

An Chomhairle Oidhreachta
The Heritage Council



Seascapes and Seascape Assessment – A Review of International Practice:

A literature review of international practice for Seascape Planning and Assessment (June 2016)

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Introduction

This review is the result of research into existing seascape planning, characterisation and assessment internationally. It should be read as a non-exhaustive reference list, or working document that can be utilised and/or built upon.

This review comes about as the Heritage Council strongly believes there is an need to establish a robust seascape policy framework, given the recent Maritime Spatial Planning Directive 2014/89/EU as well as pending legislation due to be introduced in late 2016. It is noted that maritime management in Ireland and elsewhere has focused on environmental processes, biodiversity, fisheries and aquaculture, and less so on issues such as visual impact, built heritage and cultural significance. This report is intended to inform on international experiences to date where these matters are considered. The information below is ordered in tables of each country in **alphabetical order**, with an overview of International and/or EU seascape guidelines first.



www.seascape.irish-homes/activities.htm

1. International and/or EU Seascape Planning:

	Organisation and Title	Weblink	Date	Countries	Contact	Description or comment
1	EU sponsored Wiki page for Marine Biodiversity	http://www.marbef.org/wiki/Marine_Spatial_Planning_-_the_need_for_a_common_language	Ongoing	EU and Global		Good resource for info related to marine world, including discussion threads and articles.
2	Unesco Webpage with table documenting work done on Marine Spatial Planning internationally	http://www.unesco-ioc-marinesp.be/msp_references http://www.unesco-ioc-marinesp.be/msp_around_the_world	2015	Global	-	Many documents referred touch on seascape issues and, where applicable, are detailed for each country in Section 2.
3	European Union <i>The Maritime Spatial Planning Directive</i> (2014/89/EU) EU	http://ec.europa.eu/maritimeaffairs/documentation/publications/documents/2015-leaflet_msp_en.pdf http://ec.europa.eu/maritimeaffairs/policy/index_en.htm	2015 2012	EU EU	- -	Official EU pamphlet for Maritime Spatial Planning, explaining the EU Directive. Overall Integrated Maritime Policy for Europe, which individual nations Maritime Spatial planning falls under.
4	Unesco Intergovernmental Oceanographic	http://www.unesco-ioc-marinesp.be/msp_guides	2009	Global	charles.Ehler@me.com	Useful and quite detailed guide to Marine Spatial Planning and how to approach developing a plan.

	Commission (Paris) <i>Marine spatial planning guide</i>				or f.douvere@unesco.org	
5	European Union Marine Spatial Planning Directive briefing	http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1396432777228&uri=CELEX:52008DC0791	2008	EU	-	Webpage explains the rationale around the EU Directive and includes a short review of international best practice.
6	OSPAR Commission North East Atlantic Marine (15 countries) <i>Offshore renewables guide</i>	http://www.ospar.org/work-areas/eiha/offshore-renewables	2008	North East Atlantic countries	chris.multon@ospar.org	OSPAR is the mechanism by which 15 Governments & the EU cooperate to protect the marine environment of the North-East Atlantic. They have numerous areas of interest and produced guidance in 2008 for offshore renewable development. The OSPAR Assessment Tool is 'currently under development' and will be ready for the delivery of the Intermediate Assessment 2017.
7	EUCC EU Coastal and Marine Network <i>EU Legislation for Individual Countries</i>	http://www.coastalguide.org/index.htm	Early 2000's	Continental EU	-	Summaries of national marine legislation produced by the EUCC for the countries of the Black, Adriatic and Caspian Seas.

2. Practice in Individual Countries - the following are reviewed in the sections below:

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Australia:

