

Development of Maritime High Schools in the Eastern Cape

12-13 August 2010



Table of Contents

1.	Introduction	3
2.	Purpose	3
3.	Workshop programme.....	4
3.1	Explanation of the process	4
3.2	Background to the Maritime High School Initiative.....	5
4.	Workshop Inputs for the Maritime Futures Themes for the Eastern Cape	8
4.1	Futures Wheel: Group A – Quality Maritime High School, Sourcing & Management of Funds ...	8
4.2	Futures Table (a): Group A – Quality Maritime High School	8
4.3	Futures Table (b): Group A – Sourcing & Management of Funds.....	9
4.4	Proto-scenario (a&b): Group A –Quality Maritime High School and Sourcing & Management of Funds.....	10
4.5	High-level Action Plan Group A – Quality Maritime High School and Sourcing & Management of Funds.....	11
4.6	Futures Wheel: Group B – South Africanization of Shipping.....	12
4.7	Futures Table: Group B – South Africanization of Shipping	12
4.8	Proto-scenario: Group B –South Africanization of Shipping	13
4.9	High-level Action Plan Group B – South Africanization of Shipping.....	15
4.10	Futures Wheel: Group C – Centre for Excellence, Ship/Boat Building & Ship Repair	16
4.11	Futures Table (a): Group C – Centre for Excellence	16
4.12	Futures Table (b): Group C – Ship/Boat Building & Repair.....	17
4.13	Proto-scenario: Group C –Centre for Excellence	17
4.14	High-level Action Plan Group C – Centre for Excellence	19
4.15	Futures Wheel: Group D –Development of a Maritime Education Hub in the Eastern Cape	20
4.16	Futures Wheel: Group E – Development of a Maritime Education Hub in the Eastern Cape....	20
4.17	Futures Table: Group D & E– Development of a Maritime Education Hub in the Eastern Cape	21
4.18	High-level Action Plan Group D&E – Maritime Education Hub	22
5.	Valuated Futures Themes in Futures Wheels	23
6.	Recommendations.....	25
7.	Conclusion	25
	Appendix A – Attendance Register.....	26
	Appendix B – Programme	28

1. Introduction

The Member of the Executive Council responsible for Education has expressed a desire to establish a Maritime High School in the Eastern Cape. The envisaged Maritime High School is intended to provide knowledge about the maritime industry as well as demonstrate the career opportunities available to high school learners within the industry. Qualifying matriculants will be able to choose to go directly to work for a shipyard or maritime company/union or continue their education by attending a maritime academy, university, or trade school.

The ultimate aim of any maritime education and training is to produce well-trained and qualified maritime personnel who have followed a well planned program of training leading to the issuance of appropriate certificates of competency in their respective fields. The education of maritime personnel, like other types of education is the building in the minds of people; the broader understanding of the trade in which they are involved. It will afford individual self-reliance and promote national economic advantages in the trade on a national and world basis. The objectives of the initiative are:

- To introduce students to the maritime industry, its function in South Africa and world history, commerce, basic terminology/taxonomy, and careers. This will allow the students in a very interactive (tours/ guest speakers/class project) manner to look at the industry and to decide if they want to pursue further studies in high school leading to employment or higher maritime education;
- To provide students with an understanding of the various occupations in the maritime industry to assist them in identifying their potential career path based on their academic proficiency and interest;
- To expand students knowledge of a given career path to receive specialized training to develop skills in those areas that can be utilized upon graduation. Students will choose an academic and professional structure, building on the experience and academic curriculum provided and
- To enable students to receive extensive instruction and experience both academically and practical in the designate career path chosen.

In light of the above objectives, the Department of Education has sought to facilitate a Foresight process, which is an approach that refers to methods and techniques used to develop viable sustainable futures for institutions, companies and communities.

2. Purpose

The workshop was held at the Halyards Hotel, Port Alfred, to develop a realistic and implementable programme for the development of Maritime High Schools in the Eastern Cape. The purpose of the workshop was to achieve the following deliverables (during and post-workshop):

- A Maritime High School Strategy and Implementation Plan;
- Actions for implementation for 2010/11, 2011/12 and beyond;
- Funding requirements for the establishment of Maritime High Schools in the Eastern Cape
- A set of proto-scenario fragments will be crafted into drafts of full maritime scenarios for the Eastern Cape and
- Version 1 of a set of provincial maritime scenarios to be produced.

The approach used during the workshop was Foresight process, which entailed the following: (i) the development of a Futures Wheel from a maritime industry perspective, (ii) the development of a Futures Table (ACTVOD Table) for each theme identified by the participants, (iii) the consolidation of the main future maritime issues for the Eastern Cape Province, (iv) the development of High-level Actions Plans, and (v) the production of maritime proto-scenario fragments (Futures Story).

Thirty-two participants (see Appendix “A” - Attendance Register) attended the workshop and were randomly placed in 5 groups. It was expected that the groups would use the Futures Wheel to identify a wide range of issues and opportunities reflecting desirable 2010 futures, from which a theme would be prioritized.

3. Workshop programme

3.1 Explanation of the process

The workshop followed the following set of processes:

- A brief description of the background to the Maritime High School Initiative;
- Explanation of the process to be followed;
- An introduction to Futures thinking and Futures methodologies with particular reference to Foresighting;
- Expert inputs; and
- Foresighting in working groups.

A background to the Maritime High School Initiative was provided by the Member of the Executive Committee (MEC) for Education in the Eastern Cape, Mr. Mahlubandile Qwase. This was followed by an explanation of the workshop process by Mr. David Lefutso. Mr. Thembinkosi Semwayo of Ontolligent Services then gave an introduction to Futures thinking and Futures methodologies with special reference to Foresighting. This was then followed by expert inputs from the following experts¹ in the Maritime Industry:

¹ Their presentations are available and can be accessed on Basecamp, <http://coega.basecampHQ.com>. This is secure web portal for authorized participants only.

- Mr. Tsietsi Mokhele, and Mr. Nigel Campbell of the South African Maritime Safety Authority;
- Mr. Brian Ingpen, Lawhill Maritime Academy; and
- Capt. Roy Martin – Admiralty Shipbrokers and Consultants.

The nature and values of the workshop were:

- Participation and inclusiveness;
- Integration of Foresight;
- Openness;
- Effectiveness/influence; and
- The development of deliverables.

Mr. Mahlubandile Qwase confirmed to the participants the process and expectations of the workshop as presented by Mr. David Lefutso.

3.2 Background to the Maritime High School Initiative

Mr. Mahlubandile Qwase, who is the Member of the Executive Council responsible for Education in the Eastern Cape Province, provided an overview of the aims and objectives of the Maritime High School Initiative. He reiterated the fact the Eastern Cape Province has three ports, namely, Port Elizabeth, Ngqura and East London; however, it's still lags behind Cape Town and Durban in terms of volume and tonnage. The economies of the port cities in the Eastern Cape Province do not have a highly developed and advanced integrated economy as the ones in the Western Cape and KwaZulu-Natal. The Eastern Cape Province does not employ as much people in our ports compared to our competitors in the country and this situation must be reversed.

