

European Maritime Clusters and the EU Maritime Policy **Green Paper** Debate

Prof.dr.ir. Niko Wijnolst
Forum for shippingøkonomi og strategi
30 November 2006

3 Topics

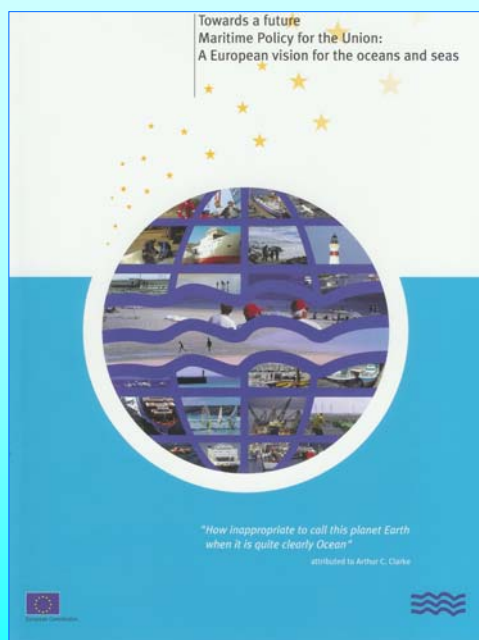
1. **Green Paper** Objectives, Themes and Comments;
2. **EU is a Maritime Superpower**;
3. **Maritime Cluster** approach; *use network of maritime cluster organizations to strengthen pan-European policies*

European Maritime Policy Green Paper

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*Towards a future Maritime Policy for the Union:
A European Vision of the Oceans and the Seas.*
European Commission Communication, March 2005

OBJECTIVES

- Oceans and seas are a vital resource for life on earth. They play a key part in our economic, social and cultural life. They are an important source of wealth with great potential for development. Ensuring the sustainable use of the marine environment is a prerequisite for that potential to be fully realised.
- There is growing international recognition that ocean and sea affairs are interlinked and require a comprehensive approach, and there is a clear move towards such an approach in many parts of the world.
- A strong case can be made for Europe to look at ocean and sea affairs in a more coordinated way, rather than in the current sectoral manner. The **Strategic Objectives** of the Commission for 2005-2009 noted *“the particular need for an all-embracing maritime policy aimed at developing a thriving maritime economy and the full potential of sea-based activity in an environmentally sustainable way.”*

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EC Maritime Policy Task Force
Maritime Policy Green Paper

- Publication of the Green Paper 7 June 2006
- Discussion with stakeholders until 30 June 2007
- Before the end of 2007 the Commission will address a Communication to the Council and Parliament, summarising the results of the consultation process and proposing the way forward.
- http://ec.europa.eu/comm/fisheries/maritime/index_en.htm



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Members of the Maritime Policy Task Force

Joe Borg (Fisheries and Maritime Affairs, Chairman)

Günter Verheugen (Enterprise and Industry)

Jacques Barrot (Transport)

Stavros Dimas (Environment)

Danuta Hübner (Regional Policy)

Janez Potočnik (Science and Research)

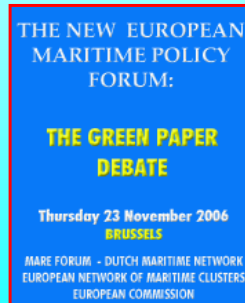
Andris Piebalgs (Energy)



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www.mareforum.com

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Underlying principles of the Maritime Policy The Vision of the EC should rest on two pillars

Pillar 1: The Maritime Policy should be anchored within the Lisbon Strategy, stimulating growth and more and better jobs within the Union. Continued investments in knowledge and skills are key factors for maintaining competitiveness and for ensuring quality jobs.

Pillar 2: We must maintain and improve the status of the resource upon which all maritime activities are based, namely the ocean itself. To do this, ecosystem-based management built on the best scientific knowledge, is essential. The Commission has completed the groundwork for this by putting forward its **Thematic Strategy for the Marine Environment**.

<http://ec.europa.eu/comm/environment/water/marine.htm>

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Complicating characteristics of the Marine Environment

The global nature of the oceans leads to both complementarity and competition between nations. This necessitates the development of **universally applicable rules**. Yet each part of the oceans and seas is different and may require its own more **specific rules and administration**.

Maritime good governance involves multiple actors resulting in multiple sectoral policies at all levels of government from the EU to the national, regional and local. **Action at an EU level should be undertaken only where it contributes clear value-added to the activities of others.**



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Main **Questions** of the Maritime Policy **Green Paper**

1. Should the EU have an integrated maritime policy?
2. How can the EU add value to the many national, local and private initiatives which already exist in the maritime field?

