
Ports and Logistics: A Vision for Future Integration

He added that as far as safety and combating piracy are concerned, PMAESA will continue to work closely with the international communities such as AU, IMO, RECs, US Coast Guards, among others, in order to combat piracy within the Eastern and Southern African regions.

Morwe noted that PMAESA is an association of different African countries with different economies.

“With around 90% of the world’s cargo handled by ships, you can appreciate the role Ports play in a regional context,” said Nghitima.

Mauritius Container Terminal was initially designed as a 2-berths facility for 5,000 TEUs vessels.

Djibouti lies at the intersection of main maritime routes with minimum deviation from those routes. It is the natural port of Ethiopia with a capacity of handling 98% of Ethiopian cargoes.

What is a Port Single Window?

PMAESA –Our Ports, Our Future

REPORT

ON

THE SUMMARIES

OF PRESENTATIONS AND DISCUSSIONS

OF THE

THE 37TH AFRICAN PORTS AND MARITIME

CONFERENCE

HELD ON

28 AND 29 NOVEMBER 2011

AT THE SWAKOPMUND HOTEL AND

ENTERTAINMENT CENTRE

SWAKOPMUND

NAMIBIA

Report compiled by: Prof Jairos Kangira

DAY 1: 28 NOVEMBER 2011

OPENING REMARKS

Bisey Uirab, CEO, Namibian Ports Authority

Bisey Uirab, NAMPORT CEO, gave a warm welcome to the delegates of the 37th **AFRICAN PORTS AND MARITIME CONFERENCE** held at Swakopmund Hotel and Entertainment Centre. Uirab also welcomed the Minister of Works and Transport, Hon. Erkki Nghitima, who had come to officially open the Conference. He unravelled the theme of the Conference as “Ports and Logistics: A Vision for Future Integration”. Uirab said that delegates to this auspicious Conference were going to deliberate on crucial issues concerning ports. He added that the Conference discussions would come up with solutions to many challenges that affect the operations of ports and related activities. He told delegates to feel at home throughout their stay in Namibia.

Jerome Ntibarekerwa, Secretary General of PMAESA

In his welcome speech Jerome Ntibarekerwa thanked the Government of the Republic of Namibia, through NAMPORT, for hosting the 37th AFRICAN PORTS AND MARITIME CONFERENCE in the resort coastal town of Swakopmund. In relation to this, he thanked the Ports and Maritime Association of East and Southern Africa (PMAESA) Board members for nominating Namibia as the venue for this year’s conference under the theme “Ports and Logistics – A Vision for the Future Integration”. He paid tribute to “PMAESA AMBASSADORS” for organising the conference. Ntibarekerwa said the conference had attracted more than 150 delegates from Africa, Europe, US, China and Asia. Commenting on the theme of the conference, Ntibarekerwa said that PMAESA has a vision for future integration into a global village where ports play a crucial role as catalysts for regional integration as espoused by the regional Heads of State through the African Union and Regional Economic Communities. He also said that PMAESA also believes in regional integrations and therefore, PMAESA participates actively in regional integration programmes of transport infrastructure which are promoted by African Development Bank (ADB), African Union (AU), and the United Nations Economic Commission for Africa (UNECA).

“PMAESA also collaborates with the RECs, particularly with SADC, Comesa and EAC to implement their agenda as a Specialised Agency in the port sector and related fields,” said Ntibarekerwa.

He pledged that PMAESA will focus on the following key issues:

- Active participation of the private sector in the management of our ports.
- Identify the need of human resource on our ports in order to harmonize and improve on our technology.
- Create a data base of port statistics and performance indicators with training needs.
- Establishing our regional permanent corridor working group in order to set up permanent dialogue between our ports corridor authorities and the region in order to continue working in the transport integrated system and to participate in the elimination of the Non-Tariff Barriers to trade in the region.

He added that as far as safety and combating piracy are concerned, PMAESA will continue to work closely with the international communities such as AU, IMO, RECs, US Coast Guards, among others, in order to combat piracy within the Eastern and Southern African regions.

Ntibarekera highlighted the following regional initiatives which are taking place to support the regional integration agenda as

- Development agencies such as UNECA, the World Bank (SSATP), the AFDB, the EU etc. place emphasis on the facilitation of inter-state trade along corridors
- Increasingly funding corridor developments along corridors Border delays, a proliferation of road checkpoints and other practices that increase monetary and time costs.
- Various initiatives have been designed to both monitor the performance of ports and corridors and to eliminate the non-tariffs barriers (NTBs).
- Corridors management Institutions (CMIs) in Southern African region are therefore promoting and developing various transit corridors across the region.

He ended by thanking all the donors, sister organisations, IMO, ADB, EU, TradeMark, World Bank, SADC, COMESA and EAC.

Tau Morwe, Chairman, PMAESA

Tau Morwe, PMAESA told delegates that the 37th AFRICAN PORTS AND MARITIME CONFERENCE was taking place against the backdrop of economic turmoil in Europe. He said that European economies are in dire straits and struggling to survive. Morwe noted that PMAESA is an association of different African countries with different economies. These countries must work together for integration to take place. He stressed that job creation was pivotal in all PMAESA countries. He said the Conference had attracted speakers from across the globe and there was going to be sharing of wide experience and expertise. He added that there should be a draft of action that would make regional integration a reality.

Snowden Mmadi, SADC representative

Snowden Mmadi, SADC Representative, said SADC fully supported PMAESA and this Conference. He said SADC alone cannot manage to effect programmes on poverty alleviation. He said there was need have an integrated approach to the transport system in Africa. There was need to have a co-ordinated link among maritime, rail and road transport networks. He cited capacity building as a major constraint in the transport system. He thanked the Government and people of Namibia for hosting this Conference. It was appropriate to have the conference at the beautiful resort town of Swakopmund.

