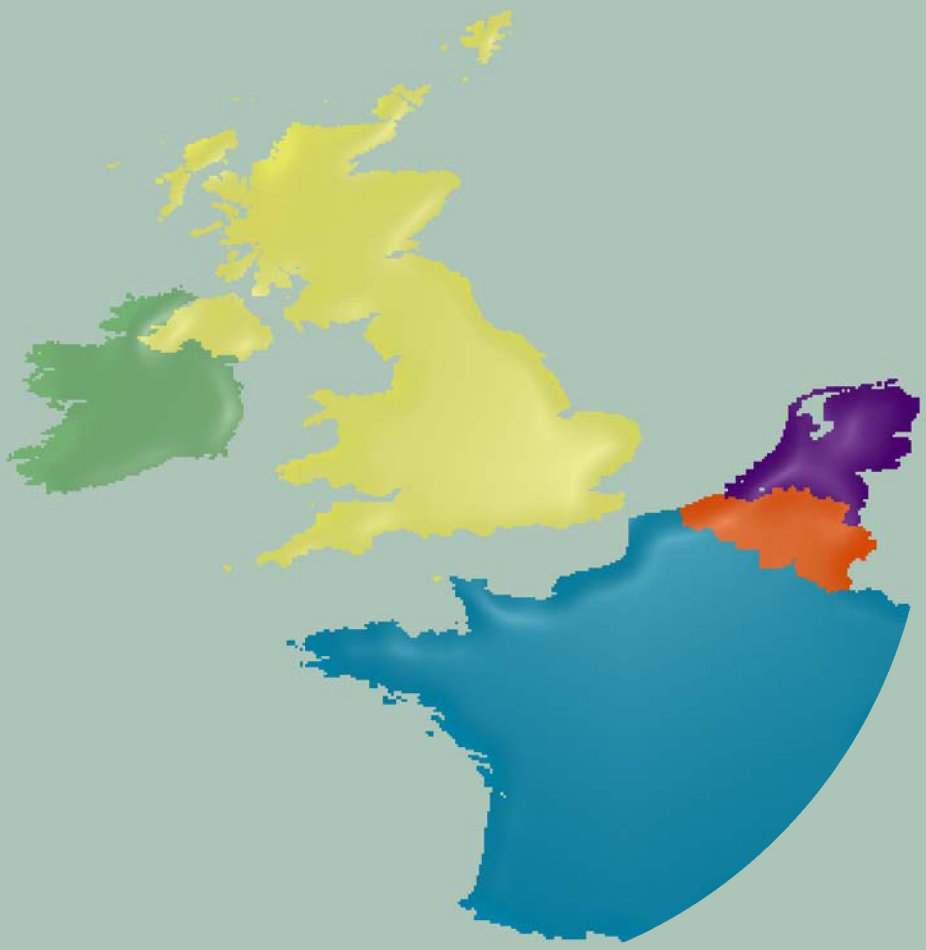
The Point of COREPOINT

Improving Capacity for Integrated Coastal Zone Management in North West Europe



Rhoda Ballinger, Valerie Cummins, Anne Marie O'Hagan & Manuelle Philippe (eds.)

April 2008

The Point of COREPOINT

April 2008

Funded under the INTERREG IIIB programme, the Coastal Research and Policy Integration project (COREPOINT) was a 4.2m Euro project with 12 Partners from Ireland, UK, France, Netherlands and Belgium. The project ran from November 2004 until April 2008 and was led by the Coastal & Marine Resources Centre in University College Cork. The Project utilised the expertise within the project consortium to attempt to progress the development and implementation of Integrated Coastal Zone Management (ICZM) solutions across the North West Europe (NWE) region.

For further information on COREPOINT and the full range of outputs from the project please see http://corepoint.ucc.ie

APPENDICES

FIGURES

TABLES

ABBREVIATIONS

AGMACS	ADVISORY GROUP ON MARINE AND COASTAL STRATEGY (UK)
DEFRA	DEPARTMENT OF ENVIRONMENT, FOOD AND RURAL AFFAIRS (UK)
DOENI	DEPARTMENT OF THE ENVIRONMENT NORTHERN IRELAND
ECN	EXPERT COUPLET NODE(S)
EEA	EUROPEAN ENVIRONMENT AGENCY
EEZ	EXCLUSIVE ECONOMIC ZONE
ESDP	EUROPEAN SPATIAL DEVELOPMENT PERSPECTIVE
ESPON	EUROPEAN SPATIAL PLANNING OBSERVATION NETWORK
GESAMP	GROUP OF EXPERTS ON THE SCIENTIFIC ASPECTS OF MARINE ENVIRONMENTAL PROTECTION
GIS	GEOGRAPHICAL INFORMATION SYSTEMS
GPS	GLOBAL POSITIONING SYSTEM
GRDP	GROSS REGIONAL DOMESTIC PRODUCT
HA	HECTARE
ICT	INFORMATION AND COMMUNICATION TECHNOLOGIES
ICZM	INTEGRATED COASTAL ZONE MANAGEMENT
LIS	LOCAL INFORMATION SYSTEM
LOSC	LAW OF THE SEA CONVENTION
MSP	MARINE SPATIAL PLANNING
NGO	NON-GOVERNMENTAL ORGANISATION
OJ	OFFICIAL JOURNAL
OSPAR	CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT OF THE NORTH-EAST ATLANTIC
SAC	SPECIAL AREA OF CONSERVATION
SIAGM	SYNDICAT INTERCOMMUNAL D'AMÉMAGEMENT DU GOLFE DU MORBIHAN
SMVM	SCHÉMA DE MISE EN VALEUR DE LA MER
SPA	SPECIAL PROTECTION AREA
SWOT	STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS
UK	UNITED KINGDOM
UNESCO	UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANISATION
US	UNITED STATES
VLIZ	VLAAMS INSTITUUT VOOR DE ZEE
WG-ID	WORKING GROUP ON INDICATORS AND DATA
WSSD	WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT

RECOMMENDED CITATION

COREPOINT: BALLINGER, R., CUMMINS, V., O'HAGAN, A.M. AND PHILIPPE, M. 2008. THE POINT OF COREPOINT: IMPROVING CAPACITY FOR INTEGRATED COASTAL ZONE MANAGEMENT IN NORTH WEST EUROPE, COREPOINT REPORT, 81 PP.

ACKNOWLEDGEMENTS

THE EDITORS OF THIS DOCUMENT WOULD LIKE TO THANK ALL THE PARTNERS FROM THE COREPOINT PROJECT FOR THEIR IDEAS, COMMENTS AND INPUT INTO THIS DISCUSSION DOCUMENT. IN ADDITION, THE EDITORS ACKNOWLEDGE THE HELP AND WORK OF:

- JEREMY GAULT (CMRC) FOR HIS CONTRIBUTION TO COLLATING AND FORMATTING THE DOCUMENT;
- JEREMY ALDEN (CARDIFF UNIVERSITY) FOR HIS HELP WITH AND CONTRIBUTION TO THE SPATIAL PLANNING SECTION;
- VICKI O'DONNELL (CMRC) AND ALUN ROGERS (CARDIFF UNIVERSITY) FOR THEIR WORK ON THE DESIGN AND LAYOUT OF THE DOCUMENT.

[executive summary]

Executive summary

The COREPOINT[1] Discussion Document on the Status of ICZM in North West Europe is one of the strategic outputs of the COREPOINT project, a partnership of research centres, local authorities and coastal networks from Belgium, France, Ireland, the Netherlands and the United Kingdom. The project (2004 to 2008), which was funded under the INTERREG IIIB programme, sought to strengthen links between researchers and policy makers to help orientate relevant research towards problem-solving at the local level within the coastal zone. Relationships between local authorities and research groups formed the basis of the operation of COREPOINT Expert Couplet Nodes (ECN) at nine study sites across North West Europe.

After an introductory section describing the main characteristics of the coast of North West Europe and the status of ICZM, including the governance context for its development within the region, the document presents some of the key outcomes from the COREPOINT ICZM capacity building initiatives. The discussion highlights four key ways in which capacity can be strengthened and research-policy integration can be achieved, namely:

- local solutions for managing coastal information (through Local Information Systems);
- the Research-Policy partnership approach (Expert Couplet Nodes);
- COREPOINT training schools; and
- assessing progress in integrated management (Progress Indicators).

Recommendations evolving from the COREPOINT experience are presented which build on the innovative aspects of capacity building activities undertaken in the COREPOINT project. Some recommendations support existing approaches to ICZM, which have demonstrated clear 'added value' as part of the project. These include:

- continuing to advocate the use of ICZM as a means of bridging the strong land/sea divide. In particular, the North West Europe INTERREG Secretariat is encouraged to maintain ICZM as a programme priority to facilitate efforts towards the sustainable development of the region's coast;
- promoting the wider use of the ICZM Progress Indicator through wide stakeholder involvement and repeated assessment. It is suggested that indicators become adapted to the objectives of the relevant local level; and
- continued support for communication, coordination and collaboration between planning and ICZM. It is suggested that appropriate resourcing and guidance at the North West Europe INTERREG, national and sub-national levels is required.

Other recommendations advocate new approaches or material for consolidating capacity building for ICZM in North West Europe. These include promoting, demonstrating and developing:

- the COREPOINT Expert Couplet Node model to build capacity for bridging the gap between coastal researchers and policy makers in North West Europe;
- the Local Information System as a key tool for ICZM and use the CoastWeb portal as a platform for its development;
- the COREPOINT procedure for assessing local adherence to the EC ICZM principles and for standardising evaluation of the whole 'principle package' at local levels; and
- the COREPOINT ICZM professional training model. The use of the COREPOINT training material on the COREPOINT website for capacity building for ICZM within local authorities is recommended as well as extending the COREPOINT ICZM school approached through 'training of trainers'.

[1] Coastal Research and Policy Integration

[ch 1
introduction to the
discussion document]

Chapter one

Introduction to the Discussion Document

1.1 INTRODUCTION TO INTEGRATED COASTAL ZONE MANAGEMENT IN NORTH WEST EUROPE

The coastlines of North West Europe are threatened by human activities and natural environmental change. For example, intensive exploitation of coastal resources and increasing coastal development has resulted in the degradation of coastal habitats and pollution. This degradation has negative environmental, social and economic consequences. Concerns for such problems are shared by North West European coastal countries.

ICZM promotes the sustainable management of coastal zones through co-operation and integrated planning, involving all the relevant players at the appropriate geographic level.

In 1996, as part of its Environmental policy, the European Union launched the Demonstration Programme on Integrated Coastal Zone Management (ICZM). One of the outcomes of this programme was a set of recommendations on a European Strategy for ICZM (Recommendation of the European Parliament and Council concerning the implementation of ICZM in Europe; 2002/413/EC). Subsequently, there have been varying levels of engagement with this strategy across North West Europe as a region.

To ensure a balanced approach to regional development and improved social and economic cohesion there is a need to bring North West Europe to a common level of implementation of ICZM. Despite the momentum generated by the EC Recommendation, a review conducted in 2007 showed that there remains a high degree of uncertainty among Member States about how to proceed with the implementation process, even though a high degree of theoretical work, good practice guidance and practical knowledge has been accumulated across Europe over the last decade (Rupprecht Consult, 2006).

1.2 THE INTERREG PROGRAMME FOR NORTH WEST EUROPE & ICZM

The INTERREG programme is a European initiative financed under the European Regional Development Fund. The aim of the programme is to stimulate inter-regional cooperation in the European Union and to promote the development of the European territories. INTERREG facilitates the implementation of cooperation projects to enable exchange of experiences and knowledge, and improved economic and social sustainable development. These projects associate a large diversity of partners within public and private research, private companies, NGOs, public bodies and charities. INTERREG projects provide opportunities to build cross-border (A), trans-national (B), or inter-regional (C) initiatives supported by the European Union. The COREPOINT project was funded under the INTERREG IIIB programme, which is targeted towards trans-national co-operation in North West Europe.

1.3 OVERALL AIMS OF THE COREPOINT PROJECT

The principle goal of the COREPOINT project is to establish North West Europe as an Internationally Recognised Region of Excellence in Coastal Management.

Trans-national co-operation was used as a conduit to meet the following project objectives:

- to build European and local capacity to implement integrated coastal management programmes;
- to provide concrete solutions for current problems in the North West Europe region using current best practice approaches and to identify models for sustaining ICZM initiatives;
- to promote social and political responsibility for the coastal environment;
- to influence national spatial policy development in response to the EC Recommendation on ICZM; and
- to develop an integrated coastal information management system for North West Europe.

1.4 AIMS OF THE COREPOINT DISCUSSION DOCUMENT

The COREPOINT project was organised according to five work packages to meet the above objectives, which engaged the partners in trans-national, collaborative activities. Multiple outputs arose from each of the work packages over the course of the project, including Geographical Information Systems (GIS) for conflict mapping, demonstrations of Virtual Reality approaches to coastal planning and the CoastWeb portal for project product dissemination. See Appendix I for a complete list of the outcomes and outputs.

As the project evolved between 2004 and 2008, it became clear that the key impact of COREPOINT could best be described according to a number of innovative and important capacity building initiatives. As a result, this Discussion Document focuses specifically on increasing awareness targeted towards the COREPOINT objective of building capacity to implement ICZM.

Specific aims of the Discussion Document are to:

- reflect on the status of ICZM and spatial planning in North West Europe in the context of coastal governance (Chapters 2 and 3);
- promote awareness of the COREPOINT approaches to capacity building to address the key issues that hinder progress on ICZM in North West Europe, as outlined above (Chapter 4); and
- make recommendations on how research-policy integration can help to sustain best practice in approaches to coastal management in North West Europe (Chapter 5).

1.5 TARGET AUDIENCE

This Discussion Document is aimed at policy makers, planners, practitioners and researchers with an interest in and knowledge of ICZM. It is particularly aimed at decision makers that may influence the future strategic direction of ICZM within Europe and within North West Europe as a region (e.g. the EU ICZM Expert Group and the INTERREG IIIB Secretariat respectively). However, as COREPOINT focused on the local level implementation of ICZM, this document has relevance for decision makers working at national and sub-national levels also.

While the document focuses on North West Europe as a region, lessons learned may be of interest and are transferable across Europe and other international divides.

An accompanying Summary Document has also been produced to promote the key messages from the COREPOINT audience to a wider, non-specialised audience.

1.6 STRUCTURE OF THE DISCUSSION DOCUMENT

The document is designed to familiarise the reader with the coast of North West Europe (Chapter 2) and to make the reader aware of the governance context for ICZM within the region (Chapter 3), before focusing on the key outcomes from the COREPOINT ICZM capacity building initiatives in Chapter 4.

Throughout the report, the reader is pointed to supporting documentation produced within the project, which provides more detailed context, evidence and justification for the COREPOINT approach.

Recommendations are offered in Chapter 5. These are targeted towards decision makers that may influence the future strategic direction of ICZM within Europe and within North West Europe as a region.

1.7 BACKGROUND TO THE COREPOINT PROJECT

Following an exploratory workshop in Liverpool in 2003, facilitated by the INTERREG IIIB Secretariat, coastal management experts from the COREPOINT partnership identified the following five issues that needed to be addressed to improve approaches to ICZM in the region:

- **Issue 1: Need for integrated planning and management to achieve sustainable development of the North West Europe coastal zone:**

Traditional land based spatial planning regimes are rarely linked to the administrative structures and policies which govern activities in the marine environment. Managing the coastal zone is further complicated by a sectoral approach to coastal activities such as fishing, shipping and marine recreation. The European Spatial Development Perspective (ESDP) encourages "widening the horizon beyond purely sectoral policy measures, to focus on the overall situation of the European territory" (ESDP p.7). In addition, the ESDP recognises the need for ICZM as a necessary element in achieving a balanced and sustainable spatial development policy (ESDP Section 4.7, p.45).

As mentioned, the European Commission has also issued a set of measures on ICZM to be implemented by Member States by 2006. COREPOINT project partners recognised that acting on the ESDP and the ICZM Recommendation at the local level could help to meet policy requirements and to set out a long-term vision for integrated spatial development as it affects the coastal areas of North West Europe.

- **Issue 2: Need for engagement and open communication with stakeholders, including political representatives and the general public:**

Coastal regions support a wide range of interest groups, which include local administrators, fishing, aquaculture, tourism, recreation and shipping industries. Often there is a lack of trust and an absence of communication between these different entities, resulting in poor planning, utilisation and protection of coastal resources. Engagement and communication between these different interest groups are pre-requisites to realising balanced and sustainable development. Consequently, COREPOINT partners identified the need to develop and implement frameworks to support better communication and joint understanding among groups of stakeholder organisations.

- **Issue 3: Need to improve links between researchers and policy makers:**

The need to connect science and policy to ensure that scientific knowledge is transferred to policy makers has been acknowledged for over a decade as an important aspect of Integrated Coastal Zone Management (ICZM) (National Academy of Science, 2005). Unfortunately, support for such an approach tends to manifest itself in principle rather than practice.

Despite significant progress in scientific understanding of complex coastal ecosystems, there is still a systematic failure to incorporate scientific outputs into improved coastal management frameworks. Evidence for this is provided in Europe's coastal zone (EEA, 2006), where there has been a decline in coastal environmental quality due to factors such as urbanisation, wetland loss and degradation, water pollution and resource over-exploitation.

According to GESAMP (1996) collaboration between scientists and managers should occur at all stages of the formulation, implementation and review of coastal management policy and programmes. The GESAMP task force recognised the need for an interdisciplinary approach among scientists, including the involvement of natural and social scientists to take a holistic view of coastal management problems. Almost a decade later, the COREPOINT partners prioritised this objective to test within the project.

- **Issue 4: Need to sustain capacity and expertise for coastal management within local authorities:**

Because ICZM is often considered as a non-core or luxury activity within local authorities, it is dealt with on a project basis. Experts are temporarily recruited to oversee and implement specific projects. On completion of the project, this expertise is lost to the authority.

COREPOINT partners identified a need to ensure the long-term integration of ICZM within local authorities by strengthening the capability of permanent staff directly involved in the coastal management process (e.g. planners, engineers, conservation officers); and by achieving the support of local and regional politicians for the development and implementation of ICZM initiatives. It was recognised in the development of the COREPOINT project that ICZM must be championed from within local authorities to become a fundamental part of the spatial planning process and that training has an important role to play to fulfill this aim.

- **Issue 5: Need to address disproportionate levels of progress on ICZM in North West Europe:**

While the coastal countries in North West Europe were working towards the common aim of meeting the requirements of the EC Recommendation on ICZM, the political climate for progressing ICZM differed between Member States. This was evident in the disproportionate levels of engagement and progress in the development of national ICZM strategies within the region. The COREPOINT partners recognised the need to test the implementation of the EU ICZM Progress indicator, which was under development at the time, to enhance opportunities for promoting this tool as a mechanism for helping stakeholders to consider their approaches to ICZM.

TABLE 1.1 SUMMARY OF THE COREPOINT APPROACHES ELABORATED UPON IN THIS DISCUSSION DOCUMENT

Issue		COREPOINT approach to addressing the issue described within the Discussion Document:
1	LACK OF INTEGRATED PLANNING AND MANAGEMENT	REVIEW OF LOCAL LEVEL ARRANGEMENTS FOR ICZM AND SPATIAL PLANNING IN NORTH WEST EUROPE ASSESSMENT OF LOCAL LEVEL ADHERENCE TO THE ICZM PRINCIPLES OF BEST PRACTICE
2	LACK OF STAKEHOLDER ENGAGEMENT IN ICZM	DEVELOPMENT OF LOCAL INFORMATION SYSTEMS (LIS) AS A FRAMEWORK TO SUPPORT BETTER COMMUNICATION AND JOINT UNDERSTANDING AMONGST A GROUP OF STAKEHOLDER ORGANISATIONS
3	NEED FOR IMPROVED LINKS BETWEEN RESEARCHERS AND POLICY MAKERS IN ICZM	DEMONSTRATION OF THE EFFECTIVENESS OF NINE EXPERT COUPLET NODES TO HELP DELIVER SUSTAINABILITY THROUGH A CLOSER RELATIONSHIP BETWEEN SCIENCE, POLICY AND PRACTICE
4	LACK OF SUSTAINED CAPACITY FOR IMPLEMENTING ICZM AT THE LOCAL LEVEL	IMPLEMENTATION OF A TRIED AND TESTED, TRANSFERABLE AND HIGHLY INTERACTIVE ICZM PROFESSIONAL TRAINING MODULE BASED AROUND THE ICZM PRINCIPLES OF BEST PRACTICE AND ENGAGING CASE STUDIES
5	DISPROPORTIONATE LEVELS OF PROGRESS ON ICZM IN NORTH WEST EUROPE	TESTING OF THE APPROVED EU INDICATOR TO MEASURE PROGRESS IN THE IMPLEMENTATION OF INTEGRATED COASTAL ZONE MANAGEMENT IN EUROPE

1.8 THE COREPOINT APPROACH

The COREPOINT project was funded through INTERREG IIIB to address the five issues outlined above by strengthening links between researchers and policy makers to orientate relevant research towards problem solving at the local level within the coastal zone.

Table 1.1 provides a summary of the COREPOINT approaches elaborated upon in this Discussion Document. It should be noted that this is not an exclusive list of COREPOINT activities undertaken to address the project objectives. For a more comprehensive overview of the project outputs, the reader should refer to Appendix 1.

The COREPOINT model demonstrates the need to recalibrate institutional mechanisms to provide better support for ICZM among policy makers and researchers. The approach also addressed the issues of sustaining the institutional capacity of local government to deliver long term solutions for ICZM.

The COREPOINT partnership consisted of research centres, local authorities and coastal networks from Ireland, UK, France, the Netherlands and Flanders (Belgium). Relationships between local authorities and research groups form the basis of the operation of the COREPOINT Expert Couplet Nodes (ECN) at nine study sites across North West Europe (Table 1.2).

TABLE 1.2 DETAILS OF THE COREPOINT PARTNERSHIP ORGANISED ACCORDING TO THE NINE ECN CASE STUDY LOCATIONS

ECN Location	Established	Country	Partners
CORK HARBOUR	ESTABLISHED DURING COREPOINT	IRELAND	RESEARCH: COASTAL & MARINE RESOURCES CENTRE, UNIVERSITY COLLEGE CORK LOCAL GOVERNMENT: CORK COUNTY COUNCIL
MONT ST. MICHEL BAY	ESTABLISHED DURING COREPOINT	FRANCE	RESEARCH: UNIVERSITY OF WESTERN BRITTANY AND IFREMER LOCAL GOVERNMENT: INTER COUNTY COUNCIL ASSOCIATION (MANCHE-ILLE ET VILAINE)
GOLFE DU MORBIHAN	ESTABLISHED DURING COREPOINT	FRANCE	RESEARCH: UNIVERSITY OF WESTERN BRITTANY AND IFREMER LOCAL GOVERNMENT: THE INTERCOMMUNAL ASSOCIATION OF THE GULF (SIAGM: SYNDICAT INTERCOMMUNAL D'AMÉMAGEMENT DU GOLFE DU MORBIHAN)
FLANDERS	ESTABLISHED PRIOR TO COREPOINT	BELGIUM	RESEARCH: MARITIME INSTITUTE, UNIVERSITY OF GENT LOCAL GOVERNMENT: FLEMISH AUTHORITY: AGENCY FOR MARITIME AND COASTAL SERVICES – COASTAL DIVISION
SEVERN ESTUARY	ESTABLISHED PRIOR TO COREPOINT	WALES	RESEARCH: CARDIFF UNIVERSITY LOCAL GOVERNMENT: SEVERN ESTUARY PARTNERSHIP
WESTERN ISLES	ESTABLISHED DURING COREPOINT	SCOTLAND	RESEARCH: ABERDEEN UNIVERSITY LOCAL GOVERNMENT: WESTERN ISLES COUNCIL
SEFTON COAST	ESTABLISHED DURING COREPOINT	ENGLAND	RESEARCH: CARDIFF UNIVERSITY LOCAL GOVERNMENT: SEFTON COUNCIL
DURHAM COAST	ESTABLISHED DURING COREPOINT	ENGLAND	RESEARCH: ENVISION LTD. LOCAL GOVERNMENT: DURHAM HERITAGE COAST
DONEGAL BEACHES	ESTABLISHED PRIOR TO COREPOINT	NORTH OF IRELAND	RESEARCH: UNIVERSITY OF ULSTER LOCAL GOVERNMENT: DONEGAL COUNTY COUNCIL
Cross-cutting Coastal Network Partners: EUCC, Netherlands and CoastNet, UK			

1.9 CONTEXT FOR COREPOINT FOCUS ON LOCAL CAPACITY BUILDING

Although science policy communication can occur in coastal management at a number of levels, COREPOINT focuses on an examination of these issues at the local level. The EU Demonstration Programme found that local authorities take over 90% of decisions regarding the management of European coasts (Doody, 2003). The EC Recommendation on ICZM advocates the principle of subsidiarity and governments are urged to support the empowerment of local communities, including local government, to secure sustainability of the coastal environment (European Commission, 2002).

Initiatives such as Agenda 21 promote local sustainability partnerships, incorporating new arrangements between government, industry, academia and civil society. Researchers can play a critical role in this process. However, these partnerships reflect a relatively new form of engagement.

Although some progress is being made to replace traditional, top-down governance with more participatory approaches (O'Riordan, 2004), we still have much to learn about the optimisation of interactions between the various players (scientists, practitioners and policy makers) to achieve improved coastal management, including the form and content of sustainability science in ICZM.

COREPOINT examines a critical element in this governance for sustainability chain. It reflects on the relationship between a research group and a local authority as an example of a refined coastal decision making process, which should ultimately lead to more sustainable coastal zone management.

1.10 INTRODUCTION TO THE CASE STUDIES – COREPOINT EXPERT COUPLET NODES (ECN)

COREPOINT ECN address the issue of sustaining ICZM by building capacity for knowledge transfer between research centres and local government officials involved in coastal research and management respectively. The approach is aimed at the creation and support of a series of ECN in the study region in North West Europe. While COREPOINT operates at a range of levels, the couplet methodology is applied at the local scale, which is deemed most appropriate for the delivery of tangible benefits to coastal communities (Cummins *et al.,* 2004). The COREPOINT project was constructed with the principles of sustainability science in mind. The ECN, embedded within the project, aims to ensure that a paradigm shift in attitude and behaviour towards traditional science and management practices takes place.

Sustainability science invokes a co-produced approach to research involving a shared participatory, policy-centred process between researchers and managers. COREPOINT applies the principles of sustainability science to ICZM.

Nine ECN are functioning in four INTERREG IIIB countries: two in France, one in Belgium, two in Ireland and four in the UK. The organisation of these ECN is summarised in Table 1.2 and their locations are shown in Figure 1.1.

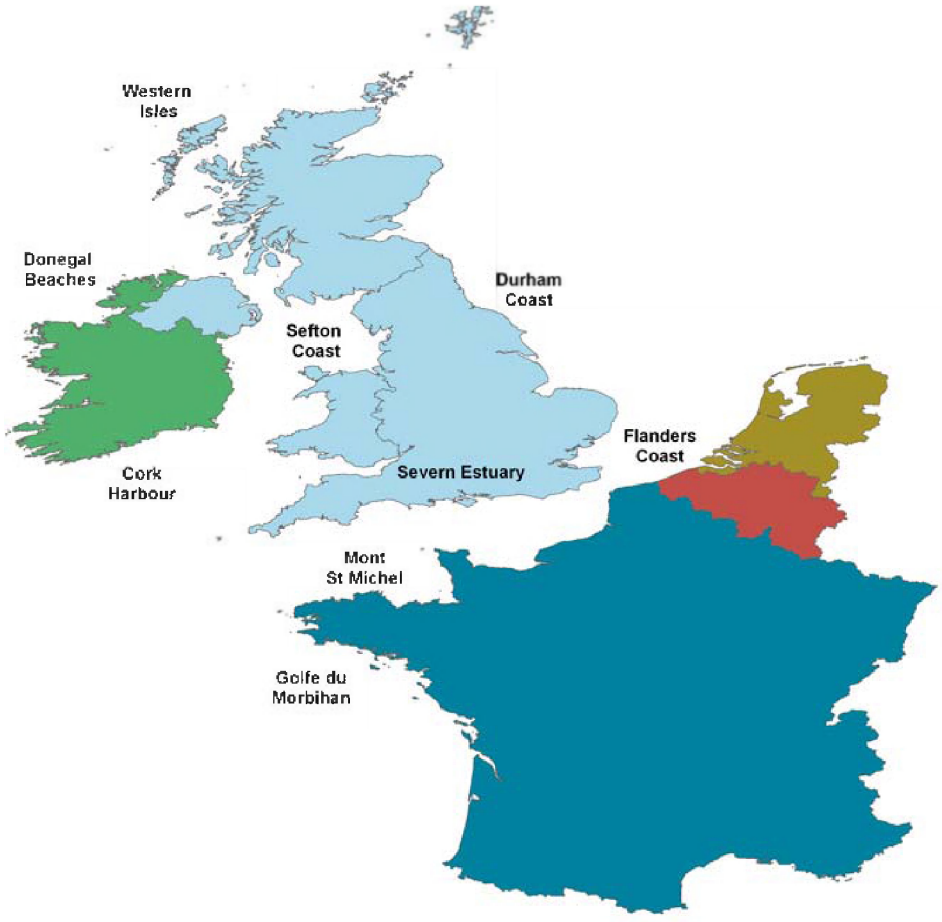


FIGURE 1.1 THE LOCATIONS OF THE NINE EXPERT COUPLET NODE STUDY SITE LOCATIONS USED AS LOCAL CASE STUDY AREAS WITHIN THE COREPOINT PROJECT

1.11 CLARIFICATION OF TERMINOLOGY USED IN THE DISCUSSION DOCUMENT

Region: The term 'region' is used throughout this document in a variety of contexts. A region may be international, for example, as in the Regional Seas Programme. Region can also refer to the European Union entirely or to a particular area within the EU such as those areas covered by the INTERREG programme. In addition a region may have a different meaning at a national level where it refers to areas within a country that have certain definable characteristics but not necessarily fixed boundaries.