Main **Themes** of the Maritime Policy **Green Paper**

1. Retaining Europe's leadership in sustainable maritime development.
2. Maximizing quality of life in coastal regions.
3. Providing the tools to manage our relations with the oceans.
4. Maritime Governance.
5. Retaining Europe's maritime heritage and reaffirming Europe's maritime identity.

Theme 1: Retaining Europe's leadership in sustainable maritime development

Considerations:

- Europe has a huge maritime economy with a strong global position. The key objective behind the Maritime Policy initiative is to maintain *A competitive maritime industry*.
- The strength of the European maritime industry lies first of all in its own entrepreneurship and ability to innovate.
- The question is how to maintain and strengthen the competitiveness of the maritime cluster.
- A condition is the availability of the highest quality production factors, such as oceans, scientific knowledge and a well educated and experienced workforce.
- Economic competitiveness should be achieved under the stringent condition of sustainability.
- What mechanisms should be in place to ensure that?

Theme 1: Retaining Europe's leadership in sustainable maritime development (cont'd)

Instruments and targets:

- a) *The sustainable use of our marine resources* implies preservation of oceans and seas (Thematic Strategy) and a shared sustainability paradigm of all users and stakeholders.
- b) *Remaining at the cutting edge of knowledge and technology*, requires increased marine research efforts and this will be reflected in the 7th Framework Programme.
- c) *Innovation under (dramatically) changing circumstances*, such as climate change, energy resource scarcity and blue technology.
- d) *Developing Europe's maritime skills and expanding sustainable maritime employment*, in particular the lack of well trained European seafarers may jeopardize the competitiveness.

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Theme 1: Retaining Europe's leadership in sustainable maritime development (cont'd)

- e) *Maritime clustering* is a tool to achieve the EU's policy objectives, as maritime sectors are all part of a big maritime cluster. Such local, national and European networks of interrelated maritime companies and institutions are able to increase the competitiveness within the global economy.
- f) In sectors such as shipping, port infrastructure and offshore resource exploitation, where large investments are being made in innovative products designed to last for decades, a *stable regulatory framework* is important. Simplifying and streamlining regulations (Customs Code), enforcing existing rules, self regulation linked to an appropriate incentive system (shipowners, lower port costs and fewer security checks); a review of regulatory and structural framework should identify economic incentives across maritime sectors; monitoring independent ship registers, creating an optional European quality register with added incentives.

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Theme 2: Maximizing quality of life in coastal regions

Considerations:

- A healthy marine environment is essential for the quality of life of an increasing number of citizens in coastal regions. The various threats to the coast and its inhabitants should be dealt with and turned into opportunities, among which maritime tourism.

Instruments and targets:

- a) *The increasing attraction of the littoral as a place to live and work* is difficult to measure as comprehensive statistics are not really available. The Commission believes that a comprehensive study of these “non-market value” economic indicators should be undertaken in order to provide decision-makers and stakeholders with a quantitative view of coastal issues and trends across Europe.
- b) *Adapting to coastal risks* like erosion, flooding, storms and tsunamis, is the reverse of protection of the oceans and seas. The severe changes in weather cycles which are attributed to climate change have fundamental repercussions on coastal ...

Theme 2: Maximizing quality of life in coastal regions (cont'd)

.....infrastructure, shipping, aquaculture and marine engineering projects, while half of Europe's wetlands may permanently disappear under the sea. This requires an incorporation of risks in planning and investment decisions.

- c) *Developing coastal tourism* is the subject of the Commission's European Agenda 21 for the sustainability of European tourism. The diversification of tourism products and services can contribute to the competitiveness of coastal and island destinations.
- d) *Managing the land-sea interface*, or rather in formal terms “integrated coastal zone management (ICZM)” is a challenge for planners and policy-makers. Integration of the diverse interests under a single integrated management will increase the speed and quality of economic development in coastal zones.

Theme 3: Providing the tools to manage our relations with the oceans

Instruments and targets:

- a) Better understanding of the competing uses of the seas and oceans will require *better data and information on maritime activities*. However, there are still major problems of harmonisation and reliability of data collected, as well as insufficient and geographically imbalanced monitoring in EU marine regions.
- b) *Spatial planning for a growing maritime economy* in the waters under jurisdiction of or controlled by the Member States should be created. As economic activity moves increasingly further offshore, the EU and its Member States will need to take the lead in ensuring that multilateral rules evolve to allow for reconciling the right of innocent passage with the increased need for offshore spatial planning.
- c) The EU and Member States should *make the most of the financial support for coastal regions (EU Structural Funds)*.