Honourable Erkki Nghitima, Minister of Works and Transport

Minister Erkki Nghitima thanked PMAESA for spearheading the dialogue amongst Port managers at the 37th AFRICAN PORTS AND MARITIME CONFERENCE. He noted that international trade fosters the economic well-being of countries. The Minister revealed that the Namibian government will invest N\$ 3 billion in the Targeted intervention Employment and Economic Growth (TIPEEG) at NAMPORT and that this will create 3000 jobs. He

informed the delegates that Namibia, through the Port of Walvis Bay, had established Dry ports for Zambia, Zimbabwe and Botswana thereby fostering regional economic integration. He also pointed out the successes scored by the Trans-Kalahari and Trans-Capivi Corridors as traditional trading routes. The Minister emphasised that the political stability in Namibia was conducive to economic prosperity. He added that good business follows good politics.

“With around 90% of the world’s cargo handled by ships, you can appreciate the role Ports play in a regional context,” said Nghitima. The Minister officially opened the Conference and proceeded to tour the Exhibition.



Figure 1 Hon. Minister Nghitima (second from left) listening to an explanation in the Exhibition Hall shortly after officially opening the Conference



Figure 2 A trio on a maritime mission! (L to R):BiseyUirab, CEO of NAMPORT; Tau Morwe, Chairman of PMAESA; Jerome Ntibarekerwa, Secretary General of PMAESA



Figure 3 Part of the "PMAESA AMBASSORS" - Their excellent organisation made the Conference tick without hitches from the first day until the last minute. Well done NAMPORT Team!

PLENARY SESSION 1

SAMSA: “ENTERPRISE OF INTEGRITY”

Captain Karl R. Otto, Executive Head. Centre for Sea Watch and Response, South African Maritime Authority

SAMSA is the South African Maritime Safety Authority. The maritime policy imperatives and goals in the Transport Policy are articulated as:

- Developing maritime awareness;
- Assisting in the creation and fostering of an economic environment for the

Maritime Transport Industry which will allow it to compete with other nations;

- Contributing to the release of the full potential of the maritime industry in South Africa; Modernisation of South Africa’s shipping administration;
- To ensure the safety of life and property at sea;
- To prevent and combat pollution of the marine environment by ships; and
- To promote the Republic’s maritime interests.

SAMSA realises the potential of the international and domestic maritime industry in assisting with the creation of employment that is sustainable, of high quality and attracting foreign earnings, eliminating poverty and contributing to economic growth. The projected seafarer numbers only represent the South African quota of the total international seafarer market, with a potential to take a bigger share of both the seafarers and non-seafaring. The maritime industry as a whole has a potential of creating hundreds of thousands of jobs. Fisheries employ about 200,000 people yet the sector receives little skills development support. Boat and ship building and repairs, including offshore structures, create hundreds of jobs, also with little skills development support. Seafaring has the potential to create thousands of jobs, yet there is no support.

SAMSA considers the Human Resource Development Secretariat and its Technical Working Group as key partners and enablers in the maritime skills development and job creation efforts. SAMSA is organising a Maritime Skills Development Summit at which the Skills Study will be launched.

STIMULATING DEVELOPMENT AND GROWTH OF PORTS ALONG THE AFRICAN COASTLINE

John Omingo, Head of Commercial Shipping, Kenya Maritime Authority

Kenya's Maritime sector is regulated in accordance with the Kenya Maritime Authority Act of 2006 and Merchant Shipping Act of 2009. The major aim is to guarantee safety of life at sea according to International Maritime Conventions and Regional Search and Rescue coordination, and to establish a piracy information exchange centre. In addition, the KMS is committed to the prevention and control of marine pollution and commercial maritime services.

The growth of ports along the African coastline is determined by three main factors. These factors are safety and security, efficiency and productivity, and additional capacity. Security is of paramount importance taking into account the US 9/11 Terrorist attack and piracy activities off the coast of Somalia. Although there may be ISPS Codes in ports and ships, security is needed beyond the port; every node in the supply chain where each player is responsible for securing its leg of the supply chain. There must be a national supply chain security standard which all parties in the supply chain should sign up to. Piracy is complex and entrenched beyond the capability of any one entity alone to effectively deal with. According to a recent World Bank Report, the annual cost of piracy to the world economy is 7 - 12 billion US dollars and the Annual Piracy Surcharge in Mombasa is over 200 million US dollars.

It was concluded that there is need to adopt a total logistics chain approach to stimulate port growth. Overland systems with appropriate intermodal facilities should be established in order to:

- alleviate port congestion problems; facilitate growth in cargo volumes and provide great competitive advantage to a port;
- enhance customs and other agency processes within ports and along inland transport corridor;
- utilise effective key performance indicators; and
- monitor reliability, efficiency, costs and of performance.

DISCUSSION

- To avoid delays, there is urgent need to introduce more electronic paper systems to speed up clearance of vessels and cargo.
- However, the hard copy paper system is still needed to complement the electronic system where necessary.
- Therefore cargo can be released earlier by using the two systems.
- Ports should not be warehouses; if cargo is delayed at a port, this makes it expensive to the trader.
- Improvement of port infrastructure is needed to speed up clearance of cargo.
- Safety framework must be coordinated to make the supply chain more secure; a trader can be trusted in one country but not in another.
- There are physical security standards in the EU bloc.
- Governments should come together to formulate security standards.
- Countries should ensure balance of trade so that vessels do not travel empty from one destination.
- Governments should be more aware of the tripartite agreement/working group.
- The Walvis Bay Corridor Group (WBCG) has attracted many traders as a safe port.
- WBCG to develop some types of goods/cargo to take to Zambia or Democratic Republic of Congo.
- WBCG to fill up the gaps and develop this trade route so that it becomes viable.
- A standardised measure of the performance of the corridor is in place.
- Performance indicators – they must stipulate the number of days it takes to clear a vessel and make sure we conform to that.
- The issue of security of routes and ports should be addressed to make sure that there is consistency in all countries.
- Traders should be assured of transit time; this is important to ensure predictability in the supply chain.