He mentioned that the strategy is to build our human resources in the maritime industry and the development of Maritime High Schools could be the catalyst in realizing a prosperous and sustainable maritime industry in the Eastern Cape Province. The cities of Port Elizabeth have higher education institutions that could teach students and learners the knowledge and skills to be employed in the maritime industry, and they are the 4 resident universities (University of Fort Hare, Walter Sisulu University, Rhodes University and Nelson Mandela Metropolitan University) and three Further Education and Training (FET) colleges (Cape Midlands, Port Elizabeth and Buffalo City FET).

In addition, he stated that the development of the required skills would not suffice on its own, the active involvement of the private sector (shipping companies, etc.) and public sector organizations (Department of Transport (national and provincial), South African Maritime Safety Authority (SAMSA), Transport Education Training Authority (TETA), etc. is required).

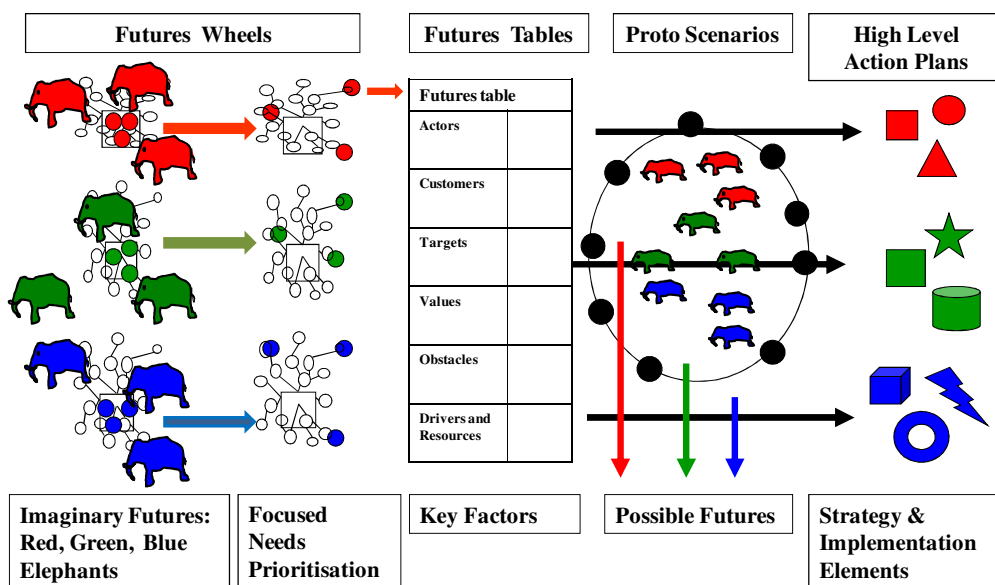
Mr. Mahlubandile Qwase thanked all the participants for attending the workshop and he felt humbled by their presence and contribution so far.

3.3 Introduction to Futures Thinking and Futures methodologies

The methodology as applied during the workshop is called Foresight.

Foresighting refers to methods and techniques used to develop viable and sustainable futures. Foresighting focuses on “*what can be*” and then directs efforts towards systematically developing the desired futures. Foresighting is a long range visionary planning method. The strength of Foresighting over short term development strategies is in its proactive development approach towards desired futures. It is a departure from short-term incremental planning, which typically focuses on *how to* solve present problems. Foresighting on the other hand focuses on future possibilities, gains insight from the past and present, and then directs efforts towards systematically developing desired futures.

The Foresighting methodology can be summarized diagrammatically as follows:



The Futures Wheel is a brain storming, non judgmental Foresighting technique used to identify important issues around a desirable “imaginary” future by a group of workshop delegates. The participants, typically in groups of between 5 and 8 people “dumped” their thoughts around the central vision on a flip chart spread out on a desk. Every issue raised was documented. No issue was considered right or wrong. At the end of the process related issues were grouped into emerging themes. Delegates then prioritized what they considered the most important theme for further analysis.

The **prioritization** was achieved through a democratic voting process. Each delegate had 3 votes, and voted for what they considered the 3 most important issues/themes in priority order. It must be noted though that although a specific theme was prioritized this does not necessarily exclude other important issues as in most cases the issues are inter-connected.

Futures Tables were used to tease out the key factors needed to design desirable futures. The participants used the ACTVOD futures table for the workshop. **ACTVOD** is an acronym which stands for:

- **Actors / Roles** - players participating in realizing a desired future;
- **Customers / Services** – The range of customers to be served and /or the services to be provided;
- **Targets** – milestones to be realized in the short, medium and long-term;
- **Values** – values to be embraced by the role players in order to realize the 2020 future;
- **Obstacles / risks** - key uncertainties likely to be encountered in realizing the strategic futures. The identification of obstacles and risks is carried out primarily to find ways of bypassing the identified obstacles;
- **Drivers** - present or emerging driving forces likely to have an impact on the strategy and implementation plan.

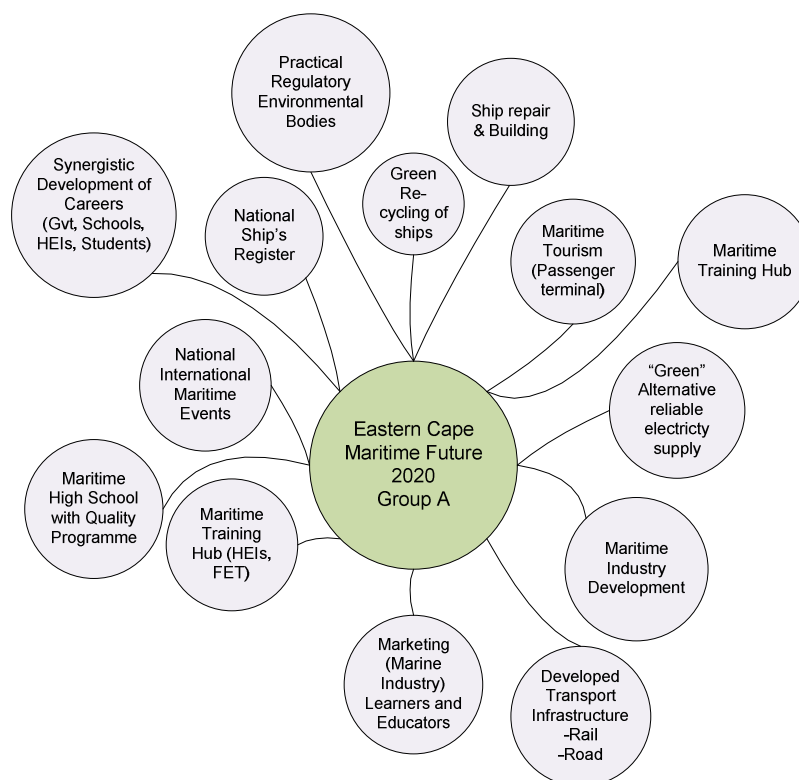
Proto scenarios are short stories describing a possible path to the prioritized future theme, taking into account the factors identified in the Futures Wheels and ACTVOD Futures Tables. They typically take the future target date as the starting point and provide a reflection of “How we got here”. The proto-stories typically revolved around:

- A character;
- A well defined plot;
- A slice of life focusing on an important event;; and
- A pay off line, a punch line that summarizes the proto-story in a catchy phrase that leaves a lasting impression and easy to remember.