Generally regional arrangements serve to implement policies which are necessary in the interest of a specific community of States and which can best be tackled on a regional basis.

In this document the term region is prefaced by the words international, European or national to ensure clarity.

References

Cummins, V., Ballinger, R., O'Mahony, C., Dodds, W. and Smith, H. (2004). Coastal Communities Network (CoCoNet): Final Report INTERREG IIIA. 51pp.

Doody, J.P. (2003). Information Required for Integrated Coastal Zone Management: Conclusions from the European Demonstration Programme. Coastal Management, 31, 163-173. Taylor and Francis.

European Commission. (2002). Council Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe, Brussels OJ L148-24.

European Consultative Forum on the Environment and Sustainable Development. (1999). The European Spatial Development Perspective, January, 1999. Available at: http://europa.eu.int/comm/environment/forum/spatreport_en.pdf

EEA. (2006). The changing faces of Europe's coastal areas. EEA Report No. 6 of 2006. EEA, Copenhagen, Denmark. Available at: http://reports.eea.europa.eu/eea_report_2006_6/en/eea_report_6_2006.pdf

GESAMP. (1996). The Contributions of Science to Integrated Coastal Zone Management. Reports and Studies No. 61. Food and Agricultural Organisation of the United Nations, Rome.

National Academy of Science. (1995). Science, Policy and the Coast – Improved Decision Making. National Academy Press. Washington D.C., U.S.A.

O'Riordan, T. (2004). Environmental Science, Sustainability and Politics. Transaction of the Institute of British Geographers NS 29 234-247. ISSN 0020-2754. Royal Geographical Society (with the Institute of British Geographers), London.

Rupprecht Consult – Forschung & Beratung GmbH. (2006). Evaluation of Integrated Coastal Zone Management (ICZM) in Europe: Final Report - revised version 1/12/2006. Cologne, Germany. Available at: http://www.rupprecht-consult.eu/iczm/

[ch 2
the coast of
North West Europe]

Chapter two

The coast of North West Europe

2.1 INTRODUCTION

The coast of Europe is one of the most complex of its kind, in both physical and human geographical terms. The North West European coast is briefly described in the following sections in terms of physical geography, socio-economic characteristics, and resulting regional patterns. Subsequent sections outline the key features associated with the COREPOINT case study areas, including the Expert Couplet sites.

For more detailed coverage of the coastal characteristics of the COREPOINT case study sites, reference should be made to the COREPOINT report by Carlisle *et. al.*, (2007). For more information on the coast of Europe, reference should be made to the recent report by the European Environment Agency entitled 'The Changing Faces of Europe's Coastal Areas' (EEA, 2006), as well as relevant sections of various EEA reports (EEA, 2005; EEA, 2003 and EEA, 2002).

2.2 THE COAST OF NORTH WEST EUROPE

2.2.1 Physical characteristics

The geological and geomorphological characteristics, together with a temperate climate, form the basis for complex meteorological and oceanographic conditions at the coast.

The physical geography of North West Europe may be broadly defined in terms of three major regions, distinguished fundamentally in terms of solid geology, but each having specific sets of isostatic and tectonic inter-relationships, and correspondingly distinctive coastal geomorphologies (Figure 2.1).

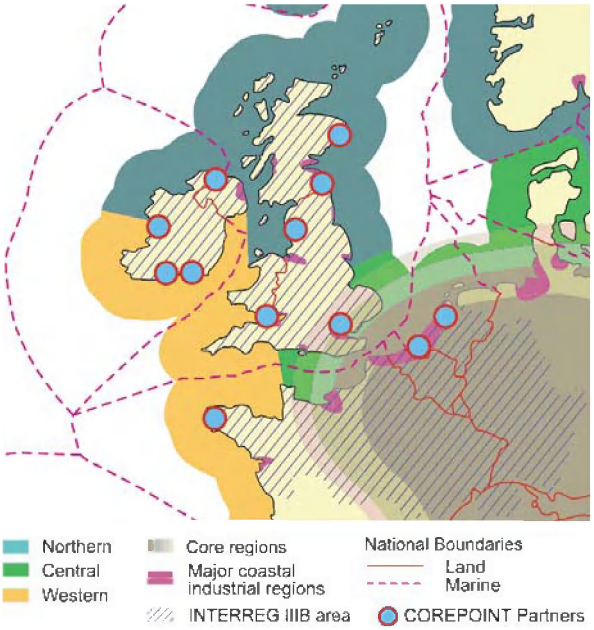


FIGURE 2.1 THE CHARACTERISTICS OF THE NORTH WEST EUROPEAN COAST

The coast is very young, having only reached its present configuration in the past 10,000 years or so during the onset of the latest interglacial in the Pleistocene Ice Age (Devoy *et al.*, 2000). This is of special importance for the Northern region, and small parts of the Central and Western regions which were successively glaciated during the previous glacial epochs. Consequently, seaward of the shoreline there are extensive shelf deposits of glacial till and fluvio-glacial sands and gravels, which have been re-worked by the rising sea level, and are associated with buried river valleys.

The Northern region is dominated by fjord and fjard coasts, with deep, sheltered inlets and rocky open coasts. Broadly speaking, sea levels have been falling due to isostatic uplift, but there are exceptions due to crustal flexing, with submerged shorelines the rule in the Orkney and Shetland Islands, for example. The Central region has characteristically low, sandy coasts backed by extensive dune systems and incorporating barrier islands and lagoons, most extensively developed in the southern North Sea. The Western region's coast is characterised by shallow ria inlets[2] produced by isostatic submergence and open coasts consisting of complicated mixes of cliffs and beaches.

[2] Drowned river valley systems

2.2.2 Socio-economic characteristics

The long and complex cultural history of Europe, extending from the last inter-glacial to the present, is beyond the scope of this document, except to note that it constitutes a valuable coastal heritage. Of more immediate interest are the stages of economic development which remain detectable in landscapes, seascapes and related human use patterns, and are of inestimable heritage value. These include the medieval period, the early modern period, and the series of four stages beginning with the 'industrial revolution' in Britain, Ireland and adjacent parts of mainland Europe between 1780 and 1830. A strong maritime and therefore coastal focus has prevailed throughout these development stages.

The distinctive combinations and permutations of economic, technological and cultural factors superimposed on the regional physical geographical patterns ensured the primary role of Europe in the development of the global economy until the turn of the twentieth century. It is likely that Europe is in transition economically from a fourth to a fifth stage; and similarly in a much broader long term cultural transition between modern and post-modern times, akin in scale and complexity to the transition between medieval and modern Europe half a millennium ago.

The economic development outcome related to the physical geography is summarised in Figure 2.1. There is a major core region with large urban-industrial areas, many of these coastal; and a vast periphery which also contains important coastal urban industrial areas (Ballinger *et al.*, 1994; Smith, 1997). The core region in particular contains most of the large ports of North West Europe such as Rotterdam, Antwerp, Zeebrugge and Le Havre, as well as London, Felixstowe and Southampton. The peripheral coasts are predominantly rural and relatively sparsely populated overall (except the Belgian coast), often associated with substantial emigration over long time periods and corresponding regional development problems. These include extensive stretches of the coasts of North West Scotland, Wales and the West coast of Ireland.

However, within these areas there are some significant areas of intense development related to tourism, aquaculture and port activities.

This urban-rural divide extends to the intensity and complexity of sea use patterns, inshore, in the realms of territorial seas, and beyond in the exclusive economic zones. The urban coasts exist, mainly though not exclusively, in association with the differing types of inlets and estuaries described above. On the coast itself, there is a predominant mix of coastal engineering works including harbours, marinas, coastal protection and flood defence; waste disposal, shipping routes and concentrations of marine and coastal recreation. Because of the land and sea use pressures, these locations paradoxically also include many conservation designations. In contrast, the rural coasts and seas are associated with resource extraction: fisheries, fish farming, aggregate extraction, dredging, offshore oil and gas exploitation, military exercise areas and some major shipping lanes and arteries.

2.3 COASTAL ISSUES IN NORTH WEST EUROPE

As a result of the patterns of coastal development and usage described above, there are many issues facing the coastal managers of North West Europe. A COREPOINT report on Coastal Issues and Conflicts in North West Europe Framed within the Lisbon and Gothenburg Agendas examines this subject in greater detail (COREPOINT: O'Connor *et al.*, 2007). For example, a range of issues described by Suman (2001) were assessed within the review according to their importance to coastal stakeholders in the North West Europe region (Table 2.1).

TABLE 2.1 COASTAL ISSUES IN NORTH WEST EUROPE, AS DESCRIBED BY SUMAN (2001), RATED BY THEIR PERCEIVED LEVEL OF IMPORTANCE BY STAKEHOLDERS IN THE REGION [FROM: COREPOINT: O'CONNOR *ET AL.*, (2007)]

High / Medium / Low / Variable	England	Scotland	Wales	Ireland	France	Belgium	Netherlands
LAND-USE PLANNING AND ZONING							
ESTUARY MANAGEMENT							
COASTAL DEVELOPMENT							
REDEVELOPMENT OF URBAN WATERFRONTS							
REGENERATION OF TRADITIONAL SEASIDE RESORTS							
PROVISIONS FOR TRADITIONAL USERS AND USES							
NATURAL RESOURCE PROTECTION (MARINE/COASTAL)							
FISHERIES							
AQUACULTURE							
COASTAL WATER QUALITY							
LANDSCAPE QUALITY							
COASTAL/MARITIME SAFETY							
EROSION							
FLOODING							
SEA LEVEL RISE							
CLIMATE CHANGE							
DISASTER RESPONSE							
ACCESS TO THE COAST							
PUBLIC INVOLVEMENT IN COASTAL PLANNING							
INTER-GOVERNMENTAL COOPERATION (AT ANY LEVEL)							
SECTORAL INTEGRATION							
USER CONFLICTS							
LEGISLATIVE PROVISION							
NATIONAL FUNDING FOR ICZM							

2.4 INTRODUCTION TO THE COREPOINT CASE STUDY LOCATIONS

The following section provides an introduction to the case study locations, whilst also indicating the diversity of coastal types dealt with in the COREPOINT project. This diversity, provided in more detail in COREPOINT: Carlisle *et al.* (2007), reflects the general characteristics of the coast of North West Europe as a region as outlined in the overview above. These COREPOINT case study sites are also the focal point for the Expert Couplet Nodes described in greater detail in Chapter 4.

The physical characteristics of the COREPOINT case study sites range from high energy, hard, rocky shorelines to low energy, soft, sediment-dominated shorelines. Some of the sites are primarily characterised by one shoreline type. For example, the Belgian and Sefton coasts are almost totally comprised of sandy beaches, with associated dune systems. By contrast, Donegal and the eastern side of the Western Isles are predominantly comprised of rocky peninsulas interspersed with small sandy beaches or mudflats. Locations such as the Severn Estuary and Baie du Mont St. Michel are more varied, with large areas of shingle, sand and mud, but also with areas of sea cliff and rocky shore platform. The coast of North East England has long sweeping beaches but also areas of sea cliffs. The Golfe du Morbihan and Cork Harbour are all drowned river valleys or rias, and so have very sheltered, muddy gravel subsea substrates, with very little sand.

All of the sites host a range of ecologically important habitats and species and many include areas designated for their conservation value under the EC Birds and Habitats Directives (Special Protection Areas [SPAs] and Special Areas of Conservation [SACs] respectively). For example, sites such as Cork Harbour, Severn Estuary, Golfe du Morbihan and Baie du Mont St. Michel include extensive inter-tidal mudflat systems important for waders and other over wintering migrant bird species. In areas such as Donegal and the Western Isles, sightings of marine mammals such as whales, dolphins and seals are relatively frequent. Turtles and basking sharks are also known to occur along these coasts.

As shown in Table 2.2 and Figure 2.1, the character and level of development varies considerably between sites. Some sites, notably those of Sefton, Belgium and the Severn Estuary, lie within the European 'core' region, while others, particularly those of Brittany, and the western British Isles, reside within the North West European 'peripheral' region (Section 2.2.2). The urbanised 'core' coasts, not only include extensive port and associated development, but also significant tourism and residential development. In contrast, primary sectoral activities, including fishing, aquaculture and agriculture, as well as tourism, dominate along the more rural coasts, such as those in Ireland and western Scotland.

Significant economic regeneration and associated waterfront development occurs within some sites and their hinterlands as economies undergo long-term restructuring and shift from traditional, heavy industry to more service-based economies. The coasts of Merseyside (Sefton), the Severn (notably the Welsh coast) and North East England, for example have witnessed such massive change. Table 2.2 outlines the main socio-economic activities associated with each of the COREPOINT sites.

TABLE 2.2 SUMMARY OF THE KEY PHYSICAL, ECOLOGICAL AND SOCIO-ECONOMIC FEATURES OF THE CASE STUDY LOCATIONS.

LOCATION	KEY CHARACTERISTICS
CORK HARBOUR 	**Physical:** A large, sheltered, natural harbour environment. Surface water body of over 100km^2. Estuarine influences. Diverse shoreline types including shallow cliffs, intertidal mudflats, reedbeds, shingle and rocky foreshores. **Ecological:** Important ecological systems such as extensive mudflats and salt marsh. Protected habitats designated as SPAs, SACs and Ramsar sites of international wetland significance. Important fish spawning and nursery areas. **Socio-economic:** Cork City is located in Cork Harbour. Within the Harbour there are also a number of densely populated coastal towns and villages. The Port of Cork is a major economic driver in the region. The Harbour is internationally renowned for sailing. Eight out of the ten top pharmaceutical companies in the world are located there.
DONEGAL BEACHES 	**Physical:** Primarily characterised by rural, sandy beaches and dune systems – including 37 separate sand dune systems. Shorelines also include estuarine inlets, rocky foreshores and offshore islands. **Ecological:** Extensive areas of priority habitat e.g. grey dunes, machair and Atlantic dune systems. Home to marine mammals such as seals, dolphins and whales. Mud flats and salt marshes of the major estuaries provide important feeding grounds for both waders and migratory birds. **Socio-economic:** Sparsely populated, peripheral area with a shift in population to the east, away from the coast over the last 25 years. High unemployment with decline in agricultural and textile industries. Tourism is promoted but remoteness and lack of infrastructure limit growth.

LOCATION	KEY CHARACTERISTICS
SEVERN ESTUARY 	**Physical:** Britain's second largest estuary which includes an extensive intertidal area (22,000ha) and boasts the second largest tidal range in the world. Severn is a large coastal plain estuary, providing an outlet for five major rivers; it is extremely diverse, supporting areas of open, low lying coast, salt marshes, tidal flats and offshore islands. **Ecological:** Protected habitats designated as SPAs, SACs and Ramsar sites of international wetland significance. The estuary includes large areas of salt marsh and intertidal mudflats. Together these support extensive bird populations including over-wintering migratory waterfowl. The estuary boasts the only known extensive subtidal reefs of the honeycomb worm, *Sabellaria alveolata*, in Britain and is internationally important for migratory fish. **Socio-economic:** The estuary incorporates large urban areas including the four major cities of Cardiff, Newport, Bristol and Gloucester. Extensive industrial development (including chemical processing plants and power stations), ports and port-related activities are supported by excellent land and sea communications. Tourism and recreation are important, particularly waterfront attractions and traditional resorts.
SEFTON COAST 	**Physical:** A soft sandy coast, which extends over 34km, characterised by extensive sand dune systems, beaches and salt marshes. Sand dunes provide protection from the sea, but extensive artificial coastal defences are also in place. Two major estuaries influence the coastal systems – the Mersey and the Ribble. **Ecological:** Important ecological habitats of marshes, beaches and dune systems. The entire coast is designated under European legislation. The area supports Sand Lizards and Natterjack Toads. The estuaries are important for the support of numerous bird species. **Socio-economic:** Densely populated coastal zone: The population of the Sefton area is approximately a quarter of a million. Tourism is a primary coastal sector. Other sectors of human influence include agriculture, sand extraction and dumping of material.
DURHAM COAST 	**Physical:** An extensive coastal plain influenced by a number of river valleys running eastwards towards the North Sea. A magnesium limestone plateau concludes in 60m cliffs along the North East coast. **Ecological:** A number of ecologically important habitats e.g. maritime cliffs, the unique grasslands of the Whin sill escarpments and Durham cliffs and the chalk cliffs at Bempton - home to England's largest Gannet population. 13% of the area of the region is covered by a number of international, European and national statutory and non-statutory designations. **Socio-economic:** Approximately 2.5 million inhabitants (70% in urban areas, while rural areas are sparsely populated). Significant employers are agriculture, forestry and fishing (9.2% of rural employment). Rural tourism is increasing as an alternative industry following the decline in the coal mining industry.

LOCATION	KEY CHARACTERISTICS
WESTERN ISLES 	**Physical:** Rocky cliffs dominate the east coast, with the deep waters of the Minch close inshore. Much of the west coast has gently sloping sandy beaches and occasional salt marshes. Coastal plains of machair make up about 8% of further inland areas. **Ecological:** Important habitats supporting numerous bird populations (machair, sea cliffs and peat lands). The islands provide for migrating land birds to and from their Arctic breeding grounds and a refuge for windblown vagrants from America and northern Europe. Home to marine mammals such as whale, dolphin and porpoise. **Socio-economic:** Sparsely populated density of 9 people per km^2. High reliance on agriculture, fishing and fish-farming. Crofting, a land use system unique to the Highlands and Islands of Scotland, is the predominant form of land use. Tourism has grown in significance for the regional economy; contributing 15.6% to GRDP in 2003.
FLANDERS COAST 	**Physical:** The coastal plain comprises beaches, dunes and polders. No rocky shores/substrates are found. Human influence resulted in the fragmentation and loss of natural dune systems. Artificial nourishment frequently occurs. Coastal defence structures characterise the majority of the coastline length (in 1994, about 70% of the total length). **Ecological:** Major pressure on fragile ecosystems from human activities. The coastal hinterland mainly consists of polders, land previously reclaimed from the sea by systematic dyke construction and drainage. Areas where the natural transition between dunes and polders is still intact have become extremely rare. There are two beach reserves and three nature reserves along the Flemish coast. **Socio-economic:** A densely populated, urban coastal strip. There has been a decrease in traditional agriculture and fishing industries. Tourism is the most important economic activity in the coastal region. Due to its geo-economic central location in the European core, the coastal region forms the setting for transport, logistics and distribution e.g. ports of Zeebrugge and Ostend.
GOLFE DU MORBIHAN 	**Physical:** Primarily intertidal flats and salt marshes interspersed with 30-40 small islands. The area also includes wetlands, small sandy beaches and some rocky coast. Most of the seabed is shallow, <5m in depth. The channel opening on to the Atlantic, however, is relatively deep (up to 30m) and narrow which creates strong currents. **Ecological:** High ecological value ecosystem. Diverse and extensive bird populations including waders and migratory birds. The gulf is protected by a large variety of designations from national to international level (e.g. Ramsar and Natura 2000). The eelgrass beds, which are a very important habitat for Brent geese and sea horses, are currently in decline. **Socio-economic:** Densely populated area: about 300 inhabitants per km^2. Coastal sectors: Tourism - most important economic activity (1.2 million tourists during summer time). Shellfish farming is a long-established traditional activity (200 shellfish farms on 1650 ha). Agriculture is being reduced due to urbanisation.

LOCATION	KEY CHARACTERISTICS
BAIE DU MONT ST. MICHEL 	**Physical:** Primary shoreline type: Long flat beaches. Also includes: dunes, cliffs, rocky coast, wetlands, salt marsh and salt meadows. One of the largest intertidal zones in the world (250km²). Second largest tidal range in the world (15m). **Ecological:** Large and complex ecosystem. Salmon spawning area; important nursery habitat for juvenile sea bass and mudflats for over wintering waders. Home to marine mammals such as seals and dolphins. Tube worm accumulations, *Sabellaria alveolata,* form reefs that can be 1.5m high, cover 100 ha approx. **Socio-economic:** Population: 40,000; sparsely populated Coastal sectors: Tourism - 3.5 million visitors annually. Oyster farming - ~5,000 tonnes/year. Fishing – angling & trawling (licences allow 60 trawlers to fish within 3 nautical miles).

COREPOINT Reference Material

Carlisle, M., Green D.R. and Ritchie, W. (2007). COREPOINT: Case Study Area Descriptions. May 2007. 37pp.

O'Connor, M., Mc Kenna, J. and Cooper, A. (2007). COREPOINT: Coastal Issues and Conflicts in North West Europe Framed within the Lisbon and Gothenburg Agendas. February 2007. 22pp.

References

Ballinger, R.C., Smith, H.D., and Warren, L.M. (1994). The management of the coastal zone of Europe. *Ocean & Coastal Management*, 22 (1), 45-85.

Devoy, R.J.N., de Groot, T., Jelgersma, S., Marson, I., Nicholls, R.J., Paskoff, R. and Plag, H.P. (2000). Sea-level changes and coastal processes: recommendations. In: D. Smith *et al.* (eds), *Sea Level Change and Coastal Processes: Implications for Europe,* pp. 1-8. European Commission, Brussels.

EEA. (2006). The changing faces of Europe's coastal areas. EEA Report No. 6 of 2006. EEA, Copenhagen, Denmark. Available at: http://reports.eea.europa.eu/eea_report_2006_6/en/eea_report_6_2006.pdf

EEA. (2005). The European Environment – State and Outlook. EEA, Copenhagen, Denmark.

EEA. (2003). Europe's Environment - the Third Assessment. Environmental Assessment Report No. 10. EEA, Copenhagen, Denmark.

EEA. (2002). Environmental Assessment Report - Environmental Signals 2002 – Benchmarking the millennium. Environmental Assessment Report No. 9. EEA, Copenhagen, Denmark.

Smith, H.D. (1997). The management of the European coast: west and east. *Cahiers Nantais,* Nos. 47-48, 497-502.

Suman, D. (2001). Case studies of coastal conflicts: comparative US/European experiences. *Ocean and Coastal Management*, 44 (1-2), 1-13.

[ch 3
coastal governance
arrangements]

Chapter three

Coastal Governance Arrangements

3.1 INTRODUCTION

As recognised in Chapter 1, there is a need to bring North West Europe to a common level of implementation of ICZM in order to deliver a balanced approach to regional development and improved social and economic cohesion. Any changes to management regimes much take account of the broader law and policy frameworks in which they have to function. For this reason it is necessary to examine the governance arrangements in place for ICZM in North West Europe. In this context, governance refers to the entire decision-making framework for management, how such decisions are made and enacted by government as well as other relevant mechanisms, institutions and stakeholders. Most ICZM initiatives are carried out within broader international, regional, national and sub-national governance arrangements. A brief overview of these levels of governance and their relevance to ICZM is presented below. An extensive review of European legislation and policies as well as international approaches to ICZM was carried out as part of the COREPOINT project (COREPOINT: O'Hagan *et al.*, 2005a and 2005b). These reviews were part of an initial work package which aimed to determine the effectiveness of current spatial policies for coastal management. The resulting information and discussion formed a basis from which subsequent activities of the project could build upon.

Following an overview of governance arrangements for ICZM, key planning tools for delivering this are summarised in recognition of COREPOINT's objective to influence national spatial policy development in response to the EC Recommendation on ICZM. An outline of terrestrial spatial planning systems is presented along with an overview of the more recent concept of Marine Spatial Planning. Key drivers for Marine Spatial Planning in Europe are identified and there is a brief discussion of the relationship between marine and land-based spatial planning in realisation of the need for more integrated planning and management of the coasts of North West Europe (Section 1.7). To achieve this, the section concludes with a number of key conclusions on the governance and delivery aspects of ICZM.

3.2 LEGAL, POLICY AND ORGANISATIONAL ASPECTS

Integrated coastal management is implemented through law, policy and administrations which work at various scales. These are discussed briefly here. For further information reference should be made to the following report: European legislation and policies with implications for ICZM (COREPOINT: O'Hagan *et al.*, 2005b).

3.2.1 Legal aspects of governance

<u>International and regional context:</u>

Many international conventions and treaties to which the EU is a signatory have important repercussions for future coastal management in Europe. These are described in detail in the COREPOINT report on European legislation and policies with implications for coastal management (COREPOINT: O'Hagan *et al.*, 2005b). This report notes how the ICZM process has received considerable prominence through various international legal developments and prescriptions. Most of these have emphasised the value of the ICZM process as a means of promoting sustainable development. One of the most recent re-iterations, at the United Nations World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, not only encouraged coastal States to promote integrated, multidisciplinary and multi-sectoral coastal and ocean management at the national level, but also stressed the need to strengthen regional cooperation and coordination among relevant regional organisations and programmes. Of particular significance to the future of ICZM are the Law of the Sea Convention, the Convention on Biodiversity, and at an international regional level, the OSPAR Convention.

The UN Law of the Sea Convention (LOSC) has been described as a constitution for the oceans. The Convention covers areas such as maritime jurisdiction, fisheries, protection of the marine environment and marine scientific research. In the context of North West Europe, some Member States have implemented the Law of the Sea jurisdictional framework in a manner consistent with the Convention whilst other Member States have failed to enact legislation asserting their maritime jurisdiction to the maximum possible extent permissible under international law.

While France, Belgium, the Netherlands, and Germany have proclaimed Exclusive Economic Zones, neither Ireland nor the United Kingdom has proclaimed such a zone. This is all the more surprising as both of these States have significant maritime interests as well as extensive sea areas under their sovereignty and jurisdiction. As Long and O'Hagan (2005) point out the baseline legislation of several North West European States does not comply with the letter or indeed with the spirit of the LOSC. This has implications for European legislation which relates to this baseline. The implementation of the Water Framework Directive (2000/60/EC) in the marine environment as well as the Marine Strategy Directive (COM (2005) 505 final) are, for example, linked to the baseline. In effect, this means that the LOSC and many European legal instruments which relate to the marine environment will not be applied consistently by Member States.

The Convention on Biological Diversity has a specific mandate on marine and coastal diversity (Jakarta, 1995). Key features of this include the implementation of integrated coastal and marine management as the most suitable framework for addressing human impact on marine and coastal biological diversity (Article 6(b)), as well as the establishment of marine and coastal protected areas (Article 8(A)). At a regional level these objectives are being progressed both by the OSPAR signatories through various work programmes and in the European Union through implementation of the Natura 2000 network at Member State level. Both of these demonstrate how European legislation develops as a result of international action.

European context:

There is a profusion of European legislation and policies which have both direct and indirect implications for ICZM. Over 50 Directives were identified in the COREPOINT review of European legislation and policies with implications for ICZM (COREPOINT: O'Hagan *et al.*, 2005b). Key Directives are the:

- Water Framework Directive (2000/60/EC);
- EIA and SEA Directives (85/337/EEC; 2001/42/EC);
- Birds and Habitats Directives (79/409/EEC; 92/43/EEC); and
- Marine Strategy Directive (COM (2005) 505 final).

However, the range and variety of legislation applicable to the coastal zone not only causes confusion but there is also the problem of overlapping legislation and jurisdiction in practice. Legislation should facilitate rather than impede the management process. While recent history suggests that the European Commission is hesitant to make coastal zone management compulsory for Member States, this does not take away from the fact that greater integration and revision of some key European Directives and policies are needed and would help achieve successful management. It is inevitable that the management of a complex environment such as the coast will involve a multitude of legislation and policy, but such legislation should be mutually consistent and should facilitate rather than impede the administrative process.

Consolidation of all relevant legislation into one Integrated Coastal Zone Management Directive, as previously suggested by various European institutions (OJ C155, 29/05/01, p.17), would be incredibly difficult given that the majority of these laws not only relate to the coast but deal with a multitude of other important Community issues.

As a result of this and, coupled with the variety of legal systems operating at Member State level, a long term perspective for coastal management cannot be adequately taken into account within the existing law and policy framework.

It is recognised that there are limitations to the actions that the European Commission is able to take with respect to legislating for coastal management due to the firmly rooted principles of subsidiarity[3] and proportionality[4] in the European Treaty. It is important to remember, however, that the principle of integration requires environmental considerations to be taken into account in the preparation and implementation of all policies that impact on the environment. With respect to legislation, this principle of integration was first introduced in the Single European Act in 1987.

Since then, the Amsterdam Treaty, which entered into force in 1999, has reinforced the principle with specific reference to the duty to integrate. Article 6 states that "environmental protection requirements must be integrated into the definition and implementation of Community policies and activities referred to in Article 3, in particular with a view to promoting sustainable development".

