Operation Phakisa: Oceans Economy
Exploring Opportunities: Towards a National Maritime Cluster

Dolphin’s Leap Conference Centre
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Port Elizabeth, Nelson Mandela Bay
‘Opportunities to increase competitiveness come not from a single asset or an investment, but from the combination of people, place, investment and attitude.’

(Grow Wellington, New Zealand)

‘Passion and teamwork – the twins for successful cluster management.’

(ICT Cluster Bern, Switzerland)
‘Cluster programmes need to be designed to support different types of clusters: emergent, national champions, world-class clusters and clusters in transition. And long-term support is required.’
(Danish Science, Technology & Innovation Agency)

‘International inter-cluster collaboration offers access to new, complementary knowledge, new collaboration partners and new markets.’
(VINNOVA, Sweden)
‘Clusters that cross political boundaries can create benefits for the companies they serve, but regional rivalry must be recognised and managed if clusters are to reach their full potential.’

(South Carolina Council for Competitiveness, USA)

‘Private sector-led cluster development, especially when supported by private funding, can significantly speed needed action within local governments and academic institutions.’

(HIS Global Insights, San Francisco)
Maratim21- Norway

Accelerate innovation through collaboration by means of a common research and innovation strategy platform for Norwegian maritime industry, research, education and politics

"Cooperate where we can - Compete where we must"

Innovate or die!
Maritime Cluster Benchmarking Analysis
17 European Maritime Clusters

Characteristics:

• Historic Development
• Maritime Policy
• Logistics
• Research & Development
• Higher Education
European Network of Maritime Clusters
Existing clusters

- United Kingdom
- The Netherlands
- Bulgaria
- Spain
- Germany
- Denmark
- France
- Norway
- Finland
- Sweden
- Romania

ENMC
Maritime Clusters in South Africa

• There are only two maritime clusters in South Africa i.e. The eThekwini Maritime Cluster (EMC) based in Durban and the Nelson Mandela Bay Maritime Cluster (NMBMC) based in Port Elizabeth.

• The EMC was established by a top-down public sector approach and the NMBMC was established by a bottom-up private sector approach.
Port Elizabeth has a Maritime History
Port Elizabeth from the Donkin Reserve
Terrestrial Biodiversity converges with Marine Biodiversity creating a ‘Big 7’ National Park
Algoa Bay is the most researched bay in Africa
Port Elizabeth Bottlenose Dolphin Capital of the World
Large Pods of 1,000 Plus Dolphins
Marine Spatial Planning

- Multiple use MPA
- MPA no-take zone
- Wind-farm zone
- Oil and gas licensed area
- Fishery closure
- Shipping lane
- Port management zone
Clustering does not happen naturally; they have to be constructed. Over the last decade, the concept of clustering has become a central concept for analyzing the competitiveness of nations, industries, and firms.

The Nelson Mandela Bay Maritime Cluster is still under construction and requires administrative and secretariat support from both the public and private sectors to be sustainable.
Cluster Definition

A cluster is defined as `a population of geographically concentrated and mutually related business units, associations and public (private) organizations centred around a distinctive economic specialization’.

- **First**, a cluster is a *population*, not an entity. Consequently, the internal heterogeneity of clusters should be taken into account.

- **Secondly**, clusters are *geographically concentrated*. This dimension sets clusters apart from networks.
• **Thirdly**, the *cluster population* consists of business units, associations, public-private organizations, and public organizations. Associations are defined as `organizations that provide services to members’. Associations are included in the `population’, if they are `cluster specific’, i.e. if the majority of their members is included in the cluster population. Public and public-private organizations (such as education or research institutes) are included in the population if they engage in cluster specific activities.

• **Fourthly**, clusters are ‘centred around’ a particular *economic specialization*, that can be regarded as the `core’ of the cluster. The notion of a core is implicit in most studies on clustering.