Theme 4: Maritime Governance

Considerations:

- A future EU maritime policy has to take into account the principles set out in the Treaty in relation to policy areas and the distribution of competences between the EU institutions, the Member States, the regions and the local authorities. Policy making requires a stronger coordination and integration among sectoral policies.
- Sea related policies also have to take into account the commitments undertaken in the context of the 2002 World Summit on Sustainable Development and the provisions of UNCLOS.
- EU maritime policy making can be partly implemented through existing institutions. Sectoral advisory bodies set up by the Council or the Commission will, however, have to be supplemented by appropriate cross sectoral bodies.
- Where appropriate, Member States should use existing regional organisations whose activities impact on maritime activities, such as HELCOM and OSPAR.

Theme 4: Maritime Governance (cont'd)

Instruments and targets:

- a) *The offshore policy integration of governments* relating to territorial waters and Exclusive Economic Zones (EEZs) vary greatly between Member States. The trend on the seas seems to be towards a “Common EU maritime space”, governed by the same rules for safety, security, environmental protection and border control.
- b) *Maritime activities* transcend by their very nature the boundaries of Europe and are therefore best *regulated on the basis of international rules*. The EU should place particular emphasis on using its external policy to establish an international level playing field, in particular where this is required to ensure fair competition for economic operators.

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Theme 4: Maritime Governance (cont'd)

- c) The EU should strive to ensure coherence, transparency, efficiency and simplicity of rules relating to oceans and seas, in particular within UNCLOS.
- d) Sub-theme c) The role and status of the EU in *international organizations* dealing with maritime affairs needs to be reviewed, taking into account the fact that in several cases the issues under consideration fall within the exclusive competence of the EU. With regard to Community *membership of IMO*, the Commission has made its views clear in the Recommendation on this issue in 2002.
- e) Sub-theme d) Although a *European maritime policy* needs a general framework, its implementation *will need to take account of realities of Europe's geographical situation*. For example, EU Member States' overseas territories provide a worldwide dimension to European Maritime Policy.

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Theme 5: Retaining Europe's maritime heritage and reaffirming Europe's maritime identity.

Considerations:

- The Commission believes that there is much to be gained by encouraging a sense of common identity among all those who earn their living from maritime activities or whose quality of life is significantly connected to the sea.
- This can foster a better understanding of the complex relationships involved and the importance of the seas for human life, as well as to a better understanding of the contribution of maritime activities to the economy and well-being.
- The result can be a more favourable image of maritime activities, an appreciation of their growth potential, and a greater interest in choosing a career related to them.

Instruments and targets:

- “The continuity between the past, present and future needs to guide and inspire European, national and regional strategies, policies and actions related to cultural heritage.”

Preliminary Comments on the Maritime Policy Green Paper 1. *Maritime Policy System Boundaries*

- The **system boundaries** of the Green Paper can be defined on the basis of various dimensions, like geographical, economic, environmental, social.
- The **geographical** dimension in the Green Paper varies from the world level, European level, regional level (i.e. Baltic Region), member state level, EEZ and local level.
- The **economic** dimension varies from global competitiveness, level playing field, employment, value added, export, innovation, to individual sectors such as fisheries, offshore, shipping, shipbuilding, and entire maritime clusters.
- The **environment** also has many dimensions, ranging from conditions for sustainable growth, knowledge about the oceans and the seas, erosion and coastal protection, marine pollution, offshore energy, climate change, depletion of the seas, biodiversity, pollution from land, habitat and water directives, safety and security, spatial planning.

Preliminary Comments on the Maritime Policy Green Paper

1. *Maritime Policy System Boundaries* (cont'd)

- The **social** dimension ranges from employment and education, coastal tourism, illegal immigration, education, maritime heritage and identity, to regional development.
- This short list illustrates the **complex boundaries** of the maritime system that the Green Paper attempts to define. It is not clear where we draw the limits. And that is not surprising as maritime and marine affairs are by its very nature global with multifaceted impacts.
- The Maritime Policy Task Force should have made an effort to define more clearly the system boundaries, as well as the dimensions that the future European maritime policy should encompass. The current “capita selecta” of topics and dimensions **makes it difficult to focus on the core-issues of the Green Paper.**

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Preliminary Comments on the Maritime Policy Green Paper

2. *Lack of maritime and marine data*

- There is a **serious lack of knowledge** about the oceans and seas, the coasts, impact of human activities like dredging, the definition and measurement of maritime sectors and clusters, climate change and so on.
- Without a solid understanding of the complex relationships of the marine and maritime world, **it is difficult to formulate performance criteria** which can be used to formulate and monitor maritime policies.
- **Closing the scientific knowledge and data gaps** should be a precursor to any effort to formulate a holistic European maritime policy. This will also facilitate the process of defining the system boundaries of Europe's maritime ambitions.