[3] This principle ensures that decisions are taken as close to the citizen as possible in areas that are not within the exclusive competence of the EU.
[4] This principle regulates the exercise of powers by the EU. Under this principle, the involvement of EU institutions is limited to what is necessary to achieve the objectives of the Treaties.

Despite the obvious progress made in legislating for environmental protection and maritime sectors (e.g. the Common Fisheries Policy), the EU still lacks a coherent legal framework to ensure that the various sectoral policies which regulate shipping, the marine environment, marine scientific research, energy, fishing activity and international trade are consistent with each other and achieve the same goals. In particular, the EU does not have instruments similar to the United States Coastal Zone Management Act of 1972 or Canada's Oceans Act of 1996 to unify the conflicting approaches adopted by the Member States to coastal and ocean issues. The current legislative focus of the European Union has, however, placed protection of the marine environment at the top of the political agenda and has a sophisticated institutional framework which is capable of policy development and conflict resolution (Long and O'Hagan, 2005).

At a more practical level, there is no uniform definition in European law regarding the extent or the size of the coastal zone with no consensus on how far landward or seaward such a zone should extend. This is linked to the maritime jurisdictional zones contained in the Law of the Sea Convention. It is entirely foreseeable that the baseline required by it may be used at some future date as the obvious datum to measure such a zone. The blurring of definitions and the absence of a consistent approach to such a baseline will undoubtedly undermine the ability of the Member States to implement both ICZM in a uniform manner, as well as various pieces of legislation such as the Water Framework Directive and the Habitats Directive. The absence of such a definition also creates difficulties at the national and sub-national levels.

National and sub-national context:

As noted above, different legal systems operate in different Member States. With respect to North West Europe, in Belgium and Germany, for example, a federal system operates while in the United Kingdom there is a system of devolved Government. In addition, the diversity of coastal environments in the various Member States has, to an extent, dictated the legal approach taken to management at national and sub-national levels. This results in a reactive rather than proactive management approach. Specific legislation relating to the coastal zone is largely absent from the Member States examined.

Of those Member States that do have specific coastal legislation it tends to deal primarily with planning issues and/or public access, for example, France. Coastal planning laws relate only to the terrestrial side of the coastal zone and also tend to focus on

urbanised coastal areas. In France, however, the coastal zone law *(Loi littoral)* takes into account, perhaps in a restrictive way, some marine areas and natural zones[5]. Moreover, in most Member States the power to make planning decisions is devolved to local planning authorities which often do not have the technical expertise, finance or political will to fully embrace planning and management in the coastal zone. In Ireland, for example, local authorities also have responsibility for many hard engineered coastal protection works despite the fact that only two Irish local authorities employ maritime engineers.

3.2.2 Policy aspects of governance

International and regional context:

Most binding legal instruments tend to have their genesis in policy documents. This is particularly true of environmental legislation. Framework conventions, such as the Convention on Climate Change, can influence the development of customary law as they establish use of, and support for, certain principles, such as the ecosystem approach and precautionary principle. The policy of OSPAR in relation to management of the water resource has been progressed by the EU, as a signatory to OSPAR, by the Water Framework Directive. For this reason, it is essential to look at current European policies and also those under development as these will influence the future of integrated coastal management. In addition, various international and regional organisations have worked extensively on coastal management, producing guiding policy documents, principles and guidelines to help guide the ICZM process and its implementation. These are presented in Appendix II.

[5] Article L.146-6 Urbanism Code.

European context:

To inform the development of European policy on ICZM and to learn from best practice, the European Commission launched a Demonstration Programme on ICZM between 1996 and 1999. From this, the Commission outlined a strategy for ICZM (Communication on ICZM: A Strategy for Europe: COM/2000/547 of 17 September, 2000) and then, in May 2002, the European Parliament and Council adopted a Recommendation (Recommendation of the European Parliament and Council concerning the implementation of ICZM in Europe; 2002/413/EC). This forms the current policy basis for ICZM in Europe.

Chapter III of the Recommendation encouraged Member States to undertake a stocktake to analyse applicable policy and legislative measures which currently influence coastal management. This stocktaking exercise had to cover all administrative levels as well as interested citizens, non-governmental organisations and the business sector. Based on the results of the stocktaking exercise, Member States were encouraged to develop national strategies. The objective of these is to increase the coherence between the many national, regional and local regulations and initiatives affecting coastal zones. In formulating national strategies and measures based on these strategies, Member States were asked to follow the principles of good ICZM, contained in the Recommendation, to ensure good coastal management and governance.

These are:

(a) a broad overall perspective (thematic and geographic);

(b) a long-term perspective which will take into account the precautionary principle;

(c) adaptive management during a gradual process;

(d) local specificity and the great diversity of European coastal zones;

(e) working with natural processes and respecting the carrying capacity of ecosystems;

(f) involving all the parties concerned in the management process;

(g) support and involvement of relevant administrative bodies; and

(h) use of a combination of instruments designed to facilitate coherence.

The current status of implementation of the ICZM Recommendation is presented in Table 3.1. Of the 20 coastal EU Member States, only 14 submitted official reports to the Commission (including 5 out of 6 in North West Europe). Member States were required to report to the Commission on the implementation of this Recommendation 45 months after its adoption.

The European Commission was also obliged to provide the European Council and Parliament with an evaluation report and a proposal for EC legislation, if appropriate, by January 2007. To inform this, an external evaluation of the implementation of the ICZM Recommendation was carried out by Rupprecht Consult and the International Ocean Institute (Rupprecht Consult, 2006).

TABLE 3.1 NORTH WEST EUROPE MEMBER STATE PROGRESS ON IMPLEMENTATION OF THE EUROPEAN ICZM RECOMMENDATION

Country	Stakeholder	Strategy	Reporting
BELGIUM	YES	NO	YES
FRANCE	YES	YES	YES
GERMANY	YES	YES	YES
IRELAND	IN PROGRESS	NO	NO
THE NETHERLANDS	YES	NO	YES
UNITED KINGDOM			
• ENGLAND	YES	UNDER DEVELOPMENT	YES
• SCOTLAND	N/A	YES	N/A
• WALES	N/A	YES	N/A
• NORTHERN IRELAND	N/A	YES	N/A

The evaluation by Rupprecht Consult used a regional seas approach, considered the most effective for governance of European coastal areas. The evaluation highlighted the success and potential of the European ICZM Recommendation (Rupprecht Consult, 2006) in facilitating improved coastal management and revealed that the ICZM principles have created a new awareness in some Member States. The evaluation also found that many Member States have successful local ICZM projects many of which have created a strong pressure to increase participation in the decision making process. Suggestions for improving the implementation of ICZM within the evaluation included:

- improved regional cooperation within existing regional seas programmes;
- stronger and more effective exchange of expertise and information;
- improved stakeholder participation; and
- enhanced monitoring and review of implementation.

The evaluation states that an EU-wide implementation of ICZM would have a significant economic and social impact (Rupprecht Consult, 2006, p.10). It also recognises that ICZM is a key instrument in linking the legislation and policies of terrestrial and marine environments. This is intrinsic to any future actions taken by the European Union in relation to an over-arching Maritime Policy and by individual Member States in relation to Marine Spatial Planning.

In response to the evaluation, the Commission issued a communication to the European Parliament and Council in June 2007. This states that "while the prevailing approach is still sectoral, the national strategies should provide a more strategic and integrated framework" (COM (2007) 308 final, p.5). It views the Recommendation as a valid basis to continue to support the integration process whilst recognising that the implementation is a slow, gradual and on-going process. For this reason and due to the fact that further developments are expected through the Marine Strategy Directive (COM (2005) 505 final) and an over-arching EU Maritime Policy, the Commission considers that at this stage a new specific legal instrument to promote ICZM is not foreseen.

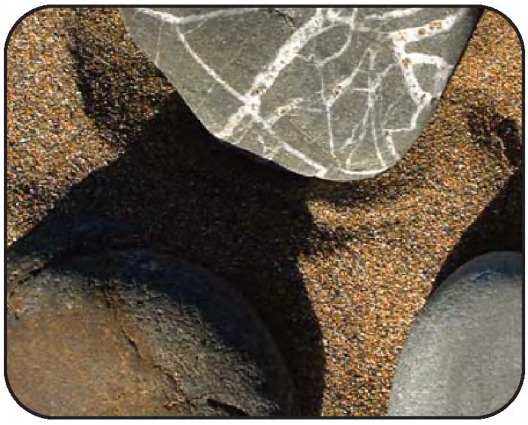
Other European policies of relevance:

The influence of other European policies cannot be underestimated. Of particular note are the European Spatial Development Perspective (ESDP) and the Marine Strategy Directive (COM (2005) 505 final). The former aims to correct regional and spatial disparities across Europe through providing a framework for terrestrial spatial planning, discussed in more detail below. The recently adopted Marine Strategy Directive (COM (2005) 505 final) emanates from the strategy on the protection and conservation of the marine environment (COM (2002) 539 final). Under this Directive, each Member State within a marine region will be required to develop a strategy for its marine waters. The Directive also stipulates that "Member States shall, where practical and appropriate, use existing regional institutional cooperation structures, including those under Regional Seas Conventions, covering that Marine Region or Sub-Region" (Article 5(1)).

The Marine Strategy Directive must be seen in the wider context of the development of the new EU Maritime Policy. Subsequent to widespread consultation on the Green Paper on this, the Commission produced the Blue Book – an Integrated Maritime Policy for the European Union. This lays the foundation for the governance framework and cross-sectoral tools necessary for an EU Integrated Maritime Policy and sets out the main actions that the Commission will pursue during the course of this mandate. The Commission will:

- invite Member States to draw up national integrated maritime policies, working closely with stakeholders, in particular the coastal regions;
- propose in 2008 a set of guidelines for these national integrated maritime policies and report annually on EU and Member States' actions in this regard from 2009; and
- organise a stakeholder consultation structure, feeding into further development of the maritime policy and allowing exchange of best practices.

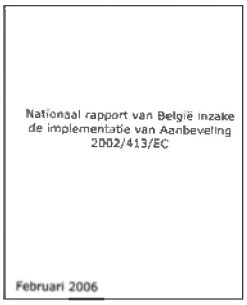
The Communication recognises that an integrated governance framework for maritime affairs requires horizontal planning tools that cut across marine-related sectoral policies and support joined up policy making. Marine Spatial Planning and ICZM are recognised as key approaches for sustainable decision-making (Section 3.4.2).

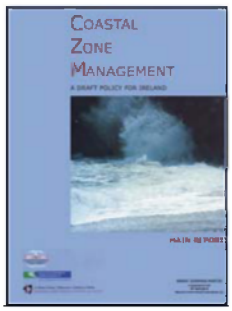
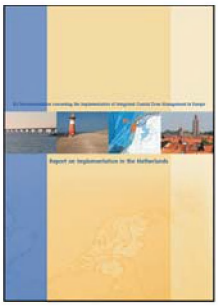


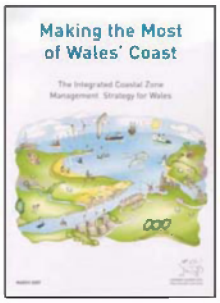
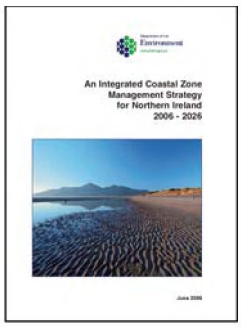
National context:

While the vast majority of Member States of North West Europe have formally reported to the Commission on their Stocktake relatively few have developed specific ICZM strategies (Table 3.2), many States, such as Belgium preferring to use existing policies and instruments. The legal and institutional frameworks operating in North West Europe Member States have effectively prescribed the way in which the EC ICZM Recommendation has been brought forward. Variations in these frameworks produce different approaches to management and profoundly affect any future integrated management regime.

TABLE 3.2 ICZM STRATEGIES AND SUPPORTING DOCUMENTS FROM NORTH WEST EUROPE

DOCUMENT	DETAILS
BELGIUM  	**Strategy:** No separate strategy document. **Reporting Documentation:** North Sea and Oceans Steering Committee. 2006. National Belgian report on the implementation of Recommendation 2002/413/EC on Integrated Coastal Zone Management. North Sea and Oceans Steering Committee, Belgium. **Comment:** Report outlines the existing efforts relating to ICZM and is "intended to be a source of inspiration for the government to optimize its integrated policy for the coast and to provide information for all actors involved who wish to acquire better insight into the efforts made so far on the coast and current lines of thinking for the future" (*op. cit.*, p.1).
FRANCE  	**Strategy:** The French strategy is detailed in the report made about the implementation of the European recommendation on ICZM in France. **Reporting Documentation:** DIACT-SG MER. 2006. Rapport français d'application de la Recommandation du Parlement Européen et du Conseil du 30 mai 2002 relative à la mise en œuvre d'une stratégie de gestion intégrée des zones côtières en Europe, [French report on the application of the Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe], Paris, France. **Comment:** The French process seems to be quite advanced in terms of the development of national dialogue and strategy. The institutional arrangements for ICZM in France are discussed in greater detail in the COREPOINT report on this (Kervarec, 2007). Nationally, the French Government are making strong efforts to coordinate European policy, the national strategy and the local application of the ICZM principles. The government in 2006 funded 25 projects all over the French coast in order to facilitate and encourage usage of the ICZM principles and consequently help deliver a new governance regime.

DOCUMENT	DETAILS
IRELAND 	**Strategy:** None. **Reporting Documentation:** None. **Comment:** Ireland is lagging behind in terms of reporting on ICZM implementation as well as strategy development. However, a stocktake is currently underway. Previous studies have indicated that the strong land / sea divide remains an impeding factor to integrated management (Brady Shipman Martin, 1997).
THE NETHERLANDS 	**Strategy:** No separate strategy. **Reporting Documentation:** Dutch Government. 2005. EU Recommendation concerning the Implementation of Integrated Coastal Zone Management in Europe - Report on Implementation in the Netherlands. The Hague. **Comment:** The Dutch Government has decided not to develop a separate ICZM strategy, but instead to follow the current practice for the implementation of spatial planning and coastal management in the Netherlands as much as possible. Given that half of all the land in the Netherlands is below sea-level, the country has a long tradition of shoreline management. The policy instruments in place, which includes decentralised decision-making at regional and local levels as well as horizontal exchange between relevant administrative bodies, seem to be sufficiently strong to successfully implement ICZM.
UNITED KINGDOM 	Each devolved administration has developed its ICZM strategy independently although the UK reported on the implementation of the EC Recommendation to the European Commission. **Supporting documentation:** Report from the UK: implementation of (2002/413/EC) Recommendation of the European Parliament and of the Council, of 3 May 2002, concerning the implementation of Integrated Coastal Zone Management in Europe. Available at: http://www.defra.gov.uk/environment/water/marine/uk/iczm/index.htm
ENGLAND 	**Strategy:** Under development. Being taken forward through the Marine Bill process. **Supporting documentation:** Promoting an integrated approach to the management of the coastal zone (ICZM) in England: a consultation document of the Department of Environment, Food and Rural Affairs (Defra), June 2006. Available at: http://www.defra.gov.uk/ENVIRONMENT/water/marine/uk/iczm/index.htm Summary of responses to the consultation (Defra, June 2007) Available at: http://www.defra.gov.uk/ENVIRONMENT/water/marine/uk/iczm/index.htm

DOCUMENT	DETAILS
SCOTLAND 	**Strategy:** Yes. **Supporting documentation:** Scottish Executive. 2005. Seas the Opportunity: A strategy for the long-term sustainability of Scotland's coasts and seas. Scottish executive, Edinburgh. Available at: http://www.scotland.gov.uk/Publications/2005/08/26102543/25444
WALES 	**Strategy:** Yes. **Supporting documentation:** Welsh Assembly Government. 2006. Making the Most of Wales' Coast: the integrated coastal management strategy for Wales, Welsh Assembly Government, Cardiff. Available at: http://www.countryside.wales.gov.uk/fe/master.asp?n1=797&n2=123&n3=952
NORTHERN IRELAND 	**Strategy:** Yes. **Supporting documentation:** DOENI. 2006. An Integrated Coastal Zone Strategy for Northern Ireland. Department of the Environment Northern Ireland, Belfast. Available at: http://www.coastalmarineni.com/index/integrated_coastal_zone_management/the_ni_iczm_strategy.htm

Sub-national:

Below the national level, there is ICZM activity at both regional and local levels. However, there is considerable variation in the degree to which ICZM is progressed at the regional level (COREPOINT: Hills *et al.*, 2008) with relatively few specific 'regional' ICZM efforts or ICZM initiatives which involve regional government as a key player apart from the North West Coastal Forum in England and the Belgian ICZM Coordination Point, respectively (North Sea and Oceans Steering Committee, 2006).

At local levels there is considerable ICZM effort although this is not evenly distributed along the coasts of North West Europe with a tendency to be focused on the more intensively used, urban estuaries and coasts even within Member States with higher levels of activity, such as the UK. Local ICZM effort ranges from specific ICZM programmes to more sectorally focused local initiatives, which, through increasing use of partnership and integrated environmental management approaches, actually help deliver many of the key ICZM principles on the ground without being 'labelled' as ICZM *per se*. These include the management programmes associated with heritage coasts, European Marine Sites (under Natura 2000) and shoreline management in England and Wales (Ballinger *et al.*, 2004). Specific local ICZM efforts may be facilitated by local institutions including local government and harbour authorities in relation to specific local issues and priorities or, more commonly across North West Europe, may be linked to specific national projects or European programmes, such as INTERREG. As such, the latter are frequently beset with problems associated with short-term funding and associated commitment, and the former may be hampered with over reliance on local 'champions' (Cummins *et al.*, 2004).

The partnership approach to local delivery of ICZM is noteworthy and is particularly well developed within the UK. Such partnerships seek to foster co-operation between a wide range of public, non-statutory and commercial organisations with local coastal interests and responsibilities, and generally encourage a more coordinated approach to management. Most focus on estuaries and firths where sectoral management and administrative overlap are pronounced. The partnerships usually produce some sort of 'integrating' management strategy involving wide public participation and involvement of relevant stakeholders. Examples include the Solway Firth Partnership in Scotland and England and the Severn Estuary Partnership in Wales and England. The partnership approach to management is discussed further in the COREPOINT review of international approaches to ICZM (COREPOINT: O'Hagan, et. al., 2005a) and the dedicated COREPOINT report on partnership working (COREPOINT: Lymbery, G. *et al.*, 2008).

The COREPOINT project sought to advance the implementation of ICZM at the local level in North West Europe through a range of capacity building initiatives involving partnership working. This approach is described in detail in Chapter 4.

3.2.3 Organisational aspects of governance

This section focuses only on the European and national/sub-national levels. The key European institutions that have a role in ICZM are the European Commission, the European Parliament and the Council of the European Union.

It is clear that the management of the coastal zones of North West Europe is primarily carried out on a sectoral basis. This approach, however, is generally not conducive to integrated management. Even institutions that have roles in both the terrestrial and marine environments can rarely take an interdisciplinary approach due to their legal, sectorally-biased remit. However, there are efforts within some Member States to encourage non-statutory coordination and collaboration between central government departments and other national stakeholders in relation to coastal and marine matters. For example, the Wales Coastal and Maritime Partnership brings together a wide range of organisations to discuss coastal and marine issues and to advise the Welsh Assembly Government on relevant policy development.

The broadest role and responsibilities in coastal areas rest with local government/local planning authorities. However, coordination across several tiers of local government (provincial/county and local/district/municipal councils) as well as between internal local government departments with coastal functions and responsibilities is frequently fraught with difficulty. This is exacerbated by complex organisational structures, the different backgrounds of the personnel involved in areas as diverse as coastal engineering, tourism management and land use planning as well as the perceived peripherality of ICZM to daily service provision, which is largely based on sectoral legislative requirements emanating from the national level (Ballinger *et al.*, 2004). The regulation of significant coastal industries such as fisheries, oil and gas and marine aggregate extraction is primarily the responsibility of central Government departments.

As a consequence, the management of such industries tends to be far removed from the principles of good ICZM contained in the European ICZM Recommendation. The broad, holistic approach which sub-national, regional government institutions can provide is also not currently being fully realised although the regional tier of government, particularly associated with the regionalisation of economic development and planning policy, is currently growing in importance.

A detailed examination of individual Member States' governance systems is beyond the scope of this document. However, a brief outline of their essential characteristics and key differences is presented graphically on the following pages.

