

# **Key messages from the C-SCOPE** marine planning process

Thursday June 14<sup>th</sup>, 2012

Ness Smith
C-SCOPE Project Officer



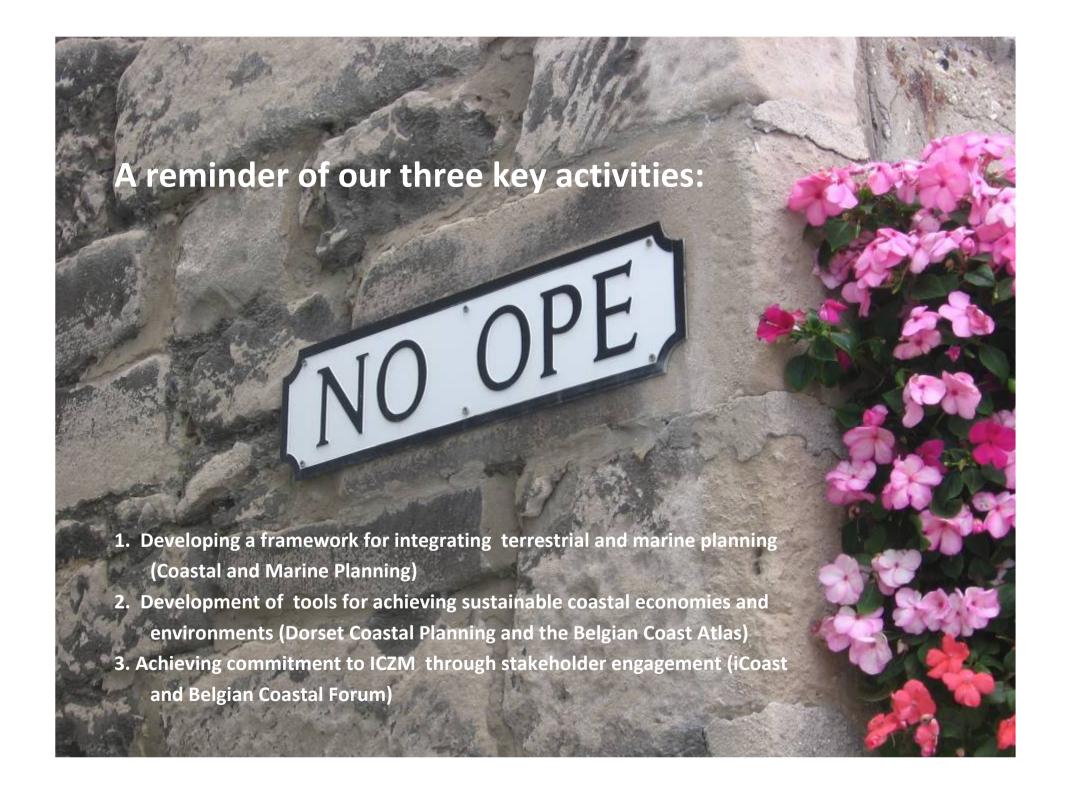














## 'EU Roadmap' key principles for maritime spatial planning

- 1. Using MSP according to area and type of activity
- 2. Defining objectives to guide MSP
- 3. Developing MSP in a transparent manner
- 4. Stakeholder participation
- 5. Coordination within Member States Simplifying decision processes
- 6. Ensuring the legal effect of national MSP
- 7. Cross-border cooperation and consultation
- 8. Incorporating monitoring and evaluation in the planning process
- 9. Achieving coherence between terrestrial and maritime spatial planning
- 10. A strong data and knowledge base









