

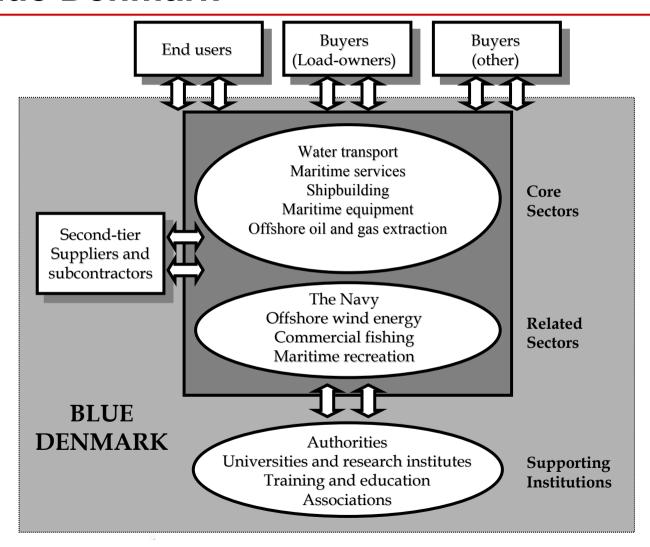
Aim of the cluster-study

- Part of a maritime growth project
 - > The maritime growth strategy focus on competencies
- Significance
- Structure
- Dynamics
- Indicator system





The Blue Denmark





Statistical delimitation

- Choice of proxies
- Input output matrices
- SNA93
- 130 industries
- 1993 to 1999
- Over and under evaluation of industries





Employment (1999) in 1000 persons

Industry	Direct	Incl. indirect
Water Transport	17	20
Maritime services	30	48
Shipbuilding	9	15
Maritime equipment	22	32
Offshore	1	2
Total	79	117
In % of Danish economy	2,9%	4,3%





Overview 1999 in %

Industry	Production Value	Gross Value Added	Gross Factor Income	Wages	Employment
Water transport	45 %	22 %	22 %	20 %	22 %
Maritime Services	23 %	28 %	28 %	39 %	38 %
Shipbuilding	5 %	4 %	5 %	11 %	11 %
Maritime equipment	13 %	16 %	16 %	27 %	27 %
Offshore	14 %	30 %	30 %	3 %	2 %
Cluster	100 %	100 %	100 %	100 %	100 %
Of Danish economy	7 %	5 %	5 %	3 %	3 %





Multipliers 1999

Industry	Output multiplier	Employment coefficient	Employment multiplier
Water transport	1,13	0,30	0,34
Maritime Services	1,57	1,04	1,63
Shipbuilding	1,71	1,32	2,25
Maritime equipment	1,47	1,30	1,92
Offshore	1,15	0,07	0,08
Total cluster	1,31	0,62	0,81





Linkages within the cluster

- Intermediates
 - > Week within the cluster
 - ➤ Links up with other industries
- Investments
- Education and training
- Labour market
- Organizations
- Informal relations





Innovation the way ahead

- Standardized services
- Specialized markets
- Drivers
 - Customers
 - > Prizes
 - > Research and development





Supplementary analyses

- Danish maritime graduates
 - > Education
 - Supplementary education
 - Job career The Blue Denmark
- International benchmark of the Danish maritime education system
- Strategic development of the Danish Maritime education system



MARITIME DEVELOPMENT CENTER OF EUROPE



www.maritimecenter.org

Maritime Development Center of Europe



A private membership based interest organization established in 1999:

- Promote innovation and cooperation in the maritime cluster
- Promote a positive image of the entire maritime cluster
- Secretary for EVIMAR A/S
- Coordinator for Shortsea Promotion Denmark
- Coordinator for maritime network "Highway at Sea"
- Cooperation with other organisations established i 2004.







The European Virtual Maritime Institute

Skibsteknisk Selskab

The Danish Society for Naval Architecture and Marine Engineering

Foreningen til Søfartens Fremme

Søfartsteknisk Forening



SHORTSEA PROMOTION® DANMARK

The Maritime Cluster







- Ship owners
- Shipyards
- Component manufacturers
- Port authorities
- Service companies
- Research institutions
- Educational institutions
- National authorities
- Trade organizations
- Finance and insurance

Membership of MDCE



- Ship owners
- Shipyards
- Component manufacturers
- Port authorities
- Education & Research
- National authorities
- Trade organizations
- Service & Consultancy
- Finance and insurance

17

1

12

3

13

4

10

27

5

Objectives of MDCE



- The Association is a networking organisation for the maritime sector and for those with an interest therein.
- Interaction between members shall be stimulated by, among other things, meetings and conferences, from which synergies may arise.
- Maritime companies/institutions and maritime activities such as conferences/exhibitions shall be attracted.
- International marketing shall be ongoing.

Objectives of MDCE

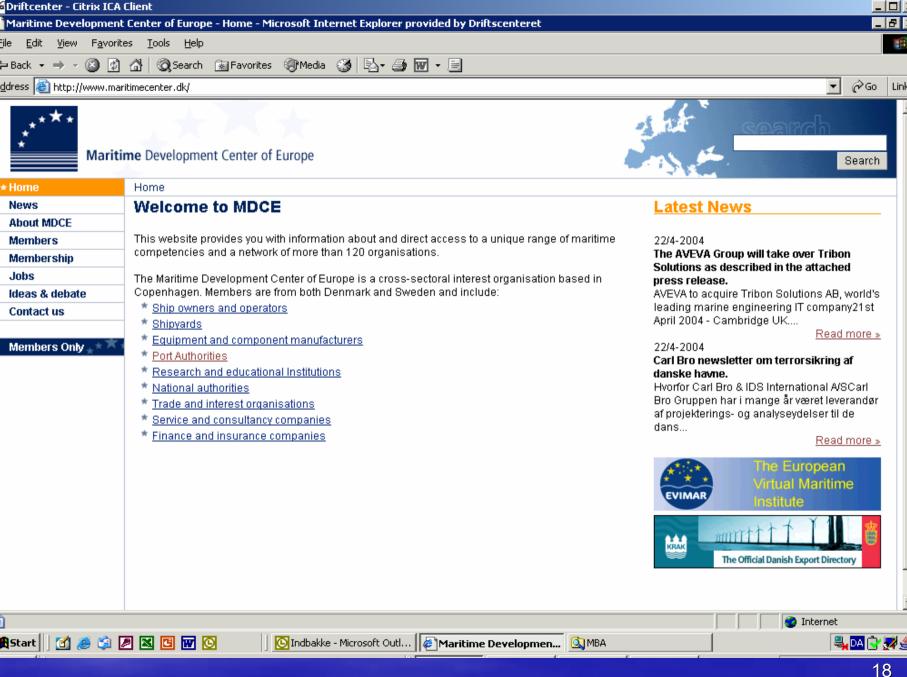


- The Association shall stimulate research, development and education.
- The Association shall create links with, and may be a member of other associations or EU and international bodies, whenever this promotes the Association's objectives.
- The Association may participate in national and international research and development projects which are judged to be beneficial to the general development of the maritime sector.
- The Association may participate as an active resource in public or other fora, where it is deemed that the Association may make a positive contribution.

Figures for danish shipping



- 505 vessels, 9,2 million tdw
- 123 vessels on order, value of dkk 30 billion
- Fleet age 6,5 years
- 100 billion dkk foreign currency earnings
- About 50% is based on operators.
- This share is increasing



MARITIME DEVELOPMENT CENTER OF EUROPE



www.maritimecenter.org