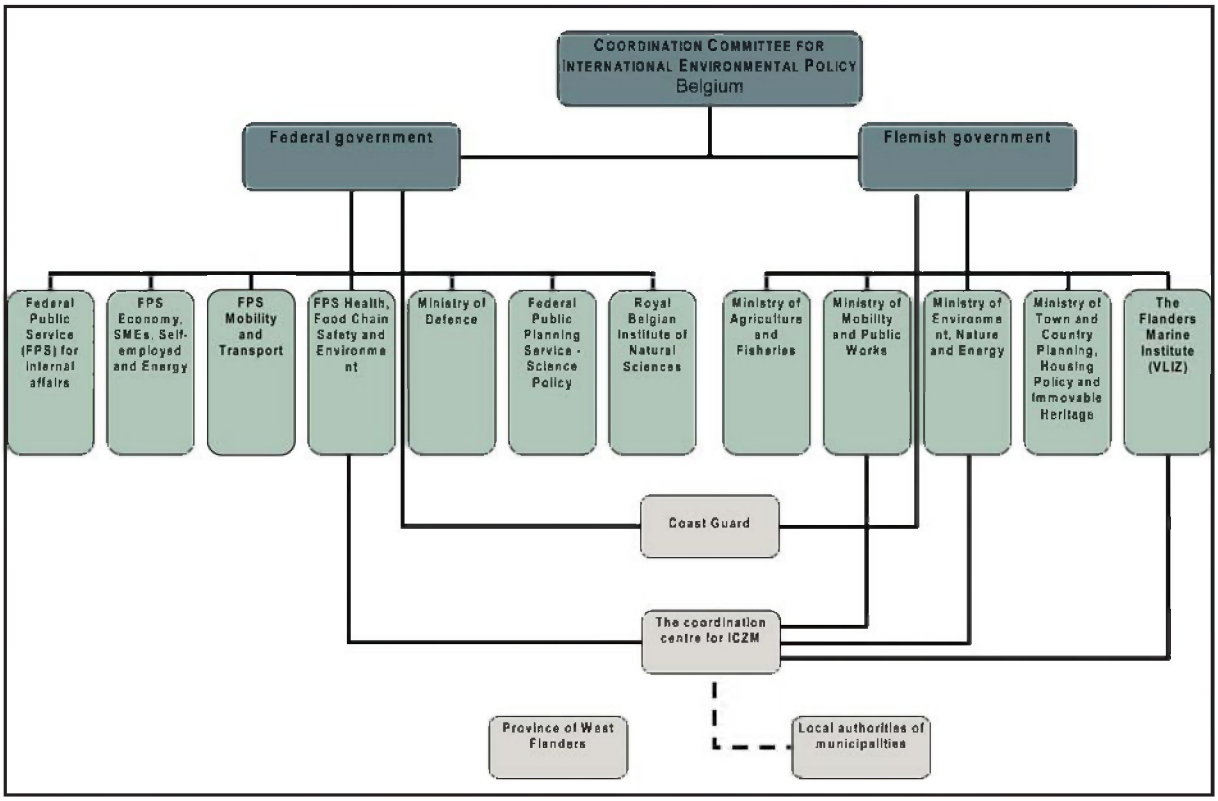


FIGURE 3.1A INSTITUTIONAL SCHEMA FOR BELGIUM

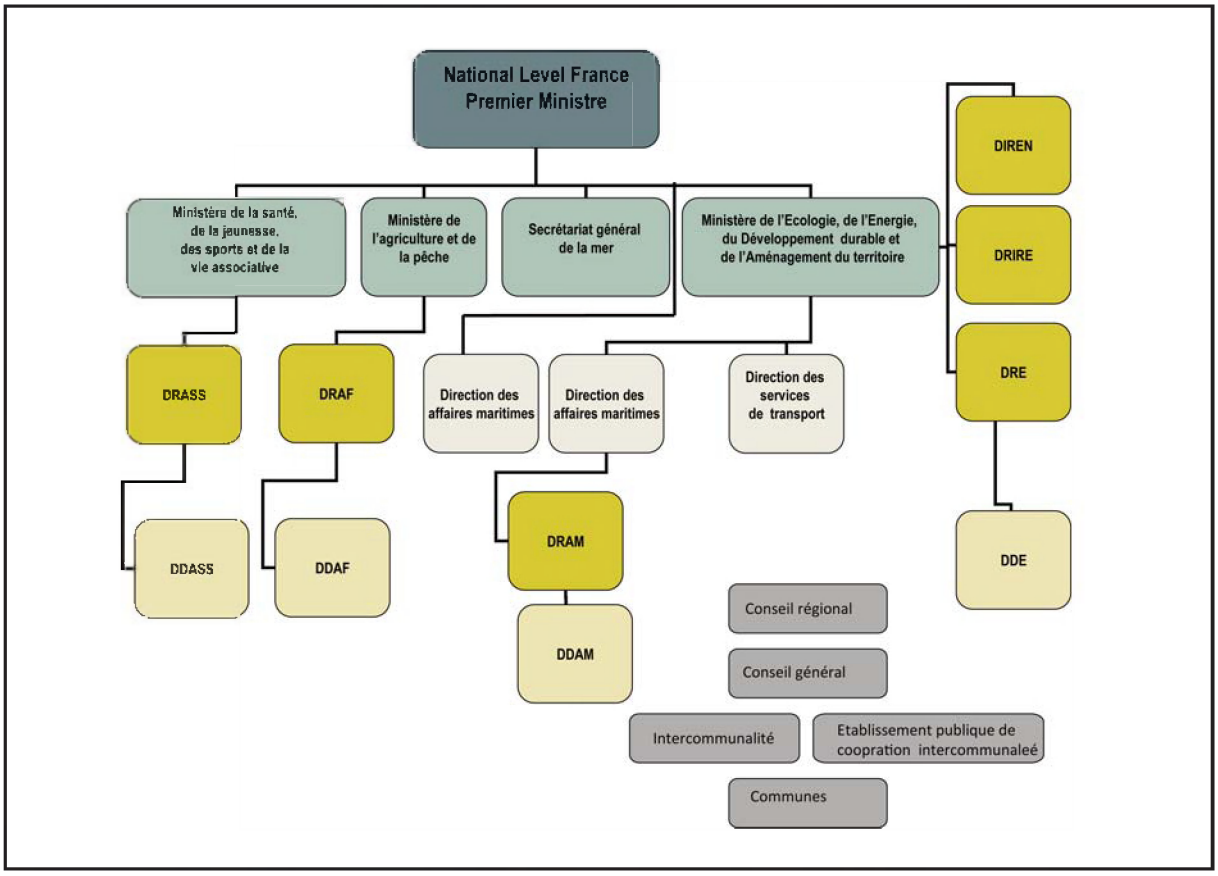


FIGURE 3.1B INSTITUTIONAL SCHEMA FOR FRANCE

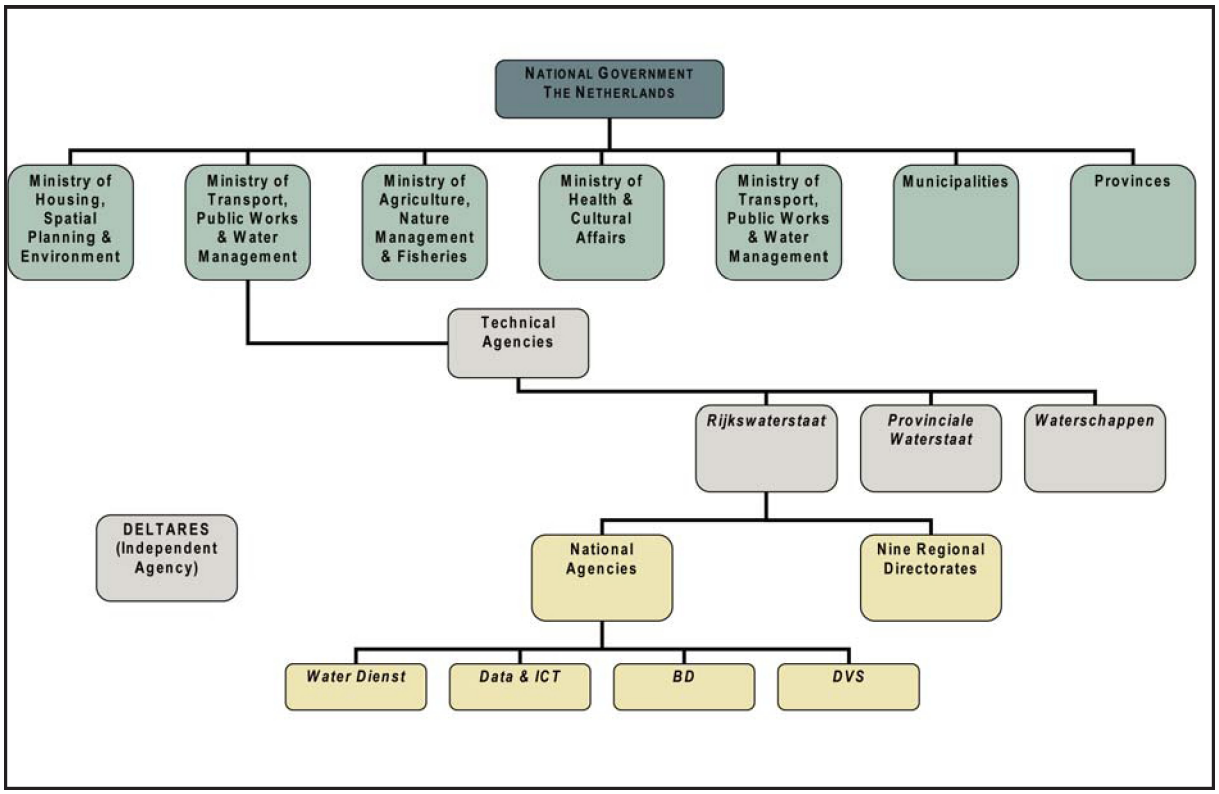


FIGURE 3.1C INSTITUTIONAL SCHEMA FOR THE NETHERLANDS

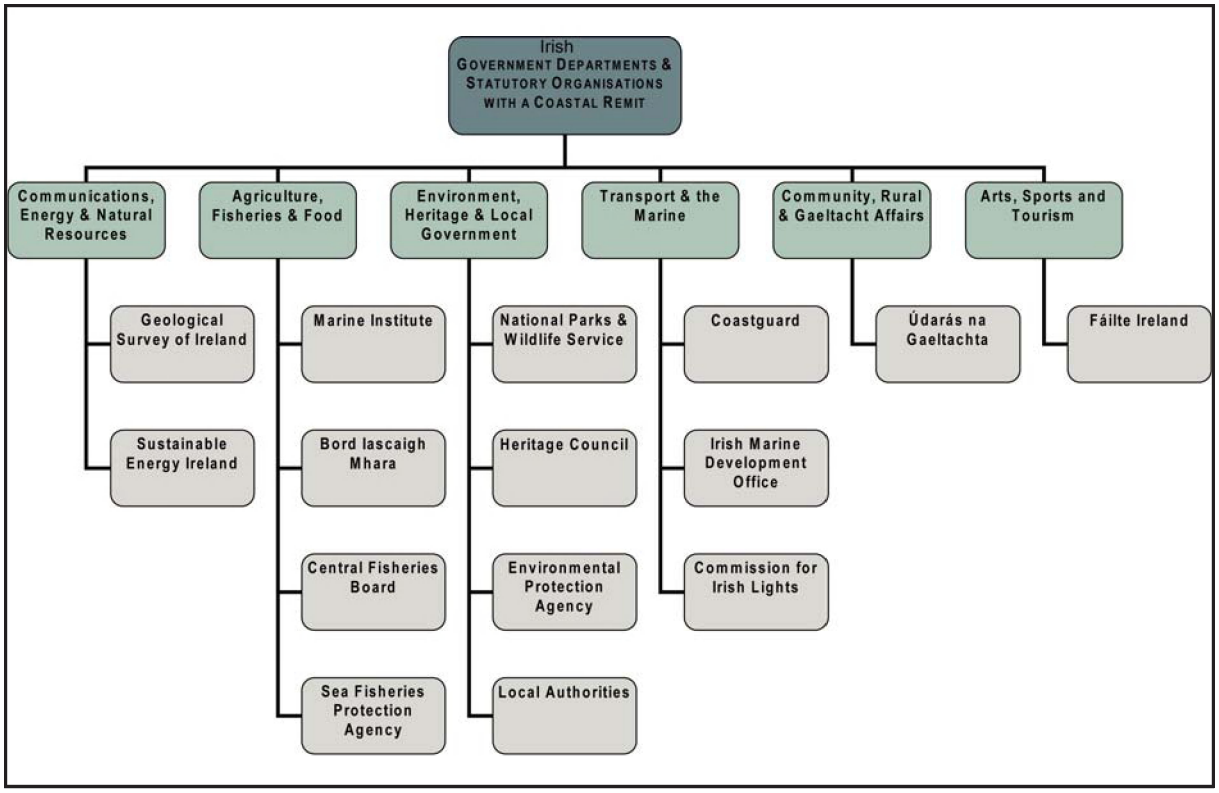


FIGURE 3.1D INSTITUTIONAL SCHEMAS FOR IRELAND

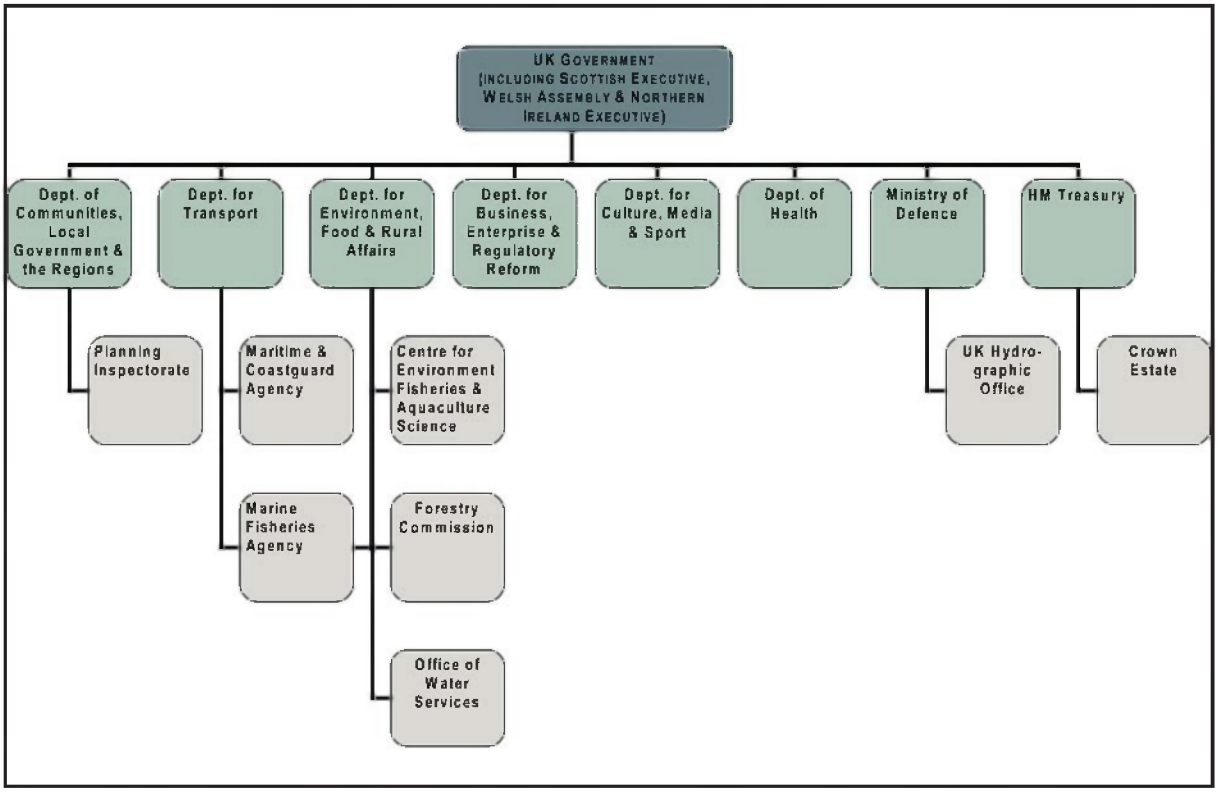


FIGURE 3.1E INSTITUTIONAL SCHEMA FOR THE UK (DEVOLVED ADMINISTRATIONS FOLLOWING)

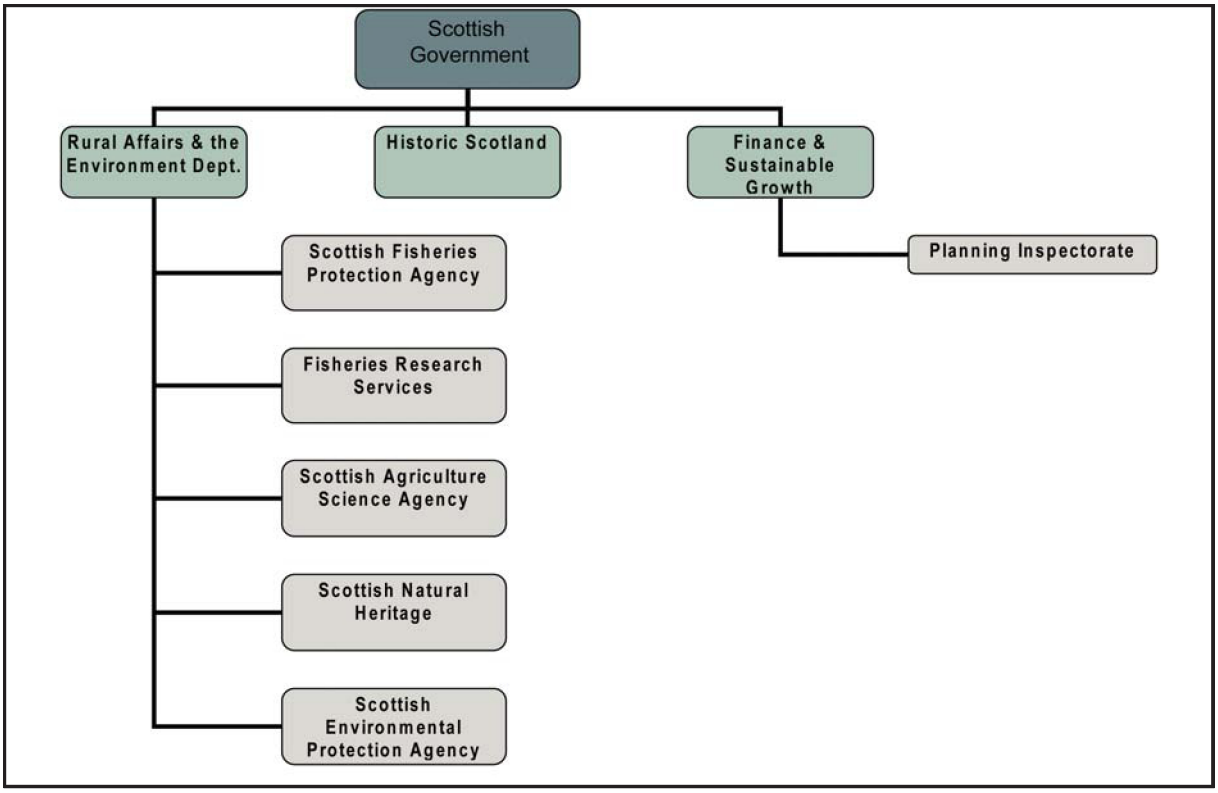


FIGURE 3.1F DEVOLVED ADMINISTRATION IN SCOTLAND

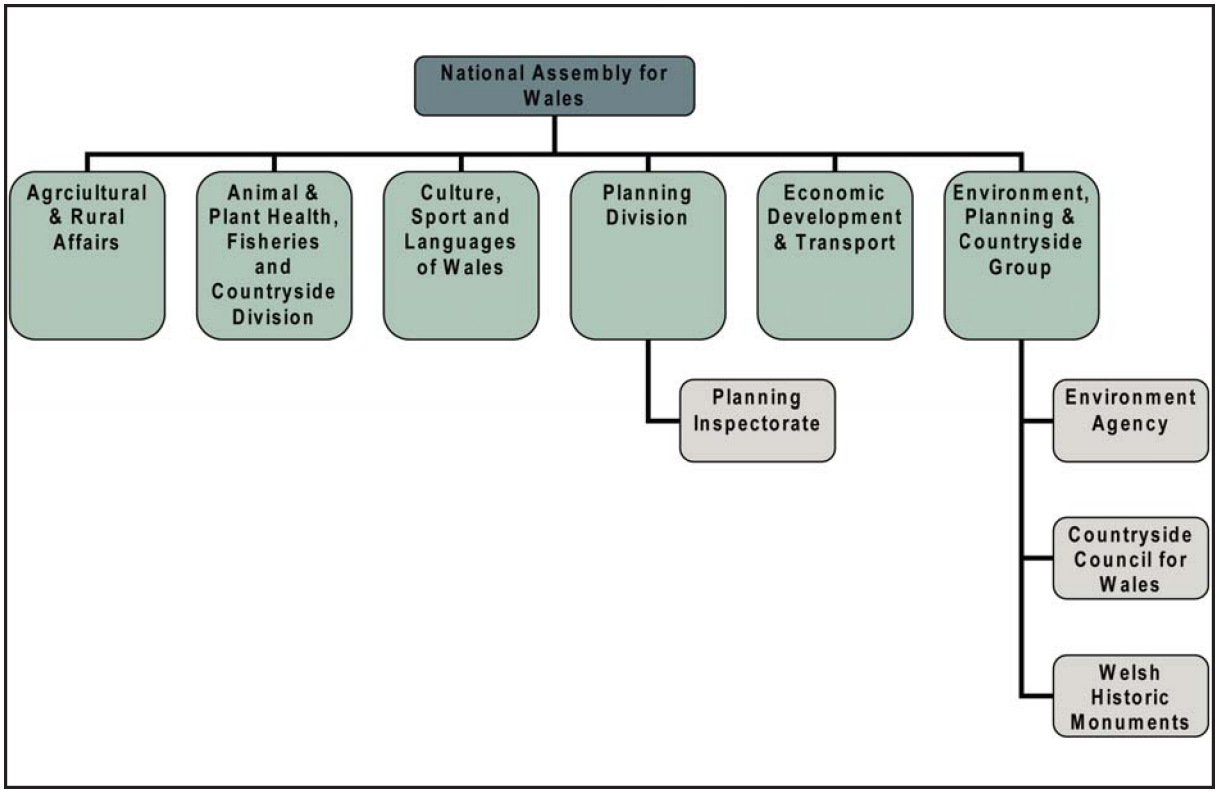


FIGURE 3.1G DEVOLVED ADMINISTRATION IN WALES

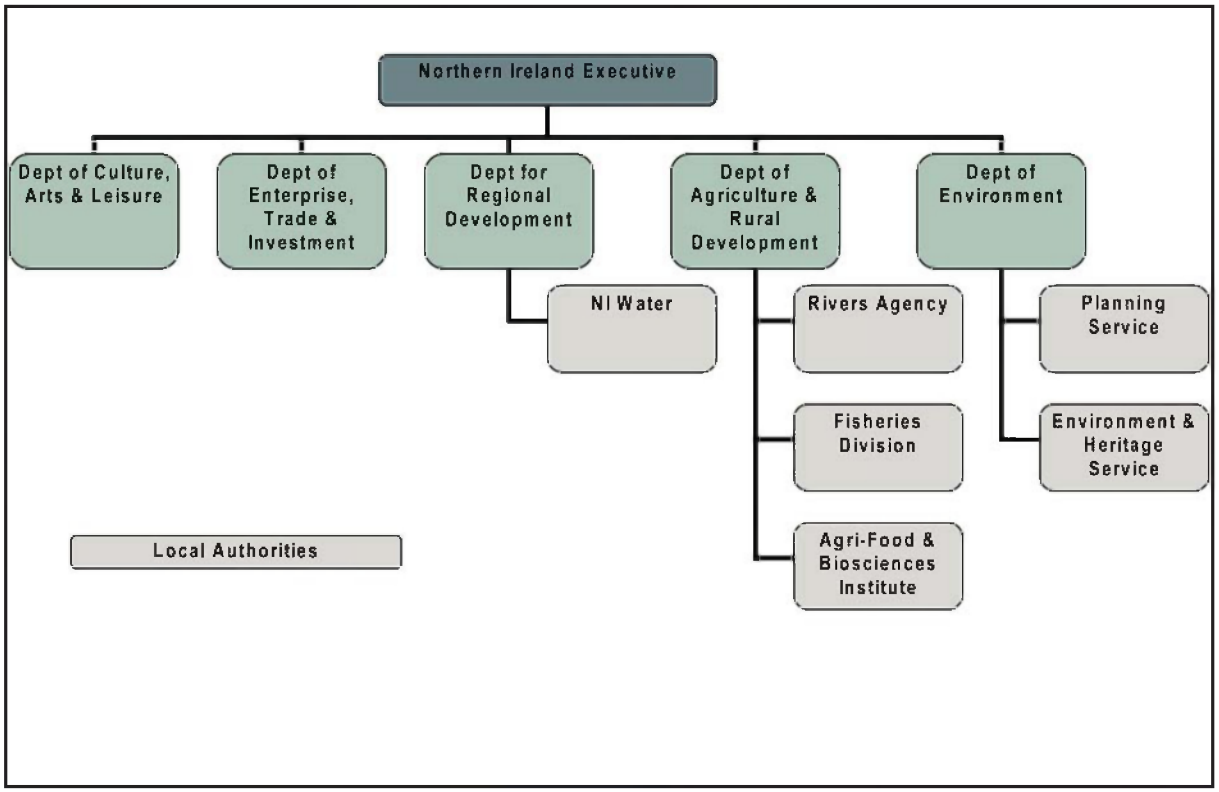


FIGURE 3.1H DEVOLVED ADMINISTRATION IN NORTHERN IRELAND

3.3 SPATIAL PLANNING

3.3.1 Spatial planning: European and national dimensions

Since the early to mid-1990s there has been considerable interest in, and development of, spatial planning within Europe at all levels as a means of promoting sustainable and balanced development whilst respecting territorial cohesion, economic competition and the diversity of particular areas (Adams *et al.*, 2006). Being a wider and more strategic concept and activity than land-use planning, spatial planning links land-use planning with economic development policy and other policy areas, including social and environmental ones.

Of particular note in a European context, are the European Spatial Development Perspective (ESDP) and the supporting European Spatial Planning Observation Network (ESPON). The former has promoted balanced and sustainable polycentric[8] development in trying to address the excessive economic and demographic concentration in the congested areas of the EU. The aims and principles of ESDP have been recently supported by the EU's Territorial Agenda (2007). ESPON, a pan-European research community, supports policy development through increasing relevant knowledge and understanding as well as by developing integrated tools and instruments to improve spatial coordination of sectoral policy.

Given spatial planning's key role in the delivery of sustainable development, its ability to recognise and address 'wicked' issues and its particular focus on the 'region', it is an important tool for ICZM. This is particularly so for North West Europe where there has been a significant renaissance in regional development and associated spatial planning strategies and governance structures over the last decade (Section 3.2.3).

Across the EU, there is clear recognition of the importance of national spatial planning systems in providing a policy and procedural framework for managing land use change, and relating this to wider economic, social and environmental objectives. In unitary States like France, Ireland and the UK, the national government generally makes the law in relation to spatial planning which is then applied throughout the country. However, since devolved government in the UK in the late 1990s, there have been devolved spatial planning powers for Scotland and Wales. In federal States, power is shared between national and other tiers of government. In the case of Belgium, power is shared with the regions, such as Flanders, therefore, play the primary role in spatial planning.

3.3.2 Land use planning in Member States of the COREPOINT Project

The review of the characteristics of the planning systems of the Member States relevant to the COREPOINT Project Expert Couplet sites (COREPOINT: Alden, 2007) revealed that all six Member States have a similar pattern of spatial and land use planning at national, regional and local levels. However, it revealed subtle differences between the planning systems which are summarised in the separate COREPOINT report (Ballinger and Alden, 2008). Such differences were also highlighted by the COREPOINT survey of local ICZM experiences across North West Europe (COREPOINT: Ballinger *et al.*, 2008).

At local level, local authorities have prime responsibility for detailed plan making, within a framework set and supervised by national or regional government. In the United Kingdom, such local planning systems, have been described as operating as the 'gatekeepers' of development (Taussik, 2007). They are vital in determining the location and distribution of development and land use, providing a context for the regulation of land use and physical development[9]. As such these plans shape the resultant character and associated management issues of coastal areas, albeit their limited seaward jurisdictional limit[10]. Given recent planning and institutional reforms, it is a time of opportunity for coastal planners and managers to communicate, cooperate and collaborate so that they can acquire a wider and better shared understanding of coastal issues in order to generate improved policy frameworks for both ICZM and planning (Taussik, 2000; PlanCoast, 2008).

[8] Polycentric spatial development promotes the establishment of multi-centred, balanced development foci as well as 'dynamic and competitive cities and urbanised regions' and 'indigenous development of productive rural areas' (Wiesbusch, 2004). It also recognises the functional linkages between urban and rural areas and the role of urban clusters and gateways in achieving such balanced development.

[9] In the UK, for example, a plan-led system informs individual decisions regarding development control.

[10] Low Water Mark in England and Wales, for example.

This is why the COREPOINT project team has worked with and included local planners and why this section of the document is so important, providing background to the COREPOINT Expert Couplet sites and activities (Chapter 4). Indeed, the results of the COREPOINT Partners' Questionnaire Survey (Section 4.2) have indicated that there is considerable synergy between local planning and ICZM efforts. However, the findings also suggest a number of challenges to further integration between the two systems.

3.3.3 Marine Spatial Planning

Whilst Marine Spatial Planning (MSP) is at an early stage of development across North West Europe, international experience suggests that it can facilitate sustainable development and strategic planning as well as multiple use allocation and associated conflict mitigation and reduction for offshore areas (UNESCO, 2006, Ehler *et al*, 2007). Being area-based, it can also provide a practical approach to long-term ecosystem-based management *(op. cit.)*. As such it is an essential tool for the coasts of North West Europe, particularly those facing increasing pressure from traditional as well as emerging new uses within already congested coastal space.

The different character of the marine natural environment, the contrasting nature and patterns of land and sea use as well as the different information and data requirements for marine and terrestrial environments, suggest that Marine Spatial Planning systems may need to adopt a somewhat different approach to current land-based spatial planning systems (Ballinger *et al.*, 2005) as demonstrated in Table 3.3 below.

TABLE 3.3 KEY DIFFERENCES BETWEEN TERRESTRIAL AND MARINE SPATIAL PLANNING

THE DIFFERENT CHARACTER OF THE MARINE NATURAL ENVIRONMENT
The three dimensional nature of the marine environment: 1. Development and uses can occur on the seabed, on the sea surface or anywhere in-between (or combination of these). It may also be necessary to consider use of the airspace above the sea surface, e.g. air transport servicing offshore platforms, etc. 2. This necessitates a three dimensional approach to Marine Spatial Planning, as opposed to a two-dimensional approach in land use planning.
The dynamic nature of the marine environment: 1. This demands a more flexible and adaptive approach to planning. For example, pollution can spread much quicker than on land due to wave / current / tidal action; offshore features such as sand-banks are more dynamic than topographical features on land.
The mobility of marine species: 1. Marine species tend to be more mobile than terrestrial species. 2. Such species are difficult to protect with static geographic designations, such as those on land. 3. Though these may be more appropriate for the protection of nursery / breeding / spawning sites.
THE DIFFERENT NATURE AND PATTERNS OF LAND AND USE
Many sea-use activities are not restricted to linear routes: 1. For example, roads and rail set aside specifically for transport (shipping lanes are an exception). 2. There are public / common rights to navigation and fishing which have to be upheld.
Variations in temporal uses: 1. Characteristics of development on land (buildings / fixed assets) do not change significantly over time. 2. Many sea-use activities are highly mobile and intensity of use may vary temporally.
Land use tends to be exclusive, i.e. used for one purpose: 1. Not so at sea, where multiple use of sea areas is common / more widespread than on land. 2. Also variations in temporal uses of the sea (fishing seasons, recreational use, etc).
Different levels of dependency upon the supporting environment 1. Arguably, development on land is less dependent upon the condition of the land than most offshore industries / uses many of which are reliant upon a healthy marine ecosystem.
OTHER CONSIDERATIONS
Identification of planning units on sea compared with on land 1. It would be more difficult to identify static, easily-identifiable planning units at sea compared with those for land areas.
Information, data and knowledge 1. No comparable data on the extent of physical / biological processes or the impact of development upon these for the marine compared with the land environment. 2. Implications of resource depletion / state of the marine environment may be less obvious / less immediately identifiable than on land. 3. Additional complexities associated with monitoring / data collection in a dynamic and constantly changing environment offshore.

Source: Ballinger *et al.* (2005)

Drivers for Marine Spatial Planning (MSP) in Europe

Interest in MSP at both the European level and national level has been triggered and supported by a range of policy drivers. At the European level the following have been important:

- the 2002 Bergen Declaration (agreed at the 5th North Sea Conference of ministers);
- the EU's Natura 2000 network and the second Ministerial Meeting of the OSPAR Commission Recommendation 2003/3 on a Network of Marine Protected Areas;
- the EC Recommendation on ICZM (2002);
- the EU Maritime Policy (COM 2006); and
- the Blue Book – an integrated maritime policy for the European Union (2007).

Development of Marine Spatial Planning in North West Europe

In addition to the Trilateral Wadden Sea Plan, the first European transboundary marine spatial plan between the Netherlands, Germany and Denmark (2001), marine spatial plans are under consideration or in preparation by various individual Member States (Table 3.4). These include national and regional initiatives in France as well as national efforts in Belgium and the Netherlands. The MSP process for Belgium is particularly noteworthy. The turbulent history and legal contests associated with this case illustrate the importance of transparent, clear and extensive procedures for stakeholder involvement (Maes *et al.*, 2005; Douvere *et al.* 2007). The Belgian experience also shows the merits in adopting a phased delivery to MSP implementation, adapting to changing circumstances and benefiting from new, innovative planning and management solutions (*op. cit.* Figure 3.1).

Given the early evolutionary stage of development of MSP alongside the different human and physical characteristics of the coastal waters of North West Europe, it is not surprising that there are somewhat different interpretations and initiatives labelled as MSP at Member State level. However, despite the different geographical scales of operation, status, tools and levels of constraint associated with MSP in the North West Europe region (Table 3.4), the planning efforts share a common objective. They all attempt to provide a strategic framework to organise offshore activities and uses in order to secure sustainable and integrated development.

BELGIUM: A NATIONAL CASE STUDY IN MSP

Backaround

The Belgian Part of the North Sea (BPNS) is a small and intensively used sea area facing increasing pressures caused by limited availability of space on land and offshore, including:

- new uses of the sea and sea bed, including installation of wind turbines;
- growing demand for laying cables and pipelines;
- growing demand for sand and gravel exploitation;
- increase in shipping traffic and recreation;
- need for establishing marine protected areas; and
- increased pressure from land-based activities on sea-based activities.

The Master Plan for the BPNS

Priorities and objectives included the:

- delimitation of a zone for offshore wind farming;
- delimitation of a zone for marine protected areas;
- elaboration of a policy plan for sustainable sand and gravel extraction;
- enhancement of financial resources for pollution prevention;
- mapping of marine habitats;
- protection of wrecks valuable for biodiversity; and
- management of land-based activities impacting on the marine environment.

Incremental implementation of the Master Plan

Despite no legal basis for MSP, the Master Plan provides a translation of current and future objectives of various sectors into a spatial vision using a new cross-sectoral, multi-use approach[11]. It is being implemented incrementally in two phases.

First implementation phase:

Sand and gravel extraction

A diverse zoning system for sand and gravel extraction (2003) designates most intensive exploitation as control zones along with a sequential rotation procedure for exploitation. Royal Decrees (2004) support this, introducing conditions and procedures for granting concessions for the exploration and exploitation of mineral resources and other non-living resource[12] as well as setting out regulations for the environmental impact assessment of such activities.

Offshore wind energy

Designation of zones for offshore wind parks has had a short but very turbulent history, with various concession permits contested in several legal procedures in court (Council of State) and finally being cancelled by the Minister of the North Sea. A new approach foresees the establishment of two adjacent zones on Thornton Bank.

[11]Such an approach might involve, for example, limitations on sand and gravel extraction during fish spawning periods; future offshore wind farms hosting aquaculture projects.
[12]This relates to exploration and exploitation in the territorial sea and on the continental shelf, as well as within the new exploitation zones.

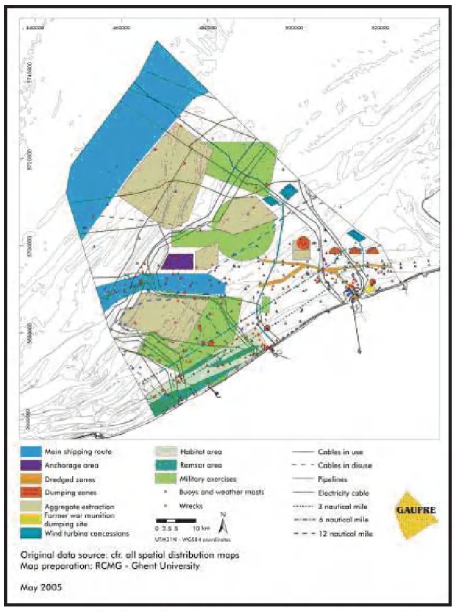


FIGURE 3.2 DIFFERENT USES OF THE BELGIAN PART OF THE NORTH SEA (2004)

Second implementation phase:

Focusing on the implementation of Natura 2000, three offshore SPAs and two SACs received legal status in 2005 with a further zone, the Bay of Heist, receiving protected status in 2006.