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Preliminary Comments on the Maritime Policy Green Paper
3. Policy hierarchy

- The United Nations Convention on the Law of the Sea (UNCLOS) is an example of a global maritime policy to which the Member States and the EU have subscribed and which governs a major part of the maritime and marine world.
- The International Maritime Organisation (IMO) is yet another example, but is focused on the shipping, shipbuilding and marine equipment sectors.
- The Member States are part of regional policy fora with third countries, like the Helsinki Commission (HELCOM) for the Baltic Region.
- There are EU policies, like those related to the Cohesion policy, which address various (maritime) policy objectives, or sectoral policies like the EU Common Fisheries Policy. The EU influence or control over these policies varies widely.

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Preliminary Comments on the Maritime Policy Green Paper
3. Policy hierarchy (cont'd)

- There are often issues of subsidiarity with Member States policies. This sets the scene for a major confusion of which maritime policies should be addressed by the EU and which policies should be left to other policy levels.
- **A clear system delineation and policy hierarchy is lacking in the Green Paper, which will pose an extra hurdle for a structured discussion with Member States.**

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Preliminary Comments on the Maritime Policy Green Paper

4. *Recommendation*

- The Green Paper is an admirable attempt to define a European Maritime Policy Framework.
- However, the lack of clear system boundaries, the structural lack of data on maritime and marine affairs, as well the absence of a policy hierarchy and the complex links with other international and EU policy domains, does not facilitate the task of making a constructive contribution to the discussion.
- The Member States should therefore focus on these basic issues first, before more mundane themes like coastal tourism are addressed. “What is it that Member States want the EU to do?” comes before the answer of “How to organize it within an EU Maritime Policy”.

Main Questions of the Maritime Policy Green Paper revisited

Question: Should the EU have an integrated Maritime Policy?

Answer: Yes, the European maritime cluster will benefit from such a broad policy framework, but the boundaries, data basis and policy hierarchy should be agreed upon first among member states.

Question: How can the EU add value to the many national, local and private initiatives which already exist in the maritime field?

Answer: By focusing first on the critical enablers of the maritime cluster, and adding gradually broader maritime policy objectives.

Why should Europe be concerned by the future European Maritime Policy Green Paper Debate?

EU is a Global Maritime Superpower
Denmark is a cornerstone of Maritime Europe

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Europe's maritime sectors are global market- and technology leaders, create jobs and value added through continuous innovation

- European ports handle 25% of world seaborne trade
- European shipowners own 40% of the world fleet
- 4 European containerlines are in the Top-5
- European shortsea shipping is 50% of world total
- European inland shipping has a modern fleet of 9,400 ships
- European shipbuilders have the highest turnover
- European shipowners order 40% of new buildings
- European marine equipment manufacturers produce 35% of the world market
- European offshore companies are world leaders
- European yachtbuilders produce 60% of the mega-yachts
- European dredging companies have 80% of the open market
- European maritime services, maritime research, inland shipping, fisheries, and navies are world leading

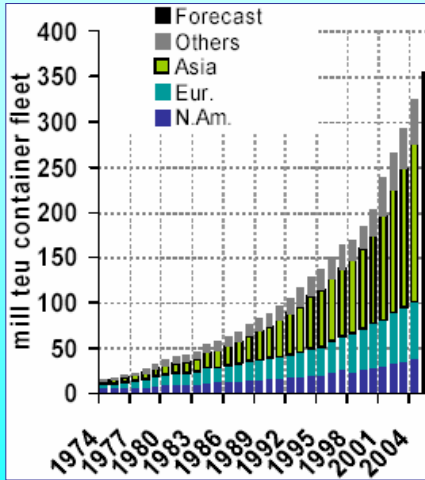
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4 European containerlines are in the Top-5

% share of world fleet



1. Maersk	18.2%
2. MSC	8.6%
3. CMA/CGM	5.6%
4. Evergreen	5.2%
5. Hapag/CP	4.5%

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European shortsea shipping represents 50% of the world total

10,000 ships (500 – 10.000 GT) making 460,000 port calls
1200 ports, Motorways of the Sea



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European Inland Shipping is prominent

9400 ships: 8200 dry cargo, 1200 tankers (10,3 million dwt)