PLENARY SESSION 2

NAMIBIAN PORTS AUTHORITY

Bisey Uirab, CEO Namibian Ports Authority

- There need for political stability in countries in order to attract investors to our ports. Namibia is a safe place; Namport offers a bridge between Namibia and Zambia, and other counties.
- We must have fair and transparent structures and operations for the good of our customers.
- There is need for partnership with global companies.
- Most ports in the region are managed by governments.
- Therefore governments should show commitment towards the development of ports.
- There is need to develop infrastructure because of the huge cargo that we handle.
- We are responsible for economic growth and the creation of jobs.
- In Namibia the unemployment rate is said to be between 28% and 51%, and 40% in South Africa.
- We must continue building capacities that foster bilateral trade and create job opportunities in the region.
- We should overcome challenges and develop our ports for the good of our nations

EASTERN AND SOUTHERN AFRICAN CHALLENGES IN PORTS DEVELOPMENT: PORT LOUIS HARBOUR

ArunaBunwareeRamsaha, Deputy Director-General, Mauritius Ports Authority

The main focus of the presentation was on the case study of Port Louis Harbour in Mauritius which is the sole maritime gateway of Mauritius handling 99% of external trade contributing 2% to the country's GDP. It was established that:

- Mauritius has a capacity of 550,000 TEUs capable of catering for the captive traffic in the long term.

- Mauritius Container Terminal was initially designed as a 2-berths facility for 5,000 TEUs vessels. It is equipped with 5 post panamax cranes with an outreach till the 16th row.
- 8,000 TEUs vessels with 17 rows not fully loaded already call at Port Louis.
- 8,000 TEUs vessels once fully loaded require dredged depth of 16.5 metres.
- Port expansion is required to accommodate larger vessels and the resulting extra port capacity will have to be used for transshipment traffic.

If the terminal is not expanded, there is the risk that shipping lines will skip Port Louis the following will happen:

- Cargo for Port Louis will be transhipped through other ports.
- The island will lose precious connectivity causing delays in export of goods.
- Cost of exports and imports will be increased, thus rendering the Mauritian product less competitive on the international market.

There is a proposed extension of about 240 metres in Phase I. There should also be strengthening and upgrading of existing berths of 560 metres; dredging to depth of 16.5 metres; an expansion of Container Yard by 7.5 hectares; and an annual throughput capacity of 750,000 TEUs. The estimated cost of the project is USD 124.0 M and the date of completion of the project is 2014.

Port Louis should take advantage of its strategic positioning. Piracy attacks in Indian Ocean are forcing shipping lines to review their East-West routes. For example, vessels plying from Far East to South America whilst avoiding the risky zone have the option to call at ports located more on southern part, thus representing a window of opportunity for ports such as Port Louis.

CASE STUDY: EASTERN AND SOUTHERN AFRICAN CHALLENGES IN PORTS DEVELOPMENT

Major investment and infrastructure plan and port capacity: The case of the Ghanaian Port of Takoradi

Nii Nikoi Amasa, Port Monitoring Manager, Ghana Ports and Harbours Authority

The relationship between ship size and provision of appropriate port infrastructure can be likened to the proverbial chicken and egg debate. Which one comes first, port infrastructure or larger vessels with enhanced characteristics? With a LOA of 135m, a draft requirement of <9m, and between 500TEUs to 800TEUs on board vessels for the period 1956-1970, what became to be known as 1st Generation container ships were born. The length, draft and carrying capacity of container vessels evolved through Second Generation, Third Generation, and Four Generation to Fifth Generation in the periods. Each generation of vessel came with its requirements, in terms of berth length, draft and total boxes (TEUS) carried on board. The port development agenda for the Port of Takoradi would cover major port infrastructure and superstructure development/expansion aimed at eliminating the inherent inefficiencies currently being experienced, such as draft limitations, double handling of bulk cargoes, narrow quay aprons, etc. and also to meet the emerging oil and gas cluster. The Project will include the extension of the main breakwater, new quay walls, construction of a jetty and platform for conveyor systems (dry bulk) and pipe corridors for petroleum products, oil berthing facility and substantial dredging and reclamation. In later phases, the main container terminals and more oil services bases would be developed after the current ore terminal's operations are re-located to the newly developed terminals. The following are listed as PPP opportunities for further development and implementation:

- Breakwater Construction and Dredging of Port Entrance Channel and Berths alongside;
- Bulk ore terminals' superstructures and operations;
- Oil and Gas Berth (depending on GNPC / Petroleum Authority plans for this sector of port development);
- Oil services' terminals – development and operations;
- Utilities services – developments and operations to deliver utilities for operations e.g. fresh water, secured and sustained electricity, waste management, etc.;
- Container Terminal;

- Transit Cargo Sheds – import and export;
- Cocoa Sheds;
- Truck Parks with Vehicle Appointment Schemes; and
- Ancillary supplies and services.

TRANSNET

Tau Morwe, CEO, Transnet National Ports Authority

The major challenges facing productivity in our ports are people, processes, technology and superstructures. The major ports in South Africa are Port of Durban, Port of Ngqura and Port of Cape Town.