	Organisation and Title	Weblink	Date	Contact	Description or comment
1	Australian Federal Department of Environment <i>'Strategic Assessment' Webpages</i>	http://www.environment.gov.au/node/18558	Ongoing	-	This website explains the 'Strategic Assessment' concept for large scale projects to nationally important heritage (natural and cultural) sites including seascapes.
2	State Government of Victoria agency Heritage Victoria <i>Landscapes of Cultural Heritage Significance Assessment Guidelines</i>	http://heritagecouncil.vic.gov.au/research-projects/landscapes-of-cultural-heritage-significance-assessment-guidelines/	2015	Geoff Austin Manager Heritage Register & Permits, Heritage Victoria Geoff.austin@delwp.vic.gov.au	Heritage Victoria (within State Dept. of Environment) has produced a useful guide to assessing landscapes for heritage value. The last two sections of this document are of great use in identifying heritage seascapes.
3	State Government of Western Australian <i>State Coastal Planning Policy Guidelines</i>	http://www.planning.wa.gov.au/dop_pub_pdf/SPP2.6_Policy.pdf http://www.planning.wa.gov.au/dop_pub_pdf/State Planning Policy No 2 6 State Coastal Planning Policy Guidelines.pdf	2013	-	The State of Western Australia is strong on visual impact in coastal areas - not specific to offshore development.
4	National Environment Protection and Heritage Council	http://www.scew.gov.au/system/files/resources/8e446a1a-ab93-5f84-99d0-	2010	-	This very comprehensive wind farm development guideline, gives guidance on stakeholder engagement and

	<i>National Wind Farm Development Guidelines (Draft)</i>	12d3422d2a23/files/draft-national-wind-farm-development-guidelines-july-2010.pdf			mitigating effects of wind development. It does not consider off shore development.
5	State Government of Western Australian <i>Visual Landscape Planning in Western Australia</i>	http://www.planning.wa.gov.au/dop_pub_pdf/Landscape_Web_Pt3.pdf	2007		This is quite a good (if a little old) guide for development in coastal areas. It is a manual for evaluation, assessment siting and design
6	State Government of Victoria <i>Coastal Spaces Landscape Assessment</i>	http://www.dtpli.vic.gov.au/planning/plans-and-policies/rural-and-regional-planning/landscapestudies/coastal-spaces-landscape-assessment-study	2006	-	Again, the State of Victoria is strong on coastal protection but focussed on on-shore impacts but might be of interest to see their approach of designating 'Significant Landscape Overlay' protection and how they come to that conclusion - p47 and p87 of their Coastal Spaces Landscape Assessment

Belgium:

	Organisation and Title	Document Weblink	Date	Contact	Description or comment
1	Directorate of Natural Environment, Belgium Links to Marine Spatial Plan <i>Webpages</i>	https://www.naturalsciences.be/en/science/do/98/page/2493 http://www.marineatlas.be/en/index	2014	Laurence Vigin (lvigin@nautralsciences.be +32.2.773.21.14)	Belgium appears to be a world leader in Marine Spatial Planning. It has recently (2014) published its Marine Spatial Plan that prescribes (zones) areas for wind farm development that are progressively being developed under specific planning conditions by particular companies. There is a heavy emphasis on monitoring to understand efficiencies into the future, which is payable by the development companies.
2	Directorate of Natural Environment, Belgium <i>Sea of Space (Marine Spatial Plan Background Report)</i>	http://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/19087501/Zee%20van%20ruimte%20EN.pdf	2014	Laurence Vigin (lvigin@nautralsciences.be +32.2.773.21.14)	This webpage links the background documents including 'A Flood of Space'. 'A Flood of Space' is a high quality publication that graphically presents the various themes associated with the Marine Spatial Plan, breaking down the different values. From page 138 is 'the relaxed sea', which outlines the visual and recreational values of the sea.
3	Directorate of Natural Environment, Belgium <i>Webpages</i>	http://www.mumm.ac.be/Downloads/studiezichthek_20020526.pdf http://www.mumm.ac.be/	2014	Laurence Vigin (lvigin@nautralsciences.be +32.2.773.21.14)	Documents which detail visual impact methodology for offshore (translation pending).

		Common/Windmills/SPE/Advies Bijlage2 MEB Bijlage 1.pdf			
4	Directorate of Natural Environment, Belgium <i>Webpages</i>	http://www.mumm.ac.be/EN/Management/Sea-based	2014	Laurence Vigin (lvigin@nautralsciences.be +32.2.773.21.14)	More information on the activities envisaged offshore.
5	Coordination Centre on Integrated Coastal Zone Management in Belgium <i>Marine Spatial Planning in Belgium Analysis 2000-2011</i>	http://www.cscope.eu/files/results/marine-mgmt-plan/belgium/inventory-MSP-belgium.pdf	2012	E-mail: info@kustbeheer.be Contacts: Kathy Belpaeme Hannelore Maelfait Sylvia Theunynck	Excellent report that describes how the Belgian Marine Spatial was established, lessons learned, the way it works, its processes and steps. C-Scope have also partnered with the Dover Local Authority and done a pilot study into that coastline, which is in the English lit review below.