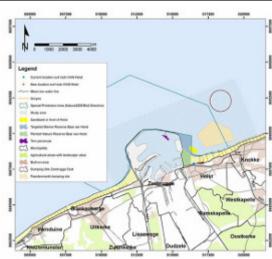


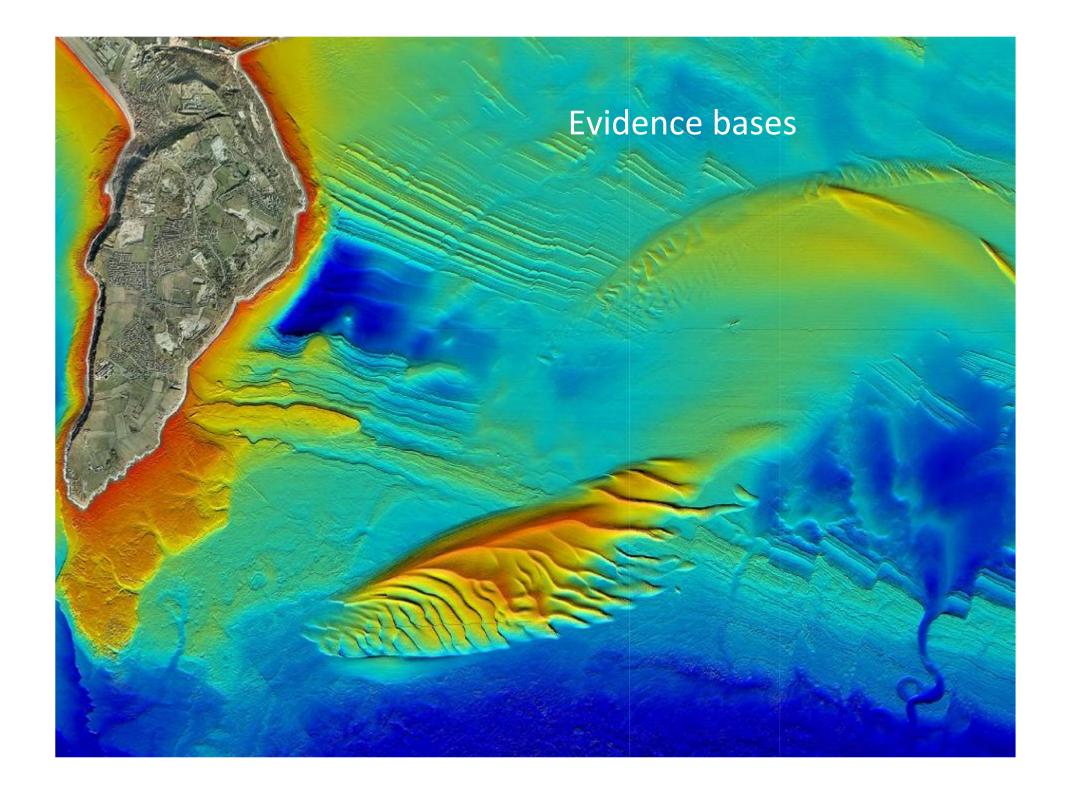


# **Marine Management Areas (MMAs)**

Dorset	Belgium
UK EEZ covers 773,676km <sup>2</sup> with 17,820km of coastline. Competition for marine space exists in some areas and is increasing, but still many undeveloped areas at sea and on the coast	Belgian EEZ covers 3457km <sup>2</sup> , with 65km of coastline. Intense competition for marine resources and land space which is scarce
Marine plan for sustainable development	Spatial vision for coastal development at Knokke-Heist focused on single issue (sandbank).
Undefined inland boundary, seaward area out to 12nm covering 953 km <sup>2</sup>	Coastal land (beach) and adjacent marine area, covering about 47 km <sup>2</sup>
Largely rural coastline, one major town	Densely built up urban area
Relatively low pressure on marine environment – no aggregates, major shipping lanes, pipelines, cables, offshore wind.	Intense use within the land/sea interface, presence of major port and shipping lanes, altered sedimentation leading to sandbank and consequent conflict between nature reserve and water sports club.
Tourism/recreation major sector	Tourism/recreation and harbour major sectors
Served as an unofficial pilot for national marine planning	Vision for Knokke-Heist being considered by Flemish Government. Expert group acted to assess state of MSP in Belgium and influence federal government via a position paper on MSP in Belgium.







## **Data**

Dorset	Belgium
Assessment of existing data and collation of new data was a long process taking nine months to complete.	Large number of national and regional marine and coastal data available through dedicated marine research programmes and the monitoring of coastal parameters
Data were compared to existing national sets and gap analysis conducted	Focused on updating existing data, collecting information at a lower scale and teasing out coastal information from regional databases
All spatial data are held on a MapInfo Geographic Information System (GIS), which formed the basis for the Dorset Coastal Planning tool	New studies to gain information on the socio-economics of the MMA and the mechanics of the sandbank were also commissioned.
Confidence assessment was conducted on data used within the Plan, and the best available data were used.	