- Port of Durban
 - Entrance channel widening and deepening
- Port of Ngqura
 - Dredging of the Channel
 - Berth extensions
- Port of Cape Town
 - Berth deepening

Recognized Maritime/Port Security Threats include:

- Lack of a collaborative maritime security strategy;
- Piracy;
- Maritime Terrorism;
- Contraband Smuggling/Trafficking;
- Incidence of Stowaways;
- Insufficient coastal protection capacity;
- Lack of 'deep water' patrol capacity;
- Incidence of Trespassing;
- Illegal exploitation of natural resources, e.g. poaching abalone, fish;
- Prohibited imports/exports; and
- Potential Marine pollution.

DISCUSSION

Competition

- The more you have competition the less the freight costs; the more competition the better it will be.
- The more the lines the better it is; therefore Mauritius welcomes this competition.

Climate change

- In the planning of ports and infrastructure we should not forget climate change; when looking at the design, ask architects to take climate change into account.
- In the planning of these new ports and infrastructure do not forget the long term effects of the raising of the sea. When planning take this into consideration in the design.
- Reclamation of land through dredging is not the first time in Mauritius.
- Climate change is a fact of life; there should be green field projects at ports.
- Namibia is in the process of reclaiming land through dredging; look at infrastructure - roads, rail
- Climate change - every country must consider all the impacts of climate change.
- Everyone in Africa is hoping to become the hub, isn't a time for us to sit down and discuss which the best port to put money into is.
- Mauritius recognises that it is constrained by space but it wants to improve on its connectivity; therefore Mauritius is extending the terminal by 200 metres. In the long term the dredging material will be used at the port.
- Material from the sea is what will be used to reclaim the land.
- In Ghana it is a requirement that for every Greenfield project this must be met.
- Namibia reclamation will utilise material dredge from the sea.
- The major challenge that most African ports have at the moment is that they have run out of capacity.
- Capacity needs to be created ahead of demand. Where we need to focus on is the oil and minerals because a number of ships move to other areas.

African companies

- It is important to support African companies when expanding ports and harbours, e.g. some vessels were built in South Africa.

Skills deficit

What African Ports are doing to assist institutions in skills training

- Ghana – a regional academy has now been turned into a university through the collaboration of west and central Africa countries
- Training of sea farers and engineers, lectures
- Students offered internships
- Mauritius – training of pilots and engineers; also a launch of a regional academy with support from neighbouring islands
- Namibia - staff training, scholarships, trainees go to SA, marine management training also
- Working closely with the Polytechnic of Namibia; Namport contributes to the curriculum of trainees at PoN.

Strategy of Mauritius

- Tranships in Mauritius; the aim is to improve connectivity.
- When shipping costs are reduced, this benefits the whole economy.
- There is need to expand land; extension of existing terminals must be done.
- Major challenge of African ports - almost run out of capacity, e.g. in Angola.
- Handling of 25 vessels a day – it is important to create capacity ahead of demand.
- Maputo corridor – we must see how we can work together with Maputo.
- SA cargo should go through Maputo.

Port security

- We must consider all port security issues and find an agreement among all the ports.
- Some ports are not safe.
- Insurance is expensive.
- Suggestion – It is vital to improve security on all the ports in the world, and not African ports only.
- We should work with Department of Home Affairs to address security issues in our ports.
- SA has put in a lot of investment in security in the last few years, but there is still a lot to be done.

Port Productivity

- Address port transit time to reduce the overall cost of transport logistics.
- Industry concerned about no accountability for delays.
- Mauritius productivity is about 18 moves per hour which is well below international standards; they are therefore looking at partners to see to it that productivity is improved.

Human resources development

- HR issues are crucial for ports and that is why PMAESA is planning a workshop on 30 November 2011 to look at this issue in depth. There is need to set up a policy on human resource development for the region.
- The workshop should assess human resources needs to find out what is offered in our training institutions.

PLENARY SESSION 3

THE IMPACT OF CONTAINERISATION ON THE PORT DEVELOPMENT: THE CASE OF PORTO DO LOBITO

Angelo Diur Kassul, Director, Maritime Department, Transport Ministry, Angola

What is a container? A container is a steel box built in standard sizes to allow a secured transportation of goods in various modes of transport. Containers can be classified by the mode of transport, that is, land, air and maritime. Containers are also classified by their sizes. Containers have the following advantages:

- They provide an easy way to move goods.
- They protect goods.
- They speed up handling and delivery.
- They permit intermodal exchange.
- They allow an economy of scale.
- They reduce inventories and costs.
- They increase productivity.
- They can be used in other industrial activities.

As far as containerisation is concerned, the main constraints of African ports are:

- Lack of appropriate infrastructures;
- Lack specialised equipment;
- Non-generalised use of ICT;
- Poor or non-existing inland connections;
- Interface port/city;
- Labour intensive;
- Heavy administrative clearing processes; and
- The imbalance in container trade.

The main Angolan ports are Luanda, Lobito and Namibe. The secondary ports are Cabinda, Soyo and Ambriz.

DJIBOUTI LOGISTIC PLATFORM

Habon Abdourahman Cher, PAID Business Development Manager

Djibouti was used as a case study because of various reasons. There is political stability in Djibouti. Though being in an unstable region, it is a safe haven for living and doing business. Its geographical position is strategic as it is located at the gateway of East Africa. It also has unrivalled nautical accessibility. Djibouti lies at the intersection of main maritime routes with minimum deviation from those routes. It is the natural port of Ethiopia with a capacity of handling 98% of Ethiopian cargoes. Djibouti has world class facilities which include:

- Doraleh Container Terminal for containerised goods;
- Port of Djibouti for general cargo, break bulk and livestock;
- Horizon Terminals for liquid bulk, oil and Petro-Chemical products;
- Djibouti Free Zone for logistic platform and procurement and distribution centre;
and
- An attractive business climate.