Canada:

	Organisation and Title	Weblink	Date	Contact	Description or comment
1	National Department of Fisheries and Oceans <i>Regional Oceans Plan 2013-17</i>	http://www.inter.dfo-mpo.gc.ca/Maritimes/intro/oceans/ocmd/Regional-Oceans-Plan http://www.inter.dfo-mpo.gc.ca/folios/00259/docs/Oceans-Plan-Description-Background-eng.pdf http://www.inter.dfo-mpo.gc.ca/Maritimes/Oceans/ocmd/MPA/Network-Planning	2014	-	This plan is the successor to the ESSIM (linked below). It casts a wider net with two additional sea units added. The plan moves away from the 'Large Ocean Management Area' LOMA approach to one that is based on nationally defined marine bioregions. It is strong on implementation and identifies key actions over a 3 year period until it is reviewed in 2017. The link at the bottom is a DFO webpage about its Regional Oceans Network.
2	National Department of Fisheries and Oceans <i>Eastern Scotian Shelf Integrated Ocean Management Plan ESSIM</i>	http://www.dfo-mpo.gc.ca/Library/333115.pdf http://oar.marine.ie/bitstream/10793/1041/1/QUB%20Final%20Report%20MSP%20Best%20Practice%20Nov-13.pdf	2007	-	This is the first Integrated Ocean Management Plan for Canada. It is strong on 'human use' analysis and planning for it. It is logically laid out with development of objectives and management plans but implementation was problem for this plan. The second link is a review of the ESSIM Plan by Wesley Flannery of Queen's University Belfast, which also evaluates other MSPs (worth a read).

Denmark:

	Organisation and Title	Weblink	Date	Contact	Description or comment
1	Danish Energy Agency <i>Physical Planning of Wind Power</i>	http://www.ens.dk/sites/ens.dk/files/policy/Global-Assistance/Materials/tool_physical_planning_wp_web.pdf	2013	Steffen Nielsen, Special Advisor, srn@ens.dk, +45 3392 6696 Kristian Havskov Sørensen, Chief Advisor, khs@ens.dk +45 3392 6738.	Really useful report on the experience to date of renewables in Denmark both on and offshore, including lessons learned etc. Produced by the Govt agency tasked with managing offshore development. From page 22, this doc summarises history of offshore wind development since 1990s including siting considerations and consenting.
2	Danish Energy Agency Guidance Document on EIA for Offshore Windfarming	http://www.ens.dk/sites/ens.dk/files/undergrund-forsyning/vedvarende-energi/EIA%20Guidance%20Document%20final%20feb%202013.pdf	2013	As above	Summary of EIA process offshore wind farming in Denmark. P12 and 18 mention landscape and cultural heritage, but primarily for onshore effects.
3	EU – Integrated Coastal Zone Management ICZM <i>Overview doc of Danish Offshore development</i>	http://ec.europa.eu/ourcoast/index.cfm?menuID=8&articleID=97	2010	-	Overview of Danish Offshore development since 1990s.
4	PartiSEApate Multi-level Governance in MSP in Baltics <i>Overview doc of Danish Offshore development</i>	http://www.partiseapate.eu/wp-content/uploads/2013/08/Denmark-country-fiche.pdf	2008	Joanna Przedzrymirska joaprz@im.gda.pl +48 583019339	Overview of Danish Offshore development since 1990s.

England:

	Organisation/ Author	Document Weblink	Date	Contact	Description or comment
1	Historic England & Cornwall County Council	https://historicengland.org.uk/images-books/publications/hsc-south-west-peninsula/	2014	Dave Hooley	This study uses the national Historic Seascape Characterisation (HSC) method to undertake a GIS-based characterisation of the south west peninsular of England's coast. It is intended to inform the management and planning of marine areas by providing an archaeologists view of the historic processes and trends that give the area it's character. It is strong in a scientific archaeological sense and weak is a visual impact sense.
2	Newcastle University	https://historicengland.org.uk/images-books/publications/hsc-east-yorkshire-norfolk/	2014	Oscar Aldred Oscar.alred@ncl.ac.uk Prof Turner sam.turner@ncl.ac.uk	Same as above.
3	Kent County Council and 'Land Use Consultancy' LUC	http://www.kentdowns.org.uk/uploads/documents/Piloting an Approach to Seascape Character Assessment in the Dover Strait.pdf	2013	kate.ahern@landuse.co.uk +44 (0)20 7383 8445	A pilot project for seascape character assessment in the Strait of Dover produced in 2013 by the Land Use Consultancy for Kent County Council (South East England). It broadly follows the Historic England 2008 methodology (referred below), but more high level in nature.
4	Natural England Guidelines on SCA	https://www.gov.uk/government/uploads/system/	2012	Christine.tudor@naturalengland.org.	National seascape character assessment guidelines by Natural England. The guide is a