## **Baseline inventories**

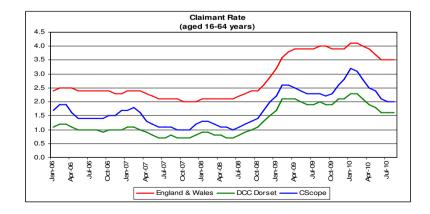
- General description of the marine plan areas, including natural and morphological characteristics and current uses
- © Climate change, and its potential effects on the marine environment, sectors and communities, was also addressed
- Belgian partners included an analysis of the current conflicts and threats and future visions of key stakeholders
- Dorset produced eighteen sectoral topic papers, plus a separate forecasting document looking at both national and local sectoral trends and possible future developments which would need to be factored in to the marine plan.





## **Socio-economic reports**

Dorset	Belgium
Identified key issues which might be addressed through the marine plan	Focused on an impact assessment of the sandbank on the Bay of Heist on recreation and tourism
Included information on coastal populations, housing and the local labour market, areas of deprivation, and a profile of marine industries	Interviews were conducted with a range of beach users and inhabitants and focused on perceptions of the current situation, and people's aspirations for the future of the beach.
Economic Impact Assessment to identify effects of additional marine jobs or job losses on the economy	Questionnaires were sent to small local enterprises to gather detailed economic information.
Fed directly into many marine plan policies.	SWOT analysis of the Heist MMA which helped the project team and MSP T&F Group to balance the needs of local businesses and residents with the environment in the final vision.



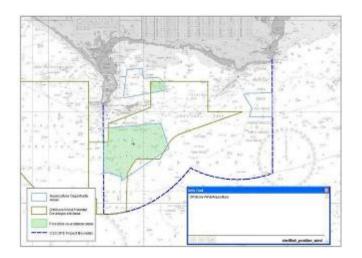


## **Spatial interactions**

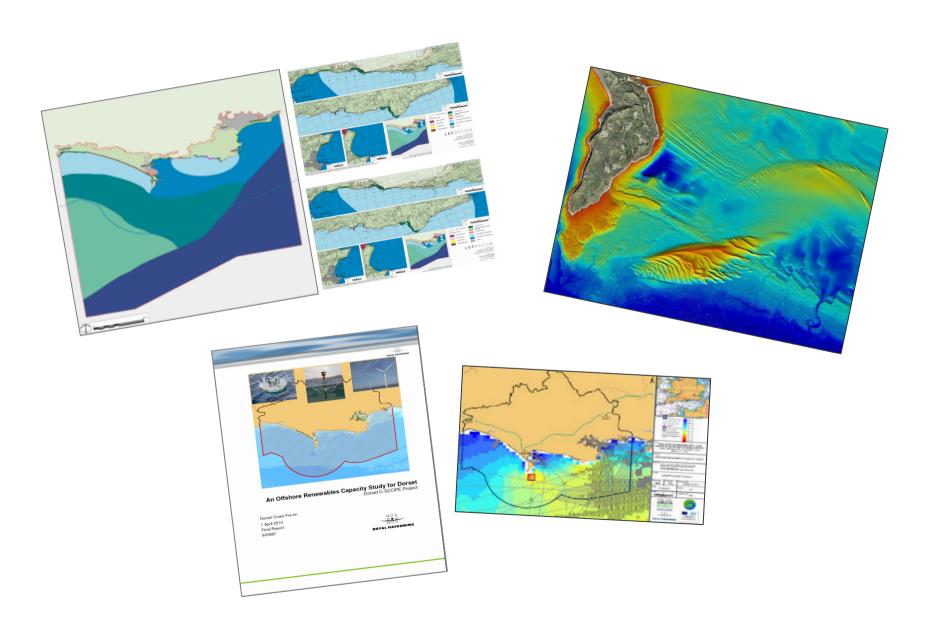
- Important to understand the spatial interactions which take place between sectors in the coastal and marine waters.
- Dorset used a sectoral interactions/compatability matrix to capture information on the nature, extent and intensity of interactions as well as their temporal nature.
- Interactions were later mapped using custom-built GIS tool to identify opportunities for co-location of activities
- Simpler matrix used to highlight coastal interactions within the Belgian MMA as part of the SWOT analysis for the baseline review study.