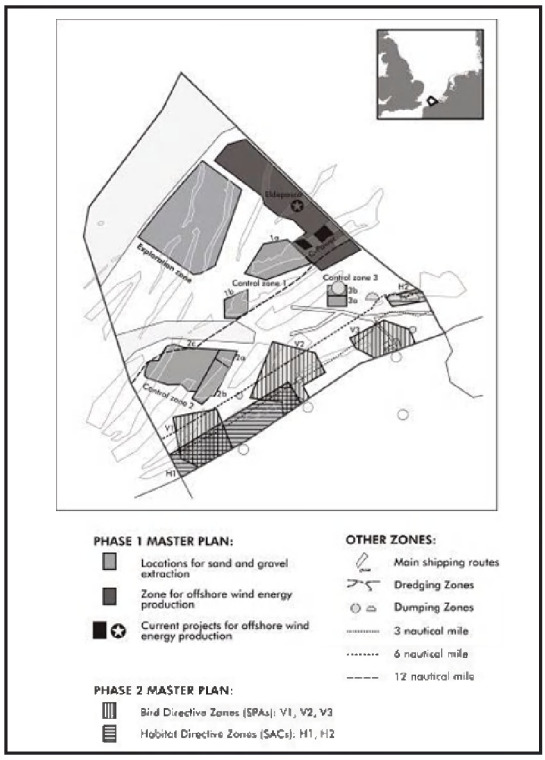


FIGURE 3.3 ZONATION ACCORDING TO THE MASTER PLAN (DOUVERE *ET AL.* 2007)

TABLE 3.4 PROGRESS IN DEVELOPING MSP IN NORTH WEST EUROPE

MEMBER STATE/ MARINE AREA	STAGE	STATUS	COMMENTS	KEY REFERENCES
IRELAND	D	N/A	RECOGNISED IN THE MARINE KNOWLEDGE, RESEARCH, & INNOVATION STRATEGY FOR IRELAND 2007-2013 AS A KEY OBJECTIVE.	MARINE INSTITUTE, (2007). SEACHANGE: A MARINE KNOWLEDGE, RESEARCH, & INNOVATION STRATEGY FOR IRELAND 2007-2013: PAGE 71
UK	D		THE UK REVIEW OF MARINE NATURE CONSERVATION ESTABLISHED AN IRISH SEA PILOT PROJECT (2002) TO EXAMINE THE POTENTIAL FOR A REGIONAL ECOSYSTEM APPROACH TO OFFSHORE MANAGEMENT. DEVELOPMENT OF UK MARINE POLICY HAS LED TO FURTHER CONSIDERATION OF MARINE PLANNING. IT IS ANTICIPATED THAT THE MARINE BILL (DRAFT DUE SPRING 2008), WHICH WILL INTRODUCE AN IMPROVED SYSTEM FOR MARINE RESOURCE MANAGEMENT, WILL INCLUDE PROVISION FOR MARINE PLANNING. IT SHOULD ALSO BE NOTED THAT SCOTLAND IS TO DEVELOP A SEPARATE SCOTTISH MARINE BILL AND IS CURRENTLY PURSUING A RANGE OF PILOT PROJECTS ON MSP AND IS INVESTIGATING THE INTER-RELATIONSHIP BETWEEN MSP AND ICZM.	UK: MSPP CONSORTIUM (2006) TYLDESLEY (2004A AND B) DEFRA (2006) SCOTLAND: ADVISORY GROUP ON MARINE AND COASTAL STRATEGY (AGMACS; 2007) SCOTTISH COASTAL FORUM AND AGMACS SECRETARIAT (2007).
FRANCE	I (LOCAL & REGIONAL LEVEL)	S (NATIONAL LEGISLATION/ LOCAL APPLICATION) NS (REGIONAL CHARTER)	AT LOCAL LEVEL, A MECHANISM OF MARINE SPATIAL PLANNING EXISTS. IT IS DEFINED BY NATIONAL LEGISLATION AND IMPLEMENTED LOCALLY (SMVM: SCHÉMA DE MISE EN VALEUR DE LA MER). AT REGIONAL LEVEL, NON STATUTORY SPATIAL PLANNING EXISTS E.G. IN BRITTANY (CHARTER FOR COASTAL ZONE MANAGEMENT).	SMVM : ART L.122-1 ET SUIVANTS DU CODE DE L'URBANISME. RÉGION BRETAGNE, 2007. CHARTE DES ESPACES CÔTIERS POUR UNE GESTION DURABLE DU LITTORAL BRETON.

MEMBER STATE/ MARINE AREA	STAGE	STATUS	COMMENTS	KEY REFERENCES
BELGIUM	I	NS	MASTERPLAN NORTH SEA AND GAUFRE PROJECT: 2003-2005	MAES *ET AL.* (2005) DOUVERE *ET AL.* 2007
NETHERLANDS	P TO I DEPENDING ON THE AREAS	S-+	INTEGRATED MANAGEMENT PLAN FOR THE NORTH SEA (2015) INCLUDES CHAPTER ON SPATIAL MANAGEMENT	INTEGRAAL BEHEERPLAN NOORDZEE (2015) - IDON (2005) DE VREES (2006)
GERMANY	D		UNDER CONSIDERATION FOR THE GERMAN EEZ. VARIOUS STATES HAVE EXTENDED PLANS OFFSHORE (MECKLENBURG-VORPOMMERN: 2005; LOWER SAXONY: 2006; SCHLESWIG-HOLSTEIN: IN PREPARATION). THE FEDERAL SPATIAL PLANNING ACT WAS EXPANDED TO THE GERMAN EEZ IN 2004. PLANNING TARGETS AND PRINCIPLES FOR THE EEZ INCLUDING THE DESIGNATION OF PRIORITY AREAS FOR SPECIFIC FORMS OF USE HAVE BEEN DEVELOPED. A FORMAL CONSULTATION ON THE DRAFT SPATIAL PLAN FOR THE EEZ WILL TAKE PLACE IN 2008.	GEE *ET AL.* (2004) SIEGEL (2007)
WADDEN SEA	I	NS	TRILATERAL WADDEN SEA PLAN, THE FIRST EUROPEAN TRANSBOUNDARY INTEGRATED MARINE PLAN BETWEEN THE NETHERLANDS, GERMANY AND DENMARK (1997). THE PLAN INCLUDES COMMON POLICIES, MEASURES, PROJECTS AND ACTIONS.	DAMOISEAUX, M.A. (2003)

Key:

Stage:
D-Under discussion / consideration
P-Being prepared
I-Being implemented
Status:
NS-Non-statutory
S-Statutory

Marine Spatial Planning and ICZM

Given the considerable interest and impetus for the development of MSP both across Europe and at Member State level, this is a time of considerable opportunity for ICZM, particularly given the similarity in aims, objectives and principles between MSP and ICZM.

Exactly, how MSP will develop and how it will interface with ICZM at the various levels, however, is still emerging although it is clear from the EC ICZM Recommendation that the Commission is convinced that MSP is a key ingredient for achieving ICZM (EC, 2002). Within discussions on the role of ICZM in providing a linkage across the land/sea divide, the need to make adequate provision for planning across this boundary is also a key consideration (Scottish Coastal Forum and AGMACS Secretariat, 2007; Atkins, 2004; Ballinger *et al.*, 2005) along with consideration of the potential role of local coastal partnerships/initiatives in MSP (AGMACS, 2007).

The experience of Oregon Ocean-Coastal Management program (US) which includes land and sea-based programmes, undertaken as part of the State-wide spatial land use planning system, suggests that ICZM programmes can provide a 'zip' bringing land and marine systems seamlessly together *(op. cit.)*. Given uncertainties regarding MSP development, MSP may need to be 'shaped' to country specific requirements, assisting with the ICZM principle of 'local specificity.' This, however, is only likely to be achieved with suitable administrative arrangements which enable full engagement of relevant sectors and other key stakeholders including the ICZM community.

3.4 CONCLUSIONS ON THE GOVERNANCE AND DELIVERY ASPECTS OF ICZM IN NORTH WEST EUROPE BASED ON THE COREPOINT RESEARCH

Legal Framework:

- Specific legislation for coastal zones is largely absent from the Member States of North West Europe;
- In many North West Europe Member States, planning powers are devolved to regional or local government whose jurisdiction rarely extends beyond the Mean High/Low water mark. This inherent inflexibility impedes integration across the land – sea divide;
- The lack of a uniform definition of the coast undermines the ability of Member States to implement ICZM in a consistent manner. It also makes implementation of key EC Directives inherently difficult as maritime jurisdictional zones vary between Member States; and
- Many of the international conventions and treaties that the EU is a signatory to will influence the development of ICZM in the North West European region in the future.

Policy:

- The principle of integration in the Amsterdam Treaty reaffirms the European Union's commitment to sustainable development. ICZM, and its associated tools for delivery, is a key way to achieve sustainable development of coastal areas;
- The EC Recommendation on the implementation of ICZM in Europe forms the current policy basis for ICZM. However the development of stocktakes and strategies in response to this is variable around North West Europe;
- In North West Europe the majority of Member States have formally reported to the Commission on their stocktake although relatively few of them have developed specific ICZM strategies, namely France, Germany and three of the devolved UK administrations. Belgium and the Netherlands will progress ICZM through their respective current instruments while the approach of Ireland is still under debate; and
- Recent and forth coming developments at European level in relation to an all-embracing maritime policy for the European Union is likely to have an impact on future ICZM initiatives.

Organisational Aspects:

- Sectoral management of coastal areas still prevails in North West Europe;
- There remains a strong land – sea divide in the management of coastal areas; and
- A variety of approaches to ICZM evident at the North West Europe scale. There is weak horizontal integration between sectors with legislation often effectively preventing cooperation. To circumvent this some Member States have favoured a non-statutory approach through voluntary ICZM initiatives and partnerships.

Planning:

- The recent renaissance in regional development and terrestrial spatial planning provides a strategic context for ICZM development in North West Europe;
- Local development planning is a long-established mechanism for influencing the distribution of development within coastal areas which is generally under-utilised in ICZM; and
- With an ability to facilitate sustainable development, strategic planning, multiple use allocation, conflict mitigation and reduction, Marine Spatial Planning is an essential tool for the coasts of North West Europe.

Implications for the COREPOINT project:

It has been recognised that there is a need for integrated planning and management to achieve sustainable development of the North West Europe coastal zone. To deliver this it is essential that the law, policy and administrative frameworks currently in operation are understood as these effectively dictate how management is carried out. Current governance arrangements present both constraints and opportunities for the wider management process. With this in mind, COREPOINT is centred on local case studies which have provided an opportunity to explore the implications of the institutional, social, natural and cultural heterogeneity of North West Europe, to compare and exchange local ICZM experiences and to benefit from such exchanges.

The specificity of each case study, in terms of its social context (uses and stakeholders) as well as its natural and cultural heritage (Chapter 2), alongside the interweaving of these aspects with governance and political dimensions, has provided a rich and challenging context for the development of the COREPOINT project. Given that the human dimension is considered central to the implementation of better management of the coastal zone the project has chosen to favour the relationship with local managers through Expert Couplet Nodes, as discussed in Chapter 4.

COREPOINT reference material

Alden, J. (2007). Appendix 3: *Matrix Table of Spatial Planning in Member Countries of COREPOINT Project.* A paper produced as part of COREPOINT project, 6pp.

Ballinger, R.C. (2008). COREPOINT: *Partner's Survey - Evaluation of local ICZM efforts*, A report prepared as part of the COREPOINT project, 59 pp.

Ballinger, R.C. and Alden, J. (2008). *Spatial planning and ICZM in North West Europe,* A report prepared as part of the COREPOINT project, 20pp.

Hills, J. et al. (2008). COREPOINT: *the role of the regions,* A report prepared as part of the COREPOINT project, 28 pp.

Kervarec, F. (2007). *ICZM in France: points of view; a summary of interviews carried out with relevant institutions.* A report prepared as part of the COREPOINT project, 10pp.

Lymbery, G. (2008). COREPOINT: *ICZM Survey of Partner Countries.* A report prepared as part of the COREPOINT project, 38pp.

O'Hagan, A.M., Ballinger, R., Stojanovic, T., and Le Tissier, M. (2005a). COREPOINT: Review of International Approaches to Integrated Coastal Zone Management (ICZM). July 2005. 108pp.

O'Hagan, A.M., Ballinger, R., Ball, I., and Schrivers, J. (2005b). COREPOINT: European legislation and policies with implications for coastal management. April 2005. 142 pp.

References:

Adams, N., Alden, J., and Harris, N. (Eds.) (2006). *Regional Development and Spatial Planning in our Enlarged EU*; Ashgate 2006. (The book covers the Spatial Planning Systems in 5 of the 6 COREPOINT countries i.e. Ireland, England, Wales, Scotland, and Flanders).

Advisory Group on Marine and Coastal Strategy. (2007). *Recommendations of the Advisory Group on Marine and Coastal Strategy.* A Follow up to Seas the Opportunity: A Strategy for the Long Term Sustainability of Scotland's Coasts and Seas, Scottish Executive. Available at: http://www.scotland.gov.uk/Publications/2007/03/08103826/0

Atkins. (2004). *ICZM in the UK: a stocktake,* Final Report, March 2004.

Ballinger, R.C., Taussik, J. and Potts, J. (2004). Sharing responsibility for managing coastal risk: lessons from the British Experience, *Delivering sustainable coasts: connecting science and policy,* Proceedings of Littoral, 2004, the 7th International Symposium, Aberdeen, UK, Sept. 20 – 22, 2004, p199 – 204.

Ballinger, R.C., Taussik, J and Ball, I. (2005). Potential links between the Wales Spatial Plan, Marine Spatial Planning and ICZM, A report produced for the Countryside Council for Wales, 74pp.

Ballinger, R.C., Gubbay, S., Stojanovic, T., Ball, I., Taussik, T and Smith, H.D. (2005). *A review of coastal and maritime initiatives and pressures,* Report to the Wales Coastal and Maritime Partnership and the Welsh Assembly Government, 155pp.

Brady Shipman Martin. (1997). Coastal Zone Management – A draft policy for Ireland. Government of Ireland, Dublin.

Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit [Federal Ministry for the Environment, Nature Conservation and Nuclear Safety]. (2006). Integrated Coastal Zone Management in Germany: assessment and steps towards a national ICZM strategy. English version. BMU, Bonn, Germany.

Cummins, V., Ballinger, R., O'Mahony, C., Dodds, W. and Smith, H. (2004). Coastal Communities Network (CoCoNet): Final Report INTERREG IIIA. 51pp.

Damoiseaux, M.A. (2003). The Management Plan of the Wadden Sea and its visualisation, in Green, D.R. and King, S.D. (2003) Eds. *Coastal and marine geo-information systems,* Springer, Netherlands, 105 - 112.

de Vrees, L. (2006). *Spatial management on the (Netherlands part of the) North Sea,* Presentation given at the International Workshop on Marine Spatial Planning, UNESCO, Paris, 8-10 November, 2006.

DEFRA. (2006a). Report from the United Kingdom Implementation of (2002/413/EC) Recommendation of the European Parliament and of the Council, of 3 May 2002, concerning the implementation of Integrated Coastal Zone Management in Europe. Defra, London.

DEFRA. (2006b). Promoting an integrated approach to management of the coastal zone (ICZM) in England. DEFRA, London.

DEFRA. (2006c). A Marine Bill, A consultation document of the Department for Environment, Food and Rural Affairs, March 2006, London.

DIACT-SG MER. (2006). Rapport français d'application de la Recommandation du Parlement Européen et du Conseil du 30 mai 2002 relative à la mise en œuvre d'une stratégie de gestion intégrée des zones côtières en Europe, [French report on the application of the Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe], Paris, France.

DOENI. (2006). An Integrated Coastal Zone Strategy for Northern Ireland. Department of the Environment Northern Ireland, Belfast.

Douvere, F., Maes, F., Vanhulle, A., Schrijvers, J. (2007). The Role of Spatial Planning in Sea Use Management: The Belgian Case, *Marine Policy*, 31, 182-191.

Dutch Government. (2005). EU Recommendation concerning the Implementation of Integrated Coastal Zone Management in Europe - Report on Implementation in the Netherlands. The Hague.

Ehler, C. and Douvere, F. (2007). *Visions for a Sea Change. Report of the First International Workshop on Marine Spatial Planning.* UNESCO, Paris.

European Commission. (2007). *The Blue Book – an integrated maritime policy for the European Union.* Commission of the European Communities, Brussels.

European Commission. (2002). Council Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe. Brussels OJ L148-24).

European Consultative Forum on the Environment and Sustainable Development. (1999). *The European Spatial Development Perspective*, January, 1999. Available at: http://europa.eu.int/comm/environment/forum/spatreport_en.pdf.

Gee, K. (2004). National ICZM strategies in Germany: A spatial planning approach. In: Schernewski G, Löser N (eds), Managing the Baltic Sea, *Coastline Reports,* No. 2, The EUCC Coastal Union, Germany.

IDON. (2005). Integraal Beheerplan Noordzee 2015. Interdepartementale Directeurenoverleg Noordzee, Rijkswaterstaat Noordzee, Rijswijk.

Long, R. and O'Hagan, A.M. (2005). Ocean and Coastal Governance: the European Approach to Integrated Management – Are there lessons for the China Seas Region? In: Recent Developments in the Law of the Sea and China; Nordquist, M., Norton Moore, J. & Fu, K. (Eds.), Martinus Nijhoff, pp:85-142.

Maes, F., Schrijvers, J., Van Lancker, V., Verfaillie, E., Degraer, S., Derous, S., De Wachter, B., Volckaert, A., Vanhulle, A., Vandenabeele, P., Cliquet, A., Douvere, F., Lambrecht, J., and Makgill, R. (2005). Towards a spatial structure plan for the Sustainable management of the sea (GAUFRE). Final report. Federal Science Policy, Brussels.

Marine Institute. (2007). SeaChange: A Marine Knowledge, Research, & Innovation Strategy for Ireland 2007-2013. Marine Institute, Galway.

Marine Spatial Planning Pilot (MSPP) Consortium. (2006). Options for developing, implanting and managing Marine Spatial Planning (MSP) in UK coastal and offshore water. Marine Spatial Planning literature review (2005) and final report commissioned by DEFRA, London.

North Sea and Oceans Steering Committee. (2006). National Belgian report on the implementation of Recommendation 2002/413/EC on Integrated Coastal Zone Management. North Sea and Oceans Steering Committee, Belgium.

OSPARCOM. (2006). General Report to the North Sea Ministers on the Follow-Up to the 2002 Bergen Declaration, London.

PlanCoast. (2008). PlanCoast initiative, an INTERREG IIIB NP CADSES Project with the aim to develop the tools and capacities for an effective integrated planning in coastal zones and maritime areas in the Baltic, Adriatic and Black Sea regions. Available at: http://www.plancoast.eu/

Région Bretagne. (2007). Charte des espaces côtiers bretons. 63pp.

Rupprecht Consult – Forschung & Beratung GmbH. (2006). Evaluation of Integrated Coastal Zone Management (ICZM) in Europe: Final Report - revised version 1/12/2006. Cologne, Germany. Available at: http://www.rupprecht-consult.eu/iczm/

Scottish Coastal Forum and AGMACS Secretariat. (2007). *Further advice on the relationship between Marine Spatial Planning and ICZM*, Paper AGMACS (07)02, 4pp.

Scottish Executive. (2005). Seas the Opportunity: A strategy for the long-term sustainability of Scotland's coasts and seas. Scottish executive, Edinburgh. Available at: http://www.scotland.gov.uk/Publications/2005/08/26102543/25444

Siegel, G. (2007). *Climate change and growing sea use pressure: solutions offered by Marine Spatial Planning,* Presentation given at the PlanCoast meeting, 16.11.2007., Berlin. Available at: http://www.plancoast.eu/php/plancoastmeetings.php?id=7

Taussik, J. (2000). Collaborative coastal zone management, *Period. Biol.*, 102, Suppl. I, 193 – 198.

Taussik, J. (2007). The opportunities of spatial planning for Integrated Coastal Management, *Marine Policy,* 31, 611 - 618.

Tyldesley, D. (2004a). Coastal and Marine Spatial Planning Framework for the Irish Sea Pilot Project. Report commissioned by DEFRA, London.

Tyldesley, D. (2004b). Making the case for Marine Spatial Planning in Scotland, Report commissioned by RSPB Scotland and RTPI in Scotland.

UNESCO. (2006). *International Workshop on Marine Spatial Planning*, 8-10 November 2006, Paris,. Available at: http://ioc3.unesco.org/marinesp/index.php?option=com_content&task=view&id=14&Itemid=33

Welsh Assembly Government. (2006). Making the Most of Wales' Coast [working title]. Welsh Assembly Government, Cardiff. Available at: http://www.countryside.wales.gov.uk/fe/master.asp?n1=797&n2=123&n3=952.

Wiebusch, M. (2004). On the road to a European spatial planning system? Paper presented to the European Council of Spatial Planners, Nov. 2004. Available at: http://www.ceu-ectp.org/inc/cgi/dd/dd20041125.pdf

[ch 4
approach to capacity
building]

Chapter four

Approach to Capacity Building - A Focus on the Core Activities of COREPOINT

4.1 INTRODUCTION

The diversity of the ecological, social and economic aspects of the coast of North West Europe, the management issues that exist, and the adequacy of contemporary coastal governance arrangements for responding to these challenges, have been discussed in Chapters 2 and 3. A common message to emerge from these context setting chapters is the need for better implementation of ICZM in North West Europe to achieve sustainable development goals.

The current chapter focuses the reader's attention on the processes and outcomes of COREPOINT project activities, developed to address this need at local levels and particularly through the Expert Couplet Nodes.

The COREPOINT project focused on barriers to the successful implementation of ICZM within planning strategies for coastal zones in North West Europe. These were described in the original COREPOINT project proposal as:

- lack of integrated planning and management to achieve sustainable development of the North West Europe coastal zone;
- lack of engagement and open communication with stakeholders, including political representatives and the general public;
- poor links between researchers and policy makers;
- lack of sustained capacity and expertise within local authorities; and
- disproportionate levels of progress on ICZM in North West Europe.

The COREPOINT project paid particular attention to capacity building as a key mechanism to address these barriers. Thus, COREPOINT endeavoured to adopt a suite of innovative approaches to capacity building with an emphasis on delivering tangible benefits at the local level across the North West Europe region.

These approaches, which supplement a wider COREPOINT range of capacity building tools (see Appendix I), are described in Sections 4.3 to 4.7 respectively as:

- operationalisation of the ICZM principles of best practice – Building capacity for integrated planning and management to achieve sustainable development;
- local Solutions for Managing Coastal Information – Building capacity to support better communication and joint understanding among a group of coastal stakeholder organisations;
- the COREPOINT Expert Couplet Node (ECN) Experience – Building capacity for coastal research and policy integration;
- COREPOINT ICZM Training Schools – Building capacity to address lack of sustained capacity and expertise within local authorities; and
- ICZM Progress Indicator – Building capacity to determine levels of progress in implementing ICZM in North West Europe.

Figure 4.1 outlines the relationships between the five capacity building components of COREPOINT.

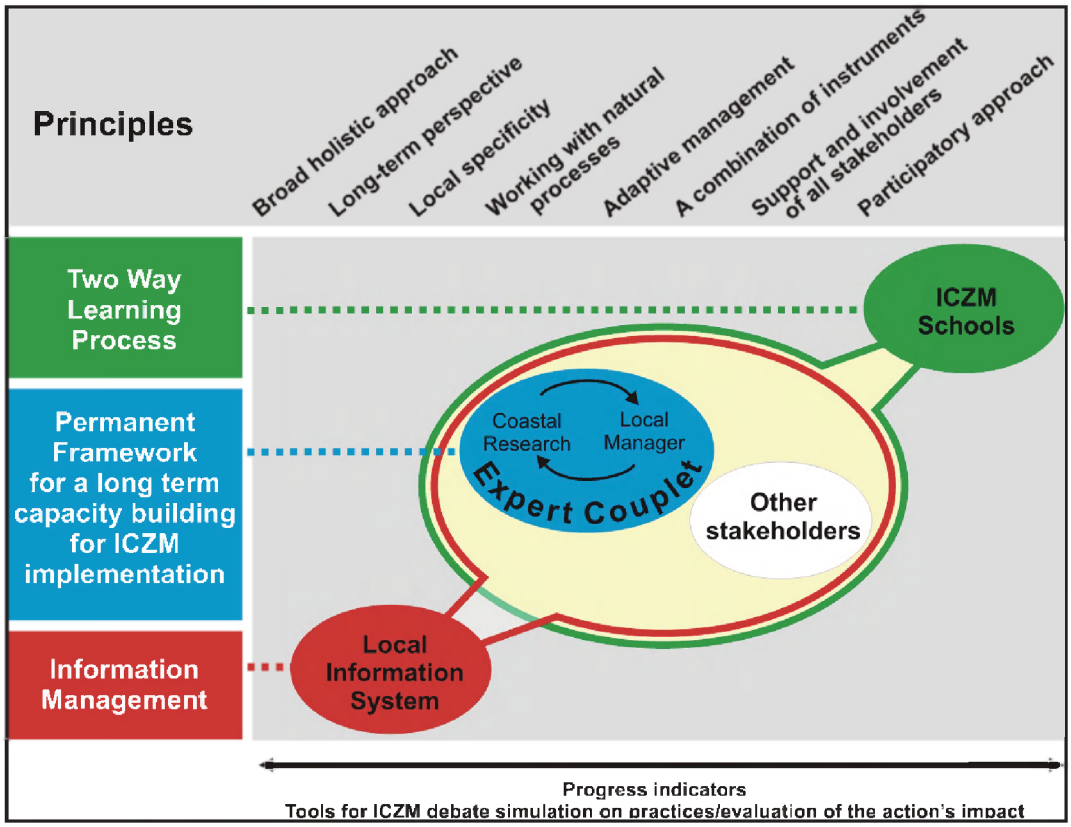


FIGURE 4.1 THE FIVE CAPACITY BUILDING COMPONENTS OF COREPOINT

4.2 REVIEW OF EXISTING CAPACITY FOR DELIVERING INTEGRATED PLANNING AND MANAGEMENT IN THE COREPOINT ECN AREAS

Methodology

An overview of the ICZM efforts associated with the ECNs was provided through the analysis of a COREPOINT Partners Questionnaire Survey. The aim of the survey was to obtain an insight into existing capacity and approaches to delivering integrated coastal planning and management in the COREPOINT region, taking factors such as spatial planning into consideration. Reference should be made to COREPOINT: Ballinger (2008) for a complete presentation and discussion of the results, covering existing ICZM initiatives and opportunities and barriers to ICZM, as identified from the COREPOINT ECN partner experiences.

Key characteristics of existing ICZM initiatives in the COREPOINT ECN areas

Table 4.1 summarises the range of ICZM plans and programmes related to the ECN locations, where partners provided detailed responses. This table shows all of the COREPOINT Expert Couplet study areas have some sort of non-statutory ICZM plan or programme in existence. Although Belgium has no official plan, it has established the Coordination Point for Integrated Coastal Zone Management. This particular activity, however focuses more on information dissemination rather than on the ICZM process.

The feedback showed a wide range of different types of ICZM effort, reflecting the different scales, geographical foci and stages of development of ICZM initiatives in North West Europe (Table 4.1). For example, plans at early stages of development are the ICZM project for Mont St. Michel and the programme for Cork Harbour. By contrast, the Sefton Coast Partnership Plan, which has gone through at least one programme cycle, has been in existence for well over a decade.

TABLE 4.1 ICZM PROGRAMMES WITHIN THE COREPOINT EXPERT COUPLET NODE AREAS, BASED ON RESPONSES TO THE COREPOINT PARTNERS QUESTIONNAIRE SURVEY

NAME OF ICZM PROGRAMME	SCALE OF ICZM PROGRAMME [13]	CURRENT STAGE OF DEVELOPMENT	COREPOINT PARTNERS RETURNING SURVEYS
DURHAM HERITAGE COAST PROGRAMME	LOCAL	IMPLEMENTATION	ENVISION
SEFTON COAST PARTNERSHIP PLAN	LOCAL	IMPLEMENTATION	SEFTON BOROUGH COUNCIL
CORK HARBOUR MANAGEMENT	LOCAL	PROGRAMME DEVELOPMENT	UNIVERSITY OF CORK CORK COUNTY COUNCIL
ICZM PROJECT OF THE INTERCOUNTY ASSOCIATION (MONT-SAINT MICHEL)	LOCAL	PROGRAMME AND POLICY DEVELOPMENT	UNIVERSITY OF BREST IFREMER
GOLFE DU MORBIHAN	LOCAL	IMPLEMENTATION	UNIVERSITY OF BREST IFREMER
SEVERN ESTUARY PARTNERSHIP	REGIONAL	STRATEGY IMPLEMENTATION	SEVERN ESTUARY PARTNERSHIP CARDIFF UNIVERSITY
OUTER HEBRIDES COASTAL MARINE PARTNERSHIP STRATEGY	REGIONAL	STRATEGY DEVELOPMENT	ABERDEEN UNIVERSITY
NORTHERN IRELAND ICZM STRATEGY	NATIONAL	POLICY DEVELOPMENT PROGRAMME IMPLEMENTATION, MONITORING AND REVIEW	UNIVERSITY OF ULSTER
COORDINATION POINT FOR INTEGRATED COASTAL ZONE MANAGEMENT	NATIONAL	N/A	UNIVERSITY OF GENT

The questionnaires revealed a considerable variety of themes within the ICZM efforts. However, all of the programmes have sustainable development as a key and overarching aim. Surprisingly, given the focus of several programmes on protection of natural areas, few of the programmes focus on nature conservation and shoreline management topics. The limited consideration of land use and spatial planning within the plans is also somewhat surprising.