400 TEU containership



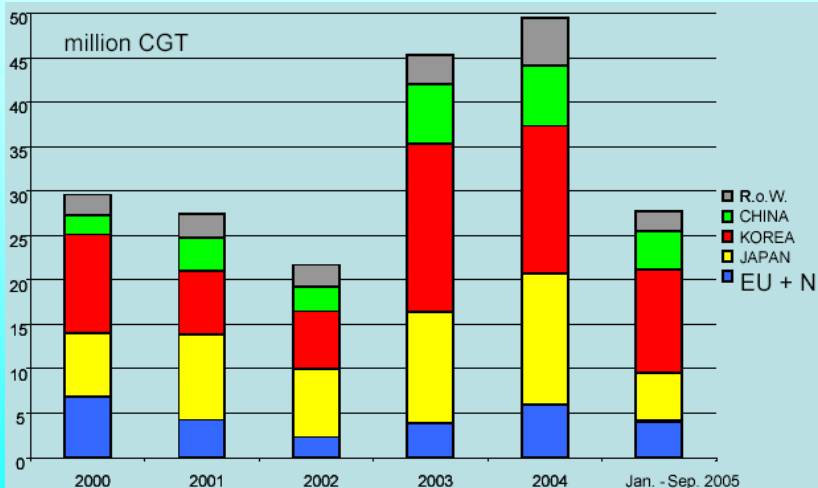
10,000 dwt oil tanker

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Europe has a modest share in shipbuilding expressed in CGT, but

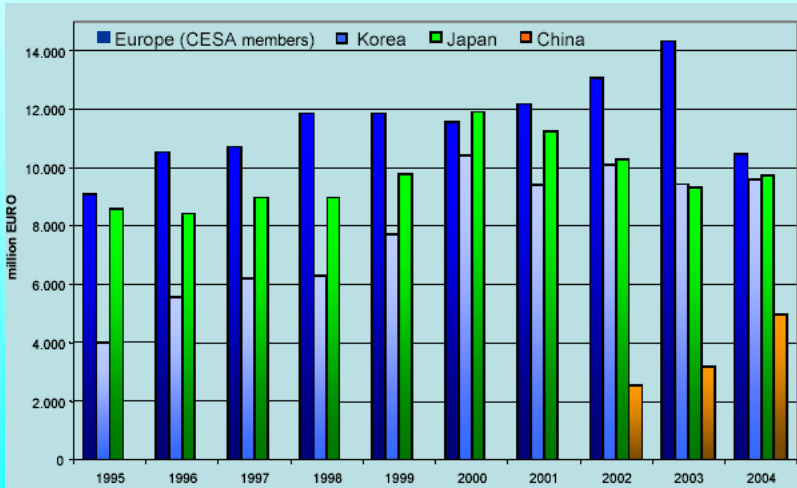


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.....European yards have the highest turnover
Turnover (million €) in the main shipbuilding areas

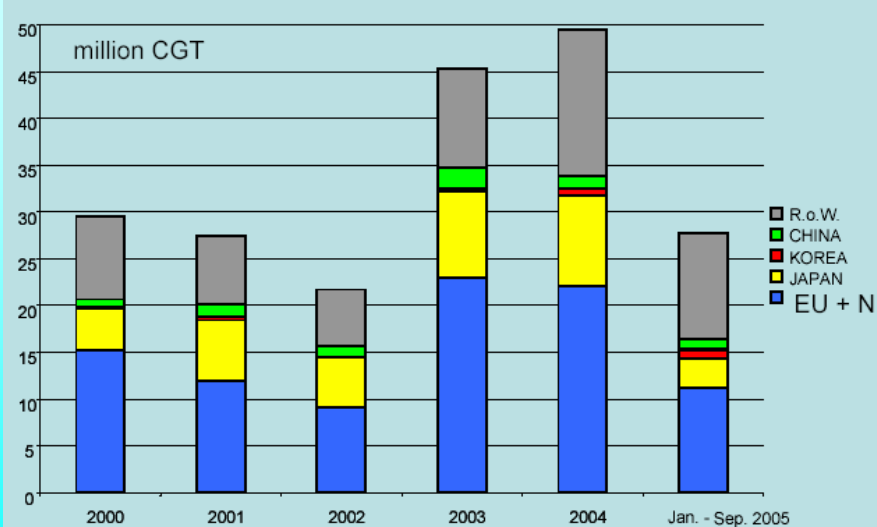


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European shipowners order 40% of new buildings

