Marine Spatial Planning

Spatial planning is now widely supported as an important component of land-use planning in the UK and elsewhere in Europe. In essence it is a plan-led framework that enables integrated, forward-looking, consistent decision-making in relation to policies and practices across regional space. The 'plan-led' system was first introduced in the UK through the Planning and Compensation Act 1991, and replaced the existing 'project-led' approach which militated against an integrated approach to development and land-use. The plan-led approach enabled a strategic approach to be taken which provided greater consistency and confidence in decision-making, and allowed for a 'spatial vision' to be developed for a particular area.

The plan-led approach now forms the basis of terrestrial planning but, as yet, there is no comparable system for the planning and management of the marine environment. However, there is growing interest in the possibility of using spatial planning to contribute towards delivery of sustainable development objectives in the marine environment and to manage the competing, and often conflicting, demands upon the sea. There is clearly a case for spatial planning in the marine environment, but due to the three-dimensional nature of the environment and the potential for uses to be superimposed spatially upon one another, there are additional complexities not encountered on land. Consequently, spatial planning frameworks are poorly developed at all levels for the marine environment.

This briefing traces the development and interpretation of spatial planning at various levels and outlines its application to the marine environment. The key drivers for marine spatial planning are identified, along with the potential benefits the process could bring. The briefing summarises the developing consensus on key issues and identifies current and future work needed to develop the concept of marine spatial planning.

WHAT IS SPATIAL PLANNING?

Spatial Planning at the European Level

Development of spatial planning at the European level can be traced back to the 1984 Council of Europe Torremolinos Charter – the *European Regional / Spatial Planning Charter* – which sought balanced socio-economic development of the regions within Europe, improvement of the quality of life, responsible management of natural resources and protection of the environment, and rational land use.

Spatial planning has emerged strongly as a theme at the European level since the late 1980's, with the establishment of the Committee on Spatial Development in 1991 and, most notably, through the adoption of the *European Spatial Development Perspective* (ESDP) and its spatial policy guidelines at the Potsdam Council in May 1999. The ESDP is defined as "an integrated, multi-sectoral and indicative strategy for the spatial development of the Union" (box 1).

Whilst ESDP does not provide for any new responsibilities at Community level (the EU has no legal competence to do spatial planning as such), it is intended to serve as an indicative policy framework for the Member States, their regions and local authorities in their own respective spheres of responsibility.[i] The ESDP also has a critical role in influencing the current and future disposition of Structural Funds as well as Interreg schemes.

Box 1   European interpretation of spatial planning

> Spatial planning refers to the methods used largely by the public sector to influence the future distribution of activities in space. It is undertaken with the aims of creating a more rational territorial organisation of land uses and the linkages between them, to balance demands for development with the need to protect the environment, and to achieve social and economic objectives. Spatial planning embraces measures to co-ordinate the spatial impacts of other sector policies, to achieve a more even distribution of economic development between regions than would otherwise be created by market forces, and to regulate the conversion of land and property uses.
>
> European Commission (1997) Compendium of European Spatial Planning Perspectives, p.24.

Spatial Planning in the UK

Spatial planning has been adopted progressively across the EU. In the UK the concept of spatial planning underpins the Royal Town Planning Institute's (RTPI's) 2001 statement *A New Vision for Planning*. The RTPI identified spatial planning as one of the core themes of its programme and proposed that it involved twin activities: *"The management of the competing uses for space; and the making of places that are valued and have identity."*[ii] The RTPI's vision goes on to explain that spatial planning is as much concerned with the spatial requirements for, and impacts of, policies – even where these do not require a 'land-use' plan – as it is with land-use zonings.

This suggests that spatial planning is wider than traditional land-use planning and provides a strategic framework to guide future development and policy interventions, addressing issues beyond the sphere of land-use planning control. For example, in a terrestrial context, it may include policy development for the spatial dimensions of transport and communications, social cohesion, economic competitiveness, environmental protection and the management of natural and cultural resources.[iii]

The Wales Spatial Plan

The Welsh Assembly Government (WAG) is one of the leading protagonists of spatial planning in the UK, with the publication of the Wales Spatial Plan (WSP) *People, Places, Futures*[iv] in November 2004. The stated role of the plan is:

- To ensure WAG and its partners develop policy in ways which take account of the different challenges and opportunities in different parts of Wales; and
- To provide a strategic context for local planning authority plan-making.

The plan translates WAG's policies into visions of how each part of Wales will develop economically, socially and environmentally over the next 20 years, and sets out the issues and opportunities across different sectors.

The WSP recognises the need to co-operate across traditional boundaries and beyond compartmentalised thinking – whether sectoral or geographic. In essence this means that decisions are taken with regard to their impact beyond the immediate sectoral or administrative boundaries and that there is co-ordination of investment and services through understanding the roles and interactions between places.