The final step involved the drafting of a high level implementation outline of actions, the owners of each action, the financial and human resources required, and the sequencing of the identified actions. The results of the exercises are detailed hereunder in section 4 onwards of this document.

4. Workshop Inputs for the Maritime Futures Themes for the Eastern Cape

4.1 Futures Wheel: Group A – Quality Maritime High School, Sourcing & Management of Funds



Group A chose the focus area **Quality Maritime High School** and **Sourcing and Management of Funds** as a priority themes for the development of a Futures Table and High Level Action Plan.

4.2 Futures Table (a): Group A – Quality Maritime High School

Theme 1	Quality Maritime High School (based on synergistic maritime career development)
Actors/Role-players	Department of Education, Department of Transport, Department of Science and Technology, Independent Examination Board, Department of Economic Development and Environmental Affairs, Maritime Industry, South African Maritime Authority
Customers/Services	Learners – educate, train & placement, mentoring/coaching Maritime Industry – qualified and skilled personnel Teachers – training & development, support & development, remuneration
Targets	2011 – Funding, marketing, recruitment & training of teachers; introduce subjects into ordinary schools 2012 – 1 st cohort (20 learners) 2013 – Recruit second intake 2014 – 20x graduates / 2015 expand to another school 2020 – 2x full classrooms

Theme 1	Quality Maritime High School (based on synergistic maritime career development)
Values	Quality Safety Equity Integrity/Honesty Commitment
Obstacles/Challenges	Funding for the following Maritime Education Specialists Simulation Equipment Library Physical Facility Political climate and continued support for project (PESTEC)
Drivers/Resources	Shortage of qualified personnel at sea and ashore Eastern Cape Economic Climate National need for Maritime Industry/Ship Registry

Once the group had created the above Futures Table, they then considered a scenario for the actualization of this focus area.

4.3 Futures Table (b): Group A – Sourcing & Management of Funds

Theme 1	Sourcing & Management of Funds
Actors/Role-players	Eastern Provincial Government (Department of Education, Department of Transport, Department of Economic Development and Environmental Affairs Project Implementation Agents National Government Departments Business (shipping and maritime)
Customers/Services	Maritime Training Academies Export/Import Industries Logistics/Warehousing/Transport Industries Maritime Law and Maritime Agencies Ship Repairs/Building Industries
Targets	Provisional budgeting from each Government Department for establishing a Maritime Future – 2011 Budgeting for infrastructure – 2011-2012 By end 2011, project plans for “maritime future” needs to be in place with funding models
Values	Quality Safety Equity Integrity/Honesty Commitment
Obstacles/Challenges	Bureaucracy and corruption Lack of buy-in/co-operation

Theme 1	Sourcing & Management of Funds
	Lack of capacity to manage sourcing/funding Lack of foreign investment
Drivers/Resources	Proactive planning Innovation strategies Economic/Social opportunities

Once the group had created the above Futures Table, they then considered a scenario for the actualization of this focus area.

4.4 Proto-scenario (a&b): Group A –Quality Maritime High School and Sourcing & Management of Funds

The Eastern Cape Maritime High School

[Verbatim]

The Eastern Cape Maritime High School has transformed the face of maritime education and industry in the province. Learners are equipped with the basic knowledge and skills to enter the vibrant maritime/shipping sector which has grown exponentially since 2010. The scholars have an opportunity to graduate with scientific, maritime and or technical subjects enabling them to pursue career at sea in the ports, ship repair industry or in related shipping and logistic services.

Pamela, a girl from Qunu is one of the success stories. She is currently serving as second navigating officer on board The SA registered car carrier, THE MV MADIBA. Her younger brother is currently in Grade 11 in the maritime school and he is following in her sister's footsteps. He is resident in the schools hostel overlooking the harbour of Port Elizabeth.

Numerous learners have benefited dramatically from this first provincial school. Pamela's family has also benefited from this initiative and is now the proud owners of a new home.

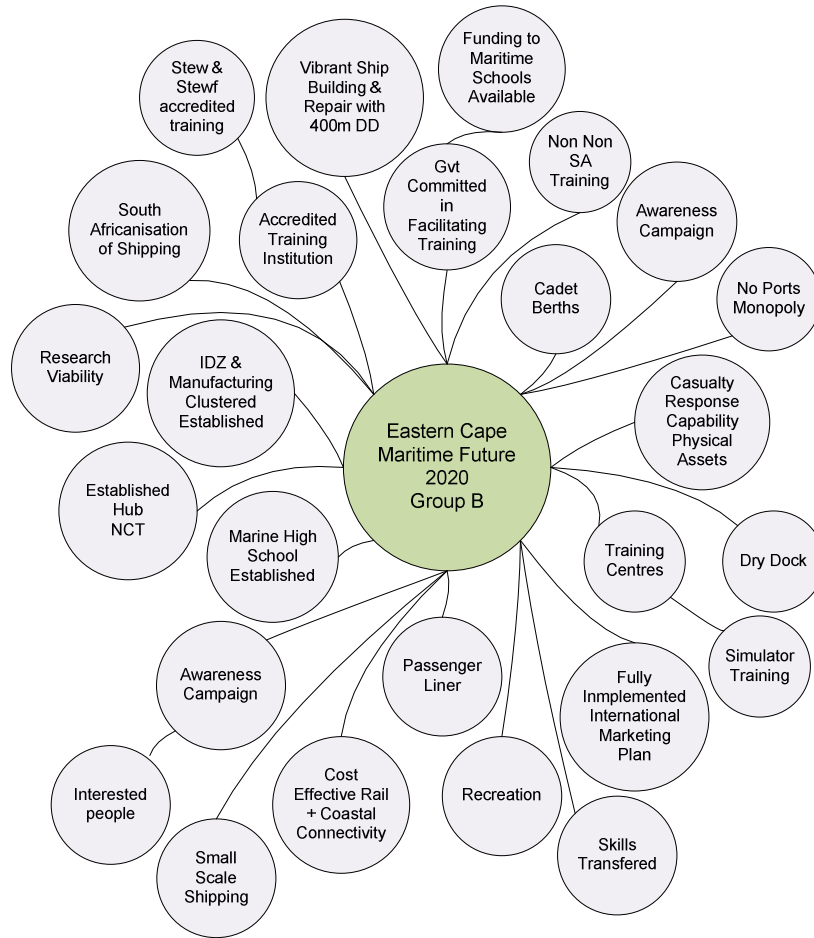
The motto is "quality maritime education for quality opportunities".

Thanks to the foresight and political will which prevailed in 2010. We look forward to an establishment of a first maritime University in Africa.