• **Fifthly**, clusters consist of business units and associations that are a part of, or relatively strongly related to, the core of the cluster. Such relations are in general both economical and social. The maritime sector consists of *sub-sectors* and *leader firms*.
Maritime Clusters:

- Act as an Incubator of Business Opportunities
- Provide opportunities for Employment
- Enhance Competitiveness of the manufacturing sector
- Promote Innovation, Research and Technology
- Offer Education, Skills and Expertise in the Maritime fields
- Facilitate new Business Partnerships
- Ensure Economic Development of the area
- Facilitate joint efforts for the Protection of the vulnerable Marine Environment
- Promote Regional Cooperation and Integration
Maritime Cluster Populations consist of Sub-Sectors and Leader Firms
Sub-Sectors: Round Table Conversations
Structure of Maritime Clusters

- The structure of maritime clusters consists of sub-sectors and leader firms.
- The structure of maritime clusters varies from country to country according to the historic development of their respective maritime industries over a period of time.
- This is usually determined by the history of port development, trade and shipping, demand for ships, when at some point in history they had a competitive advantage e.g. shipbuilding.
- A number of maritime nations lost their initial competitive advantage due to the decline in ship building demand resulting in a reduction of wages, subsequent labour disputes and strike action.
- When the demand for ships returned some nations were able to build ships at a lower cost than the traditional shipbuilding nations.
Structure of Maritime Clusters

- Shipbuilding and Ship Repairs
- Maritime Safety & Security
- Marine Renewable Energy
- Ports & Infrastructure
- Maritime Logistics
- Coastal & Marine Tourism
- Scientific & Oceanographic Research
- Fish & Sea Products
- Marine & Maritime Services
- Shipping Finance
- Maritime Law
- Maritime Training & Employment
- Maritime Consulting
Leader Firms

Leader firms are important drivers of the development of clusters. Leader firms are firms with the *incentive* and *ability* to make investments with positive ‘external’ effects for other firms in the cluster.

Leader firms encourage innovation, enable internationalization of other firms in the cluster and invest in the quality of the labour pool. In these ways, leader firms contribute to the competitiveness of other firms in the cluster and, as a consequence, the cluster as a whole.
Leader Firms

A distinction can be made between ‘network externalities’, positive effects for firms in the network of the leader firm and ‘cluster externalities’ positive effects for a wide range of firms in the cluster.

At this stage of construction, Eastern Cape maritime clusters should seek to locate leader firms in sub-sectors where they can encourage other smaller firms to join a relevant sub-sector over a period of time.
Suggested Structure for Eastern Cape

- Ports & Infrastructure Development
- Shipping, Logistics & Transport
- Research, Development & Innovation
- Marine & Maritime Education & Training
- Maritime Incubation & Skills Development
- Marine Science, Oceanography, Underwater Exploration & Observation
- Marine & Maritime Services
- Marine Tourism & Coastal Recreation
- Fishing & Fish Processing
Ports & Infrastructure Development Sub-Sector

- Port of Port Elizabeth
- Port of Ngqura
- Port of East London
- Coega IDZ
- East London IDZ
- Transnet National Ports Authority
- South African Maritime Safety Authority
- Department of Transport
Shipping, Logistics & Transport Sub-Sector

- Coega Development Corporation
- Eastern Cape Development Corporation
- Nelson Mandela Bay Business Chamber
- Border Kei Chamber of Business
- Nelson Mandela Bay Metropolitan Municipality
- Buffalo City Metropolitan Municipality
- Department of Transport
Research, Development & Innovation Sub-Sector

- South African Environmental Observation Network
- South African Institute of Aquatic Biodiversity
- NMMU Coastal & Marine Research Unit
- NMMU Chair in the Law of the Sea and Development in Africa
- Agulhas and Somali Current Large Marine Ecosystems Project
- South African International Maritime Institute
Marine & Maritime Services Sub-Sector

- South African Association of Freight Forwarders
- South African Association of Ship Operators & Agents
- Port Elizabeth Harbour Carriers
- East London Harbour Carriers
- National Sea Rescue Institute
- Maritime Security
Small Harbour & Marina Sub-Sector