In addition to these facilities, there is commitment from Government of Djibouti via DPFZA to adopt a very proactive approach with respect to foreign direct investment and to Public Private Partnerships (PPP). There is also partnership with world class leaders in Port and Free Zones management (DP World & JAFZA). Furthermore, the Djibouti Franc has fixed parity with US Dollars, 1\$ = 177.7 DJF and a strong banking system comprising 9 banks.

Djibouti boasts of expertise and best practice, efficient and fast customs clearance processes. It is a secured and well maintained corridor with reduced transit time and cost.

IFC PORT PRESENTATION

Méhita F. Sylla, Senior Investment Officer, international Finance Corporation

IFC stands for International Finance Corporation.

- Public-Private Partnerships (PPPs)

IFC helps governments to increase the quality and availability of public services and infrastructure using the PPP model. IFC has global experience in PPPs for transport (roads, airports, rail, ports, etc.), water and sanitation, health and education, power, mining, and many other areas. Governments rely on IFC to structure PPPs that cost-effectively meet public needs with well-qualified private partners. Private partners trust IFC to construct a balanced and bankable project. The key factors defining the type of private participation include:

- Port Ownership;
- Role of Port Authorities; and
- Relationship between the public and private sectors and their respective roles

Most port “privatisations” have tended towards transferring selected port services and/or assets to private or mixed economy companies by means of restrictive leasing, licensing or concessionary contracts. The role of Port Authority after PSP is to control property rights, planning and efficiency. A modern Port Authority, acting in close cooperation with private sector companies, typically concentrates its efforts on the efficient performance of a number of fundamental functions, including:

- Landlord and performance monitoring function;
- Policy-making, planning and development function;
- Traffic control, regulatory and surveillance function; and
- Marketing, public relations and promotion function.

Governments (and port authorities) also retain the responsibility for formulating a policy and/or regulatory reform agenda to serve as an effective basis for private sector

involvement, which have often included difficult and transforming legislative, institutional and procedural changes.

Governments benefit from Private Sector Participation in the following ways:

- There is great potential for new revenue streams for governments;
- There is access to private sector financing freeing Government budgets for social sectors;
- Introduction of Experienced Management and International Trade Benefits;
- Higher Efficiency through the involvement of the private sector; and
- Platform for Government Trade Strategies: Establishing a supportive environment and platform for an export-focused economy, and lowering the artificial costs of imported raw materials.

The following two case studies were given as success stories:

- Concession of a Container Terminal at Port of Toamasina, Madagascar; and
- Concession of a Container Terminal at Port of Cotonou, Benin.

IFC has ongoing and potential projects with ports in different parts of the globe

STIMULATING ECONOMIC GROWTH IN AFRICA:THE ROLE OF PORTS

Sakaria Nghikembua, CEO: Operations, Old Mutual

- The world is more globalised where the share of the world GDP is increasing.
- Globalisation is the in-thing for the world.
- There are geographical differences between countries; landlocked countries depend on their neighbours.
- Landlocked countries enjoy economic growth spill overs of neighbouring countries.
- Good neighbourhood assists the growth of landlocked countries.
- State companies operate ports in Southern Africa with different degrees of success.
- State owned companies should work hand in hand with the private sectors.
- Ports are important pillars in economic growth.
- Ports contributed to economic growth by over 10%; this included ship container traffic and general cargo traffic.
- Lack of road and rail infrastructure is the major challenge.

- Trade policies must be geared towards export growth.
- We must undertake further investment in multi-mode transport.
- We must ensure that landlocked countries benefit also.
- New models of ports need to be constructed.

DISCUSSION

- Old Mutual can finance activities.
- Security in Djibouti: foreign navies are protecting vessels outside the national waters; Djibouti is not affected but piracy because of UN forces; Djibouti is getting advantage of this situation.
- Others should go to the port of Djibouti to learn from them.
- Efficiency and employment – The Port of Djibouti had some limitations; it is still owned by the government of Djibouti.
- It created a lot of employment for local people; earlier it relied on expatriates.
- There is great experience which can work for other countries in Africa.
- Failed transactions are due to governments or companies engaging without enough preparations. Therefore there are disadvantages at the negotiation table. Preparation has a cost and it is important to pay for it. It is important to insist on preparations.
- Governments must be prepared and clear with what they want as they go into negotiations.
- Djibouti attracted new shipping lines which are doing transshipment business in the port. It has also benefited from the congestion in the ports nearby.
- The international navies protect the ships at the international waters; therefore Djibouti is not affected by the pirates. These forces are international, but because they are based in Djibouti, then it has the advantage of more protection.
- ISO 8000 Certification in the port also makes it possible to provide maximum security for both cargo and passenger.
- In 2000 Djibouti went into an agreement for the management of the port. But in 2004 congestion caused the port to rethink of what to do. Then there was

concessioning of the oil terminal and the development of a completely new terminal; this created more employment for the people.

PLENARY SESSION 4

Thoughts on the financing of ports within Sub-Saharan Africa's transportation networks

Peter Copley, Transport Specialist, Development Bank of Southern Africa

How to attract investment in our ports

- Society decides;
- Post 1994 South Africa saw great international interest in internal investment;
- This came from then Deputy President Mbeki, highlighting the role of the senior political patron;
- Driven by permanent public servants;
- Supported by project driven private sector champions;
- Post Polokwane, when society elected President Zuma to succeed President Mbeki, the commercialisation/privatisation process appeared to stall.
- The current international PPP interest in Africa is in Nigeria
- South Africa will have to see what happens in Manguang in May next year with the next societal expression of direction.
- To attract international investment you have to show the World that you are investment friendly.
- Of the G7, USA, UK and Japan have private sector rail systems (Japan the late comer as the national economy could no longer carry the debt. It took 10 years to take that decision).
- Germany, Italy and France have state owned rail systems.
- Canada has a private system AND a state owned system.
- Society ultimately decides whether the public or private sector is the predominant source of finance, or PPP's.