	(produced by LDA) <i>An Approach to Seascape Character Assessment</i>	uploads/attachment_data/file/396177/seascape-character-assessment.pdf		uk	high quality publication with some great illustrations on the importance and methodology of seascape character assessment. Assists with the process of undertaking character assessment but lacks specific development guidelines to avoid effects on seascape character.
5	Dorset Coast Forum and the Coordination Centre for Integrated Coastal Zone Management Belgium, C-SCOPE (prepared by LDA design) <i>The Dorset Coast Land and Seascape Assessment</i>	http://www.cscope.eu/files/results/activity_1/dorset/Supporting%20Documents/C-SCOPE%20Seascape%20Report.pdf	2010	E-mail: dorset.coast@dorsetcc.gov.uk Contacts: Ken Buchan, Bridget Betts, Ness Smith	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 landsea interface.
6	Historic England Methodology on SCA <i>Historic England Seascape Method Statement</i>	http://www.heritagecouncil.ie/fileadmin/user_upload/Planning/LCA_CPD/LCA_CPD_Sep_2011/Reports/HSC_National_Method_Statement_English_Heritage_2008.pdf	2008	Dave Hooley https://marinedevelopments.blog.gov.uk/author/dave-hooley-english-heritage/	In-depth data based analysis that provides a full understanding of human interaction and values for seascapes both above and sub surface. Really useful tool that can be used to advise individual EIA processes (rather than undertaken as part of it). The contents page lists everything considered and is a good summary. Strong in a scientific archaeological sense and weaker, in a visual impact sense.

Netherlands:

	Organisation and <i>Title</i>	Weblink	Date	Contact	Description or comment
1	Government of Netherlands <i>Integrated Management Plan for the North Sea</i>	http://www.unesco-ioc-marinesp.be/uploads/documentenbank/4cf76ef0978d9e21b00ffa0460eb0221.pdf	2015	-	This is a wide reaching and detailed integrated coastal management plan that follows on from a previous Marine Spatial Plan. It is upfront in stating that it sees the sea as a 'resource'. It outlines all objectives for the sea, including 'a profitable sea' (chapter 5) with development goals (and a windfarm opportunity map). Chapter 6 has an assessment guideline, which is really detailed and useful in a planning sense.
	Dutch Ministry of Housing, Spatial Planning and the Environment published for the first time a North Sea chapter in their national 'Spatial Planning Policy Document'	http://www.unesco-ioc-marinesp.be/spatial_management_practice/the_netherlands	2005	-	The inclusion of Marine environment in the National Spatial Policy was a precursor to the Integrated Management Plan above.

New Zealand:

	Organisation and Title	Weblink	Date	Contact	Description or comment
1	Marlborough District Council <i>Natural Character Assessment of the Coast</i>	http://www.epa.govt.nz/Publications/MDC%20%280102%20and%20FS0007%29%20P%20Rough%20Appendix%203.pdf	2011	-	Commissioned by a coastal local authority, which was subject to large-scale controversial salmon farming. From p9 it provides a good framework for assessing natural character in a coastal setting.
2	National Department of Conservation <i>Coastal Policy Statement</i>	http://www.doc.govt.nz/about-us/science-publications/conservation-publications/marine-and-coastal/new-zealand-coastal-policy-statement/new-zealand-coastal-policy-statement-2010/policy-6-activities-in-the-coastal-environment/	2010	-	For New Zealand there is a gap in seascape development guidance. The Department of Conservation has issued strong but broad policy guidelines.

Norway:

	Organisation and <i>Title</i>	Weblink	Date	Contact	Description or comment
1	Royal Norwegian Ministry of the Environment <i>An Integrated Management of the Marine Environment of the Barents Sea and the Sea Areas off the Lofoten Islands</i>	http://www.unesco-ioc-marinesp.be/uploads/documentenbank/98f9ab04c6f054e434d506dbeba3f65e.pdf	2005	-	Heavily focused on environmental impact – has a section on impact on cultural heritage on p34.
2	Institute of Marine Research	http://www.imr.no/english/data/page/6335/Marine_protected_areas_in_Norway.pdf	2005	-	A summary of Norway's Marine Protected Areas (2005).

