the Suffolk/Essex border, to the Hampshire/Dorset border; from where 'Finding Sanctuary' (<http://www.finding-sanctuary.org/>) extends to encompass the seas of south west England. The Marine and Coastal Access Act makes provision for sites of historic or archaeological interest to be considered under the social consequences of designating an MCZ (HM Government 2009a: Section 117). The UK Marine Science Strategy recognises that there is a need to understand, for example, 'the importance of historic wrecks for ecosystems' (HM Government et al. 2010: 15). HSC can assist with this, helping identify the patterns of cultural activity, such as fishing methods, that have shaped present expressions of marine biodiversity and describing the historic cultural dimension of topographic features such as cliffs, coastal rough ground, dunes, saltmarsh, sandflats and the like, often termed 'semi-natural' but commonly mistaken as essentially 'natural'.

The intimate inter-relationships between the historical and natural environment are well recognised by curators of the coastal and marine environment. The extension of that inter-relationship to landscape and seascape, as noted by the ELC, is perhaps less fully recognised. The environmental impact of human activities over time can affect a wide range of aspects including biodiversity, the movement of sand along beaches and dunes, or the change in habitats along rivers and estuaries. Similarly coastal and marine habitat management is also a historic environment action in the same way as the management of the historic environment has impacts on natural habitats that must be taken into account. Just as the effects of human management have left a cultural imprint on the *environment* as a whole, that cultural imprint has shaped the cultural perceptions in people's minds of *landscape* and *seascape*, where it involves the sea. The character of that cultural imprint is illustrated through the HSC approach to characterising the coastal and marine landscape, reflecting not only the more

obvious human activities such as industry and leisure, but all those which have played roles in shaping the present, everywhere, whether deliberate or unintentional, active or passive. HSC recognises the imprints of historic cultural process as a dimension of the environment and the cultural perceptions of it. HSC is necessary for informing broader environmental understandings, highlighting its value, through the HSC's GIS platform, enabling its interoperability with other environmental spatial databases.

Major port developments, such as those affecting Southampton and its environs, including Dibden Bay, illustrate these aspects and provide exemplars of how the Marine and Coastal Access Act 2009 will address them and the HSC contributions to inform the process. In February 2011, Associated British Ports (ABP) received consent from the Marine Management Organisation for the construction of a new quay wall at Berths 201 and 202 in the Port of Southampton

([http://www.marinemanagement.org.uk/works/abp\\_southampton.htm](http://www.marinemanagement.org.uk/works/abp_southampton.htm); <http://www.abports.co.uk/news20117634.htm>). However, the development of Dibden Bay as a port has raised many conflicting opinions and has been subject to a period of public discussion. Following this Public Inquiry, the Secretary of State concluded that the proposed development would damage the integrity of the Solent and Southampton Water Ramsar Site and Special Protection Area (SPA) ([http://econat-network.org/docs/documents/Session4\\_Estuaries\\_PAPER\\_Dibden.pdf](http://econat-network.org/docs/documents/Session4_Estuaries_PAPER_Dibden.pdf)). HSC can further inform this process by providing a broad assessment of activities and key features dominating the marine and coastal environments through an inclusive approach based on landscape and seascape perceptions.

The application of the Act to major coastal and marine developments, including ports, comes firmly into the role of the Marine Management Organisation (MMO), whose remit includes:

- Preparation of plans for the marine areas around the UK coast;
- Consideration of applications for port development; and
- Streamlining of marine consents.

#### *Marine Plans*

In discharging their remit, of particular relevance for HSC's roles in informing the MMO's considerations is Section 54 of the Marine and Coastal Access Act 2009. Section 54 states that 'a marine plan authority (in this case the MMO) must keep under review the matters which may be expected to affect the exercise of its functions relating to:

- (a) The identification of areas which are to be marine plan areas, and
- (b) The preparation, adoption, review, amendment or withdrawal of marine plans for those areas.