Partnership with Government

- The Maputo Corridor started (1995) within South Africa's company and contract law
- Only followed with PPP legislation in 1998
- Maputo Corridor now essentially a private sector driven corridor
- Walvis Bay Corridor Group a true Public Private Partnership

- We can learn something from that.

Attracting international shipping companies to our ports

- Safety and efficiency in turnaround times.
- Vehicle carrying vessels are turned around in 4 hours at Maputo versus 24 hours in Durban.
- Facilitated by effective use of ICT, clearing customs while the vessel is still at sea.
- We need to turn BRICs into BRICS.
- We must reflect on China's balance of payments and the role of coal.

EAST AND SOUTH AFRICAN CONTAINER MARKETS: TRENDS AND CONSEQUENCES FOR PORT AUTHORITIES & INLAND CORRIDOR SERVICES

Yann Alix, General Delegate, SEFACIL Foundation, Le Havre – France

SEFACIL Foundation is a unique international think-tank around strategic and prospective analysis of Port, Maritime and Logistics. It creates innovative products on development in Africa, China and Europe. It provides a summary of the shipping lines that call in the ports of the region. SEFACIL analyses all the trade capacities and vessels. For example, it figures out the capacity deployed by the main players such as Maersk line, MSC, and CMA-CGM.

The Milk Run System is the national single port gateway, serving mainly domestic markets. This means the shipping lines have to call at each port because of the poor trading between the countries. The shipping lines will calculate their saving depending on their regularity and reliability.

DISCUSSION

- Workforce challenges; consider the types of vessels that are processed at the two ports, Maputo and Durban.
- The role of the private sector is underplayed.
- SA issued licences to 67 operators, only 17 of these were from the government.



Figure 4 Some of the delegates ready to deliver their papers



Figure 5 Smiles and smiles during the Conference!

DAY 2: 29 NOVEMBER 2011

PLENARY SESSION 1

CHALLENGES IN TRANSPORT CORRIDORS INFRASTRUCTURE (RAIL AND ROAD) FOR THE SOUTHERN AFRICAN REGION

Johny M. Smith, CEO – WBCG

The transport sector faces these challenges: lack of maintenance; overloading; balance of trade; private sector financing of road infrastructure; poor condition of roads; unavailability of funding; unavailability and insufficient rolling stock; unpredictable delivery times; real time information on wagon and consignment; lack private sector participation; and lack regional integration of rail network. The challenges faced along the corridors are border transit time; rail versus road; increase in infrastructure and logistics capacity; regional growth; reduction costs; and the creation of alternative trade routes. Corridors should accelerate infrastructure development. The Government invested in major transport infrastructure to link Namibia with rest of neighbouring countries. There is need to optimise the unique location of Namibia and to establish new trade routes to link Namibia with rest of the SADC region. The WBCG was established in 2000 as a Private Public Partnership. The Government is cooperating with private sector to optimise infrastructure development. The corridor supports cross border movement of goods into inland dry ports. The development of the WBCG followed these stages:

- 1994 – Fishing Port
- 2000 – Deepening of port to 12.8 m
- 2004 – First Hinterland cargo
- 2011 - Deepening of port to 14 m

Future plans are:

- 2016 – Port Expansion
- 2020 – Railway links to all neighbouring markets
- 2025 – Logistics & Distribution Hub for Southern Africa

TRADE FACILITATION AND INTRA-AFRICAN TRADE

Jon Walden, Senior Adviser, Customs and Trade Facilitation, Crown Agents

Crown Agents' adopts a "4P" approach to implementing Trade Facilitative measures. The 4Ps are:

- Focusing **P**eople: human resources, training, organisation strategy, change management, culture
- Implementing **P**latform: legislative framework, legal framework
- Improving **P**rocesses: trade, efficiency, business, mapping
- Aligning **P**olicy: technology and infrastructure

Typical cost elements in an international sale include:

- The product;
- Packing and handling;
- Inland transport;
- International transport / port charges / dwell time;
- Insurance;
- Documentation;
- Customs clearance – export and import;
- Security clearance – export and import; and
- Duties and taxes.

The transport issues include:

- Transport infrastructure – congested ports, road, rail, air;
- Lack of competition;
- Inter-modal capabilities – containerisation where appropriate;
- High transport costs – land locked countries;
- Need for common standards (axle weights, height, etc.);
- Availability and capacity of suitable haulage – chilled units / ventilated units;
- Security (personnel and cargo);
- Availability of appropriate warehousing; and
- Import / export imbalance.

The trade issues show the following challenges:

- Lack of uniform procedures / processes are inconsistent;
- Lack of standard documentation;
- Lack of trading capacity / experience;

- Customs delays;
- Bureaucracy;
- Few economies of scale;
- Phyto-sanitary requirements; and
- Market access (tariff and non-tariff).

Solutions to these challenges include:

- Regional integration;
- Harmonised legislation;
- Institutional strengthening;
- Trade/Maritime Corridors – fed by, and feeding, efficient ports ;
- Information support networks/Trade partnerships/Innovation;
- Trusted Trader regimes;
- One Stop Border Posts/Collaborative Border Management;
- Holistic capacity building programmes;
- Intermodal Transport Infrastructure Investment – private sector engagement /PPPs/ stakeholder co-operation; and
- Reduce bureaucracy – IT / Single Window Environment.

The other challenge is to develop a deregulated and privatised multi-modal transportation and logistics system responsive to the trader's needs and user's expectations.