Portugal:

	Organisation and <i>Title</i>	Weblink	Date	Contact	Description or comment
1	Instituto De Agua, Portugal & Wave Energy Centre <i>Offshore Renewable Energy and its Potential for the Outermost Regions</i>	http://www.wavec.org/content/files/05_-_Margarida_Almodovar.pdf	2011	Margarida Almodovar (Instituto De Agua)	Powerpoint document explaining (in English) the Portuguese Maritime Spatial Plan.
2	European Commission Directorate-General for Maritime Affairs and Fisheries <i>Study on the Economic Effects of Maritime Spatial Planning</i>	http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/economic_effects_maritime_spatial_planning_annex_en.pdf	2010	-	This is an academic study in economics using Portugal's POEM Maritime Plan to analyse economic costs and benefits.

Scotland:

	Organisation and Title	Weblink	Date	Contact	Description or comment
1	Scottish Natural Heritage <i>Offshore Renewables – Guidance on Assessing the Impact on coastal landscape and seascape</i>	http://www.snh.gov.uk/docs/A702206.pdf	2012	Firstname.surname@snh.gov.uk Planning Team Manager Ivan Clark 01738 458558 Renewable Energy Casework Advisers: North - Nina Turner 01463 725216 East - Matthew Burnett 01738 458540 West - Paul Taylor 01786 435366	Excellent guide for scoping an EIA and to assess the effects (on natural and cultural heritage) of individual development proposals, including cumulative effects.
2	Scottish Natural Heritage <i>An Assessment of the sensitivity and capacity of the Scottish seascape in relation to offshore windfarms</i>	http://www.snh.org.uk/pdfs/publications/commissioned_reports/F03AA06.pdf	2005	Frances Thin, Scottish Natural Heritage, Tel: +441463 712221	Forward planning tool to guide sea use and would be most relevant prior to the above assessment guide. It is strategic guidance with the specific aim of identifying areas where the impact of offshore wind energy development on Scottish seascapes are likely to be of least significance. The guide has a really logical phasing of work to anticipate development and establish character types.

Concluding Notes

From this research exercise, it is clear that that marine planning and assessment globally has, in the past, focused heavily on environmental processes and biodiversity, and less so on issues such as visual impact, built heritage and cultural significance. Where visual impact has been addressed it has been for sensitive coastal 'landward' areas, rather than 'seaward'. This is changing, however with a greater acceptance of 'seascape' as part of landscape, pursuant to the European Landscape Convention, Marine Spatial Planning Directive 2014/89/EU, and Environmental Assessment Directive 2001/42/EC.

While Belgium and the Netherlands have taken a zoning approach with specific activities allocated to specific offshore locations (and even the creation of new islands in the case of Belgium), Scotland and England are moving ahead with Seascape Characterisation Assessment (SCA) approach, informing SEA and EIA processes. Denmark, the world leader in offshore renewable development, appears to have identified preferred offshore sites for wind energy development in the 1990s with general acceptance of visual impacts being tied to the concept of the receiving community's 'willingness to pay' (WTP). This community-led approach is recognised as being effective in achieving broad consensus and efficient development, interestingly, without a Maritime Spatial Plan. Importantly, Denmark places great emphasis on post-operative monitoring in order to continually improve output and reduce adverse effects. Belgium's new Marine Spatial Plan is an impressive piece of work, encompassing all aspects of human interaction with the sea. However, it does not appear to have a great deal of regard for cultural heritage impacts (it is a relatively small and heavily used part of the North Sea). On the other hand, Scotland and England's approach is to clearly identify cultural heritage value with extensive studies.

Ireland's Marine Spatial Planning is well-placed to utilise the experience of other territories and EU Member States. With Ireland's Exclusive Economic Zone (EEZ) totalling more than the Netherlands, Sweden and Germany combined, the opportunity to follow best practice spatial planning can lead to a wide range of benefits, not least supporting renewable energy production as well as heritage-led tourism initiatives such as the Wild Atlantic Way and Ireland's Ancient East. The Heritage Council recognises this potential and advocates strongly for investment in the formulation of a robust seascape policy framework.

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