(2) The matters include:



- (a) the physical, environmental, social, cultural and economic characteristics of the authority's region and of the living resources which the region supports;
  - (b) the purposes for which any part of the region is used;
  - (c) the communications, energy and transport systems of the region;
  - (d) any other considerations which may be expected to affect those matters.
- (3) The matters also include:
- (a) any changes which could reasonably be expected to occur in relation to any such matter;
  - (b) the effect that any such changes may have in relation to the sustainable development of the region, its natural resources, or the living resources dependent on the region.
- (4) The reference in subsection (2)(a) to the cultural characteristics of the authority's region includes a reference to characteristics of that region which are of a historic or archaeological nature.

Subsection 4's clarification of subsection 2a explicitly confirms that historic and archaeological cultural character are matters which may be expected to affect the exercise of the MMO's exercise of its functions in relation to identifying marine plan areas and the preparation, review and amendment of marine plans. This is broader, and without prejudice to, the Act's and the Marine Policy Statement's clauses relating to specific relevance and aspects of the marine historic environment and heritage assets within it.

As on land, large scale change and development pressures are increasing on the British coast and seas, including society's growing demand for marine aggregates and offshore renewable. HSC would contribute to the ability to assess and respond to impacts on the coastal and marine historic environment by defining cultural character and the typical historic processes that have influenced the development of areas and the roles of human activity in shaping the environment. For example, ports have historically been significant employers in Southern England, and remain so today. The Port of Southampton natural deep-water harbour, double tide, and sophisticated Vessel Traffic Services (VTS) allow it to accommodate exceptionally large vessels, from deep-sea container ships to cruise giants. Because of this, Southampton port remains a major employer in the city, being the busiest cruise terminal and second largest container port in the UK. The redevelopment of areas into recreational facilities (e.g. Gunwharf Quays in Portsmouth) has also increased regional employment as well as the local economy. However, the continuing expansion of the commercial shipping industry can provoke mixed feelings in Southern England. It is recognised that the industry contributes greatly to the economy (local and national) and is a major employer in the region, which is welcomed by many local residents. The pressures to create additional port facilities to accommodate that industry on relatively undeveloped land (e.g. Dibden Bay), also provokes serious opposition from many (see <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmtran/217/217.pdf>)

). Much commercial shipping activity remains offshore and appears physically remote from most coastal land, but the increase in larger ships lying off or entering harbours, such as Poole, has visual effects which some see as conflicting with their roles as tourist destinations. Through this understanding of the cultural character and the typical, in this case of Southern England, HSC allows the historic dimension of the landscape to play its full role in the management of change.

Coverage by England's national HSC database provides a strategic level assessment of the broad activities and key features dominating the marine and coastal environments. For example, military coastal defences can be found along the Southern England coast, although there is a tendency to find them concentrated around the main ports (Portsmouth being an example) due to their perceived vulnerability to foreign attack over many centuries. In providing a broad-brush area-based assessment of human activity and the cultural resource, HSC will inform the marine planning process with an overview of historic cultural activity up to the present in addition to a maritime perspective of coastal land. This overview presents historic seascape character across the main marine levels: sea surface, water column, sea floor and sea-sub floor, supplementing and contextualising the coverage of individual features. For example, in the Southern England region, a substantial proportion of the navigational hazards can be related to the presence of features such as sandbanks, rocks, areas of turbulent water and strong tidal currents. Risks to navigation may be directly related to sea floor features, such as debris and obstructions, drying areas, submerged rocks, shoals and banks, or they may be indirect, with implied hazardous water in the water column and surface above such seafloor risks. Strong marine currents and their effects to seafloor and coastal topography can also pose serious hazards to navigation. This is exemplified by the narrow entrance to Chichester Harbour which is dominated by yacht traffic, navigating carefully to avoid the Chichester Bar, a shallow spit which can present a significant hazard at all states of the tide. These waters have been utilised since before the Roman occupation which has resulted in a wealth of recorded shipwreck losses. HSC's inclusive approach enables an integrated understanding of the navigational hazards in the Southern England region and its characteristic shipping traffic, which have resulted in a high number of wreck sites. Many wrecks in the region are now perceived as recreational opportunities, which are often visited by amateur dive groups and professional organisations. As fragile and non-renewable resources, these 'wreck' features provide exceptional opportunities to discover our common past as well as important habitats for aquatic life since they act as artificial reefs for entire and unique ecosystems. By identifying the characteristic and the typical through HSC, individual features can be contextualised in a holistic manner integrating physical, environmental, social, cultural and economic characteristics of the region.