Obstacles to ICZM and benefits from its local development experienced in COREPOINT ECN

Tables 4.2 and 4.3 summarise the key obstacles to ICZM and benefits from its local development, based on the COREPOINT Partners Questionnaire Survey responses. The following sections provide a brief overview of the key points from this report, providing a justification for capacity-building and the Local Expert Couplet approach, discussed in Section 4.5.

Obstacles to ICZM development

Table 4.2 highlights the main obstacles experienced by the respondents as inadequate, short-term funding and the associated short-termism of decision-makers and politicians, exacerbated by short electoral periods. Limited awareness of the ICZM process and its potential value is another significant obstacle to full stakeholder engagement.

[13]Local programmes are those within ONE local authority administrative area (including County Council areas); Regional programmes are those which include more than one local authority administrative area.

However, some respondents warned over the difficulties and costs involved in gaining successful stakeholder and public engagement in the ICZM process so that expectations are not falsely raised and no one particular single-issue group dominates the agenda. The lack of a national legal framework for ICZM development along with the low status of ICZM associated with its non-statutory nature were also cited as significant issues hampering ICZM development at local levels for many of the respondents.

TABLE 4.2 KEY OBSTACLES TO ICZM DEVELOPMENT AT LOCAL COREPOINT ECN LOCATIONS

LEGAL, POLICY AND INSTITUTIONAL ISSUES
• LOW STATUS OF EUROPEAN ICZM POLICY (A RECOMMENDATION RATHER THAN A DIRECTIVE) HAMPERING ICZM DEVELOPMENT AT NATIONAL, REGIONAL AND LOCAL LEVELS; • LACK OF SPECIFIC NATIONAL LEGISLATION RELATED TO ICZM; • NEED FOR A NATIONAL CO-ORDINATING PROGRAMMES TO FOCUS ICZM EFFORTS AND PROVIDE SUPPORT; • SOME WEAK LINKAGES WITH EXTERNAL ADMINISTRATIVE BODIES.
RESOURCE ISSUES
• INADEQUATE AND SHORT-TERM FUNDING OF ICZM; • LIMITED STAFF RESOURCES; • LIMITED PROFESSIONAL DEVELOPMENT OF SOME ICZM STAFF.
AWARENESS AND ATTITUDINAL ISSUES
• SHORT-TERM HORIZONS OF DECISION-MAKERS AND POLITICIANS; • 'SILO' (SECTORAL) MENTALITY OF MOST STAKEHOLDERS; • LIMITED AWARENESS OF COASTAL MANAGEMENT AND ITS POTENTIAL BENEFITS BY OPINION LEADERS.
OTHER ISSUES
• LONG-TIME SCALES FOR ICZM DEVELOPMENT CAUSED BY THE NEED TO ACHIEVE CONSENSUS; • THE RELATIVELY LOW AND PERIPHERAL STATUS OF ICZM.

Benefits of ICZM development

Table 4.3 highlights some of the key benefits of the ICZM initiatives identified by the respondents in the local ECN study areas. Although many respondents noted clear improvements in the quality of their coastal environment over the last decade, including improved beach and water quality, few of these improvements, unfortunately can be linked explicitly to ICZM. This is partly as a result of the relative infancy of the ICZM initiatives as well as the lack of systems in place to make environmental assessment in an ICZM context. The 'added value' associated with ICZM, however, is clearly associated with:

- improvements in public and policy-makers understanding and awareness of coastal issues;
- better organisational arrangements;
- more integrated policy development; and
- improved information provision and availability.

The improvements were frequently seen to be associated with the outward communication and partnership working approach taken by many of the ICZM efforts, engaging with a wide range of stakeholders including the public and politicians. Given the timing of the questionnaire survey, mid-way through the COREPOINT project, the contribution of COREPOINT was particularly clear, notably in relation to stakeholder involvement and information management. However, despite these improvements, respondents were keen to point out the need for further improvement.

TABLE 4.3 BENEFITS OF ICZM TO LOCAL COREPOINT ECN AREAS

ATTITUDINAL / AWARENESS ISSUES
• IMPROVED PUBLIC AWARENESS AND UNDERSTANDING OF COASTAL ISSUES; • IMPROVED LOCAL POLITICIANS UNDERSTANDING OF COASTAL ISSUES; • IMPROVED SECTORAL POLICY-MAKERS UNDERSTANDING OF MULTI-SECTORAL COASTAL ISSUES; • IMPROVED SECTORAL POLICY-MAKERS UNDERSTANDING OF ICZM; • IMPROVED LOCAL POLITICIANS UNDERSTANDING OF ICZM.
ORGANISATIONAL ARRANGEMENTS & POLICY
• IMPROVED LINKAGES BETWEEN ADMINISTRATIVE BODIES; • IMPROVED LINKAGES BETWEEN RESEARCHERS AND POLICY-MAKERS; • IMPROVED STAKEHOLDER AND PUBLIC INVOLVEMENT IN ICZM; • INCREASED ENGAGEMENT OF POLITICIANS IN ICZM; • IMPROVED SECTORAL COASTAL POLICY WHICH TAKES ACCOUNT OF LAND/SEA INTERLINKAGES; • IMPROVED SECTORAL COASTAL POLICY WHICH TAKES ACCOUNT OF CROSS-SECTORAL INTERLINKAGES.
INFORMATION AND DATA
• IMPROVED MONITORING AND INFORMATION ON THE STATE OF THE COASTAL ENVIRONMENT; • INCREASED ACCESSIBILITY OF INFORMATION ON THE STATE OF THE COASTAL ENVIRONMENT TO LOCAL POLICY MAKERS AND OTHER STAKEHOLDERS INCLUDING THE PUBLIC.

4.3 TOWARDS OPERATIONALISATION OF THE ICZM PRINCIPLES OF BEST PRACTICE

Background

As explained in Section 3.2.2, the ICZM principles are a central, defining feature of Europe's approach to ICZM, enshrined within the EC Recommendation (2002/413/EC) and recently endorsed by the Commission in its Communication on ICZM (COM(2007) 308 final). However, the latter document has highlighted the need to make the principles 'more operational and better communicated' *(op. cit.)* and the Rupprecht review of ICZM (Rupprecht Consult, 2006) has revealed a somewhat patchy adherence to the principles at national levels across Europe.

Given the importance of the ICZM principles within the European context, there was a need to have a clear understanding of what these principles meant in a practical, local context, including an appreciation of how they are being applied at local levels, from an early stage in the development of the COREPOINT project. It was suggested that this would enhance the COREPOINT partnership, enabling the COREPOINT partners to develop a deeper understanding of the ICZM process, including a clearer interpretation of the principles. This, it was anticipated, would provide useful lessons for the COREPOINT partnership as well as helping to fashion the future evolution of the local ICZM initiatives and associated Expert Couplet Nodes.

Given the heterogeneity of the case studies in terms of their socio-economic, political, environmental and governance characteristics (Chapter 2) as well as the varying characteristics of the ICZM initiatives, both in terms of their stage of development and their provenance (Section 4.2), it was considered that the lessons from the COREPOINT partnership would have a wider relevance, particularly to the coasts of North West Europe.

Methodology

The COREPOINT Partners Questionnaire Survey completed for the plans and programmes listed in Table 4.1 (Section 4.2) also included a series of questions relating to the extent to which the eight EC ICZM principles of best practice (Section 3.2.2) were addressed by the local ICZM efforts. Questions were framed to help map a relationship between the characteristics of ICZM plans and programmes described by the respondents with these principles. An objective and semi-quantitative approach was adopted.

In addition to the COREPOINT Partners Questionnaire Survey, a parallel Practitioners Survey (of the wider coastal stakeholder community) was undertaken to gauge general stakeholder knowledge, understanding, use and perceived value of each of the principles. This web based survey resulted in 68 responses. France, Ireland and Scotland provided the best response rates. Even with a rather limited response the findings provide a rough indication of levels of awareness and understanding across North West Europe (COREPOINT: Lymbery, 2008).

Results

For a full discussion of the results reference should be made to the COREPOINT partners' survey report (COREPOINT: Ballinger, 2008). Table 4.4 summarises the main findings of the COREPOINT Partners Questionnaire Survey, providing a general overview of the extent to which each principle is being adhered to within the ICZM initiatives associated with the COREPOINT ECN study areas. Qualitative judgements based on an informed review of the responses rather than statistically generated scores provided the information for the greyscale shading system used in column two of the table.

The table indicates some of the key strengths and weaknesses of the local ICZM initiatives in being able to deliver the principles. In summary, and not surprisingly given the local and bottom-up nature of many of the ICZM initiatives, those principles which were better addressed were those which related to local specificity and the support and involvement of stakeholders. In contrast, those principles providing the greatest challenge are those which promote the broad holistic approach, long-term approach and adaptive management.

TABLE 4.4 SUMMARY OF ICZM EFFORTS AND THEIR ADHERENCE TO THE EC PRINCIPLES OF ICZM

PRINCIPLE	EVALUATION[15]	STRENGTHS OF LOCAL ICZM INITIATIVES	WEAKNESSES OF LOCAL ICZM INITIATIVES	FURTHER COMMENTS
BROAD HOLISTIC APPROACH		• ALL ICZM INITIATIVES REVIEWED INCLUDE SUSTAINABLE DEVELOPMENT AS A KEY AIM • MOST INITIATIVES ADDRESS A WIDE RANGE OF TOPICS	• BIAS TOWARDS CERTAIN TOPICS WITHIN SOME INITIATIVES • FOCUS TOWARDS ENVIRONMENTAL RATHER THAN SOCIO-ECONOMIC AND CULTURAL ISSUES • MOST DO NOT CONSIDER REGIONAL CONTEXT SUFFICIENTLY • LIMITED CONSIDERATION OF LAND-SEA INTERACTIONS • LIMITED CONSIDERATION OF CROSS-BOUNDARY IMPACTS AND ISSUES • VARIABLE CONSIDERATION OF POLICIES FROM OTHER PLANNING PROCESSES • VERY POOR RECOGNITION OF ICZM WITHIN LOCAL SPATIAL PLANNING DOCUMENTS IN MANY AREAS	

[15] Darker shades indicate greater adherence to principle

PRINCIPLE	EVALUATION[15]	STRENGTHS OF LOCAL ICZM INITIATIVES	WEAKNESSES OF LOCAL ICZM INITIATIVES	FURTHER COMMENTS
LONG-TERM PERSPECTIVE			• FEW AREAS HAVE UNDERTAKEN OR EVEN YET CONSIDERED ICZM PLAN / PROGRAMME REVIEW • POOR OR LIMITED AVAILABILITY OF LONG-TERM DATA SETS FOR ICZM PLANNING • PAUCITY OF DATA AND INFORMATION ON SECTORAL TRENDS FOR ICZM DEVELOPMENT	• THE LACK OF LOCAL ICZM PLANS AND PROGRAMMES IN SOME AREAS AND RELATIVE INFANCY OF THE PLANS AND PROGRAMMES ELSEWHERE MAKES EVALUATION OF THIS ASPECT DIFFICULT • THE SHORT-TERM NATURE OF ICZM INITIATIVES AND THEIR FUNDING NEGATE AGAINST ADHERENCE TO THIS PRINCIPLE
LOCAL SPECIFICITY		• ALL INITIATIVES ATTEMPT TO CONSIDER LOCAL COASTAL CHARACTERISTICS AND IMPACTS • MOST HAVE MECHANISMS ENABLING INVOLVEMENT OF LOCAL ADMINISTRATIVE BODIES AND STAKEHOLDERS	• VARIABLE AND GENERALLY ONLY PARTIAL ACCESS AND USE OF LOCAL INFORMATION IN ICZM PLAN/ PROGRAMME PROCESS • GAPS IN THE ACCESS AND USE OF LOCAL INFORMATION RELATING TO COASTAL COMMUNITIES. • ATTEMPTS TO ACQUIRE LOCAL KNOWLEDGE AND FACILITATE PARTICIPATION ARE FREQUENTLY INADEQUATE	

PRINCIPLE	EVALUATION[15]	STRENGTHS OF LOCAL ICZM INITIATIVES	WEAKNESSES OF LOCAL ICZM INITIATIVES	FURTHER COMMENTS
WORKING WITH NATURAL PROCESSES		• AIMS OF PROGRAMMES CLOSELY ALIGNED TO NATURAL RESOURCE MANAGEMENT • FOCUS ON NATURAL RESOURCE MANAGEMENT LIKELY TO LEAD TO STRONG COHERENCE WITH THIS PRINCIPLE • INFORMATION AVAILABLE FOR ICZM DEVELOPMENT ON NATURAL PHYSICAL PROCESSES • EFFORTS WERE PARTIALLY ABLE TO ACCOUNT FOR THEIR IMPACT ON THE EVOLUTION AND DYNAMICS OF NATURAL COASTAL PROCESSES, THE NATURAL LIMITS OF THE COASTAL ENVIRONMENT AND THE NATURAL VARIABILITY OF HABITATS AND SPECIES	• LESS FOCUS ON NATURAL PROCESS-RELATED TOPICS • RELATIVE PAUCITY OF LONG-TERM AND MEDIUM-TERM INFORMATION ON BOTH NATURAL PHYSICAL PROCESSES AND NATURAL VARIABILITY OF HABITATS AND SPECIES • LESS INFORMATION AVAILABLE FOR ICZM DEVELOPMENT ON NATURAL VARIABILITY OF HABITATS AND SPECIES • FEW ICZM HAVE LINKS WITH CATCHMENT AND SHORELINE MANAGEMENT	• NATURAL RESOURCE MANAGEMENT FOCUS MAY LEAD TO FALSE PERCEPTIONS OF ICZM AS BEING TOO ENVIRONMENTAL • OPPORTUNITIES FOR FURTHER LINKAGES TO DEVELOP BETWEEN ICZM AND RIVER BASIN /CATCHMENT PLANNING UNDER THE WATER FRAMEWORK DIRECTIVE
ADAPTIVE MANAGEMENT		• ICZM EFFORTS APPEAR TO BE SUFFICIENTLY FLEXIBLE TO RESPOND TO EMERGING ISSUES • ALL INITIATIVES RECOGNISE THE UNCERTAINTIES AND LIMITATIONS OF THEIR INFORMATION BASE AND ARE ATTEMPTING TO FILL INFORMATION GAPS	• LITTLE CONSIDERATION OF MONITORING AND REVIEW OF THE ICZM EFFORTS • SOME SIGNIFICANT INFORMATION GAPS IMPEDE THIS APPROACH • RELATIVELY POOR LEVELS OF INFORMATION AND USE AND ACCESSIBILITY AT MOST OF THE STAGES OF ICZM DEVELOPMENT	• RESPONSE MAY REFLECT RELATIVELY EARLY STAGE OF DEVELOPMENT OF ICZM INITIATIVES
COMBINATION OF INSTRUMENTS		• MOST USE A RANGE OF INSTRUMENTS TO IMPLEMENT ICZM	• INADEQUATE PROCEDURES AVAILABLE TO IDENTIFY THE MOST APPROPRIATE SETS OF TOOLS AND TO ENSURE CONSISTENCY BETWEEN TOOLS	

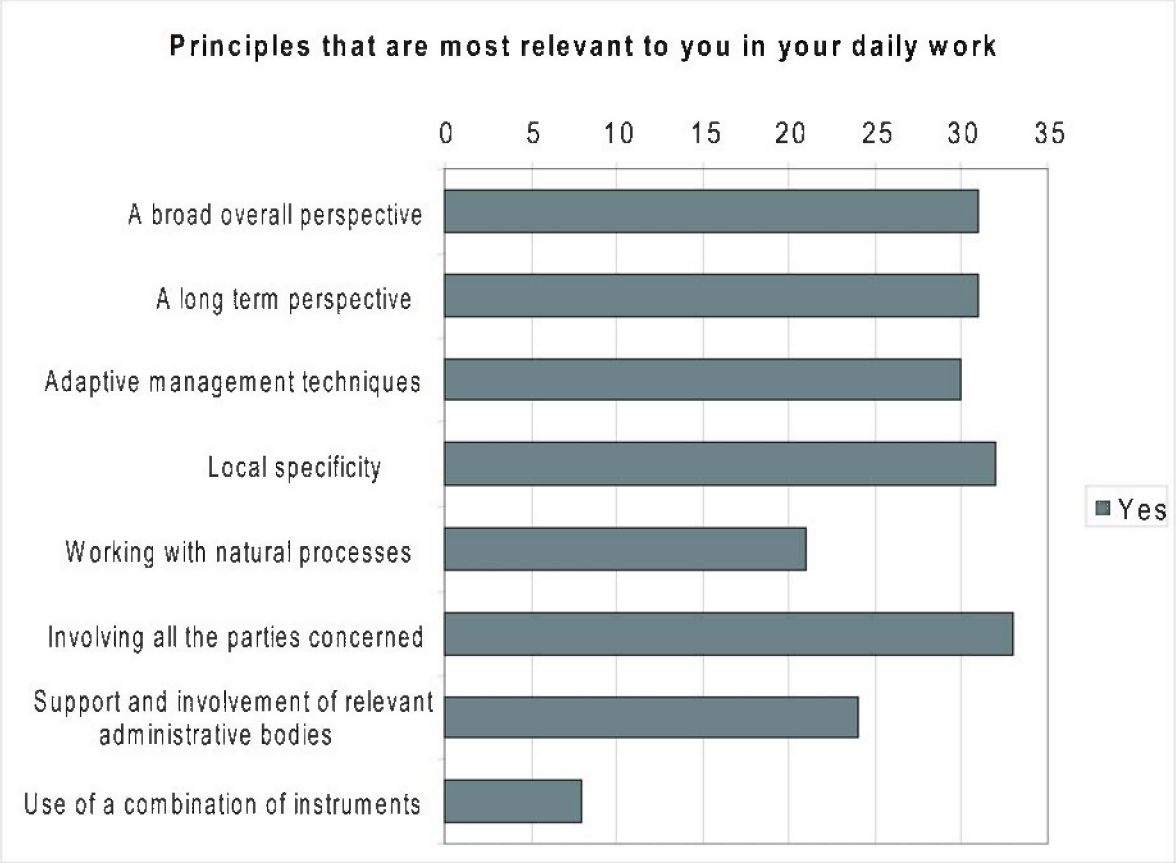
PRINCIPLE	EVALUATION[15]	STRENGTHS OF LOCAL ICZM INITIATIVES	WEAKNESSES OF LOCAL ICZM INITIATIVES	FURTHER COMMENTS
SUPPORT AND INVOLVEMENT OF ALL STAKEHOLDERS		• MOST STATE STAKEHOLDER ENGAGEMENT AS AN OVERARCHING AIM • WIDE RANGE OF SECTORS REPRESENTED FROM THE LOCAL AREA	• INADEQUATE ENGAGEMENT WITH NEIGHBOURING ADMINISTRATIONS IMPEDING A STRATEGIC AND COHERENT REGIONAL APPROACH • MORE STAKEHOLDERS INVOLVED IN THE EARLY PHASES, PARTICULARLY IN PROGRAMME INITIATION AND ISSUE IDENTIFICATION	
PARTICIPATORY APPROACH		• REASONABLE LEVELS OF CONSULTATION WITH MANY DIFFERENT TYPES OF STAKEHOLDERS • GOOD LEVELS OF CONSULTATION OCCUR WITH RECREATION GROUPS AND NGOS	• LEVELS OF ACTIVE PARTICIPATION GENERALLY SIGNIFICANTLY LOWER FOR ALL THE SECTORS • INDUSTRY AND THE BUSINESS SECTOR APPEAR PARTICULARLY POORLY ENGAGED IN ICZM	• PUBLIC PARTICIPATION IS GENERALLY MUCH HIGHER DURING THE EARLY STAGES OF ICZM DEVELOPMENT, PARTICULARLY DURING ISSUE IDENTIFICATION • LONG-TERM NATURE OF ICZM MAY CAUSE DIFFICULTIES MAINTAINING HIGH PARTICIPATION LEVELS

With respect to the parallel Practitioners Survey the responses indicated less than 50% awareness of the principles from practitioners most of whom spent 50% or more of their time working on coastal issues and who came predominately from the Planning and Development or Conservation sectors. Despite this, most of the principles appeared to be well understood with adaptive management and a combination of instruments being the exceptions (Table 4.5). There were concerns expressed about the implementation of some principles. Such concerns ranged from resource issues to problems associated with achieving collaboration with other bodies. Although the principle related to working with natural processes was understood there were some clear issues associated with the implementation of this principle and also some variation in the extent to which principles are seen to be relevant to stakeholders' daily work (Figure 4.2).

TABLE 4.5 UNDERSTANDING AND APPLICATION OF ICZM PRINCIPLES AMONG THE WIDER STAKEHOLDER COMMUNITY RESULTING FROM THE COREPOINT PRACTITIONERS SURVEY

PRINCIPLE	EVALUATION		SUMMARY OF RESPONSE
	UNDER-STANDING	USE	
BROAD, HOLISTIC PERSPECTIVE	☺	☺	IT WOULD APPEAR FROM THIS THAT THIS PRINCIPLE IS WIDELY RECOGNISED, UNDERSTOOD AND APPLIED.
LONG TERM VIEW	☺	☹	IT WOULD APPEAR FROM THIS THAT THIS PRINCIPLE IS WIDELY RECOGNISED AND UNDERSTOOD. THERE APPEARS TO BE SOME CONCERN OVER RESOURCE AVAILABILITY TO APPLY TO IT AND THE POTENTIAL DOMINANCE OF CURRENT ISSUES.
ADAPTIVE MANAGEMENT	☹	☹	COMMENTS COVERED A BROAD SPECTRUM AND WERE NOT CONSISTENT IMPLYING LESS UNDERSTANDING OF THIS PRINCIPLE AND LESS APPARENT USE OF THE PRINCIPLE.
LOCAL SPECIFICITY	☺	☺	RESPONDENTS APPEARED TO UNDERSTAND THE PRINCIPLE AND CONSIDER IT IMPORTANT. THE COMMENTS RANGED FROM SPECIFIC PRACTICE BASED COMMENTS THROUGH TO THE MORE GENERAL COMMENT PICKING OUT THE IMPORTANCE OF POLITICAL AND CULTURAL CONSIDERATIONS.
WORKING WITH COASTAL PROCESSES	☺	😐	GENERALLY THERE APPEARS TO BE A GOOD UNDERSTANDING OF THIS PRINCIPLE ALTHOUGH THERE IS SOME OVERLAP WITH THE TYPE OF EXAMPLES THAT WERE QUOTED UNDER LOCAL SPECIFICITY. THERE WAS ALSO SOME CONCERN ABOUT SOME COMMUNICATION ISSUES BETWEEN SCIENTISTS AND PRACTITIONERS.
PUBLIC PARTICIPATION	☺	😐	THERE SEEMS TO BE ACCEPTANCE OF THE NEED FOR THIS APPROACH BUT VARIATION IN TERMS OF ACHIEVING IT WHICH APPEARS TO BE EITHER DUE TO RESOURCES OR TO THE BODIES CONCERNED NOT BEING IDENTIFIED OR WISHING TO BE INVOLVED.
INVOLVEMENT OF RELEVANT ADMINISTRATIVE BODIES	☺	☹	THERE SEEMS TO BE A GOOD UNDERSTANDING OF WHAT THIS PRINCIPLE REQUIRES BUT FREQUENT CONCERNS ABOUT GETTING THE RELEVANT BODIES INVOLVED WHETHER IT BE OBVIOUS STATEMENTS OR MORE SUBTLE REFERENCES SUCH AS *'WE TRY'*.
COMBINATION OF INSTRUMENTS	☹	☹	THERE SEEMED TO BE SOME UNDERSTANDING FROM A LIMITED NUMBER OF RESPONDENTS BUT IT WAS APPARENT THAT THIS WAS THE MOST POORLY UNDERSTOOD OF THE PRINCIPLES.

Source: adapted from Lymbery (2008)



Source: Lymbery (2008)

FIGURE 4.2 PRINCIPLES OF MOST RELEVANCE TO STAKEHOLDERS: BASED ON THE WIDER STAKEHOLDER SURVEY

Discussion

Despite the heterogeneity of the case studies, there was a remarkable similarity between the responses from all the case studies involved in the COREPOINT Partners' Questionnaire Survey. Interestingly and possibly not surprisingly, the ICZM initiatives which have been in existence for the longest time, notably some of those in the UK, tended to score most highly in relation to most of the principles, possibly as a result of the maturing of these initiatives. There were also clear synergies between the research findings and those reported within the existing literature, which are explored in more details in the supporting report of the COREPOINT Partner Questionnaire Survey (COREPOINT: Ballinger, 2008). For example, the results relating to some of the key weaknesses associated with the delivery of the principles, notably the poor land-sea interaction and the resource constraints of ICZM programmes, are commonly cited as issues within the wider literature.

A comparison of the COREPOINT survey findings with those of the Rupprecht review (Rupprecht Consult, 2006) revealed some interesting comparisons and differences, which are discussed in detail in the supporting report (COREPOINT: Ballinger, 2008). In brief, there was most coherence between the responses for those principles relating to local specificity and stakeholder involvement, possibly as a result of the relatively simple means of evaluating adherence to these particular principles. The two surveys, however, found very different levels of adherence to the principles of holism and working with natural processes. This may be explained by the contrasting types of information used to assess adherence to these principles, but may also be a result of the different levels of focus of the two studies: the Rupprecht review was particularly interested in national compliance, whereas COREPOINT was more focused on local implementation. The difficulties associated with the varying availability of information and the subjective impressions of regional sea and national evaluators, is also recognised in the former review (Rupprecht Consult, 2006).

The COREPOINT study also revealed some challenges associated with the assessment of local ICZM efforts against the ICZM principles. These included difficulties associated with the:

- varying backgrounds of the COREPOINT questionnaire respondents;
- varying levels of 'interpretation' required to unpack each of the principles in order to assess Principle compliance; and
- focus on individual principles rather than the balance between all of them including consideration of linkages between principles.

With respect to the latter point, it is suggested that focusing on the evaluation of individual principles rather than the 'package' of principles, could falsely indicate better overall compliance to ICZM. It is suggested that there needs to be a balance between the adoption of the principles as any one principle, taken to excess, might undermine adherence to others . Some principles, it is also suggested are probably more important than others in assuring sustainable development of our coasts. For example, in many natural coastal contexts, unless an ICZM programme works with natural processes, even if it complies with other principles, it will eventually result in an unsustainable situation. This may be significant for some of the COREPOINT local areas where this particular principle was not well adhered to. There may also be questions regarding the representativeness of COREPOINT case studies, as, indeed most of the these may be considered better practice examples, where there is a higher level of interest and engagement in ICZM than elsewhere in North West Europe.

The wider stakeholder survey, though a relatively small sample, does provide some useful results in terms of the identification of problems with respect to the levels of understanding of some of the principles. However, it also identifies that the components of many of the principles are understood regardless of awareness of ICZM labelling of the principles as set out by the European Union. There were, however, national variations in the ranking and application of the principles which need further investigation.

4.4 LOCAL SOLUTIONS FOR MANAGING COASTAL INFORMATION

A Local Information System (LIS) is a framework to support better communication and joint understanding amongst a group of stakeholder organisations.

Background

The application of Information and Communication Technologies (ICT) in the coastal zone is problematic because of the variety of organisations and datasets involved. The current experience of stakeholders typically includes:

- lack of awareness about datasets;
- need for collaboration with other sectors due to increasingly specialised knowledge about the coastal zone;
- frustration in getting access to appropriate data and information because of its custodianship by disparate organisations;
- difficulty in dealing with information overload from the high volume of reports, projects, and datasets being produced; and
- a general project-by-project approach which sees data collated for specific tasks, rather than a systematic approach to managing information so that it can be collected once but used many times.

The COREPOINT project developed a methodology which attempted to deal with the many technological, human and organisational challenges in ICZM by mobilising information and knowledge about coastal zones. The vision was for a Local Information System to be implemented as a framework to support better communication and joint understanding amongst a group of stakeholder organisations.

Approach taken by the COREPOINT project

The Guidelines for Implementing Local Information Systems at the Coast (COREPOINT: Stojanovic *et al.*, 2007) were composed by six COREPOINT partners in collaboration with over 100 local stakeholders who engaged in a series of special LIS workshops – (Essex Estuaries, Sefton Coast, Severn Estuary, Fal Estuary, and Cork Harbour). Simulated applications were also brainstormed in France and Belgium. The Guidelines were

developed by COREPOINT partners documenting their experience in establishing Local Information Systems. These experiences have been combined with techniques from the wider field of Information Systems Development to produce a generic methodology which is applicable for the coastal zones of North West Europe (and worldwide). The findings were further developed at a special two day workshop in mid-Wales (September 2006) involving 13 delegates and seven external contributors with an interest in the field. The resulting Guidelines contain seven key actions which are based on the experience from the case studies.