4.5 High-level Action Plan Group A – Quality Maritime High School and Sourcing & Management of Funds

High Level Action Establishment of a Maritime High School in the Eastern Cape							
No	Sub-Action	Owner	Other Actors	Cost/Hr	Other resources	Completion Date	Depends
1	Funding	Education MEC: Mr. Qwase	Department: Education, Transport, Science & Technology, Transnet, Trade and Industry, Business, SAMSA	R64,950m	Accounting/Financial Management Expertise: consultants	August 2010 (March 2011)	Education MEC and other stakeholders
2	Establishment of Project Team	As above	As above	R1.5m	Department: Education, Transport	Sept 2010	As above
3	Feasibility study: Identification of Technical/High performing mathematics and science high schools	Department of Education	Department of Transport	R500k	Department of Education, EIA and Marine Consultants	March 2011	As above
4	Recruitment, training and development of educators	Department of Education	Consultants	R700k	Industry Experts	April/May 2011	As above
5	Marketing Program & recruitment of learners (maritime winter school)	Department of Education	Coega Development Corporation	R250k	ICT/Communication experts	April/May 2011	As above
6	Operational costs	Department of Education	South African Maritime Safety Authority, Provincial Treasury, Business and Department of Economic Development and Environmental Affairs	R1 mil	?	March 2011	As above
7	Direct foreign and local business investment	Department of Economic Development and Environmental Affairs	Local Chambers of Commerce, Department of Trade and Industry	R1mil	Expert Groups	Aug/Sept 2010	Department: Economic Development and Environmental Affairs, & Education
8	Capital Expenditure	Department of Education	DRPW	R60m	Business	March 2011	Department of Education, & of Roads and Public Works

4.6 Futures Wheel: Group B – South Africanization of Shipping



Group B chose the focus area **South Africanization of Shipping** as a priority theme for the development of a Futures Table and High Level Action Plan.

4.7 Futures Table: Group B – South Africanization of Shipping

Theme 1	South Africanization of Shipping
Actors/Role-players	Business Government Parastatals Education Legal Ship services
Customers/Services	South African Maritime Safety Authority Transnet Shipping lines Cargo ship owners Charterers Industrial Development Zones

Theme 1	South Africanization of Shipping	
	Ship Services, Agents, Stevedores, Chard, etc.	
Targets	Significant foreign investment Reduction of cost of business Integrated Maritime Plan Modern Legal Framework Information Technology One champion – (this is a body/institution not a person) Export of maritime excellence	Promotion of South Africa Developmentally focused Productivity against world benchmark To become a logistic hub Full utilization of the existing research and development facilities Knowledge depository – once area/point/bucket
Values	No corruption Result orientation On-time, within budget Fast response time Accountability	High skills level Continuity Political stability Recognition as world-class players Sustainability
Obstacles/Challenges	Closed economic society Retention of maritime skills Is there political will? Culture of entitlement Funding Age profile of current skills level	
Drivers/Resources	Commitment Funding Educated workforce	

Once the group had created the above Futures Table, they then considered a scenario for the actualization of this focus area.

4.8 Proto-scenario: Group B –South Africanization of Shipping

MASTER MARINER! A SUCCESS STORY

[Verbatim]

Sipho was born into a rural farming family in the Eastern Cape. Sipho and Brian's family were subsistent farmers. Sipho went to a high school that exposed him to the Maritime Sector in his junior school years. For the last three years of his schooling he went to the Umsobomvu Maritime High School in East London

Through the in depth exposure in the Maritime Sector Sipho decided that one day he would be the captain of a South African shipping Company. He excelled at the Maritime High School and was accepted by the Anzanian Shipping Company, a large SA shipping owner based in Port Elizabeth

Because of his good grounding through the Maritime education, Sipho excelled in his studies and professional exams. He always received positive comments from the senior officers of the ship. Sipho was the first South African from the rural Eastern Cape to pass his exams as a Master Mariner. He was

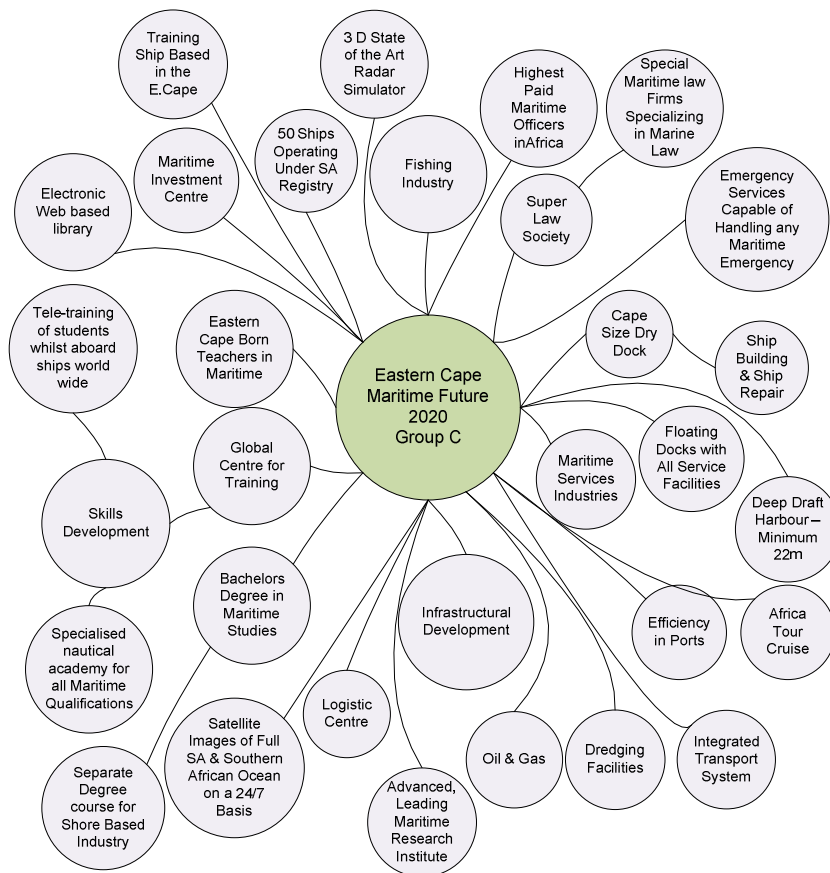
soon promoted to the rank of Captain replacing a foreign national who had held the position due to the lack of qualified people in SA.

Sipho points out to his children that through the availability of a quality Education system they can reach their dreams. He also reminds them that they also need to be educated and hardworking. He uses Brian as an example who is still herding cattle and growing maize. Sipho still lives in the Community of his birth and is looked up to as an outstanding professional in that community.

4.9 High-level Action Plan Group B – South Africanization of Shipping

High Level Action South Africanization of Shipping: Establish a Maritime Cluster							
No	Sub-Action	Owner	Other Actors	Cost/Hr	Other resources	Completion Date	Depends
1	Establish a Maritime Cluster	Department of Education	Department: Education, Transport, Science & Technology, Transnet, Trade and Industry, Business, SAMSA	R30m		2010	1
2	Introduce Maritime Studies	Department of Education Eastern Cape Government	As above			2011	1
3	Grow South African Ship Registry	South African Maritime Safety Authority	Department of Transport	R5m		2012	1
4	Availability of Berths	Government Business	Consultants	R300m		2013 and ongoing	3
5	Retain White List Status as a Country	South African Maritime Safety Authority Government	Coega Development Corporation	R1m		Ongoing	
6	Attractive Working Conditions to Retain South African Skills	Ship-owners	South African Maritime Safety Authority, Provincial Treasury, Business and Department of Economic Development and Environmental Affairs			2010 and ongoing	3, 4, 5
7	Training Programmes and Mentorships	South African Maritime Safety Authority Business	Local Chambers of Commerce, Department of Trade and Industry	R10mil		2010 and ongoing	2, 3, 4, 6

4.10 Futures Wheel: Group C – Centre for Excellence, Ship/Boat Building & Ship Repair



Group C chose the focus area **Centre for Excellence** as a priority theme for the development of a Futures Table and High Level Action Plan.