#### *Marine Conservation Zone (MCZ) selection and designation*

The Marine and Coastal Access Act Section 117 focuses on grounds for designation of MCZs, which are as follows:

(1) The appropriate authority may make an order under Section 116 [designating an MCZ] if it thinks that it is desirable to do so for the purpose of conserving:

- (a) marine flora or fauna;
- (b) marine habitats or types of marine habitat;
- (c) features of geological or geomorphological interest.

(2) The order must state:

- (a) the protected feature or features;
- (b) the conservation objectives for the MCZ.

(7) In considering whether it is desirable to designate an area as an MCZ, the appropriate authority may have regard to any economic or social consequences of doing so.

(8) The reference in subsection (7) to any social consequences of designating an area as an MCZ includes a reference to any consequences of doing so for any sites in that area (including any sites comprising, or comprising the remains of, any vessel, aircraft or marine installation) which are of historic or archaeological interest.

HSC can contribute to Marine Conservation Zone designation in several ways. It can contribute directly to the social consequences of such designation referred to in subsection 7(8) by providing the cultural context in which known sites of historic or archaeological interest are embedded: the background against which their interest and, if applicable, their heritage designation, has been adjudged and which may well be directly pertinent to the inherent setting and survival of the site of such interest themselves.

In a broader sense and of very clear relevance for HSC, and for the landward perspective of HLC, under the Nagoya Protocol for Biodiversity in October 2010, the UK Government made the commitment in its 2020 targets that the global network of Marine Protected Areas (MPAs) will be 'integrated into the wider landscape and seascapes'. The UK's domestic contribution to that global network will be the forthcoming coherent network of MCZs to be in place by the end of 2012. Confirmation of the Nagoya commitment was made by DEFRA Minister Richard Benyon MP in January 2011 (<http://services.parliament.uk/hansard/Commons/ByDate/20110119/writtenanswers/part003.html>). As the European Landscape Convention (ELC) is also in force in the UK, under ELC Article 7, its definition of landscape comes into play for the UK's work in respect of both domestic and international MPAs.

As HLC and HSC directly address cultural landscape and seascape issues, underpinned by common principles and directly in accord the ELC Articles and definitions throughout land, coast and sea, the extensive coverage by HSC and HLC databases will make a major contribution in providing a framework and content for MCZs' landscape/seascape integration.



The same role framework of landscape/seascape understanding has other benefits such as in providing valuable contextual information to inform the work of coastal planning and the recreational sector. For example, there are many ports that are thriving in the south coast of England which possess long, complex and dynamic histories that extend through many centuries. Some of them, such as Southampton with its passenger and merchant shipping terminals, are still growing, with new terminals and storage facilities being constructed every year. Other locations which are no longer being used for their original purposes have been redeveloped. An example is the former naval establishment at Gunwharf Quays, now a large retail and recreation facility, reflecting the distinctiveness and premium attached to historic coastal locations, making them prime development locations. There is considerable scope for HSC to inform the assessment of an area's historic character: what are the processes that have made it distinctive and offer opportunities for a distinctive and culturally legible future.

#### *Coastal Access*

The Marine and Coastal Access Act 2009 contains provisions for creating an access route around the English coast. Part 9 of the Act places a duty on the Secretary of State and Natural England to secure a long distance route ("the English coastal route") and land available for open-air recreation accessible to the public around the coast of England. In doing so, the Act amends existing legislation – namely the National Parks and Access to the Countryside Act 1949 and the Countryside and Rights of Way Act 2000.

The Act provides for public access on foot to certain types of land including areas of open land comprising mountain, moor, heath, down, and registered common land.

The coastal access provision is a major awareness raising opportunity and ties in to the public accountability needs of marine spatial planning in the Marine and Coastal Access Act 2009, allowing it to be accountable to a more informed public.