Results

Table 4.6 outlines the seven key actions for good practice in implementing information systems for the coast.

One particularly important approach was to get stakeholders to jointly model the stages of decision-making for their function in the coastal zone. This provided a basis for a shared vision and also a framework for sorting and ordering the delivery of datasets. Figure 4.3 provides a specific example for Managing Coastal Geo-hazards which was put together by a group of coastal engineers when considering the different information needs that arose in the Sefton Coast LIS Workshop.

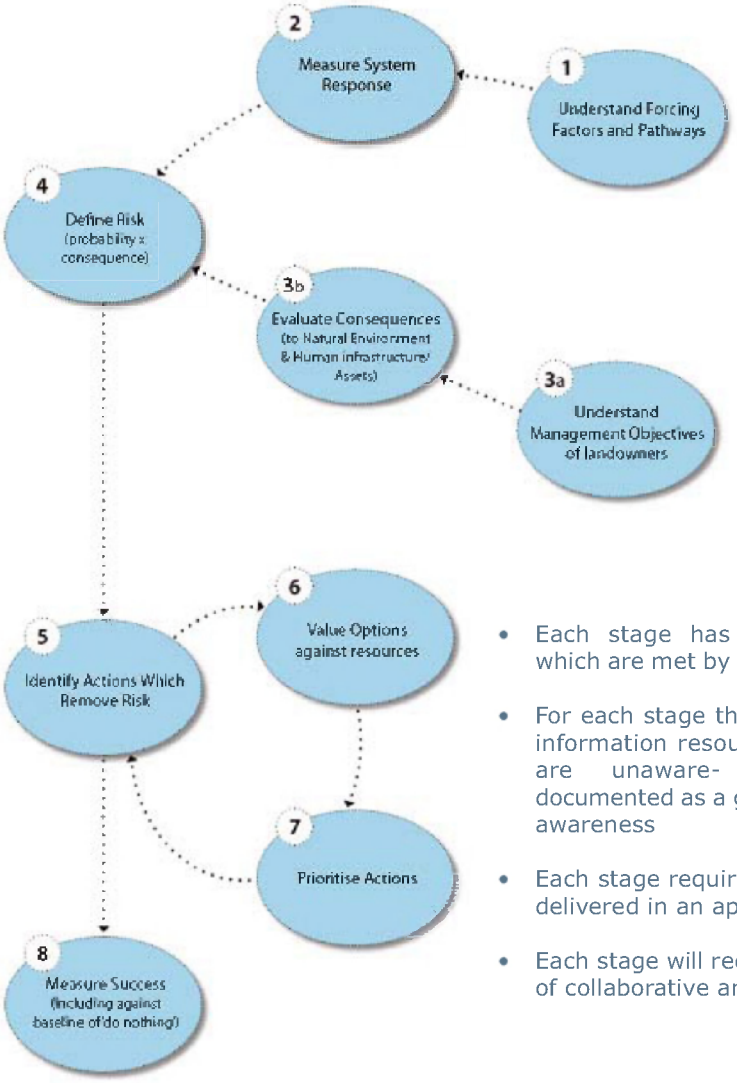
TABLE 4.6 SEVEN KEY ACTIVITIES FOR GOOD PRACTICE IN IMPLEMENTING INFORMATION SYSTEMS FOR THE COAST FROM THE COREPOINT LIS GUIDELINES (COREPOINT: STOJANOVIC *ET AL.*, 2007)

1. JUSTIFY INFORMATION SYSTEMS	
THERE ARE MANY IMPORTANT DRIVERS FOR IMPLEMENTING INFORMATION SYSTEMS, SUCH AS THE NEED TO IMPROVE OUR UNDERSTANDING OF COASTAL SYSTEMS, BETTER INVOLVEMENT OF THE PUBLIC, AND MORE EFFICIENT CUSTODIANSHIP OF DATA HOLDINGS	• LEGISLATIVE DRIVERS • THE COST OF NOT KNOWING • GOOD DATA CUSTODIANSHIP • FREEDOM OF INFORMATION/ACCESS TO INFORMATION • IMPORTANCE OF COMMUNICATION AND ENGAGEMENT WITH PUBLIC • BENEFITS OF GROUP LEARNING
2. HAVE CLEAR PURPOSES	
IN ORDER FOR INFORMATION SYSTEMS TO BE USEFUL IN PLANNING AND MANAGEMENT OF THE COASTAL ZONE, THEY SHOULD CLEARLY REFLECT FUNCTIONAL GOALS AND SUPPORT MANAGERS IN THEIR DAILY TASKS.	• CONSIDER WHICH FUNCTIONS HAVE POLITICAL OR ENVIRONMENTAL CURRENCY • IDENTIFY THE KEY PARTNERS • RELATE YOUR INFORMATION SYSTEM TO THE GOALS OF MANAGEMENT • THINK HOW AN INFORMATION SYSTEM COULD SUPPORT MANAGERS • CONSIDER AN ENABLING ROLE FOR ICZM INITIATIVES
3. INVOLVE USERS	
INVOLVING USERS IN THE DESIGN OF INFORMATION SYSTEMS IS CRUCIAL FOR THEIR SUCCESS. THE TECHNIQUE OF SOFT SYSTEMS METHODOLOGY (SEE FIGURE 4.3) IS AN IMPORTANT APPROACH THAT HAS BEEN DEVELOPED IN THE FIELD OF INFORMATION SYSTEMS DESIGN.	• GET USERS TOGETHER IN AN INFORMATION NETWORK • IDENTIFY THE NEED FOR AN INFORMATION SYSTEM • MODEL THE PROCESS OF INFORMATION MANAGEMENT (THE TECHNIQUE OF SOFT SYSTEMS METHODOLOGY IS PARTICULARLY HELPFUL HERE: SEE FIGURE 4.3) • DESIGN THE SYSTEM TO DELIVER INFORMATION TO USERS AT THE APPROPRIATE STAGE OF DECISION MAKING

4. SOLVE TECHNICAL OBSTACLES	
SOME OBSTACLES WHICH NEED TO BE SOLVED ARE RELATED TO POLICY, SUCH AS THE USE OF MEMORANDA OF UNDERSTANDING BETWEEN TWO ORGANISATIONS TO OVERCOME THE LEGAL CONSTRAINTS TO SHARING INFORMATION.	POLICY ISSUES • INFORMATION POLICY • LEGAL CONSTRAINTS • DATA SUPPLY CHAINS • COST OF DATA
OTHER OBSTACLES ARE MORE TECHNICAL IN NATURE, SUCH AS THE DEVELOPMENT OF STANDARDS WHICH WILL ALLOW WIDER USE OF DATASETS. ONE OBSTACLE IS THE LACK OF STANDARDS APPLICABLE TO THE MARINE AND COASTAL ENVIRONMENT.	TECHNICAL ISSUES • METADATA • STANDARDS • DATA DEFINITIONS • DATA FORMATS • INTEROPERABILITY
5. DEPLOY APPROPRIATE TECHNOLOGY	
A GREAT VARIETY OF INFORMATION AND COMMUNICATION TECHNOLOGIES ARE AVAILABLE TO HELP COASTAL PRACTITIONERS TO MAINTAIN THEIR KNOWLEDGE NETWORKS.	SEE FIGURE 4.4 FOR AN OVERVIEW OF TECHNOLOGIES.
6. CHECK FOR QUALITY ASSURANCE	
THERE IS A REQUIREMENT AND AVOID THE *"RUBBISH-IN, RUBBISH OUT"* SYNDROME.	• ESTABLISH CLEAR LINKS BETWEEN DATA SOURCES AND CUSTODIANS • ENCOURAGE USERS TO LOOK AT IN-HOUSE PROCEDURES FOR QUALITY ASSURANCE • STANDARDISATION OF RECORDS, THROUGH APPROACHES SUCH AS METADATA • DISCLOSURE OF LIMITATIONS FOR DATASETS • DISSEMINATION OF BEST PRACTICE • PEER REVIEW AND RATING OF USEFULNESS OF DATA SOURCES, UTILISING INTELLIGENCE TECHNOLOGIES
7. IMPLEMENTATION AND TRAINING	
PROVIDING 'HANDS-ON' SUPPORT TO INDIVIDUALS AND ORGANISATIONS IS A NECESSARY PART OF THE LIS IMPLEMENTATION AND SHOULD BE FACTORED INTO THE COSTS FOR THE PROJECT BRIEF.	• MECHANISMS SUCH AS WORKSHOPS, PERSONAL VISITS, TELEPHONE LINE SUPPORT, USER FRIENDLY INTERFACE DESIGN AND TRAINING SESSIONS.

Discussion

The seven step, user-led approach which evolved from the COREPOINT work, is very different to the common current 'data and technology led' approaches. 'Data led' approaches attempt to comprehensively catalogue all data sources, and 'technology led' ones focus on the development of particular tools such as 'Expert Systems'. Whilst such approaches are important, the lack of a 'user led' approach has been cited as the reason for discontinuation or failure of many ICT projects on European coasts (EU Demonstration Programme). The COREPOINT Guidelines, therefore, are a clear response to this need. The Guidelines for Implementing LIS should raise capacity to apply the principles of Integrated Coastal Zone Management, in particular reflecting the need for local specificity. *'This principle also implies a need to ensure the collection and availability to decision makers of appropriate data and relevant information, including informal traditional knowledge, concerning both the terrestrial and marine components of the coastal zone in question'.*



- Each stage has information needs which are met by a variety of datasets
- For each stage there may be existing information resources of which users are unaware- these can be documented as a group to disseminate awareness
- Each stage requires information to be delivered in an appropriate format
- Each stage will require different forms of collaborative analysis

FIGURE 4.3 MODELLING THE DECISION MAKING PROCESS: AN EXAMPLE FOR COASTAL GEO-HAZARDS, FROM THE COREPOINT SEFTON COAST LIS WORKSHOP

Figure 4.4 highlights the variety of technologies which can be applied at the coast. The Guidelines stress the importance of identifying the most appropriate technologies to support decision-makers and making improved links between the existing technologies, so that there is a more integrated framework for managing coastal information.

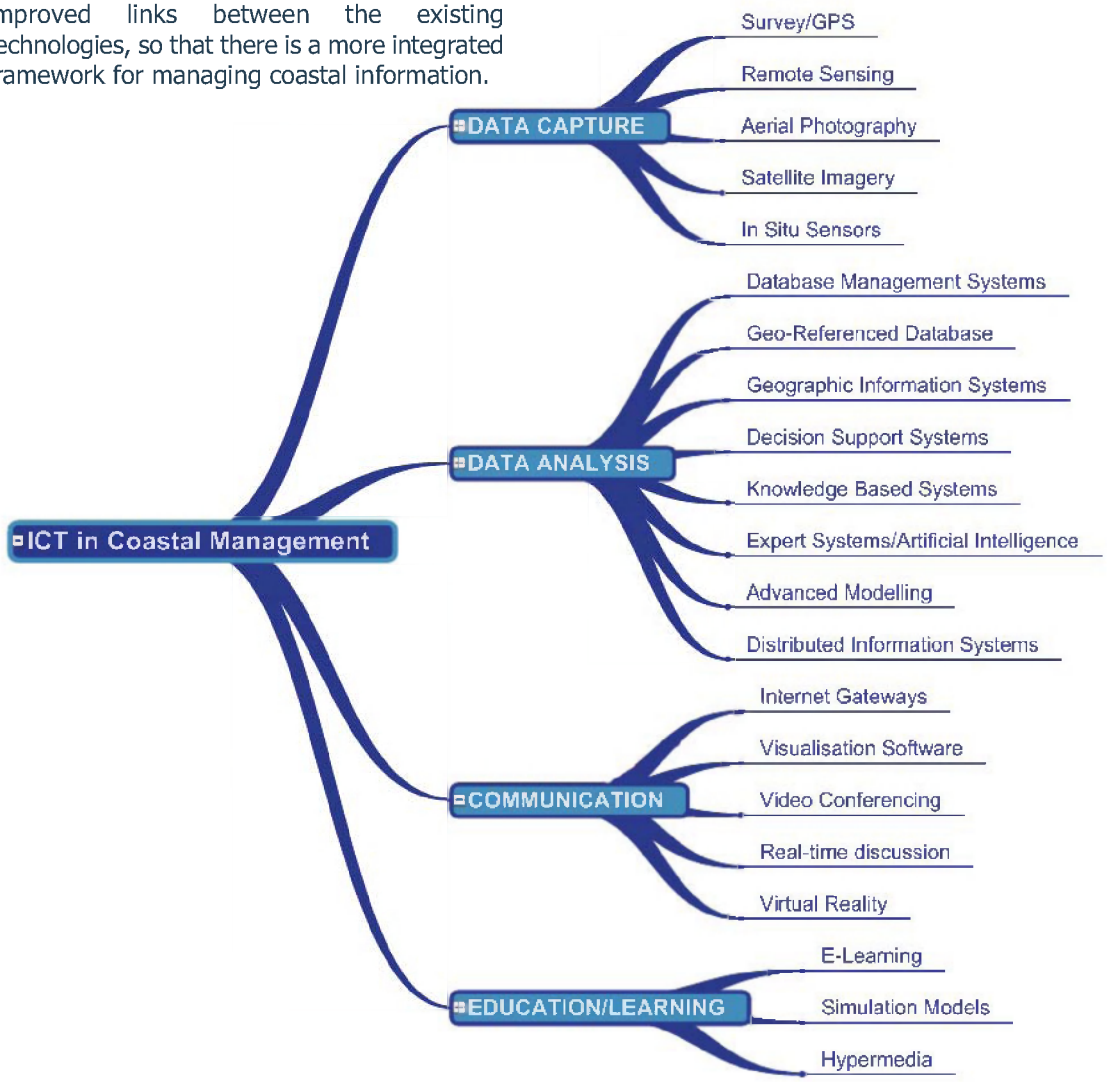


FIGURE 4.4 A TREE OF ICT TOOLS IN COASTAL MANAGEMENT, VALIDATED BY COREPOINT PARTNERS

4.5 THE COREPOINT EXPERT COUPLET NODE (ECN) EXPERIENCE

The Expert Couplet way of working helps deliver sustainability through a closer relationship between science, policy and practice. It is a mutually beneficial approach.

What is an Expert Couplet Node (ECN)?

Expert Couplet Nodes were established in the COREPOINT project to address the issue of sustaining ICZM, by building capacity for knowledge transfer between research centres and local authorities involved in coastal research and management. In other words, the ECN model equates to the implementation of local level collaborative enquiry targeted towards capacity building in ICZM.

Methodology

Review of the ECN process and outcomes

A questionnaire survey undertaken in June 2006 was used for the dual purpose of identifying and assessing the ECN process and effectiveness in each of the nine study sites. The results of this survey are used in Section 4.3 to describe the operation and added value of the ECN in more detail. Further information can be found in COREPOINT: Cummins (2006). An additional report (COREPOINT: Carlisle *et al.* 2007) reports further on the outcomes of the ECN, with site specific reviews of the issues addressed by each of the ECN models. A summary of this information is provided in Section 4.3.

Results

The ECN process and its effectiveness

- Longevity of the ECN:

  Four of the couplets were in existence to some degree prior to the COREPOINT project (Donegal Beaches, Severn Estuary, Flanders Coast and Golfe du Morbhian). The remaining five ECN were established by the COREPOINT project. Three of the four couplets that were operational prior to COREPOINT, stated that their participation in the COREPOINT project changed the nature of the relationship between the research group and the local authority. The nature of change was associated with a closer and more defined relationship and an opportunity for more strategic pursuit of ICZM.

- Frequency of interaction between researchers and policy makers:

  The majority of the ECN benefited from close physical proximity between research and local government offices which enabled regular face-to-face meetings between the research and local government partners. All of the couplets with the exception of Flanders, met at least every quarter, if not more frequently, to discuss their shared research agenda and project progress. Communication via email and telephone also occurred regularly.

- Issues addressed by the ECN:

  Key areas addressed by the ECN included: climate change, coastal flooding and defence, education and research, economic development, heritage, planning, tourism and recreation, community engagement, marine policy and a wide range of technologies including computer-assisted aids to ICZM.

- Status of the ECN partners:

  In some cases, for example for Cork Harbour, Severn Estuary and Sefton Coast, both the research group and the local government group were full partners of the COREPOINT project. In other cases, only one part of the couplet was an official partner. The lack of official partner status in some cases, however, had no impact on the regularity of contact or the operation of the couplet.

Strengths, Weaknesses, Opportunities and Threats associated with participation in ECN

The SWOT analysis revealed a multitude of issues associated with the operation of the ECN, summarised in Table 4.7. The strengths listed showed a win-win scenario for the participants. For example, benefits accrued for the research partners through enhanced research profiles while local government participants enjoyed benefits such as access to scientific expertise.

A key weakness flagged by a number of ECN was the difficulty of finding time to engage in participatory research, which is a much more time consuming process than a traditional consultancy based approach. Despite this, numerous opportunities were identified as arising from the process, including the ability to build on the track record of the partnership and to influence policy development. The long term sustainability of the ECN can be threatened by insecure funding arrangements, and progress can be jeopardised by staff turnover, among other things.

TABLE 4.7 KEY STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS ASSOCIATED WITH PARTICIPATION IN THE ECN

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
PROMOTES GOOD WORKING RELATIONSHIPS	TIME AVAILABILITY AND MANAGEMENT	BUILD ON TRACK RECORD FOR FUTURE COLLABORATION	LACK OF CONTINUITY FUNDING
RELEVANCE TO LOCAL AUTHORITY NEEDS	MANAGING EXPECTATIONS	INFLUENCE POLICY AND INCREASED POLITICAL SUPPORT	STAFF TURNOVER
SHARED GOALS AND MUTUALLY BENEFICIAL EXPERIENCE	LIMITED LOCAL AUTHORITY REMIT FOR THE MARINE ENVIRONMENT	OPTIMISE USE OF DATASETS	CHANGING STATUS OF ICZM
ENHANCED RESEARCH PROFILE	FINANCIAL SUSTAINABILITY	UTILISE CHAMPIONS	POLITICAL SENSITIVITY
ACCESS TO DATA & INFORMATION – INCLUDING SCIENTIFIC EXPERTISE	DISTANCE	DEVELOP INNOVATIVE APPROACHES	TIME AVAILABILITY
PHYSICAL PROXIMITY	OVER RELIANCE ON A SINGLE INSTITUTION	USE OF NETWORKS	POST PROJECT MOMENTUM
ADDITIONAL HUMAN RESOURCES	ACADEMIC AIMS AT ODDS WITH APPLIED RESEARCH	GENERATE PAPERS ON SUSTAINABILITY SCIENCE IN PRACTICE	CHANGING RESEARCH OBJECTIVES
PROMOTES COMMON UNDERSTANDING OF ICZM	LANGUAGE (W. ISLES)	UTILISE CASE STUDIES FOR RESEARCH INTO POLICY ISSUES	DISAPPOINTMENT WITH THE PROCESS
GENERATES MATERIAL FOR TEACHING	CONFLICT OF INTEREST	SYNERGY WITH OTHER PROJECTS	IMPLEMENTATION DIFFICULTIES
STAKEHOLDER MEDIATION			MULTIPLE LOCAL PROBLEMS
PROMOTES PARTICIPATION			
FORWARD LOOKING			

Key outcomes of the ECN

According to COREPOINT: Cummins (2006), the top three outcomes of the ECN were their ability to facilitate:

1. Greater understanding of the needs of local authorities;
2. Improved coastal management; and
3. Better understanding of the principles of ICZM in local authorities.

The outcomes of each ECN are described in detail in COREPOINT: Carlisle *et al.* (2007), but the following list offers a representative selection of key outcomes, by pairing the outcomes with local issues:

1. Examples of outcomes - Baie du Mont St. Michel:

a. The 'Days of the Bay' conference and exhibition organised through the couplet addressed local economic concerns from all sectors;

b. The ECN stimulated involvement of local authorities in consideration of issues beyond their usual day-to-day remit while also engaging the UBO-CEDEM/IFREMER researchers in more active participation in the ICZM process.

2. Examples of outcomes - Flanders Coast:

a. The expert couplet addressed the issues of a framework for Marine Spatial Planning, coastal impacts of climate change, and the sustainable development of the Belgian coastal zone;

b. The Belgian expert couplet was closely involved with the National Advisory Body for ICZM, the government 'think tank' on the subject.

3. Examples of outcomes - Cork Harbour:

a. The Cork Harbour ECN worked together to facilitate the development of an Integrated Management Strategy for the Harbour;

b. Specific outcomes from the collaborative enquiry process between the researchers and planners led to the implementation of a study of the recreation carrying capacity; a landscape character assessment and a GIS tool for Harbour management.

4. Examples of outcomes - Donegal Beaches:

a. The Donegal expert couplet facilitated the use of soft engineering approaches to coastal erosion, addressing both regional and local scale coastal erosion, sea defence and effects of sea level rise.

5. Examples of outcomes - Golfe du Morbihan:

a. The kayaking activity model (GIS) produced by the Golfe du Morbihan expert couplet helped address four issues, namely supporting the local tourism economy, dealing with regional cumulative impacts relating to tourism, mediating use cohabitation and supporting local wildlife conservation.

6. Examples of outcomes - Severn Estuary:

a. The Severn Estuary ECN supported the development of the Severn Estuary Local Information System related to the Strategic Environmental Assessment of development plans around the Estuary;

b. The ECN has facilitated the establishment of a Severn Estuary Research Advisory Group which is focusing on climate change issues around the Estuary; and

c. The ECN worked together to produce a Maritime Heritage Educational resource for the Severn Estuary targeted and distributed to local secondary schools.

7. Examples of outcomes - Durham Coast:

a. The ECNs detailed stakeholder assessment of the status of ICZM in the region addressed the two regional issues relating to co-ordination of regional management plans and development of a coastal strategy.

8. Examples of outcomes - Western Isles:

a. The Western Isles couplet's work on pair-wise comparison supported the conservation of the local archaeological heritage, and its work on the risk-return assessment for the island of Baile Sear enabled the cultural as well as economic value of local agriculture to be incorporated into ICZM strategies.

9. Examples of outcomes - Sefton Coast:

a. Sefton's LIS supported evidence based policy/decision making by informing all management aspects impacted by the future evolution of the dynamic coast.

Discussion

The issues pertaining to the operation of the COREPOINT ECN, highlighted in Table 4.7, provide some insight into the reality of implementing a participatory research or sustainability science process. The COREPOINT ECN approach cannot be deemed as a panacea for integrating research and policy. However, the COREPOINT ECN model is simple and flexible enough to deal with diversity among the couplets; including different priorities in terms of local issues and different origins in terms of operational timelines. It is important to assess the value of the process as well as the actual outcomes of such partnerships. In this case, when questioned, all of the ECN agreed that the approach adds value to existing research and management operations. The COREPOINT ECN have helped to initiate or consolidate a shift in attitude and behaviour towards traditional science and management practices in situations where new relationships between scholars and practitioners have been formed and where a foundation for collaboration previously existed.

"All of the ECN agreed that the approach adds value to existing research and management operations".

There is a strong desire to use the ECN model to structure new ICZM research and demonstration activities. In some cases, new ECN have begun to emerge e.g. between Sefton Council and Edge Hill University; and between Aberdeen University and the Fal Estuary. The INTERREG IVB programme provides an opportunity to harness science and technology for the sustainable development of coastal zones by rolling out refined versions of the ECN approach in the North West Europe region.

4.6 COREPOINT ICZM TRAINING SCHOOLS

Professional training is an important part of ICZM. The COREPOINT project has developed a tried and tested, transferable and highly interactive training module based around engaging case studies.

Background

Because ICZM is often considered as a non-core or luxury activity within local authorities, it is dealt with on a project basis.

Experts are temporarily recruited to oversee and implement specific projects. On completion of the project, this expertise is lost to the authority. There is a need to ensure the long-term integration of ICZM within local authorities by strengthening the capability of permanent staff directly involved in the coastal management process (e.g. planners, engineers, conservation officers); and by achieving the support of local and regional politicians for the development and implementation of ICZM initiatives.

FIGURE 4.5 PHOTOMONTAGE OF SELECTED COREPOINT SCHOOL ACTIVITIES

One activity of the COREPOINT project, was to hold ICZM schools targeted towards politicians, local authority employees and coastal practitioners to increase their knowledge of ICZM and the benefits associated with its implementation.

North West Europe School of Excellence in ICZM structure

The purpose of the ICZM schools was to provide training to coastal management practitioners including local authority staff and councillors, delivered by a team of trans-national experts, with a focus on teaching the ICZM principles of best practice. The aim of the training was to increase awareness and expertise within local authorities towards ICZM. The intent of this approach was to promote the COREPOINT objective of sustainable management of coastal areas and to harmonise understanding of the principles of best practice for common implementation in North West Europe.

The overall design and implementation of the schools was managed by Envision who organised a series of lectures and case study presentations that drew on the wealth of experience from other project partners. This integrated, trans-national approach to partnership working pooled expertise in North West Europe to deliver a state of the art course with maximum relevance and case study content for practitioners whose job role includes elements of ICZM.

Over the course of the project, four schools were held: Cork (March, 2005), Cardiff (July, 2005), Gent (February, 2006) and Coleraine (June 2006). All were evaluated immediately post-delivery through a mixture of scoring for Relevance; Content; Structure; Presentation style and Interest and Fun, as well as specific comments on best and worst features of the course and how the course could be improved. Scoring for all categories at all schools was well above a medium score and comments indicated a high level of satisfaction for the content and structure of the courses. However, assessment from within the COREPOINT project and suggestions from delegates from each school led to a continuous process of evolution of the course structure and content between the first school, held in Cork, and the fourth school, held in Coleraine (Table 4.8). This evolution led:

1. to a progressive reduction in formal lecture-style content of the school and an increase in opportunity for discussion and delegate participation;
2. towards a more uniform and systematic style and structure to presentations – in particular the case studies illustrating the 8 ICZM principles of best practice; and
3. to embed the ICZM principles and European perspectives of coastal management within the context of the work environment.

TABLE 4.8 FINAL OVERALL STRUCTURE AND SEQUENCE OF COURSE CONTENT FOR NORTH WEST EUROPE SCHOOL IN EXCELLENCE IN ICZM

TITLE	COMMENTS
INTRODUCTION TO ICZM AND EUROPEAN APPROACHES	PRESENTATION
BUILDING THE JIGSAW OF ICZM – AN INTERACTIVE EXERCISE INCLUDING COFFEE BREAK	GROUP EXERCISE / DISCUSSION
IMPLEMENTING COASTAL MANAGEMENT AT THE LOCAL LEVEL: THE MANAGEMENT OF SEFTON COAST	PRESENTATION DISCUSSION
CASE STUDY PRESENTATIONS – ICZM PRINCIPLES (X3)	PRESENTATION / DISCUSSION
FIELDTRIP 1 – DEMONSTRATING ONE OF ICZM PRINCIPLES	FIELDTRIP / DISCUSSION
CASE STUDY PRESENTATIONS – ICZM PRINCIPLES (X3)	PRESENTATION / DISCUSSION
FIELDTRIP 2 – DEMONSTRATING ONE OF ICZM PRINCIPLES	FIELDTRIP / DISCUSSION
IMPLEMENTING COASTAL MANAGEMENT AT THE REGIONAL LEVEL	PRESENTATION / DISCUSSION
CONCLUSIONS	DISCUSSION

Outcomes from the COREPOINT ICZM Schools

Several months after the completion of each course, a questionnaire was sent to a representative sample of attendees to ascertain the impact the school had had on both the long-term perceptions and understanding of ICZM as well as enquiring as to whether attendance had had any influence on long term work practices. The full responses, discussed in COREPOINT: Le Tissier (2007), are most promising. Attendees found the case studies in particular, illustrating real examples of coastal issues, a useful experience, and the opportunity to exchange ideas and experiences from across Europe beneficial.

Another interesting and key outcome was a realisation that the principles and practices of ICZM can be used and indeed have been used for other planning processes and methodologies. Therefore, the responses provide a clear indication that the approach to professional training provision adopted within the COREPOINT project has had a distinct influence on attendees in three linked areas:

1. **Personal understanding of ICZM in a work context – Attendees gained an insight and have taken back to their workplace ideas of how principles and practices of ICZM can:**

   a. help in finding workable solutions to coastal issues, as an ICZM approach is relevant to many existing management processes;

   b. demonstrate the need to work with natural processes and inculcate strong connections and links between marine- and land-based spatial planning, as well as the need to recognise the intricate and interconnected relationship between human and natural dimensions to coastal issues and activities; and

   c. provide an awareness for the need of a policy framework that explicitly includes combined marine and land spatial planning in the context of ICZM with inclusion vertically and horizontally of all actors.

2. **Influencing approaches to work practices – Attendees found that the Schools had given them a better understanding of the obstacles, conflicts and consequences of a lack of integration within management efforts to address coastal issues. In addition, attendees found that they were attempting to work in a more inclusive manner across sectors and departments, and build new and more inclusive local networks.**

3. **Understanding the opportunity presented by ICZM principles and practices – Discussion structured around the principles and practices of ICZM provides:**

   a. a strong mechanism for promoting a more open and clear need to widen involvement of all actors in activities;

   b. a framework for providing advice and informing others; and

   c. a strong drive for adopting a longer term perspective for planning.