4.11 Futures Table (a): Group C – Centre for Excellence

Theme 1	Centre for Excellence
Actors/Role-players	Department of Transport, Department of Trade and Industry, South African Maritime Safety Authority, Eastern Cape Provincial Government, Department of Agriculture, Forestry and Fisheries, Higher Education Institutions, Transport Education Training Authority, Shipping Lines, Department of Public Enterprises, Transnet
Customers/Services	Shipping Lines, ASABOSA, Stevedores, Transnet, Classification Society, Maritime Law firms, Marine Insurance companies, Fishing Industry, Ship/Boat Building & Repair Industry, Oil & Gas, Tourism
Targets	Phase 1: Finance for Infrastructure and Human Capital - 2011 Phase 2: Development of Infrastructure – 2012 Phase 3: Commencement of the Programme in phases from Grade 10 - 2013
Values	Interdepartmental, Governmental, PPP collaborations Innovation, Delivery of Excellence, Integrity, passion, Commitment
Obstacles/Challenges	Human capital (on the nautical science side)

Theme 1	Centre for Excellence
	Funding (too expensive) Political championship (risk) Deepening of political buy-in Placement of graduates for jobs
Drivers/Resources	Funding Human capital Political will

4.12 Futures Table (b): Group C – Ship/Boat Building & Repair

Theme 2	Ship/Boat Building & Ship Repair
Actors/Role-players	Department of Trade and Industry, Department of Transport, Transnet
Customers/Services	Ship Owners
Targets	Establishment of Shipyards by 2014
Values	Partnerships
Obstacles/Challenges	Funding Expertise Fragmentation, Non-collaboration
Drivers/Resources	Funding for Infrastructure and Human Capital Introduction of Industrial Development Incentives for the Ship/Boat Building & Repair Industry (similar to the motor industry)

Once the group had created the above Futures Tables, they then considered a scenario for the actualization of this focus area.

4.13 Proto-scenario: Group C –Centre for Excellence

Thando – Well-progressive Captain at the Harbour in East London

[Verbatim]

It all started in 2010 with the MEC: Education Mahlubandile Qwase realizing the absence of Maritime Education in the Eastern Cape education system. The programme began when the MEC called into a workshop like-minded stakeholders (the likes of DoT, SAMSA, Coega Development Corporation, Transnet, Lawhill Maritime Academy from Cape Town, to mention a few).

The stakeholders as project initiators crafted a plan to kick-start a programme of bringing maritime education to the Eastern Cape. The plan started with nothing – with only 3 ports in the province, not optimally operation; no maritime industries; no factories, no shop yards and repairs; no salvage tugs; the only registered ship about to be decommissioned; the railway lines connecting to the ports were being closed.

South African goods were being transported by foreign vessels. At national level, only two maritime schools existed, the one in Durban which closed due to a lack of funding and the other in Cape Town not even funded by government.

An international study indicated a shortage of 240 000 seafarers. At that time there was high level of unemployment in South Africa, the Eastern Cape Province registering the highest. It had only one tertiary institution offering studies in maritime education and a shortage of berthing. All these changed after the government with all stakeholders involved supported the plan for the inclusion of maritime studies in schools and tertiary institutions. Furthermore, the first ever Eastern Cape Maritime Academy was established in 2012, in Port Elizabeth. However, with inappropriate teachers to handle subjects in maritime studies, the Department of Education had to revert to re-directing, re-training and re-skilling of existing teachers and make use of retired professionals.

The Eastern Cape Maritime Academy attracted quite a number of children over the years, in particular from African States. These African children were recruited from the governments and offered bursaries as an incentive for the government to use our ports to repair their offshore oil tugs.

With the ups and downs (for some months during 2014), there was a challenge of a strike by Department of Education officials that threatened the political life of the MEC. However, with the network and cross-sectoral integration already established with other stakeholders the momentum was not lost.

IOD graduates from FET colleges and universities were produced in 2017, qualifying in a number of maritime disciplines like navigation officers, engineers, lawyers, naval architects, etc. Today, what well resourced, quality maritime Academies we have in Port Elizabeth, East London and Bizana. The Nelson Mandela Metropolitan University, Rhodes University, Walter Sisulu University are all offering tertiary studies in Maritime Education. The previous generation (like Nelson Mandela) fought for the liberation of the country.

Thando, the captain of this ship, is testimony to the work of our generation of which I am proud of the small part I have played. Now we are passing the baton to the next generation of which you are part of. Like all of us, you have a choice to use it or lose it, my grandchild; but I know you belong to the great warriors of ooNgubo!! ooGwili!! ooNgxabi!! You'll run with the foundation to the highest levels.

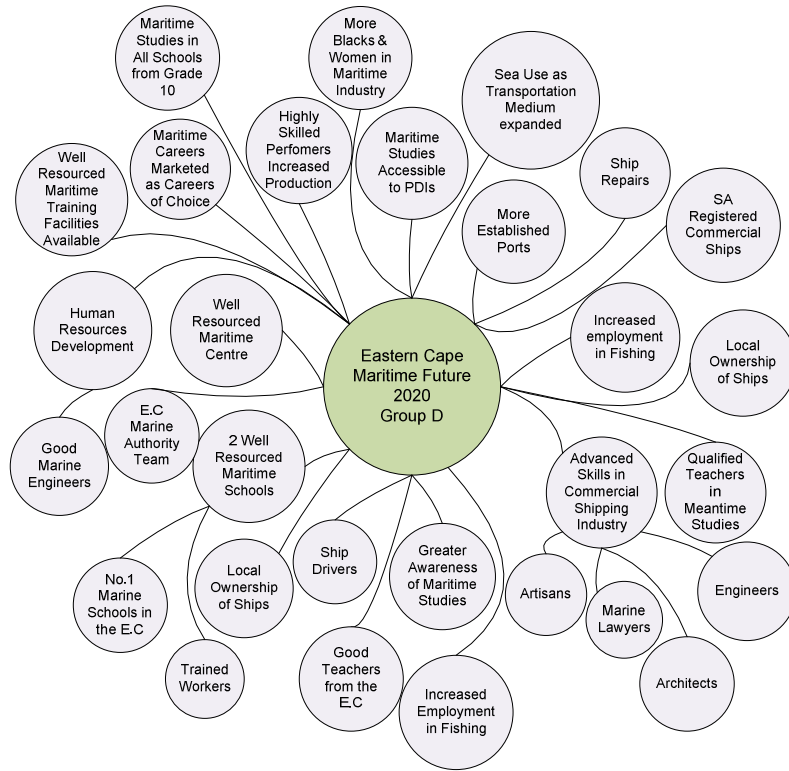
Our gratitude is paid to:

- MEC Qwase for the dream*
- David and Thembinkosi who were our facilitators during the planning stages; I hope they are still alive!*
- The Eastern Cape government for the funds for the establishment of the Academy, the running and implementation of the curriculum.*

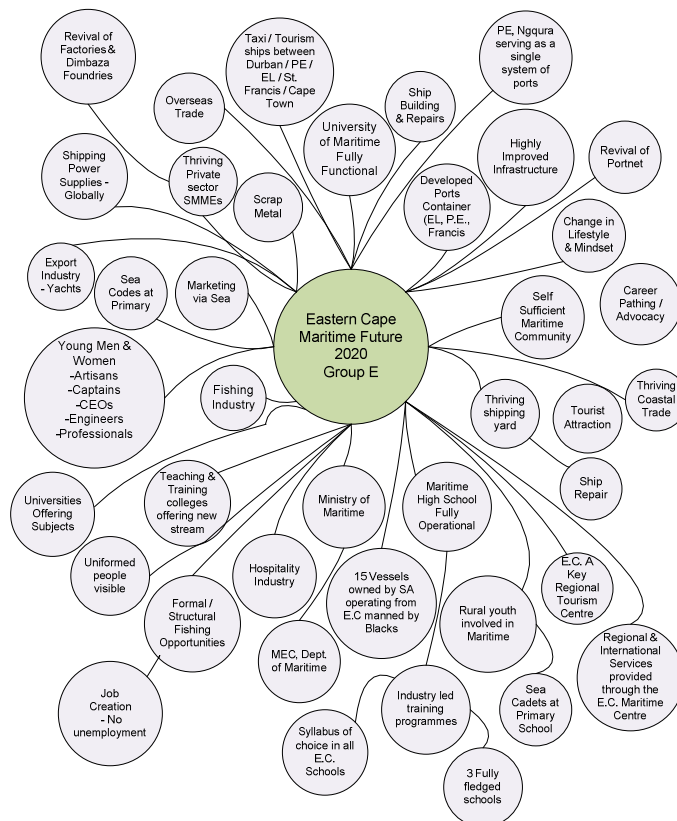
4.14 High-level Action Plan Group C – Centre for Excellence

High Level Action Centre for Excellence							
No	Sub-Action	Owner	Other Actors	Cost/Hr	Other resources	Completion Date	Depends
1	Establish a Centre for Excellence	Department of Education	Department: Transport, Transnet, Trade and Industry, South African Maritime Safety Authority	R60m	Training Facilities Human Resources	2014	Availability of funding and human capital
2	Setting-up a Steering Committee	Department of Education	Department: Transport, Transnet, Trade and Industry, South African Maritime Safety Authority	R200k	Human Capital Venues and Supporting Material	2010	Availability of personnel
3	Draft Action Plan and Business Plan	Department of Education	Department: Transport, Transnet, Trade and Industry, South African Maritime Safety Authority	R200k	Expertise	2010	Expertise
4	Identification of Institution	Department of Education	Department: Transport, Transnet, Trade and Industry, South African Maritime Safety Authority	R500k			3
5	Sourcing of Facilities <ul style="list-style-type: none"> - Land acquisition - Architectural design - Building/erecting a structure - Initial costs (hire personnel) - Source furniture, computers, simulators, books and journals (LSM) - 	Department of Education	Department: Transport, Transnet, Trade and Industry, South African Maritime Safety Authority	R31.5m R5m R100k R30m R300k R25m		2011 2011 2011/2012 2012 2012/2013	Availability of funding and expertise
6	Operational costs	Department of Education	Department: Transport, Transnet, Trade and Industry, South African Maritime Safety Authority	R960k	Electricity, water, transport, etc.	Ongoing	Availability of funds

4.15 Futures Wheel: Group D –Development of a Maritime Education Hub in the Eastern Cape



4.16 Futures Wheel: Group E – Development of a Maritime Education Hub in the Eastern Cape



Group D and E chose the focus area ***Development of a Maritime Education Hub in the Eastern Cape*** and as a priority theme for the development of a Futures Table and High Level Action Plan.

4.17 Futures Table: Group D & E– Development of a Maritime Education Hub in the Eastern Cape

Theme 1	Development of a Maritime Education Hub in the Eastern Cape
Actors/Role-players	National Department of Basic Education, Department of Higher Education, Eastern Cape Department of Education, Department of Transport, South African Maritime Safety Authority, Transnet Port Terminals, Maritime Law Association, South African Navy, Shipping companies, Lawhill Maritime Centre
Customers/Services	Young children in the Eastern Cape – Matriculation with Maritime Studies International children – Certificate STCW Undergraduates – Maritime qualification Unemployed graduates – expand in maritime studies and skills Schools Further Education and Training Colleges Higher Education Institutions
Targets	4x well-resourced maritime centres Maritime Studies offered all tertiary institutions in the Eastern Cape 10% recruitment increase of learners into the Maritime Studies field Train 100 teachers in schools in Maritime Studies Recruitment of appropriately trained teachers
Values	Collaboration between Higher Education Institutions Equal opportunities to deserving students Honesty/determination Integration Accountability Information sharing Exchange of expertise Pursuance of excellence
Obstacles/Challenges	Funding – access funding from private companies Lack of knowledge/awareness in the field – exposure to maritime information Scarcity of resources (human and material) – outsourcing, retraining, investing into maritime education Poor performance in Mathematics and Sciences – retraining of teachers
Drivers/Resources	Coastal shipping Cross-sectoral integration Determination energetic participants

Once the group had created the above Futures Tables, they then considered a scenario for the actualization of this focus area.

4.18 High-level Action Plan Group D&E – Maritime Education Hub

High Level Action Maritime Education Hub							
No	Sub-Action	Owner	Other Actors	Cost/Hr	Other resources	Completion Date	Depends
1	Concept development	Member of Executive Council		done		Done	
2	Mobilize Stakeholders	Member of Executive Council		done		Done	
3	Developed Strategy and Implementation plan	David Lefutso	Department of Education ,South African Maritime Safety Authority, Transnet, Lawhill Maritime Academy	R500k		15/09/2010	
4	Detailed Feasible Study	David Lefutso	DOE, SAMSA, Transnet, Lawhill Maritime Academy	R400k		31/03/2011	
4.1	Concretize the need of the School						
4.2	Finalize Site Plans						
4.3	Finalize cost estimate in infrastructure						
4.4	Finalize teachers and student recruitment plans.						
4.5	Finalize curriculum development						
4.6	Established resource requirements.						
5	MTEF Costing and Budgeting	David Lefutso	Department of Education(Nomise Gqoli), South African Maritime Safety Authority, Transnet			20/08/2010	
5.1	Feasibility Study						
5.1.1	Study	David Lefutso		R500k			
5.1.2	Overseas benchmarking and networking	Department of Education		R250k			
5.2	Contribution by other Funders						
5.3	Ongoing project management Costs						
6	Submission of Budget -MTEF Funding and Programme Implementation						
7	Appointment of the Principal /Project Leader to establish school						