Examples of coastline routes could include Pagham Harbour and Langstone Harbour (east of Portsmouth). These areas promote a strong sense of remoteness and separation from the surrounding highly populated areas. HSC can encourage a broader understanding of the closely related contributions made by both the cultural and natural environments to shaping visitors' perceptions, and the overlapping perspectives that are such a distinctive aspect of the coast, with views to, from and along the coastline, combining both landscape and seascape perspectives.

The coast of Hampshire and the Isle of Wight is a valuable asset due to its saltmarshes, mudflats, reedbeds, vegetated shingle and soft cliffs which home internationally important populations of species such as Brent geese, black-tailed godwits and eelgrass (see [www.hwt.org.uk](http://www.hwt.org.uk)). The majority of this coastline is

protected under national and international wildlife designations. The coast also provides a major attraction for people. The Marine and Coastal Access Act 2009 places a duty on Natural England to improve access to the English coast. Although this is welcome, some concerns regarding the implementation of the Act and the potential adverse effects that this could have on vulnerable wildlife have been raised (see <http://www.hwt.org.uk/news.php/296/wildlife-trust-warns-caution-over-coastal-access>). HSC could provide a valuable resource both in the planning of the coastal access route and in providing the information for the route's users.

HSC can be used as a raising awareness tool to enable public enjoyment as well as reinforce respect for the environment. The HSC GIS, in conjunction with other baseline data required for route-planning, will help highlight the breadth of character through which the route is being planned, provide information on what that character comprises, and help identify optimal situations where information for route users would be most beneficial in raising awareness of the cultural and historic landscape and seascape through which the route passes. Character Type text descriptions produced in conjunction with the HSC GIS offer a useful resource in the development of public information for users along the route.

## **4. Case Study Two: C-Scope Dorset Coast Landscape and Seascape Character Assessment**

### **4.1 INTRODUCTION**

This case study examines the C-Scope (Combining Sea and Coastal Planning in Europe) Dorset Coast Landscape and Seascape Character Assessment (C-Scope 2010) and how HSC can further inform this initiative.

The Dorset Coast Landscape and Seascape Assessment (Dorset Coast L/SA) has been undertaken to inform the C-Scope project. Initiated by the Dorset Coast Forum and the Coordination Centre for Integrated Coastal Zone Management Belgium, C-Scope is a three year INTERREG-funded project, which aims to achieve a seamless, integrated approach to management and planning within the land-sea interface (C-Scope 2010).

The main focus is to develop marine plans at different scales using stakeholder engagement. It also develops a GIS-based planning tool to inform decision making and help to achieve sustainable coastal economies and environments (C-Scope 2010).

The aim of C-Scope is to develop a holistic approach to coastal and marine planning. It recognises that, whilst spatial planning on land has provided a useful decision making tool for several decades, it is a relatively new concept for the marine environment (C-Scope 2010). However, marine planning, as outlined in the Marine and Coastal Access Act (HM Government 2009a) and the Marine

Policy Statement (HM Government 2010a, b), is understood as more prescriptive.

The Dorset Coast L/SA was commissioned to contribute to the management of current and future pressures facing the Dorset coast such as new land, coastal and marine developments and climate change (C-Scope 2010). Outcomes include an accessible report, supported by GIS mapping, that provides an evidence base to help inform a wide range of planning and management decisions.

The Dorset Coast L/SA states that its proposed strategies to manage change are based on the ELC (for more details refer to **Section 2.2** within this report) (see C-Scope 2010: 4-5). The concept of landscape is defined within the ELC as ‘an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors’ (ELC, Article 1). The Dorset Coast L/SA adopts this concept which is used to define both landscape and seascape (C-Scope 2010: Appendix 1, p.194). This adoption would have implications on the visual aspects of the landscape and the understanding of seascape, where most material imprints are not visible.