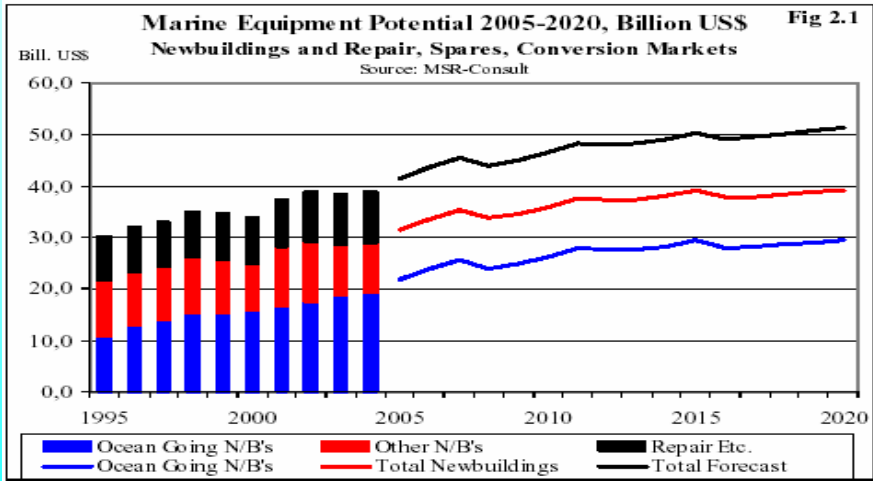


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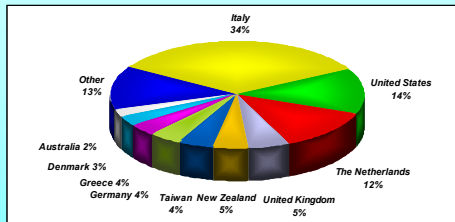
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European marine equipment manufacturers have > 35% share of the world market

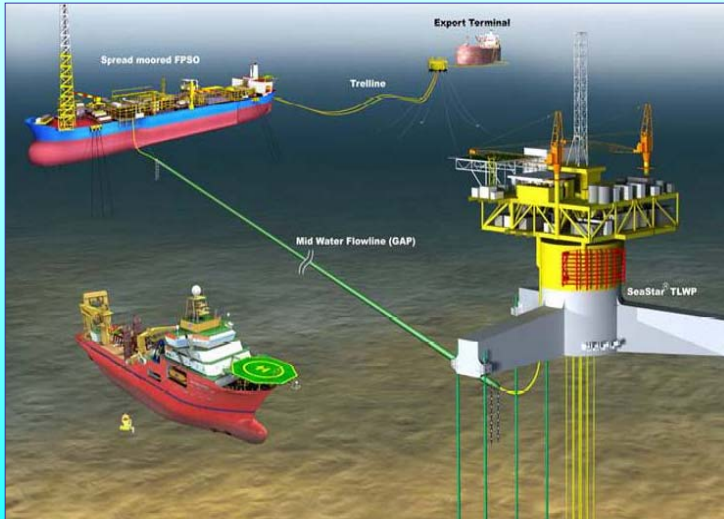


Holland Marine Equipment, September 2005

European yachtbuilders have 60% of the global mega-yacht market (24m and up, in length)



European offshore companies are world leaders in many offshore (services) markets

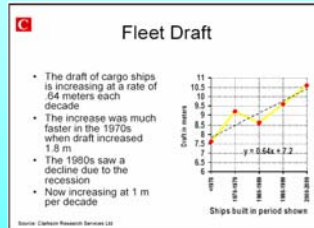
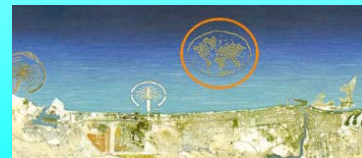


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European dredgers have 80% of the open market



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Europe should have the ambition to maintain leadership in the competitive world through a holistic maritime policy and cluster strategy.

Maritime clusters should drive EU policy

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Maritime clusters play a crucial role as facilitator of growth and innovation

Economic Cluster concept (Porter)

Clusters Increase Productivity / Efficiency

- Efficient access to specialized inputs, employees, information, institutions, and "public goods" such as training programs and training institutions
- Ease of **coordination** across firms
- Rapid **diffusion** of best practices
- Ongoing, visible **performance comparisons** and strong incentives to improve vs. local rivals

Clusters Stimulate and Enable Innovations

- Better ability to perceive **innovation opportunities**
- Presence of multiple suppliers and institutions to assist in **knowledge creation**
- Ease of **experimentation** given locally available resources

Clusters Facilitate Commercialization

- Opportunities for **new companies** and **new lines of established business** are more apparent
- Lower **barriers to entry** into cluster related businesses because of available skills, supplies, etc

- ↓
- Competition is fundamentally enhanced by externalities, linkages, and relationships across firms, industries and associated institutions

- Clusters can be characterized as networks of production of strongly interdependent firms linked to each other in a value adding chain.
- Michael Porter: *Competitive advantage of nations*.
- Clusters of industries create sustainable competitive advantage.
- Identify sectors and understand their interaction.
- Reinforce cluster at various policy levels.
- Look for the *enablers* that reinforce clusters.