It is intended to be a useful tool and activity for reconciling the different policy and activity strands which impact upon the different geographic areas of Wales.

The plan also reflects the commitment of WAG to place sustainable development at the core of all its activities. As such, the WSP will be mainstreamed in the central policy processes of WAG and forms one of the high-level strategic guidance 'building-blocks' alongside *Wales: A Better Country* and the *Sustainable Development Scheme* and *Action Plan*.

Box 2   Definition of spatial planning in the WSP

> Spatial planning is the consideration of what can and should happen where. It investigates the interaction of different policies and practice across regional space, and sets the role of places in a wider context. It goes well beyond 'traditional' land-use planning and sets out a strategic framework to guide future development and policy interventions, whether or not these relate to formal land-use planning control.
>
> WAG (2002) People, Places, Futures – The Wales Spatial Plan. Welsh Assembly Government, p.4.

WHAT IS MARINE SPATIAL PLANNING?

There is, as yet, no statutory definition of 'marine spatial plan', or even 'spatial planning' in its broader sense. Indeed there is a lack of consensus on what elements should be included in a marine spatial plan with numerous, sometimes vague, definitions of the concept being offered. Some of these are closely aligned with the widely accepted interpretation of Integrated Coastal Zone Management (ICZM), and there are clearly strong links between the two.[v]

Defra has suggested that marine spatial planning can be viewed as *"a strategic plan for regulating, managing and protecting the marine environment that addresses the multiple, cumulative and potentially conflicting uses of the sea."*[vi] The management of on-going activities is intrinsic to the approach, which seeks to rationalise sectoral decision-making regimes and provide for greater consistency and integration of sectoral interests in sea use planning and management decisions.[vii]

The processes involved in the production of the plan will arguably be as important as the tangible output (i.e. the plan itself). Indeed it has been suggested that marine spatial planning does not necessarily have to lead to the production

of a single marine spatial plan, but that it could be pursued more as a discipline that may result in several plans or polices which are more integrated and their spatial implications better co-ordinated and understood.[viii] Any approach would demand an adaptive strategy to forward planning and management due to the dynamic nature of the marine environment and to accommodate developments in marine science and understanding.

DRIVERS FOR MARINE SPATIAL PLANNING

There is increasing recognition of the need for marine spatial planning at the international, national and regional level. The UK Government has made a commitment to explore marine spatial planning at both a national and regional sea level. The main drivers are:

- The 2002 Bergen Declaration agreed at the 5th North Sea Conference of Ministers, which made a commitment to strengthen co-operation in the planning and management of the North Sea through spatial planning. The Declaration also invited the OSPAR Commission to investigate the possibilities for further international co-operation in developing marine spatial planning as a planning and management tool.
- Following the consequent agreement of OSPAR 2002 to include spatial planning in the work programme of its Biodiversity Committee (BDC), a workshop was held on the topic in January 2004. Numerous conclusions were agreed, which could be considered as building blocks for an OSPAR work programme on 'spatial planning in the maritime area'.[ix]
- EU Recommendation on ICZM[x] (May 2002), which the UK Government is committed to implement. The UK Stocktake of current practice of ICZM in the UK was published in April 2004, and notes that ICZM plans or strategies could form *"a vital link between any system of marine spatial planning and the land-use planning system as well as other relevant planning mechanisms such as…River Basin Management Plans required under the EU Water Framework Directive."*[xi]
- The Review of Marine Nature Conservation's (RMNC) Irish Sea Pilot Study, which recommended that a statutory process of marine spatial planning involving national planning guidelines, strategic plans at the Regional Sea scale, and more detailed local plans should be introduced.
- Recent major audits of Government departments have explored how co-ordination between the different legislative and regulatory bodies might be improved. The Government is currently reviewing the legislation relating to development in coastal and marine waters, with a view to streamlining the regulatory system in England and Wales. It is widely anticipated that the report will allude to marine spatial planning.[xii]
- Commitments made by the UK Government in *Safeguarding Our Seas*[xiii] (the first Marine Stewardship Report) and *Seas of Change*[xiv] to adopt an ecosystem-based approach to marine management to better integrate marine protection objectives with sustainable social and economic goals (box 3).
- Publication of the Wales Spatial Plan for the terrestrial area of Wales, and increasing interest in extending this to cover the Welsh territorial sea.
- Increased development pressures on the marine environment and potential for multiple use conflicts, for example arising as a result of the current rapid expansion of the offshore wind industry; fishing; dredging, and shipping activities; and meeting international and European commitments to biodiversity conservation.