## **4.2 HSC ROLES IN FURTHER INFORMING THE DORSET COAST L/SA**

HSC can further inform the Dorset Coast L/SA in several respects:

### *Strategic Planning*

The Dorset Coast L/SA discusses ‘physical’ and ‘cultural’ influences (C-Scope 2010: 35-49). The physical influences are linked to natural processes such as coastal erosion and sea level change (C-Scope 2010: 35). The cultural influences are defined as those that have been shaped by humans (*ibid.*). This a static and dialectic notion of physical *versus* cultural disregarding the fact that people and the environment are constituent components of the same world (Ashmore 2004; Darvill 2001: 39; Gojda 2001: 9; Ingold 1993: 154). Physical influences are not external to the cultural ones, they are not divorced from the social space (see Ashmore 2004; Darvill 2001; Dellino-Musgrave 2006). In this sense, the Dorset Coast L/SA does not address the interaction of those two broad areas of influences or incorporate them in its understanding of the perception of landscape or seascape. Inevitably perhaps, given its redefinition of ‘landscape’ from that used by the ELC, the Dorset Coast L/SA focuses largely on visual aspects and aesthetics implying that that ‘perception=visual or aesthetics’ (see C-Scope 2010: 69-70). HSC can expand considerably on this view and bring the treatment of seascape into line with the ELC definition of landscape, of which ‘seascape’ is a subset. In the ELC, and in HLC and HSC, ‘landscape’ is a matter of perception, ‘in the mind’ and capable of multiple valid definitions and descriptions for any one given area depending on one’s perspective. The marine environment provides a differing basis for our landscape/seascape perceptions. On land, we sense ‘landscape’ primarily visually, only perceiving it as ‘historic cultural landscape’, or a ‘geological landscape’, or a ‘literary landscape’ or many

other themes, when we inform our sensory data with our own cognitive data: what we have experienced, learnt or know from other sources (Hooley 2011). Historic cultural processes and their impacts have occurred, and still occur, across the marine environment as a whole, with complex relationships between, on the one hand, the areas and marine levels in which activity occurs, and on the other, the areas and levels in which its imprints may be present. HSC has scope to complement the Dorset Coast L/SA in that respect, amplifying its assessment dominated by visual qualities which is a very different but equally valid understanding. Visual seascape perceptions place emphasis on the view of the sea surface today. This could include for example the commercial and recreational ship and boat traffic in Poole Harbour, serving one of the region's busy cross-Channel ferry ports. However, that visually-dominated perception would be greatly enhanced by HSC's contributions on the layered three-dimensionality of the patterns and imprints from the long inheritance of past maritime cultural activities, which are generally not visible to the eye.

Character Type text descriptions are linked to the HSC GIS, providing consistently structured information on various aspects of historic Character Types at both regional and national levels. The information provided in the texts give the user a feel for the historical context to many of the activities represented by each character type and a better understanding of how patterns in those differing human activities have shaped our present landscape and seascape perceptions. The structure of the HSC text descriptions provides a succinct overview of the character and significance of different activities when reviewing cultural and historical human processes. They are also deliberately presented in a form readily comprehensible by other professionals, ensuring that others can understand what historic environment professionals are talking about. In facilitating communication with others, these texts can also work in complement with the outputs from the Dorset L/SA and other historic environment databases for the county and region in building information provision better geared to engaging with others' landscape and seascape perceptions.

#### *Methodology*

Consolidation of a robust HSC method was completed in 2008 (Tapper et al. 2008, 2010). English Heritage has subsequently implemented that method extensively around England's territorial sea and adjacent waters to the limit of the UK Controlled Waters.

A significant difference between the Dorset Coast L/SA and HSC lies in their understanding of marine areas. The coverage of 'seascape' for the marine areas is presented as essentially a conflated two dimensional view in the Dorset Coast L/SA (C-Scope 2010). However, HSC considers the marine in a three-dimensional sense, its characterisations separately encompassing the following marine levels: sea surface, water column, sea floor, and sub-sea floor. In addition a conflated characterisation can be drawn from the database, plus multiple characterisations of 'Previous HSC' where available information supports its

assessment, covering the fourth dimension: time. As noted above, the visual assessment which dominates the Dorset Coast L/SA is a valid approach within its own terms of reference and essential to inform much coastal and marine planning, especially for developments in sight of the coastline. However it is also limited in various respects which HSC can complement, notably in the treatment of inter-related cultural and natural processes that have shaped the character of the sea floor and water column (including the cultural factors that have affected patterns of marine biodiversity), the direct material imprints of most human activity, along with the more ‘traditional’ heritage concerns such as shipwrecks, which tend to occur on or beneath the sea-floor, and it neglects ‘undersea landscapes’ as a concept in their own right. Consequently, both the Dorset L/SA approach and HSC would be needed in conjunction and in complement to provide effective cultural inputs to inform marine planning, for example in providing informed responses to proposed offshore wind farm developments.