Printed are (inherited up blind)	(page	COMP. OF SHORE	9640094009	Constituting same constituted or had break, same protest.	Behavior benevativos adamento despetral, plan en pade:	Menor or between continued, van. 1984, petrol. petrol. pr. "Companymenton.	URDER SERVICES, MITMANDS, SANCES AN	limitar or reliacy on verygon	Director as some	Prosite .	incrines introhoms ay set usits both in logicular de went setworphy	Stations for appearing a few models of the models of the companies of the	stropers of gendelesses enterports	Desira	Sperimen or plementes	Desiries recited bedienlay on his assessed	Services of destigated at payment of withingerbookness	Over Schill Springs	Aches sees to take on the deposit of the
Noon Originaments		换	ŝ	-3-	-4-	5.5	C	Щ	Н	-	H	16	-	н	я		- 10	E	
Para namenana	ю	w	100	-	-8-	-	-	191	н	-	-	1	٠		н	-	-	+	H
Considering our de auraignets maint.	-	-	4		-	100	-		-	-	-	-			_		_	-	_
lends colo sined meson de tenar ou stida, school en	B	Ľ	-		н	5	9	9	П		-	16	*		9	*		9	-71
All gritted, given an garden before the better we know, such, but-		E	н		100		П		В	4	-	0		-	9				0
MANUFACTOR OF THE PARTY OF THE	М		0				-		в		. c	c	£	а	a	A	100	8	9
Diffusion van Isalais, contempris, stribais co realis		×	0	0	0	0			2		· Pr	F	p	-		*		P	н
restructed relations remarks and	- 54	Ū	c	-	6	0	6			-	-	10		10	a.	10		100	L N
Carp riseases are equipment	123	Ю	100	15	0	9		×				100			100				
Pyra salpings Linguistics of commissions against commiss	-	ш	Ш	-5-		9	-				-	31		111	<u> </u>	10	100	0	
mode tertospin on de untrapotentigra		١	×		e	а	,	я	c	*		c	٠	н	н	н		۹	H
U beholog brangenia sharil qualis unuli Reventepotamongag	и	М	п			13		10		m	. c			н	П	m	100	c	11
Uniform productions	П	a	c	6	6	0	2	-		н	H	м		0	n	п			10
Contractor	-			-	100	н		п		- 10	N.		-	-	-	-	-	×	-
Specificate on property state	а	181	ж	100		0		м		100		-	-	8	-	-			H
Series on her netherny state property	_	П		-	7	pr	n	п	n	10	11	10	N.	n	п			Ħ	
Secretaria na de seligio de mo	79	H	÷	0				H	H	-	-	-		ᆵ	=	-		=	**
restation to visit spotheodynamic	-				0	ū		_		11				к		н	0.00	*	-
Caratroninamento Nonumpro no socia successorio	123	2		P	A	16	100			16	1		я	•	100	100	-	-	H
of characteristical	п			×	-5	0	2	В	9	н			16		o	26	н	А	
Patiel				10-010		enge	whom .	ent :	-	die fece	workler, e	on you	No.						
water .	- are bet/s				1004, 4	- 0.0	BARRE	-	tar	to the the	-	me i	nhowi						
Orașelite / Cardini	100	7	en dia	and the same	aplane in two	on the	ien mild	_			industria o industria confect								
Comunidade				1000															