5. Valuated Futures Themes in Futures Wheels

Valuated Futures Themes in Futures Wheels: Eastern Cape Maritime Future 2020				
Group A	Group B	Group C	Group D	Group E
<ul style="list-style-type: none"> ▪ Practical Regulatory Environmental Bodies ▪ National Ships Register ▪ Green Recycling of Ships ▪ Synergistic Development of Careers (Government, schools, HEIs, students) ▪ National International Maritime Events ▪ Maritime High School with Quality Programmes ▪ Maritime Training Hub (HEIs, FET) ▪ Ship Repair & Building ▪ Maritime Tourism (passenger terminal) ▪ “Green” Alternative Reliable Electricity Supply ▪ Maritime Industry Development ▪ Marketing (Marine Industry) Learners and Educators ▪ Developed Transport Infrastructure (rail, road) 	<ul style="list-style-type: none"> ▪ Stew & Stewf Accredited Training ▪ South Africanization of Shipping ▪ Accredited Training Institutions ▪ Research Viability ▪ IDZ & Manufacturing Clustered Established ▪ Established Hub NCT ▪ Maritime High School Established ▪ Awareness Campaign ▪ Interested People ▪ Passenger Liner ▪ Cost Effective Rail & Coastal Connectivity ▪ Small-scale Shipping ▪ Recreation ▪ Skills Transferred ▪ Fully Implemented International Marketing Plan ▪ Training Centres ▪ Simulator Training ▪ Dry Dock ▪ Causality Response Capability Physical Assets ▪ Cadet Berths ▪ No Ports Monopoly ▪ Non-SA Training 	<ul style="list-style-type: none"> ▪ Ship-based Training in the Eastern Cape ▪ Maritime Investment Centre ▪ Electronic Web-based Library ▪ 50 Ships Operating Under South Africa’s Registry ▪ 3D State-of-the-art Radar Simulator ▪ Fishing Industry ▪ Super Law Society ▪ Specialized Maritime Law Firms ▪ Highest Paid Maritime Law Officers in Africa ▪ Tele-training of Students Whilst Aboard Ships Worldwide ▪ Eastern Cape Born Maritime Teachers ▪ Global Centre for Training ▪ Skills Development ▪ Bachelor’s Degree in Maritime Studies ▪ Specialized Nautical Academy for all Maritime Qualifications ▪ Separate University Degree for Shore-based Industry ▪ Satellite Images of Full SA 	<ul style="list-style-type: none"> ▪ Maritime Studies in all Schools from Grade 10 ▪ Maritime Careers Marketed as Careers of Choice ▪ Well Structured Maritime Training Facilities ▪ Well Resourced Maritime Centre ▪ Human Resource Development ▪ Good Maritime Engineers ▪ Eastern Cape Maritime Authority Team ▪ 2 Well Resourced Maritime High Schools ▪ No. 1 Maritime Schools in the Eastern Cape ▪ Trained Workers ▪ Ship Drivers ▪ Good Teachers from the Eastern Cape ▪ Qualified Teachers in Maritime Studies ▪ Greater Awareness of Maritime Studies ▪ Increased Employment in Fishing ▪ Advanced Skills in Commercial Shipping Industry ▪ Artisans ▪ Marine Lawyers 	<ul style="list-style-type: none"> ▪ 15 Vessels owned by SA operating from E.C manned by Blacks ▪ Job Creation - No unemployment ▪ Formal / Structural Fishing Opportunities ▪ Maritime High School Fully Operational ▪ Universities Offering Subjects ▪ Teaching & Training colleges offering new stream ▪ Young Men & Women <ul style="list-style-type: none"> -Artisans -Captains -CEOs -Engineers -Professionals ▪ Thriving shipping yard ▪ Export Industry - Yachts ▪ Thriving Private sector SMMEs ▪ Ship Building & Repairs ▪ University of Maritime Fully Functional ▪ Shipping Power Supplies - Globally ▪ Taxi / Tourism ships between Durban / PE / EL / St. Francis / Cape Town

Valuated Futures Themes in Futures Wheels: Eastern Cape Maritime Future 2020

Group A	Group B	Group C	Group D	Group E
	<ul style="list-style-type: none"> ▪ Government Commitment in Facilitating Training ▪ Vibrant Ship Building & Repair with 400m DD ▪ Funding to Maritime Schools Available 	<ul style="list-style-type: none"> & Southern African Ocean on a 24/7 Basis ▪ Logistics Centre ▪ Oil & Gas ▪ Dredging Facilities ▪ Efficiency in Ports ▪ Maritime Services Industries ▪ Integrated Transport Systems ▪ Africa Tour Cruise ▪ Floating Docks with All-service Facilities ▪ Deep Draft Harbour – minimum 22m ▪ Cape Size Dry Dock ▪ Ship Building & Repair ▪ Emergency Services Capable of Handling any Maritime Emergency 	<ul style="list-style-type: none"> ▪ Architects ▪ Engineers ▪ Local Ownership of Ships ▪ SA Registered Commercial Ships ▪ More Established Ports ▪ Ship Repairs ▪ Maritime Studies Accessible to PDIs ▪ Sea Use as Transportation Medium expanded ▪ More Blacks and Women in Maritime Industry ▪ Highly Skilled Performers and Increased Productivity 	
<p>Top Three Issues:</p> <ul style="list-style-type: none"> ▪ Funding ▪ Maritime high school ▪ Development transport infrastructure - 	<p>Top Three Issues:</p> <ul style="list-style-type: none"> ▪ Ship building and repair ▪ Non-SA training IDZ & Manufacturing ▪ Clustered Established 	<p>Top Three Issues:</p> <ul style="list-style-type: none"> ▪ Centre for maritime excellence ▪ Emergency services capable of handling any maritime casualty ▪ Ship building & repairs 	<p>Top Three Issues:</p> <ul style="list-style-type: none"> ▪ Maritime Education ▪ Industry Development ▪ Coastal trade 	<p>Top Three Issues:</p> <ul style="list-style-type: none"> ▪ Maritime Education
<p>Focused Substance Area(s)</p> <ul style="list-style-type: none"> ▪ Quality Maritime High School ▪ Sourcing and Management of Funds 	<p>Focused Substance Area(s)</p> <ul style="list-style-type: none"> ▪ South Africanization of Shipping 	<p>Focused Substance Area(s)</p> <ul style="list-style-type: none"> ▪ Centre for Excellence ▪ Ship/Boat Building & Repair 	<p>Focused Substance Area(s)</p> <ul style="list-style-type: none"> ▪ Development of a Maritime Education Training Hub in the Eastern Cape 	<p>Focused Substance Area(s)</p> <ul style="list-style-type: none"> ▪ Maritime Education

6. Recommendations

The recommendations are a synthesis of the emerging strategic themes, and represent critical success factors for the establishment of a Quality Maritime High School(s) in the Eastern Cape and the development of a Maritime Industry. The themes represent the common vision and aspirations of the stakeholders and reflect what is emerging as common elements' for a maritime Future. Namely:

- Quality Maritime High School;
- Sourcing and Management of Funds;
- South Africanization of Shipping;
- Ship/Boat Building and Repair;
- Centre for Excellence and
- Development of a Maritime Education Hub.