All the participants found that the School would be relevant to other colleagues and would be keen to participate in further training opportunities in ICZM. This demonstrates that there is a strong desire to learn more about ICZM and that the ICZM approach has been recognised as worthwhile by practitioners.

Example feedback from trainees (for details see COREPOINT: Le Tissier, 2007).

'The most important thing I learned is that a good and open communication with all the different partners that are involved in each project is needed/crucial for the success of each project and this from the beginning of each project'.

'The networking opportunities were very useful, meeting others who are working in similar fields. The sharing of information was very useful. The resources (field guides) provided have been useful in developing my Coastal Education programme'.

'The course was eye-opening with regards to the work ahead, the participative and integrative approach required and the urgency with which we need to be making informed policy now'.

4.7 ICZM PROGRESS INDICATOR

Further testing of the approved EU indicator to measure the progress in the implementation of integrated coastal zone management in Europe was carried out during the COREPOINT project.

Historical context

Following the adoption of the EC Recommendation on ICZM in 2002, an EU ICZM Expert Group was set up which agreed on a Working Group on Indicators and Data (WG-ID) to develop an indicators-based assessment. A document describing an indicator to measure the progress of ICZM implementation in the coastal zone was presented by the WG-ID to the second meeting of the Expert Group in June 2003 (Pickaver, 2004). This Progress Indicator allows Member States and Acceding Countries to determine the extent of their national implementation of ICZM and to assess whether progress is leading to improved sustainability of coastal resources.

The EU ICZM Expert Group agreed to adopt the Progress Indicator, to begin testing it, and to modify it according to the feedback. The COREPOINT project provided a platform to test the indicator in the UK, France, Belgium and Ireland at local, regional and national levels, and to provide valuable insights into the applicability of the Progress Indicator as a capacity building tool.

Methodology

A series of one day workshops was organised in each of the COREPOINT regions where the Progress Indicator was tested *viz.* Wales, North East England, North West England, Flanders, Ireland and North West France. The tests were conducted in English, French or Dutch (Flemish), using translations where appropriate. The participants were coastal and marine practitioners from different organisations and interest groups who were asked to complete the table together. Between five and 25 people were involved in each test.

The test in Wales, in July 2005, was the first to be submitted from the COREPOINT test cases. It used the original Progress Indicator as agreed by the 2nd EU ICZM Expert Group in June 2003. This indicator had 26 Actions divided into five Phases. The results from Wales were used to complement a series of additional tests conducted outside of the project, for example in Spain, Germany and Poland. Following an assessment of the feedback, the WG-ID agreed to modify the Indicator in line with the critique given.

The revised Progress Indicator of 31 Actions divided into 4 phases (Appendix II) was adopted by the 5th Meeting of the EU ICZM Group of Experts in September 2005. Thereafter, all workshops used the revised Progress Indicator set. The specific results of the COREPOINT tests are given in Pickaver, (in Press): North West England, May 2006; North East England October, 2005; Ireland, April 2007 and Belgium, November 2005. The tests conducted in France in October 2006, were deemed to be confidential, although the results were analysed and conclusions were drawn from them. The results from the latter tests will further influence decisions by the WG-ID with regards to the need for further modifications.

Outcomes of the COREPOINT tests

One of the main conclusions drawn from the testing was that, no matter where the tests were conducted or how they were done, there was very little difference in the general comments made following the application of the Indicator set to the local/regional ICZM process under discussion.

Within the tests conducted under the COREPOINT project, there was a consistent feeling that the process itself was of enormous benefit in bringing together different, but relevant, stakeholders to discuss the ICZM process. For example, practitioners dealing with ICZM on a daily basis rarely have the opportunity to discuss ICZM issues with professionals from other departments or fields of work. This reinforced similar comments made during additional testing outside of the COREPOINT project.

The methodology for implementing the Progress Indicator was deemed to be an easy methodology to apply. Although the results can only be considered as semi-quantitative at best, there was often real agreement (or disagreement) about the Actions under discussion. However, in line with comments received from tests conducted outside of the project, there was also general agreement that the binary scale, inherent in the approach, was not sensitive enough, and that some sort of semi-quantitative breakdown (e.g. No = 0; Yes = 5), would be more appropriate. In fact, the original methodology for the Progress Indicator deliberately selected a binary response in order to commit people to answering as honestly as possible. It was felt that most respondents would be reluctant to provide either a Yes or No answer, if provided with a middle-of-the-road choice. At the very least, the COREPOINT test participants felt that a 'Don't know' option was needed. When provided with this option, other COREPOINT test participants, still felt it to be an inadequate response, since it did not allow the multi-dimensional realities of ICZM to be fully expressed.

The test participants expressed a need for some breakdown of the Actions, in particular at the local level of assessment. It was recommended that support notes, and an explanation on how to run the test, could improve its effectiveness. This was taken on board for the revised Progress Indicator. Despite this, one of the groups observed that the new explanatory notes were not detailed or precise enough to be useful and that a response to a question could still be interpreted according to an individual's knowledge and background. Other participants expressed the need for a new Action to be included, to facilitate consideration of progress on issues such as the implementation of the Water Framework Directive or Marine Spatial Planning.

Sensitivity to the publication of the answers became apparent during the COREPOINT testing. For example, test participants from one region were reluctant to have their answers published even if their identity was to remain anonymous. Some country-specific concerns also arose. For example, although the Progress Indicator allows national, regional and local responses to be compared, these administrative boundaries are not really applicable in France. The regional bodies which are independent from the national administration have limited legal competency in the coastal zone. Legal obligations are implemented by the Prefectures, who are state representatives operating at the regional level. In fact, there are two administrative levels between national and local: the Regional Councils ("Régions") and the County Councils ("Départements").

Conclusions from the COREPOINT Progress Indicator tests

Within the wider context of the EU ICZM Expert Group, the results from the COREPOINT project have proven very useful. Although, a decision was made at the outset to keep the Indicator as simple as possible (i.e. a straight "yes/no" answer), this was modified following the Welsh test to include a "don't know" parameter. Following further COREPOINT generated feedback, the EU ICZM Expert Group are now looking at the potential to sub-divide some of the Actions even further.

The question of anonymity was always considered to be the most sensitive point of developing a Progress Indicator, as the potential arises for league tables to be published, which could show some countries in a bad light. That this same concern arose in the COREPOINT testing was not surprising. This is likely to remain an issue until the Progress Indicator set is routinely used.

Despite differences in administrative approaches to ICZM within the COREPOINT partner countries in North West Europe, the Progress Indicator was proven to be capable of distinguishing between different implementation levels at national, regional and local levels.

4.8 CONCLUSIONS

Overall conclusion on capacity building

The implementation of ICZM at the local level depends on the capability of the stakeholders to understand each other, to share their knowledge, to create mechanisms to work together, to integrate their competencies, to share data and information, and to adapt management to address the challenges inherent in the natural, social, and economic dimensions of the coastal system.

The COREPOINT project has proposed or tested a range of capacity building approaches to contribute to these aims. While all of the approaches have scope for further refinement or adaptation, methods such as the LIS, the school, the progress indicators and the expert couplet node model provide an interesting framework to improve local ICZM implementation.

The work in the COREPOINT study sites has shown us that each local case is unique. The success of an ICZM approach depends strongly on a range of human and institutional factors. However, the approaches described in Chapter 4 can contribute to the advancement of ICZM. Opportunities to share experiences among European practitioners can influence how capacity building may be addressed and ultimately how best practice will be implemented.

The COREPOINT Partners' Questionnaire Survey, which utilised 'expert' interpretation and tapped into a substantive evidence base, has provided an insight into operational aspects of the ICZM principles of best practice in a practical, local context.

In particular, the survey revealed:

- difficulties associated with gauging adherence to certain principles, as some are open to more interpretation and some wider in scope than others;
- the need to appreciate and understand how principles should be interpreted and applied in different local situations, recognising there is no one-size-fits-all solution; and
- issues associated with assessing adherence to individual principles in isolation.

The COREPOINT Practitioners Survey highlighted the fact that many of the key elements of the principles are understood although awareness of the principles with their ICZM labelling as set out by the European Union is commonly not known.

The COREPOINT ECN experience has shown that they can evolve to be effective long-term mechanisms which promote enduring working relationships between coastal research and practice communities at local levels.

In particular, the ECN provide an opportunity to:

- develop better understanding and trust between coastal research and practice communities at local levels;
- realise mutual benefits;
- build 'professional capital' to help address future challenges;
- harness relevant and appropriate science for decision-making;
- deliver local level ICZM and the principles of sustainability science; and
- bridge the gap between the EC Recommendation and local level implementation of ICZM.

The implementation of the schools within COREPOINT partner countries has proved to be a worthwhile exercise and an invaluable two-way learning process for both trainers and trainees.

The COREPOINT ICZM schools have also revealed that there is a clear need and capacity gap at local levels in relation to the interpretation and practical application of ICZM:

- in particular, the schools have helped promote the ICZM best practice principles as well as developing a more common understanding of the ICZM Recommendation and its value as a management approach for Europe's coasts at such levels; and
- the COREPOINT schools have also demonstrated the usefulness of the principles as an access point to ICZM and have also shown the value of the course's trans-national delivery and content.

The COREPOINT testing of the Progress Indicator suggests that the Indicator provides a tangible representation of ICZM, illustrates the status of ICZM at various levels and increases awareness of stakeholders of the components of progression of the ICZM process.

In particular, it is considered that the Indicator is a:

- valuable process for stimulating debate regarding ICZM at local levels; and
- relatively easy tool to use although some further refinements may be required on scaling and specific actions to maximise its potential.

COREPOINT reference material

Ballinger, R.C. (2008). *COREPOINT: Partner's Survey - Evaluation of local ICZM efforts*, A report prepared as part of the COREPOINT project, 59 pp.

Carlisle, M., Green D.R. and Ritchie, W. (2007). COREPOINT: *Case Study Area Descriptions.* May 2007. 37pp.

Cummins, V. (2006). *COREPOINT: Expert Couplet Node Questionnaire Report*. A report produced as part of the COREPOINT project, 8 pp.

Le Tissier, M. (2007). *COREPOINT: North West Europe Schools of Excellence in ICZM - Training Impact Review.* A report produced as part of the COREPOINT project, 10pp.

Lymbery, G. (2008). *COREPOINT: ICZM Survey of Partner Countries.* A report produced as part of the COREPOINT project, 38pp.

Stojanovic, T. (2007). *COREPOINT: Guidelines for Implementing Local Information Systems at the Coast.* A report produced as part of the COREPOINT project, 36pp.

References

European Commission. (1999). Lessons learned from the European Commission's Demonstration Programme on Integrated Coastal Zone Management (ICZM). Office for Official Publications of the European Communities, Luxembourg.

European Commission. (2007). Communication from the Commission: Report to the European Parliament and the Council: An evaluation of Integrated Coastal Zone Management (ICZM) in Europe. COM(2007)308 Final. Office for Official Publications of the European Communities, Luxembourg.

European Parliament and Council. (2002). Recommendation of the European Parliament and of the Council concerning the implementation of Integrated Coastal Zone Management in Europe (2002/413/EC). OJ L148, pp.24-27. Office for Official Publications of the European Communities, Luxembourg.

Pickaver, A. H., Gilbert, C., and Breton, C. (2004). An indicator set to measure the progress in the implementation of integrated coastal zone management in Europe. *Ocean and Coastal Management*, 47, 449–462.

Pickaver, A. H. (2008). ICZM Progress Indicators. In: Coastal Zone Management. Green, D. (Ed.). Thomas Telford Ltd. Publishers.

Rupprecht Consult – Forschung & Beratung GmbH. (2006). Evaluation of Integrated Coastal Zone Management (ICZM) in Europe: Final Report - revised version 1/12/2006. Cologne, Germany. Available at: http://www.rupprecht-consult.eu/iczm/

Shipman, B. and Stojanovic, T. (2007). Facts, fictions, and failures of Integrated Coastal Zone Management in Europe. *Coastal Management,* 35, 375-398.

[ch 5 recommendations]

Chapter five

Recommendations

The following Recommendations have evolved from the COREPOINT experience. They are based around the innovative aspects of capacity building activities undertaken in the COREPOINT project. As a result, the Recommendations promote a range of solutions for dealing with specific coastal management issues.

The Recommendations either:

1. seek additional support for existing approaches to ICZM, which have been demonstrated to contain added value for capacity building within the COREPOINT project, (e.g. the role out of the Progress Indicator and operationalisation of the EC ICZM principles of best practice); or

2. advocate new approaches or material for consolidating capacity building for ICZM in North West Europe, (e.g. LIS, ECN and Professional Training School modules).

The Recommendations are presented according to the issues addressed by the COREPOINT project. The relevant supporting sections are indicated in brackets.

Issue 1: Lack of integrated planning and management to achieve the sustainable development of the North West Europe coastal zone.

Summary of the COREPOINT approach:

1. review of local level arrangements for ICZM and spatial planning in North West Europe; and

2. assessment of local level adherence to the ICZM principles of Best Practice.

Recommendation 1.1: The COREPOINT project demonstrated a need for further commitment to communication, coordination and collaboration between planning and ICZM. Support for this action should be provided through appropriate resourcing and guidance at the North West Europe INTERREG, national and sub-national levels to: (Section 3.3)

* proceed with a much clearer understanding of marine and terrestrial spatial planning processes to ensure coherency of policy for the coast as a result of the continuum of natural processes and human uses on land and sea;
* engage with the decision-making process for spatial plans and local development plans at all levels; and
* share knowledge and understanding of coastal systems and governance with the spatial planning community.

Recommendation 1.2: The COREPOINT approach to the assessment of local adherence to the EC ICZM principles should be developed to: (Section 4.2)

* provide a standard procedure to enable local stakeholders to be able to interpret and understand the principles more clearly and precisely within their local context; and
* provide methods to evaluate the whole 'principle package' including ways of obtaining a sustainable balance between the principles.

Recommendation 1.3: As the problems created by strong land/sea divisions, discussed in Chapter 3, have been immediately apparent throughout the COREPOINT project, the project partners advocate ICZM as a means of bridging the divide. Thus, the North West Europe INTERREG Secretariat is encouraged to maintain ICZM as a programme priority, to facilitate efforts towards the sustainable development of the region's coast (Section 4.5).

Issue 2: Lack of engagement and open communication with stakeholders, including political representatives and the general public.

Summary of the COREPOINT approach:

1. development of Local Information Systems (LIS) as a framework to support better communication and joint understanding amongst a group of stakeholder organisations.

Recommendation 2.1: It is suggested that there is further scope for demonstration and development of the LIS as a key tool for ICZM and that there is an opportunity to use the CoastWeb portal as a platform for its development (Section 4.4).

Issue 3: Poor links between researchers and policy makers.

Summary of the COREPOINT approach:

1. demonstration of the effectiveness of nine Expert Couplet Nodes to help deliver sustainability through a closer relationship between science, policy and practice.

Recommendation 3.1: Promote the COREPOINT Expert Couplet model to build capacity for bridging the gap between coastal researchers and policy makers in North West Europe. It is important that the model is supported as an effective means of delivering ICZM at the local level and that opportunities are provided for those involved in couplets to share their experiences in delivering ICZM and for new couplets to evolve within this field (Section 4.5).

Recommendation 3.2: To achieve a wider uptake of the ECN approach, the ECN model will require a clear definition of the added value of the process, including the benefits for academic and local authority institutional involvement. A suite of indicators should be developed to help account for the benefits of the process and the outcomes in any future initiatives of this nature (Section 4.7).

Issue 4: Lack of capacity and sustained expertise for coastal management within local authorities.

Summary of the COREPOINT approach:

1. implementation of a tried and tested, transferable and highly interactive ICZM professional training module based around the ICZM principles of best practice and engaging case studies.

Recommendation 4.1: Promote the uptake of the COREPOINT ICZM professional training model for capacity building for ICZM within local authorities (Section 4.6).

Recommendation 4.2: It is recommended that the COREPOINT ICZM school approach be used as a way of making complex coastal issues more accessible and extended through the 'training of trainers' (Section 4.6).

Recommendation 4.3: It is hoped that the availability of the COREPOINT training material on the COREPOINT website will facilitate the further use and development of this approach. However, in extending and developing the COREPOINT school approach there is a need to find innovative and policy relevant topics which not only can act as a 'hook' to draw in suitable participants, but can also clearly demonstrate complex coastal issues.

Issue 5: Disproportionate levels of progress on ICZM in North West Europe.

Summary of COREPOINT approach:

1. further testing of the approved EU indicator to measure the progress in the implementation of integrated coastal zone management in Europe.

Recommendation 5.1: Progress Indicators should be used more widely by diverse stakeholders and repeated as a way of assessing progress in ICZM (Section 4.7).

Recommendation 5.2: Progress Indicators should be carefully prepared with the stakeholders in order to build indicators adapted to the objectives of monitoring at the relevant local level (Section 4.7).

[appendices]

Appendix I

LIST OF REPORTS PRODUCED AS PART OF THE COREPOINT PROJECT. FOR DETAILS OF ALL COREPOINT PROJECT OUTPUTS SEE HTTP://COREPOINT.UCC.IE

COREPOINT: Ball, I. (2006). Coastal Partnerships and Research Strategy Development - A Review. October 2006. 41pp.

COREPOINT: Ballinger, R.C. and Alden, J. (2008). COREPOINT: Spatial Planning and ICZM in North West Europe. Spring 2008. 40pp.

COREPOINT: Ballinger, R.C. (2008). COREPOINT: Partner's Survey - Evaluation of local ICZM efforts. March 2008. 69pp.

COREPOINT: Bogaert, D., Cliquet, A., and Maes, F. (2008). Who Rules the Coast?. ISBN: 9789046602164. 190pp.

COREPOINT: Carlisle, M. and Green D.R. (2006). A Guide to the Development of Use Conflict Maps. February 2006. 33pp.

COREPOINT: Carlisle, M., Green, D.R. and Ritchie, W. (2007). COREPOINT: Case Study Area Descriptions. May 2007. 98pp.

COREPOINT: Carlisle, M. and Muir, D. (2007). The Biodiversity Portfolio Approach to Coastal Valuation in ICZM. May 2007. 38pp.

COREPOINT: Carlisle, M., Green, D.R. and de la Fons, G. (2007). COREPOINT: A Template for Virtual Reality Simulations. June 2007. 68pp.

COREPOINT: Carlisle, M. and Green D.R. (2008). A Template for Human Impacts Evaluation. April 2008. 70pp.

COREPOINT: Carlisle, M., Green, D.R. and Ritchie, W. (Eds.) (2008). Expert Couplets and Case Studies - Descriptions of physical, ecological and socio-economic context and of area-specific COREPOINT activities. April 2008. 98pp.

COREPOINT: Carlisle, M. and Green, D.R. (2008). A Meta-Directory of Coastal Research Activities in North-West Europe. May 2008. 18pp.

COREPOINT: Envision. (2007). Prioritising Local Issues for ICZM. November 2007. 17pp.

COREPOINT: Gault, J., O'Mahony, C., O'Hagan, A.M. (2008). COREPOINT: Identification of innovative fiscal models for mechanisms to integrate spatial strategies for the coast. Spring 2008. 8pp.

COREPOINT: Hills, J. and Le Tissier, M. (2005). COREPOINT: Quantification of the Economic Benefits of Natural Coastal Ecosystems. May 2005. 37pp.

COREPOINT: Hills, J., Lymbery, G., Ballinger, R. and Cummins, V. (2008). COREPOINT: the role of the regions. January 2008. 28pp.

COREPOINT: Kervarec, F. (2007). ICZM in France: points of view; a summary of interviews carried out with relevant institutions. March 2007. 10pp.

COREPOINT: Kervarec, F. (2008). *La Gizc en France - points de vue Synthèse réalisée à partir d'entretiens auprès d'acteurs institutionnels.* April 2008. 14pp.

COREPOINT: Kopke, K., O'Mahony, C., Cummins, V. and Gault, J. (2007). Assessment of Coastal Recreational Activity and Capacity for Increased Boating in Cork Harbour. November 2007. 52pp.

COREPOINT: Le Tissier, M. (2007). COREPOINT: NW Europe Schools of Excellence in ICZM - Training Impact Review. December 2007. 10pp.

COREPOINT: Lymbery, G. (2008). COREPOINT: ICZM Survey of Partner Countries. January 2008. 39pp.

COREPOINT: Lymbery, G. and Holden, V. (2008). Report on the Salt Marshes at Marshside, Southport. March 2008. 44pp.

COREPOINT: Lymbery, G. and Holden, V. (2008). Report on the evolution of the Ribble Estuary, with particular reference to the north Sefton coast. March 2008. 73pp.

COREPOINT: Lymbery, G. (2008). A guide to collaborative working on the coast – "two heads are better than one!" April 2008. 40pp.

COREPOINT: Lymbery, G., Stojanovic, T., Hills, J., Queffelec, B., and McKenna, J. (2007). Industry Links - Promoting the involvement of Industry in ICZM Partnerships. December 2007. 15pp.

COREPOINT: O'Connor, M., Mc Kenna, J. and Cooper, A. (2007). COREPOINT: Coastal Issues and Conflicts in North West Europe Framed within the Lisbon and Gothenburg Agendas. February 2007. 25pp.

COREPOINT: O'Hagan, A.M., Ballinger, R., Stojanovic, T., Le Tissier, M. (2005). COREPOINT: Review of International Approaches to Integrated Coastal Zone Management (ICZM). July 2005. 108pp.

COREPOINT: O'Hagan, A.M., Ballinger, R., Ball, I., Schrivers, J. (2005). COREPOINT: European legislation and policies with implications for coastal management. April 2005. 142 pp.

COREPOINT: O'Hagan, A.M., Ballinger, R., Cummins, V., O'Connor, M., Le Tissier, M., De Waen, D., and Philippe, M. (2007). COREPOINT: Status of ICZM in North West Europe. March 2007. 47pp.

COREPOINT: Pettit, S.J., Beresford, A.K.C., Marlow, P.B. and Smith, H.D. (2008). Transport and Ports Policy in the European Union. April 2008. 26pp.

COREPOINT: Pickaver, A. and Ferreira, M. (2008). Implementing ICZM at sub-national local level - recommendations on best practice. April 2008. 19pp.

COREPOINT: Queffelec, B. and Philippe, M. (2008). *La gestion des zones côtières dans le golfe du Morbihan - regard du projet COREPOINT.* April 2008. 148pp.

COREPOINT: Reis, J., Smith, H.D., and Ballinger, R.C. (2007). Stories of the Severn Sea - A Maritime Heritage Education Resource Pack. October 2007. 58pp.

COREPOINT: Stojanovic, T. (2007). *Guide pour la mise en oeuvre d'un système d'information local littoral.* November 2007. 27pp.

COREPOINT: Stojanovic, T. (2007). Guidelines for Implementing Local Information Systems at the Coast. November 2007. 27pp.

Appendix II

The European ICZM Progress Indicator

PHASE	ACTION	DESCRIPTION	NATIONAL		REGIONAL		LOCAL	
			2000	2005	2000	2005	2000	2005
PLANNING AND MANAGEMENT ARE TAKING PLACE IN THE COASTAL ZONE	1	DECISIONS ABOUT PLANNING AND MANAGING THE COAST ARE GOVERNED BY GENERAL LEGAL INSTRUMENTS.						
	2	SECTORAL STAKEHOLDERS MEET ON AN AD HOC BASIS TO DISCUSS SPECIFIC COASTAL AND MARINE ISSUES.						
	3	THERE ARE SPATIAL DEVELOPMENT PLANS WHICH INCLUDE THE COASTAL ZONE BUT DO NOT TREAT IT AS A DISTINCT AND SEPARATE ENTITY.						
	4	ASPECTS OF THE COASTAL ZONE, INCLUDING MARINE AREAS, ARE REGULARLY MONITORED.						
	5	PLANNING ON THE COAST INCLUDES THE STATUTORY PROTECTION OF NATURAL AREAS.						
A FRAMEWORK EXISTS FOR TAKING ICZM FORWARD	6	EXISTING INSTRUMENTS ARE BEING ADAPTED AND COMBINED TO DEAL WITH COASTAL PLANNING AND MANAGEMENT ISSUES.						
	7	ADEQUATE FUNDING IS USUALLY AVAILABLE FOR UNDERTAKING ACTIONS ON THE COAST.						
	8	A STOCKTAKE OF THE COAST (IDENTIFYING WHO DOES WHAT, WHERE AND HOW) HAS BEEN CARRIED OUT.						
	9	THERE IS A FORMAL MECHANISM WHEREBY STAKEHOLDERS MEET REGULARLY TO DISCUSS A RANGE OF COASTAL AND MARINE ISSUES.						
	10	AD HOC ACTIONS ON THE COAST ARE BEING CARRIED OUT THAT INCLUDE RECOGNISABLE ELEMENTS OF ICZM.						
	11	A SUSTAINABLE DEVELOPMENT STRATEGY WHICH INCLUDES SPECIFIC REFERENCES TO COASTS AND SEAS IS IN PLACE.						
	12	GUIDELINES HAVE BEEN PRODUCED BY NATIONAL, REGIONAL OR LOCAL GOVERNMENTS WHICH ADVISE PLANNING AUTHORITIES ON APPROPRIATE USES OF THE COASTAL ZONE.						

PHASE	ACTION	DESCRIPTION	NATIONAL		REGIONAL		LOCAL	
			2000	2005	2000	2005	2000	2005
MOST ASPECTS OF AN ICM APPROACH TO PLANNING AND MANAGING THE COAST ARE IN PLACE AND FUNCTIONING REASONABLY WELL	13	ALL RELEVANT PARTIES CONCERNED IN THE ICZM DECISION-MAKING PROCESS HAVE BEEN IDENTIFIED AND ARE INVOLVED.						
	14	A REPORT ON THE STATE OF THE COAST HAS BEEN WRITTEN WITH THE INTENTION OF REPEATING THE EXERCISE EVERY FIVE OR TEN YEARS.						
	15	THERE IS A STATUTORY INTEGRATED COASTAL ZONE MANAGEMENT PLAN.						
	16	STRATEGIC ENVIRONMENTAL ASSESSMENTS ARE USED COMMONLY TO EXAMINE POLICIES, STRATEGIES AND PLANS FOR THE COASTAL ZONE.						
	17	A NON-STATUTORY COASTAL ZONE MANAGEMENT STRATEGY HAS BEEN DRAWN UP AND AN ACTION PLAN IS BEING IMPLEMENTED.						
	18	THERE ARE OPEN CHANNELS OF COMMUNICATION BETWEEN THOSE RESPONSIBLE FOR THE COAST AT ALL LEVELS OF GOVERNMENT.						
	19	EACH ADMINISTRATIVE LEVEL HAS AT LEAST ONE MEMBER OF STAFF WHOSE SOLE RESPONSIBILITY IS ICZM.						
	20	STATUTORY DEVELOPMENT PLANS SPAN THE INTERFACE BETWEEN LAND AND SEA.						
	21	SPATIAL PLANNING OF SEA AREAS IS REQUIRED BY LAW.						
	22	A NUMBER OF PROPERLY STAFFED AND PROPERLY FUNDED PARTNERSHIPS OF COASTAL AND MARINE STAKEHOLDERS HAVE BEEN SET UP.						
	23	COASTAL AND ESTUARY PARTNERSHIPS ARE CONSULTED ROUTINELY ABOUT PROPOSALS TO DO WITH THE COASTAL ZONE.						
	24	ADEQUATE MECHANISMS ARE IN PLACE TO ALLOW COASTAL COMMUNITIES TO TAKE A PARTICIPATIVE ROLE IN ICZM DECISIONS.						

PHASE	ACTION	DESCRIPTION	NATIONAL		REGIONAL		LOCAL	
			2000	2005	2000	2005	2000	2005
AN EFFICIENT, ADAPTIVE AND INTEGRATIVE PROCESS IS EMBEDDED AT ALL LEVELS OF GOVERNANCE AND IS DELIVERING GREATER SUSTAINABLE USE OF THE COAST	25	THERE IS STRONG, CONSTANT AND EFFECTIVE POLITICAL SUPPORT FOR THE ICZM PROCESS.						
	26	THERE IS ROUTINE (RATHER THAN OCCASIONAL) COOPERATION ACROSS COASTAL AND MARINE BOUNDARIES.						
	27	A COMPREHENSIVE SET OF COASTAL AND MARINE INDICATORS IS BEING USED TO ASSESS PROGRESS TOWARDS A MORE SUSTAINABLE SITUATION.						
	28	A LONG-TERM FINANCIAL COMMITMENT IS IN PLACE FOR THE IMPLEMENTATION OF ICZM.						
	29	END USERS HAVE ACCESS TO AS MUCH INFORMATION OF SUFFICIENT QUALITY AS THEY NEED TO MAKE TIMELY, COHERENT AND WELL-CRAFTED DECISIONS.						
	30	MECHANISMS FOR REVIEWING AND EVALUATING PROGRESS IN IMPLEMENTING ICZM ARE EMBEDDED IN GOVERNANCE.						
	31	MONITORING SHOWS A DEMONSTRABLE TREND TOWARDS A MORE SUSTAINABLE USE OF COASTAL AND MARINE RESOURCES.						