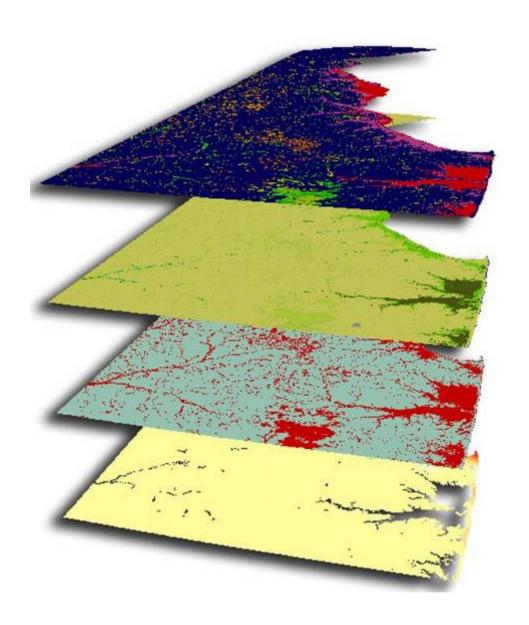


# **Additional Dorset studies**



## **Sustainability Appraisal**

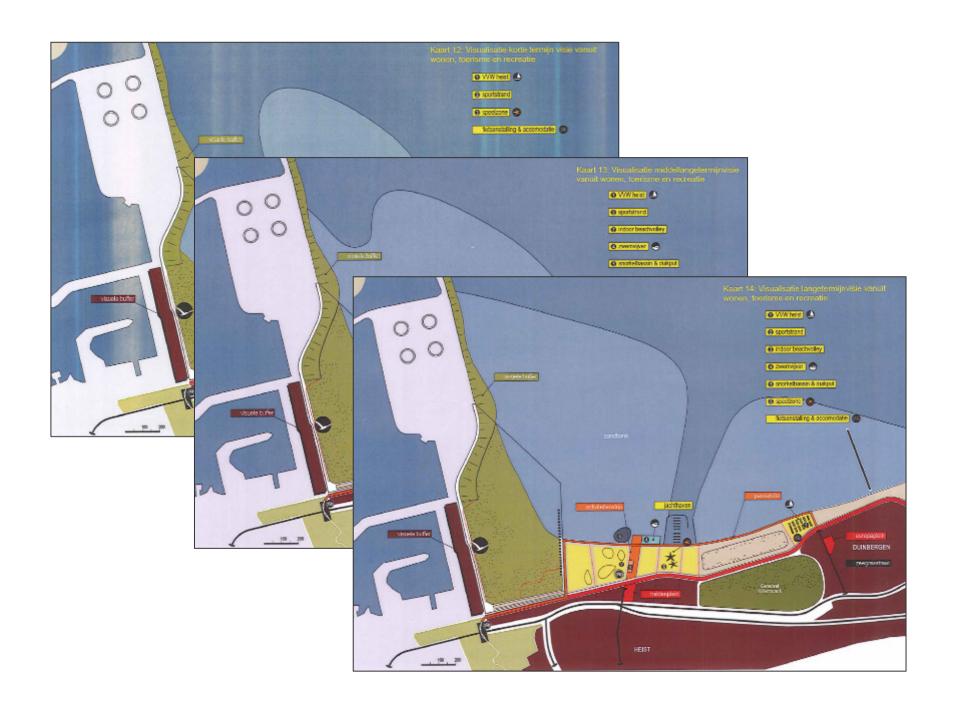




# Final coastal and marine plans

# **Heist MMA spatial visualisations**















# The C-SCOPE Marine Plan





## Protecting designated sites and delivering their associated management plans

#### Justification

Globally, the marine environment is under constant and increasing pressure from human activities. There is a growing body of evidence that Europe's marine habitats are declining significantly, and are continuing to deteriorate, threatened by multiple and cumulative pressures such as pollution from land-based activities, commercial fishing, mineral extraction, marine incidents, marine litter and coastal and offshore developments<sup>§</sup>.

Climate change is already starting to impact on the marine environment, causing changes to biological, chemical and physical processes. The main impacts include loss of inter-tidal habitat due to sea level rise, increased sea temperatures leading to changes in complex food-webs, and acidification of sea water - which is becoming a critical problem threatening a wide range of marine organisms, especially corals and molluscs. Additionally, these changes are likely to lower the resilience of ecosystems to the human pressures discussed above.

If we are to continue to benefit from the many goods and services that the sea provides, it is essential that marine biodiversity is protected and conserved. This is recognised in both European and UK legislation, most particularly the Habitats Directive and the Marine and Coastal Access Act (2009). The Habitats Directive requires member states to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those habitats and species of European importance. In addition to existing protection from SSSI, SPA and SAC sites with marine elements, the UK government has committed to have an "ecologically coherent network of marine protected areas (MPAs) substantially in place by the end of 2012"; this network will include SACs and MCZs.

Each individual designation has, or will have, its own management plan which amongst other criteria sets out the human activities that are acceptable within the site. To ensure the integrity of designated sites, and avoid substantial fines from the European Union, it is important that all potential developments and activities within the Marine Plan area not only ensure they are causing no adverse effects on those areas and species with statutory protection, but also comply with its management plan. Future activities and developments will also have to comply with existing EIA regulations, as set out in The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999.