National, Provincial, Private and Parastatal resources should be focused on developing the skills (implement the decision to have a Quality Maritime High School, Centre for Excellence and Maritime Education Hub) and provide finance, infrastructure (investigate and choose an innovative approach to meeting the infrastructure and maritime challenge for the Province. The support of those responsible for implementation of these foundational elements will be essential if the Eastern Cape Maritime Industry is to be successful.

7. Conclusion

The workshop achieved the following deliverables (during and post-workshop):

- | | |
|---|--|
| • A Maritime High School Strategy and Implementation Plan; | To be developed by 15 September 2010 |
| • Actions for implementation for 2010/11, 2011/12 and beyond; | Done |
| • Funding requirements for the establishment of Maritime High Schools in the Eastern Cape | Done, MTEF budget figures for the next three years have been submitted to the Department of Education. |
| • A set of proto-scenario fragments will be crafted into drafts of full maritime scenarios for the Eastern Cape and | Done. |
| • Version 1 of a set of provincial maritime scenarios to be produced. | To be developed by 15 September 2010 |

Appendix A – Attendance Register



Project : MARITIME HIGH SCHOOL PROJECT	Project No. : CSS/2010/005
Subject : 1 ST Stakeholder Workshop	Date : 12-13.08.2010
Place : Halyards Hotel – Port Alfred	Time : 09H00

Present:

Full Names	Organization	Fax / Email	Telephone	Cell phone
David Lefutso	Coega Development Corporation	086 615 6908 davi.lefutso@coega.co.za	041 403 0551	071 862 1095
Thembinkosi Semwayo	Ontolligent Services	thembi@kcrucible.za.net	072 530 6030	072 530 6030
Luxolo Rubushe	Coega Development Corporation	Luxolo.rubushe@coega.co.za	041 403 0442	083 304 6458
Nomkhitha Mbele	Smit Amandla Marine	n.mbele@smit.com	021 507 5777	079 699 4406
Nigel Campbell	South African Maritime Safety Authority	ncampbell@samsa.org.za	041 582 2130	083 309 6003
Qamisa Roto	Department of Transport	rotoq@dot.gov.za	012 309 3506	083 379 0573
Noxolo Fipaza	Eastern Cape Department of Transport	Noxolo.fipaza@dot.ecprov.gov.za	043 604 7675	082 054 2796
Lisolomzi Fikizolo	Department of Agriculture, Forestry and Fisheries	lisolomzif@nda.agric.za	021 402 3572	082 262 0701
Redge Nkosi	South African Maritime Safety Authority	Tnkosi@samsa.org.za	012 366 2608	083 387 9769
Nonzwakazi Sifanele	Department of Education	Nonzwakazi.sifanele@edu.ecprov.gov.za	040 608 4349	083 275 0674
John Abercrombie	South African Maritime Safety Authority	Jabercrombie@samsa.org.za	031 307 3006	071 686 9644
Khakhathi Munyai	South African Maritime Safety Authority	kmunyai@samsa.org.za	012 362 2660	082 418 0310
Pumeza Tisani	TPT Transnet	Pumeza.tisani@transnet.net	041 507 1803/1639	083 288 9797
Brian Ingpen	Lawhill Maritime Academy	brian@capeports.co.za	021 786 2106	076 223 9418
Roy Martin	Admiralty Shipbrokers and Consultants	martin@admiralty.co.za	031 267 1795	082 925 1914

Full Names	Organization	Fax / Email	Telephone	Cell phone
Sabelo Mxi	Eastern Cape Department of Education	Sabelo.mxi@dot.ecprov.gov.za	043 604 7471	072 890 2653
Nomachule Lombo	Department of Education	Nomachule.lombo@edu.ecporv.gov.za	040 608 4715	072 100 1036
Nozibele Mtembele	Department of Education	Nozibele.mtembele@edu.ecprov.gov.za	040 608 4472	082 955 8000
Thandokazi Phangabantu	Coega Development Corporation	Thandokazi.phangabantu@coega.co.za	041 403 0572	084 696 4349
Mandy Erasmus	Smit Amandla Marine	m.erasmus@smit.com	021 507 5777	082 903 8986
Tsietsi Mokhele	South African Maritime Safety Authority	tmokhele@samsa.org.za		083 287 0342
Pieter Coetzer	South African Maritime Training Academy	pcoetzer@samtra.co.za	021 786 8419	083 780 6704
Londoloza Lotya	Department of Education	Londoloza.lotya@edu.ecprov.gov.za	040 608 4227	083 275 0670
Pumla Grootboom	Smit Amandla Marine	p.grootboom@smit.com	021 507 5777	082 906 2665
Nomise Gqoli	Department of Education	Nomise.gqoli@yahoo.com	040 608 4222/3	083 479 7002
Monde Sanqqu	Department of Education	Monde.sanqqu@edu.ecprov.gov.za	040 608 4205	083 324 4409
Michael Majorman	Department of Education	Michael.majorman@edu.ecprov.gov.za	040 608 4258	078 980 8313
Nolundi Siwisa	Department of Education	Nolundi.siwisa@edu.ecprov.gov.za	040 608 4489	083 324 4417
Dr. Siyabonga Simayi	Coega Development Corporation	Siyabonga.simayi@coega.co.za	040 403 0486	083 607 5160
Sisa Soga	Department of Education	Sisa.sityata-soga@ovi.com	040 608 4777	072 102 3368
Dineo Matroko	Department of Education	Dineo.matroko@edu.ecprov.gov.za	040 608 4797	072 572 0038
Mahlubandile Qwase	Department of Education	Nomandla.gobeni@edu.ecprov.gov.za	040 608 4203	

Appendix B – Programme



Day 1

0830 – 0845	Registration	
0900 – 0915	Welcome & Introductions	Mr. Chuma Mbande
0915 - 0930	Background to the Maritime High School Initiative	MEC Mahlubandile Qwase
0930 - 1000	Explanation of the process to be followed Introduction to Futures thinking and Futures methodologies	Mr. David Lefutso Mr. Thembinkosi Semwayo
1000 - 1015	Tea / Coffee	
1015 - 1115	Expert input	Representative - South African Maritime Safety Authority Mr. Brian Ingpen – Lawhill Maritime Academy Capt. Roy Martin – Admiralty Shipbrokers and Consultants
1115 - 1200	In working groups: Futures wheel	
1200 - 1300	In working groups: Futures tables	
1300 - 1345	Lunch	
1345 -1500	In working groups: Futures tables continued Plenary report preparation	
1500 - 1515	Tea / Coffee	
1515 - 1600	Plenary discussion	
1600	Close	

Day 2

08:30 – 08:45	Day 1 recap	Mr. Thembinkosi Semwayo Mr. David Lefutso
09:00 – 10:00	In working groups: Consolidate the main maritime futures issues Write pro-scenario fragments	
10:00 – 10:15	Tea / Coffee	
10:15 – 12:15	In working groups: Development of High Level Action Plans	
12:15 – 13:00	In working groups: Development of proto-scenarios	
13:00 – 14:00	Lunch	
14:00 – 15:15	Plenary – report back	
15:15 – 15:30	End for the day	