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Europe's Maritime Clusters are prominent some examples

- United Kingdom
- France
- Finland
- Poland
- Germany
- Netherlands
- Italy
- Denmark
- Norway
- Sweden
- (Spain)



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DYNAMIC EUROPEAN MARITIME CLUSTERS

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Maritim Forum, Norway
and
Dutch Maritime Network

in cooperation with
European Network of Maritime Clusters

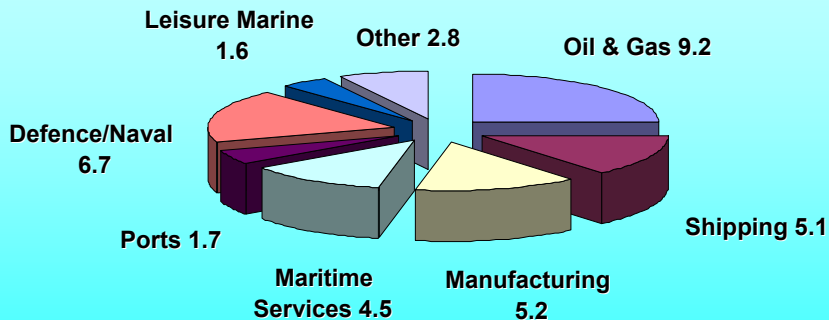


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United Kingdom Maritime Cluster Turnover £ 37bn (€55 bn), employment 250,000



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French Maritime Cluster

Turnover €35 bn; employment 315,000

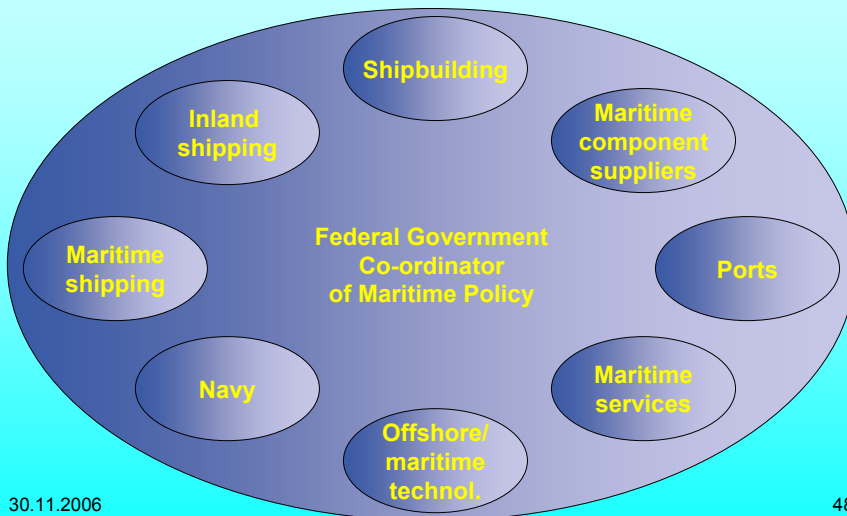
Sector	Rev (bns €)	workforce	Main features
Shipping	6.6	20 000	100 million tons, 14 million passengers per year
Ports	4.5	44 000	50 % of external trade (75 % toward outside EU)
Shipyards and marine eqpmt	4.5	41 000	Specialized in knowledge-based vessels
Offshore oil & gas	5.5	25 500	Up to 2 000 m depth.
Boat industry	3	50 000	93 000 units produced in 2003.
Fishing	5.7	55 000	5 600 ships / 800 000 tons + 2400 ships overseas
Navy and coast guards	6	60 000	From the patrol boat to the aircraft carrier
Research Institutes	0.6	4 000	From the North pole down to extreme depth
Training	0.6	6 000	In preparation for the future
Others(class,banks, brokers..)	1.8	9 500	They support the above sectors
TOTAL	35	315 000	1,5 % active population 2-2,5% GNP

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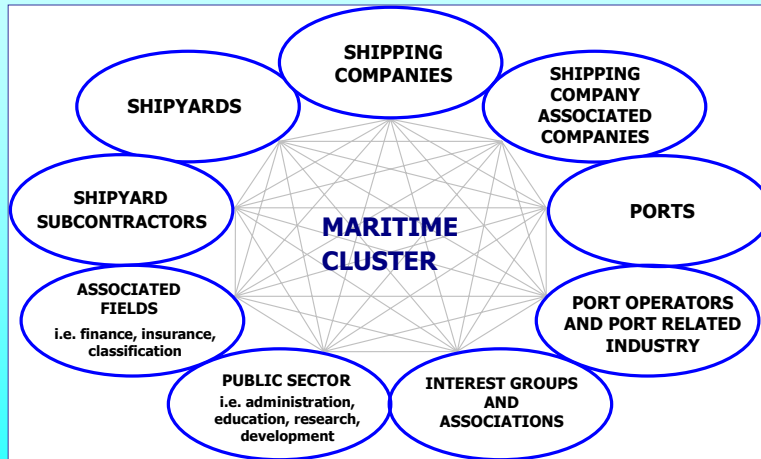
German Maritime Cluster