The Marine Plan area also contains two important landscape and heritage designations with substantial coastal elements; Dorset AONB and the Dorset and East Devon Coast World Heritage Site, the latter of which extends to MLW. Both sites have statutory management plans which must also be considered by any potential development.

**HME 1**: Development or activities will respect the purpose of international and national environmental designations within the marine and coastal environment, and contribute to their enhancement where possible, in a manner that is consistent with terrestrial plans.

HME 2: Future development will take account of the management plans for European and national environmental designations, including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs), Marine Conservation Zones (MCZs), Areas of Outstanding Natural Beauty (AONB) and World Heritage Sites.

C-SCOPE Marine Plan

<sup>8</sup> Charting Progress 2, UK National Ecosystem Assessment, Composite Report on the Conservation Status of Habitat Types and Species as required under Article 17 of the Habitats Directive, 2009.

<sup>9</sup> http://www.oursouthwest.com/climate/scopingstudy.htm, Marine Climate Change Impacts Partnership 2010-2011 Annual Report Card

and Torbay cSAC Weymouth Swanage Portland South-East of Portland Bill Studland to Portland pSAC Purbeck Voluntary Marine Nature Reserve Special Areas of Conservation World Heritage Site Special Protection Area RAMSAR Site Site of Special Scientific Interest MCZ Reference Areas Wight Barfleur pSAC Recommended Marine Conservation Zone

Figure 34: HME 1 & HME 2 Designated coastal and marine sites

C-SCOPE Marine Spatial Plan

#### These policies comply with:

- European legislation Council Directive (92/43/EEC) on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive)
- EC Marine Strategy Framework Directive (2008/56/EC)
- Council of Europe European Landscape Convention (2000)
- Marine & Coastal Access Act (2009)
- Wildlife and Countryside Act (1981)
- The Conservation of Habitats and Species Regulations (2010)
- The Dorset and East Devon Coast World Heritage Site Management Plan (2009-2014)
- Dorset Area of Outstanding Natural Beauty Management Plan (2009-2014)
- Dorset Coast Strategy (2011-2021)

## Protecting important species and habitats not covered by European or National legislation

#### Justification

European and UK legislation makes provision for protecting a wide range of species and habitats, and delivery mechanisms include the designation of SACs, SPAs SSSIs, and MCZs. However, these provisions cover priority species and habitats and do not necessarily protect wider ecosystem function outside designated areas.

Marine ecosystems are complex and there are still many interactions which are not fully understood. The regulating, cultural, supporting and provisioning services that these ecosystems provide are also strongly interlinked; but the relationship between biodiversity processes and the provision of services remains un-quantified. By adopting the precautionary principle and ensuring developments and activities have regard to adverse affects on all habitats and species, this policy will help to sustain and potentially increase ecosystem services within the Marine Plan area. This policy seeks to ensure ecosystem function is considered in the context of any existing permitting processes, and the hierarchy of significance for protected sites is respected. It is therefore envisaged that there will not be an additional process burden on developers.

**HME 3:** Developments or activities should have regard to the potential adverse effect either directly, indirectly or cumulatively on habitats or species which are not designated under European or National legislation but which warrant protection to maintain wider ecosystem function, or as providers of marine goods and services.

#### This policy complies with:

- European legislation Council Directive (92/43/EEC) on the Conservation of natural habitats and of wild fauna and flora (Habitats Directive)
- EC Marine Strategy Framework Directive (2008/56/EC)
- Marine & Coastal Access Act (2009)
- Wildlife and Countryside Act (1981)
- National Planning Policy Framework (2012)
- Dorset Local Biodiversity Action Plan (2003)
- The Dorset and East Devon Coast World Heritage Site Management Plan (2009-2014)
- Dorset Area of Outstanding Natural Beauty Management Plan (2009-2014)
- Dorset Coast Strategy (2011 2021)



C-SCOPE Marine Plan 73



## **Objective Setting**

- © Clear, transparent objectives, which are endorsed by its stakeholders, are an essential building block for a marine plan.
- © C-SCOPE marine plans were stakeholder led, but marine planners will need to present a first draft to stakeholders to give them a tangible starting point.
- Objective setting should be an iterative process
- They can be sectoral, cross-cutting or a mixture of both, but should ultimately help to deliver the stated aims.