We should also explore:

- ICT / Single Window Concept;
- Trade / maritime Corridors;
- Beneficial contracting;
- Collaborative border management;
- Customs modernisation – 'facilitate legitimate trade'; and
- Transport liberalisation.

The focus should be on a holistic approach to trade facilitation and subsequent increased competitiveness.

DISCUSSION

- To avoid delays, there is urgent need to introduce more electronic paper systems to speed up clearance of vessels and cargo.
- However, the hard copy paper system is still needed to complement the electronic system where necessary.
- Therefore cargo can be released earlier by using the two systems.
- Ports should not be warehouses; if cargo is delayed at a port, this makes it expensive to the trader.
- Improvement of port infrastructure is needed to speed up clearance of cargo.
- Safety framework must be coordinated to make the supply chain more secure; a trader can be trusted in one country but not in another.
- There are physical security standards in the EU bloc.
- Governments should come together to formulate security standards.
- Countries should ensure balance of trade so that vessels do not travel empty from one destination.
- Governments should be more aware of the tripartite agreement/working group.
- The Walvis Bay Corridor Group (WBCG) has attracted many traders as a safe port.
- WBCG to develop some types of goods/cargo to take to Zambia or Democratic Republic of Congo.
- WBCG to fill up the gaps and develop this trade route so that it becomes viable.
- A standardised measure of the performance of the corridor is in place.
- Performance indicators – they must stipulate the number of days it takes to clear a vessel and make sure we conform to that.
- The issue of security of routes and ports should be addressed to make sure that there is consistency in all countries.
- Traders should be assured of transit time; this is important to ensure predictability in the supply chain.

PLENARY SESSION 2

DEVELOPING PORT PERFORMANCE ASSESSMENT TOOLS

Hannes Finkenbrink, UNCTAD – Trade Logistics Branch

The Port Index would be developed and monitored by a neutral body. The main benefits of the Port index include the provision of worldwide benchmarks to ports; monitoring of performance developments over a longer time series; results evaluation by a neutral and external body; and constant update of measurement technique based on feedback of partners. There exists an option for a detailed analysis of port performance and suggestions for performance improvement.

TRAIN FOR TRADE PORT TRAINING PROGRAMME

HerthaMuyoba

The purpose of the programme is to develop the human capital within the port community, taking into account local circumstances to foster efficiency, and take advantage of the international trade with the aim to boost up economic development. The TrainForTrade programme helps participants acquire the skills needed to participate more effectively in the global economy. It promotes access to trade-related knowledge adapted to local conditions and country needs. The programme targets Management, the Port Community and Ministries. The curriculum of the programme is as follows:

- Module 1: International trade and transport
- Module 2: Recognizing the port as a system
- Module 3: The functioning of a port system
- Module 4: The main challenges for the future
- Module 5: Methods and tools of modern port management
- Module 6: Economic, commercial and financial management
- Module 7: Administrative and legal management
- Module 8: Technical management and human resources development.

CONCESSION FRAMEWORK TO IMPLEMENT AND OPERATE A PORT SINGLE WINDOW

Pascal Ollivier, Director of Corporate Development, SOGET and Jean Michel Marnoto, Vice President, BUREAU VERITAS

What is a Port Single Window? It is a neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders in order to improve the competitive position of the sea and air ports' communities. It optimises, manages and automates port and logistics efficient processes through a single submission of data and connecting transport and logistics chains. A PSW has three layers – the Foundation Layer, the Export Layer and the Import Layer.

There are 10 reasons for using a Port Single Window Concession. The reasons are:

- Reason 1: Port Authorities have a very limited PSW track record in Africa
- Reason 2: Ports have experiences in Concession
- Reason 3: PPP Joint Venture with stakeholders
- Reason 4: Best way to accelerate modernization
- Reason 5: Benefits are immediately visible
- Reason 6: Efficient operations
- Reason 7: Key Performance indicators
- Reason 8: Capacity Building
- Reason 9: Transparency via tendering process
- Reason 10: Reduced risks

A good example of a PSW is the PSW of Cotonou, Benin. It followed these stages:

- Expression of Interest: February 2010
- Tender: May 2010
- Signature of Concession: November 2010
- Start of first stakeholders: March 2011
- Go Live: July 2011
- Import Roll out: October 2011
- Export Roll out: December 2011

Opting for a concession agreement is the most promising vehicle for the Government requiring no public financial resources while providing efficient operations, immediate results and reducing risks.

DISCUSSION

- There is a perception of conflict of interest between the automated system and single window system (SWS).
- It is difficult to change the minds of the people when you introduce a new system.
- Minds of the people have to be changed to get the performance of the automated system accepted. It is a total change management issue.
- On the question of a single window, it was noted that there is no unique single window.
- The single window in trade is for customs and for managing electronic permits for all government processes; this is a government to government system.
- In a port there must be a port single window where the system manages business to business processes. In the port community environment, there is also a need for respect of information/data of the different players. In this case there is need for the ports to champion the PSW.
- Cost of concessions: There is a transaction fee that is determined case by case and this fee is agreed upon. The initial investment is USD1.5 - 100 million for operation.
- The UNCTAD programme: Those who enrol for this programme graduate with a certificate.
- The implementers of the programme are moving towards ensuring that the course is accredited by individual countries. The individual countries should decide what level according to their standards they would want to place the course.
- It would be wiser for countries to compare among one another. There should be information sharing and the benchmarking.
- The challenge of building the index is getting the data, but whatever data will be given will be accessed and used.
- Another challenge is the different ways by which data can be interpreted. This therefore gives more benefits for use of the index.