• Algoa Bay Yacht Club
• Port St Francis
• Royal Alfred Marina
• Port St Johns Waterfront Development
• Nelson Mandela Bay Waterfront Development
Coastal & Marine Tourism

- WESSA Algoa Bay Branch
- Eastern Cape Hope Spots
- Nelson Mandela Bay Tourism
- Buffalo City Tourism
- Eastern Cape Parks & Tourism Agency
- Department of Economic Development, Environmental Affairs, and Tourism
- Eastern Cape Development Corporation
- Eastern Cape Surf Lifesaving Association
- WESSA Blue Flag
- SA Association for the Conference Industry
Fishing & Fish Processing Sub-Sector

• No leader firms in this sub-sector have been identified or invited to have a seat on any proposed Eastern Cape maritime clusters or the Provincial Maritime Sector Coordinating Committee
Economic Specialization

Maritime clusters are centred around a particular economic specialization ‘the core of the cluster’.

What is the economic specialization of potential Eastern Cape maritime clusters, i.e. Nelson Mandela Bay Maritime Cluster, and East London Maritime Cluster?
A Complete Maritime Cluster in Norway

- Bank and finance
- ICT
- Petroleum
- Shipyard
- Research
- Assurance
- Financing
- Classing
- Legal
- Ship owner
- Ship design
- Education
- Equipment producers
Latvian Maritime Cluster

- Banks, Insurance, Finance Services
- Shipowners
- Ship Managers
- Crewing Agents
- Shipping Agents
- Ship Chandling
- Marine/Ship Services
- Harbour Services
- Maritime Training & Education
- Classification/Certification
- Consulting/Broking
- Maritime Administration
- Seamen (12,000+)
- Transit, Business, Ports, Terminals
- Fishing & Food Production
- Tourism, Boating, Marinas
- Marine Environment, Spatial Planning
Polish Maritime Cluster
Eastern Cape Maritime Sector
Special Purpose Vehicle (SPV)

Eastern Cape Maritime SPV
Provincial Maritime Cluster?
Provincial Maritime Authority?
Provincial Maritime Agency?
Provincial Maritime Chamber?
Section 21 Company?
Public Private Partnership?

Eastern Cape Maritime Cluster
West
or
Nelson Mandela Bay Maritime Cluster

Eastern Cape Maritime Cluster
East
or
East London Maritime Cluster
Questions for Discussion

• Should there be a single Eastern Cape Maritime Cluster or two maritime clusters i.e. Nelson Mandela Bay Maritime Cluster (West) and East London Maritime Cluster (East)?
• How should Eastern Cape maritime clusters be structured i.e. relevant sub-sectors and leader firms?
• What is the economic specialization (core of Eastern Cape maritime clusters)?
• Who will provide administrative and secretariat support for the maritime clusters?
• What maritime cluster institutional arrangement is best for South Africa i.e. national, provincial, and local?
• Is there a demand for a national maritime directory?
Ocean Business Community
Quo Vadis?

The triple-helix linkage

• “Positions of strength”
The Oceans Economy is Everybody’s Business

“The Sea, the great unifier, is man’s only hope. Now as never before, the old phrase has literal meaning: we are all in the same boat”  (Jacques Cousteau)

“The best efforts by a single company or an entire industry will not be enough to address cumulative impacts in the inter-connected marine ecosystem. Companies dependent on the ocean will benefit from collaboration with others in the ocean business community to address marine environmental issues”  

(World Ocean Council)
The sea-horse villa

For Dubai’s latest twist on luxe living, don’t look up—look down, into the Persian Gulf. That’s where developer Kleindienst is building dozens of half-submerged $3.3 million vacation homes, each with an underwater master bedroom. The Floating Seahorse villas, set to begin opening this fall with their own coral gardens, are named for the rare creatures they aim to attract, both for decoration and preservation. “We’re building an entire habitat,” says architect Paulo André. —Julie Shapiro
What is the Key to Constructing and Ensuring Maritime Cluster Success?