Box 3   Recent commitments and recommendations to explore and/or develop marine spatial planning

The Bergen Declaration[xv]
"The cumulative effects of the uses of the sea and seabed on the ecosystems and their biodiversity are of increasing concern to the North Sea States, in particular in relation to the conservation of the Natura 2000 network and other areas of ecological significance. In order to prevent and resolve the potential problems created by such conflicts, the Ministers agree that the strengthening of co-operation in the spatial planning processes of the North Sea States related to the marine environment will be required." S.XI, §76

EU COM2002(539)[xvi]
"…the Commission will address the integration of nature protection measures and the various sectoral activities impacting on the marine environment including spatial planning."

Irish Sea Pilot[xvii]
"A statutory process of marine spatial planning involving national planning guidelines, strategic plans at the Regional Sea scale, and more detailed local plans should be introduced." §11, p.5

Review of Marine Nature Conservation[xviii]
"Government should undertake a trial of marine spatial planning at the Regional Sea scale to determine the suitability of implementing such an approach across all UK waters." Key recommendation 7

"A marine spatial planning trial should develop and build upon the experiences gained through the Irish Sea Pilot. On the basis of the Pilot's work, consideration should be given to undertaking the trial in the Irish Sea." Supporting recommendation 7.1, p.34

Safeguarding Our Seas[xix]
"…we will explore the role of spatial planning for the marine environment and provide a focal point to build on existing seabed mapping for coastal waters around the UK." p.3

"To become better integrated we will…work through OSPAR to explore spatial planning for the marine environment at the regional level." p.8

"Better integration and more effective management of conflicting pressures and demands placed on the marine environment is a prerequisite for conservation. This is why we need to strengthen co-operation in spatial planning processes for the marine environment." §1.23, p.8

"As agreed at the 5th North Sea Conference, we will work through OSPAR to strengthen co-operation between Contracting Parties to prevent and resolve potential conflicts by developing spatial planning processes related to the marine environment. Within this context, OSPAR will establish present uses of the marine environment and investigate the possibilities for further international co-operation in planning and managing marine activities through spatial planning." §6.38, p.53

Seas of Change[xx]
"The Government envisages that development of an operational framework for ecosystem-based management will include …incorporating mechanisms for decision-making, e.g. through spatial planning…" §2.12, p.8

Wales Spatial Plan[xxi]
"We will support the development of integrated spatial strategies for our marine and inland water assets, including an Integrated Coastal Management Plan to provide a cohesive framework for Wales' coast and sea area." p.28

WHY IS MARINE SPATIAL PLANNING NEEDED?

In addition to upholding commitments made in binding declarations, there are a number of important reasons why the UK Government and the devolved Administrations should pursue marine spatial planning:

- There is increasing development pressure on the marine environment and competing interests for the use and exploitation of finite resources (including space).
- Current management of the marine environment is complex and fragmented. There is no holistic plan-led approach, comparable to that on land, that provides a

strategic context for sustainable development in a particular sea area.

- Development below low-water mark (LWM) is regulated on a sectoral approach, where individual developments and activities are considered through different licensing / consenting regimes.[xxii]

- There is little or no interaction between the various consenting authorities. It has been argued that this has led to confusion amongst marine developers and users, and that industry has been disadvantaged due to the complex and expensive consenting regimes.[xxiii]

- Information, understanding and other essential tools for planning at sea are undeveloped.[xxiv] In particular, there is no clear understanding of the cumulative, or in-combination, effects of different projects and policies upon the marine environment or the interactions between different users and developments.

- The current sectoral approach to managing the marine environment is contradictory to the ecosystem approach, which requires a holistic and integrated view rather than narrow sector-based decision-making.

- OSPAR has adopted a recommendation (2003/3) to develop an ecologically coherent network of marine protected areas (MPAs) in the OSPAR maritime area by 2010, and the EC is committed to the establishment of Natura 2000 protected sites throughout European marine waters. To ensure the integrity of such a network of protected sites, they need to be set within the context of spatial planning of the whole maritime area, so that they do not become insular and isolated.[xxv]

BENEFITS OF MARINE SPATIAL PLANNING

The Irish Sea Pilot proposed that marine spatial planning *"would deliver a co-ordinated, holistic, integrated, pro-active, effective, enforced, forward-looking, plan-led, targeted approach to the use and management of the sea."[xxvi]* Several other reports have also identified the potential benefits of marine spatial planning, which could:

- Provide a mechanism for looking at the 'bigger picture' and managing multiple resource use, where compatible, within the same sea area.