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Finnish Maritime Cluster



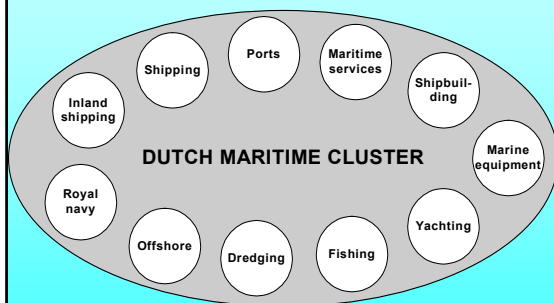
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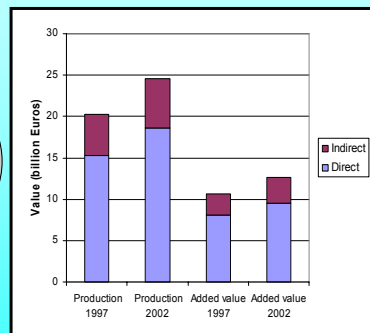
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Dutch Maritime Cluster

production €25 bn, exports 63%, employment 190,000



11 sectors of the cluster



Evolution of the cluster 1997-2002, production and value added

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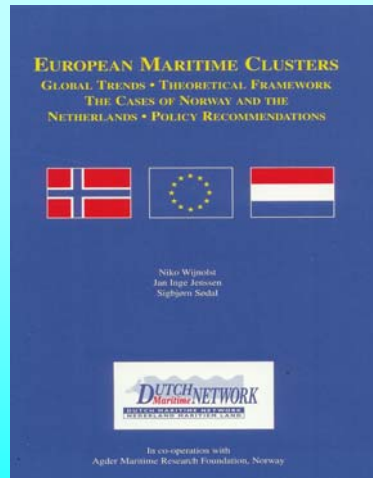
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Enablers of European Maritime Clusters

Norwegian-Dutch study 2003

- Maritime sectors change and maritime clusters grow and decline.
- How can one measure the strength and dynamics of a cluster?
- What are benchmarks of cluster performance?
- What are cluster enablers?



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Maritime cluster performance indicators

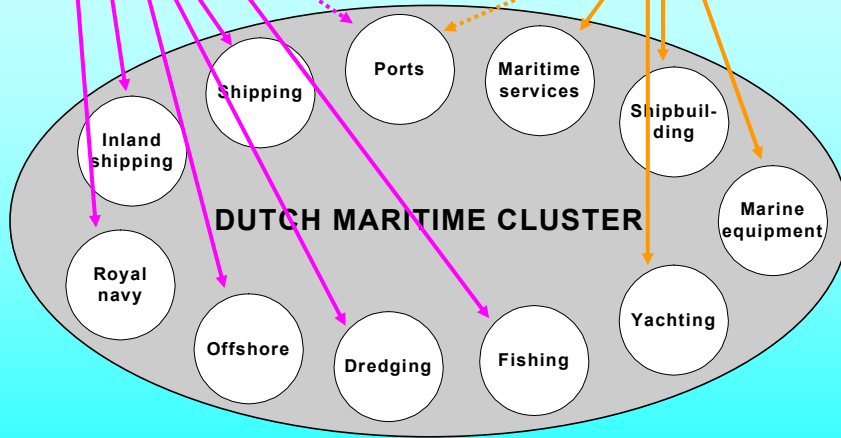
1. Structural indicators
2. Economic indicators
3. Internationalisation
4. Critical mass and leader firms
5. Level playing field
6. Innovation
7. Institutional framework and business networks
8. Labour market and education
9. Image and communication

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6 demand pull sectors and 5 supply push sectors



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Shipping is the main driver of maritime clusters



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Enablers of maritime cluster dynamics

1. Define the cluster, establish its significance and promote visibility and monitor its development
2. Define an economic policy (and stick to it...)
3. Strengthen demand pull sectors
4. Monitor and maintain a level playing field
5. Promote exports and internationalisation
6. Strengthen innovation, R&D and leader firms
7. Strengthen education and labour market transparency

In Conclusion

It is in Europe's interest that the maritime community in Denmark actively contributes to:

- The Maritime Policy Green Paper Debate
- The strengthening of the maritime superpower status of Europe
- The creation of an effective pan-European network for maritime cooperation* through its maritime cluster organization

*Successful Example: Waterborne Technology Platform