## Scale and resolution

- © Critical factors in all aspects of marine planning, from data gathering, devising appropriate stakeholder participation methods, spatial analysis, and the final marine plan form
- Small scale of Belgian MMA enabled detailed analysis and the involvement of all stakeholders, leading to a vision for the area which included re-location of the surf club and the creation of new recreational zones.
- In Dorset, this level of detail could not be achieved through the marine plan, which focused on more high-level, sustainable development objectives.
- To address the scale of different activities, the Dorset marine plan incorporated existing recreational beach plans into its policy and GIS tool. Tool also allows for data to be interrogated at different scales.
- In line with existing terrestrial planning systems, the creation of nested plans at different scales should be considered when planning at a national level.







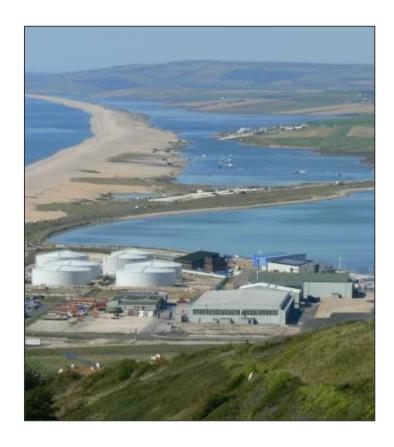






## **Boundaries**

- Boundaries are necessary to define the marine planning area and focus planning activity.
- This can be a challenging task; at what point does the land stop influencing the marine environment and conversely, how far inland do marine activities have an influence?
- Drawing lines at sea is particularly difficult as unlike on land there are fewer natural barriers to movement of water, sediments and species.
- Political boundaries may make planning simpler logistically, but taking an ecosystem approach will not fit within these boundaries.









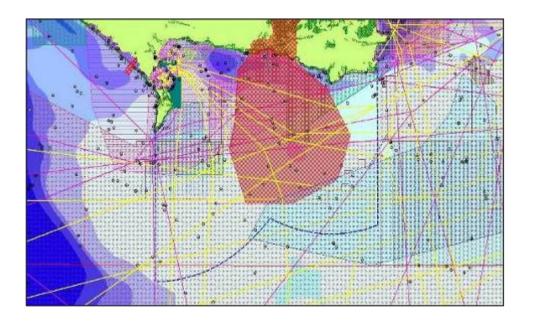






## **Data collection and management**

- The aims, scale and boundaries of the plan will determine the type and resolution of data it is necessary to collect
- Ideally these should all be determined before collection begins.
- The Dorset partners made the mistake of applying a 'scattergun' approach which led to unnecessary data being collected, taking additional time and resources.















## **Data and knowledge gaps**

- Data can be hard to find, and the data that are available are not always up to date.
- Data are often incompatible with other data
- Gathering data in the marine environment is difficult and costly, and consequently many gaps exist; habitat data is often patchy, of low resolution,
- Socio-economic data are plentiful, but in both countries it proved difficult to find them at an appropriate resolution, and also to separate marine and coastal components from the terrestrial data.
- This made it almost impossible to place a true value on marine industry and recreation.
- Sknowledge gaps also necessitate the use of 'best available data', and some stakeholders questioned this.















## **Sensitivity mapping and cumulative effect**

- Sensitivity mapping of the marine environment currently has significant limitations, including confidence in habitat maps (visible differences between resolutions of data, and survey and modelled data)
- With current technology and methods, even high resolution data in complex seabed areas cannot be given total confidence; boundaries between sensitive and non-sensitive biotopes being of particular concern
- This makes decisions on cumulative effect in a planning context difficult
- With current levels of knowledge, future developments will still require their own seabed surveys through the EIA process.













## **Other issues**

- Identifying future needs and issues is imprecise and subject to economic fluctuations, unexpected global events, technology developments and political change. It is also one of the primary reasons that marine plans should be regularly reviewed.
- Sectoral marine planning has always relied on constraints mapping to identify practicable exploitable resources, such as wind and tidal energy, aggregates and mariculture.
- Inputs, particularly hard and soft constraints, contain a degree of subjectivity which combined with the scale of the assessment will affect whether a resource is considered feasible.

















And as this will be my last ever C-SCOPE presentation, I'd just like to say a big cheers to you all. It's been an incredible three years.

















# With special thanks to our funding partners

### and all our coastal stakeholders