- Provide a spatial context to decisions on resource allocation, which would help to integrate the interests of different stakeholders and enable strategic conflict resolution at a regional, as opposed to project, level.[xxvii]

- Improve confidence in regulatory processes and decision-making and increase efficiency, by helping to reduce complexity and duplication of effort inherent in sectoral management.

- Enable forward planning to inform the type of plans and policies that would be acceptable for a particular sea area, in place of the current reactive and *ad hoc* system of regulation.

- Improve information collection, processing and dissemination, as well as strengthening understanding of cumulative and in-combination effects of projects and policies through Strategic Environmental Assessment (SEA) of all uses at the ecosystem level.

- Increase stakeholder participation and improve transparency and consistency of decision-making.

- Help deliver on international, European and regional commitments to conserve biodiversity, and contribute to UK sustainability objectives outlined in the Marine Stewardship Report.

ELEMENTS OF MARINE SPATIAL PLANNING

It is widely accepted that marine spatial planning would be based on the ecosystem approach, which is the integrated management of human activities based on knowledge of ecosystem dynamics to achieve sustainable use of ecosystem goods and services, and maintenance of ecosystem integrity.[xxviii] It is also generally agreed that spatial planning would need to occur on a regional sea basis, as is currently being tested by the Spatial Planning Pilot project in the Irish Sea (see below).

It is anticipated that the plan would set out a vision for a particular marine area, identify potential sites for appropriate development and uses, those in which development or activities should be managed or restricted, areas where important assets need to be protected, and where there should be a presumption against development or uses.[xxix] A review of the relevant literature suggests that the key elements on which to base a marine spatial plan could include:

- Access to marine and coastal information for decision-support purposes;

- Identification of the shared values of the region, including environmental, economic, social and cultural (heritage) values;

- Current uses, activities and pressures for change, including future trends;

- SEA for the marine area as a whole;

- Modelling of physical and biological processes and their interactions;

- Conflict resolution tools and cumulative impact assessment;

- Streamlined mechanism for administering the consents process;

- Identification of administrative and institutional arrangements and responsibilities;

- Mechanism for stakeholder involvement;

- Monitoring programmes and methods for assessing performance.

It is clear that many of the elements that could underpin a system of marine spatial planning already exist. For example, the Department of Trade and Industry (DTI) have, since 1999, been undertaking SEA of the UK Continental Shelf to inform the oil and gas licensing procedure. Recently, the SEA process has been merged with that for marine renewables (second round sites for offshore wind were identified using SEA techniques), which has resulted in better consideration of environmental issues from an earlier stage. However, these SEAs are largely sectoral and do not assess cumulative or in-combination effects of the total human activities in any given area of sea. Such effects would be addressed by cross-sectoral policies.

CURRENT AND FUTURE WORK

Following the work undertaken for the Irish Sea Pilot as part of the RMNC (see box 4 for key recommendations), Defra has commissioned a study to research options for developing, implementing and managing marine spatial planning in England and Wales. The project, which is due for completion in late autumn 2005, will investigate how marine spatial planning could contribute to marine sustainable development, and how it could accommodate new and existing sustainable human uses while also providing better protection for environmental and heritage resources.

The study will include a pilot project in the form of a simulation at an 'appropriate scale' in the UK half of the Irish Sea to determine the feasibility and practicality of developing and applying a marine spatial plan.

In order to progress the concept of marine spatial planning and take it forward towards implementation, it is important that the study and subsequent future work address a number of practical considerations, including:

- Availability and quality of data for planning purposes;
- Role of stakeholders in the planning process, including methods for engaging their co-operation;
- Type of development, plan, policy and activity covered and geographic extent of coverage;
- Development of appropriate tools to measure cumulative impacts and address conflict resolution;
- Interactions with other plans in the coastal zone, including ICZM plans and River Basin Management Plans (RBMPs), and how the marine spatial plan would mesh with the land use planning regime;
- Responsibilities for developing, implementing, monitoring and enforcing a marine spatial plan;
- Consideration of whether marine spatial planning should be implemented on a statutory or non-statutory basis;
- Consenting, enforcement and monitoring responsibilities under any new administrative / regulatory regime.

Box 4   Key recommendations of the Irish Sea Pilot

- Marine spatial planning should be introduced as a statutory process embracing both plan making and regulatory controls. It should require all competent authorities to apply the precautionary principle, and also the principle that, where there is a conflict of interest, the conservation (and restoration) of the sea's biodiversity and natural physical and ecological systems should prevail.
- Marine spatial planning should cover all forms of physical and spatial development, changes of use and all ongoing or proposed activities, seaward out to 200n miles within the UK's marine competency.
- Marine spatial planning should operate at the national and regional sea levels, and where appropriate also at the more detailed local level; furthermore jurisdictional competency in the intertidal zone should be rationalised to avoid duplication.

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