An analogy may be offered here from an offshore wind farm proposed off the Isle of Wight under the Crown Estate’s Round 3 for offshore energy ([www.thecrownestate.co.uk/our\\_portfolio/marine/offshore\\_wind\\_energy/round3.htm](http://www.thecrownestate.co.uk/our_portfolio/marine/offshore_wind_energy/round3.htm)). This area, especially the western Solent, has a high potential of submerged prehistoric land-surface survivals complete with intact occupation deposits, exemplified by the site of Bouldnor Cliff (Momber 2006; Momber et al. 2009; Momber et al. in press). This site has been exposed to erosional processes, although other parts of this area may still be buried: characterisation and palaeolandscape survey, for example by seismic survey, can help elucidate that and inform our understanding of ‘previous HSC. The point here is that the cultural character of the western Solent can only be fully understood to inform marine planning with a multi-level three dimensional understanding of the marine zone. Similarly, HSC will amplify the Dorset L/SA and inform marine planning with the full breadth of landscape/seascape-relevant effects from interacting cultural and natural processes found beneath the sea surface. Bringing the cognitive fully to bear on the sensory in that way will help diminish the ‘out of sight, out of mind’ attitude towards the marine environment that has dogged the cultural uses of the seas and contributed to its unsustainable management to date (see Hooley 2007, 2011, forthcoming).

#### *Coastal Coverage*

The coast is an area of overlapping perceptions, notably to seaward, to landward, and along the coast, amongst others. These overlapping perceptions are addressed within HSC by its overlap, rather than abutment, on coastal land with the land-based Historic *Landscape* Characterisation (HLC). HLC takes the land-based perspective while HSC takes the maritime perspective: each can produce a perfectly valid but differing characterisation of the same piece of coastal land. For example, from a terrestrial perspective, a factory chimney in a coastal town on the south coast of England may be classed in HLC along with the factory as ‘industrial’, but if visible from the sea and shown as a distinctive feature on coastal navigational profiles or Admiralty charts, HSC’s maritime perspective will



consider it as a navigational aid or daymark. HSC has much to offer in complementing the Dorset Coast L/SA in this respect as the latter does not admit such overlaps: its seascape coverage abuts its landscape coverage at the coast.

In providing that coastal overlap while remaining underpinned by common principles, HSC and HLC highlight the seamless yet overlapping relationships between our perceptions of land and sea. The extent and scale of human activities offshore are inextricably linked with, and interdependent on, adjacent coastal areas, the activities which characterise them and the resources they offer. This seamless understanding is another aspect that HSC can contribute, not only within the context of the Dorset Coast L/SA but also nationally in the implementation of the Marine and Coastal Access Act 2009, and internationally in meeting the obligations of the ELC (see **Sections 2.2** and **3.2**).

## 5. Conclusions

This application review was designed to identify and demonstrate some of the roles in which Historic Seascape Characterisation has potential in informing marine planning. The review illustrates, with reference to its case studies, how HSC can enable the historic character of present coastal and marine seascapes to play its full part in shaping culturally distinctive and legible seascapes for the future.

At the time of writing (March 2011) marine planning is a young and rapidly developing area, with many practical aspects yet to be worked out in the implementation of the Marine and Coastal Access Act, not least the implementation of the coastal access provisions for which Natural England's pilot projects have currently been scaled down. Despite this, the review of HSC applications has demonstrated some of its range of potential for differing contexts, taking account of the current state of policies and legislation, government priorities and the needs of marine and historic environment interests.

In order to contextualise the discussion, the review has considered the roles of HSC in national and international contexts including UK legislation, marine planning, and EU marine policy and the European Landscape Convention.

Finally, this review highlights some of the applications of HSC in delivering baseline information at a strategic level, providing cultural context and extending the principles of historic characterisation to the coast and marine, with ample scope, need and opportunity for informing marine planning and the sustainable management of change.

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