- Alignment issue – it is important to have concerted effort to make sure that there is quality training for the region.
- We need to think PPP and this can happen only at the highest level of the government. In some countries if we do not do what needs to be done, the vessels will go elsewhere. So it is important that politicians need to understand these issues. We must educate the governments on these and other important issues.
- Corruption: It is an issue of major concern in Africa. If it is a wide spread issue and concern to investors, then it should be included as an indicator in the Port Index.
- This can be included as a perception index. Data integrity is key to the PSW.
- To implement knowledge sharing among countries, we must get the best practice; but it is difficult to get all the data because of confidentiality.
- We can treat the information confidential by indexing or coding it.
- Politicians must understand that investors leave when the environment is not conducive for business
- Politicians should attract investors.
- Benin was given as an example where politicians successfully attracted investors through the Ministry of Finance. Benin was also supported by IMF.
- It is our duty to educate our governments on how important it is to attract investors.
- It was noted that corruption is a major concern all over the world; it is not a problem only in Africa.
- We must incorporate integrity in performance indicators.
- Data integrity is the most important issue in the single window system.

PLENARY SESSION 3

MARITIME ENVIRONMENT REGULATIONS AND IMPACT ON INVESTMENT OPPORTUNITIES

Nompumelelo Dweba, Deputy Director, Maritime Industry Development and promotion (South Africa)

The INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (MARPOL) is a combination of two treaties adopted in 1973 and 1978 respectively and also includes the Protocol of 1997 (Annex VI). MARPOL has the following mandate:

- It deals with the prevention of pollution (oil, chemicals, harmful substances, sewage and garbage) from ships of the marine environment and by ships from operational or accidental causes.
- It has been updated by amendments through the years. Annex I Regulations for the Prevention of Pollution by Oil (entered into force 2 October 1983) Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk, Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force 1 July 1992), Annex IV Prevention of Pollution by Sewage from Ships (entered into force 27 September 2003).
- Annex V Prevention of Pollution by Garbage from Ships (entered into force 31 December 1988) Annex VI Prevention of Air Pollution from Ships (entered into force 19 May 2005).

International Convention on oil pollution preparedness, response and co-operation and OPRC-HNS Protocol 1990

- The Protocol defines Hazardous and Noxious Substances as substances besides oil, which, if spilled into the marine environment, can create hazards to human health, living resources and marine life and damage facilities or to interfere with other officially authorized uses of the sea.
- Provision of assistance by Member States to the extent possible and feasible, to other States in the event of a pollution emergency is required.
- There is a provision for the reimbursement of any assistance provided.

Provision of salvage operations and pollution response

- Member States and Designated Authorities party to the OPRC 1990 and OPRC-HNS Protocol are required to develop a national contingency plan and procure response equipment.

- Undertake regular training and exercises.
- Bilateral or Multilateral agreements on preparedness for, and response to, pollution incidents involving HNS.

Green House Gas emissions from ships

- Contribution to GHG emissions was estimated at 1008 mt in 2006;
- Conference of Parties (CoP) 17 CMP 7 to the Kyoto Protocol for the United Nations Conference Reduce and stabilise Green House Gas concentration from Ships;
- Operationalisation of the Cancun (Mexico) agreement and political matters arising from the Bali Roadmap;
- Gather and share information on how to reduce Green House Gas Emissions, National policies and best practices;
- Adopt an African position and launch of National strategies to address Green House Gas emissions;
- Emissions and provision of finance and technological support for developing countries;
- Cooperate in preparing adaptation impacts of Climate change; and
- Monitor progress from various countries to deal with Climate change.

Investment opportunities: Green House Gas emissions from ships

- Adopting a pragmatic approach to reduce Green House Gas Emissions (invest in training and development);
- Introduction of renewable energy products such as (wind farms, solar energy, bio fuel production and waste to energy power, low heater water projects);
- Introduction of green economy is identified as one of the National projects for job creation (companies to assist governments to achieve this outcome);
- The establishment of green industries as outlined in the National Growth Path and Industrial Policy Action Plan (IPAP 2);
- Introduction of Carbon tax on Ships;
- Energy efficiency design for Ships Index (investment in shipyards to update their technology for designing ships);
- Ships energy efficiency plan for all ships (training and development, monitoring and evaluation); and
- Waste Management companies market is developing.

FACILITATING RETURN ON ENVIRONMENTAL INVESTMENT - RESPONSIBLE AND PROFITABLE PORTS BUSINESS, UNINTERRUPTED!

Louis Celliers, Safe and Sustainable Ports, CSIR – South Africa

In investigating the state of Ports in Africa (including Environmental Management and Water Quality), the objectives are to:

- Conduct a rapid assessment and report upon a first African Environmental State of Ports;
- Design a regionally accepted generic framework for establishing Port Water Quality Management Plans;
- Assess capacity in LPPs to implement water quality monitoring in ports;
- Strengthen technical and environmental information and best practice exchange networks; and
- Develop and implement best practice guidelines.

The key areas of relevance to port management are:

- Environmental health and compliance assessment and monitoring;
- Informing sustainable & safe port design and operations; and
- Environmental planning and management frameworks.

The reasons for assessing and monitoring the natural environment in ports are:

- Economic - ports must operate uninterrupted using the opportunities within the hosting environment and avoiding or planning for threats;
- Ethical – being a good neighbour to the port city and the hosting environment;
- Legal requirements - many countries have established environmental quality objectives for port environments;
- International conventions - many countries are signatories to international conventions for the protection of coastal waters and oceans (e.g. London Convention); and
- Environmental and human health – many African ports are very important habitats for flora and fauna, and are used by humans for recreational purposes and as sources of food (e.g. fishing).

DISCUSSION

- Port receptions are not enough; every port should have a particular thing to do.
- We should introduce a particular measure; for example, limit speed when entering terminals.
- We should identify what individual ports can do in order to address the issue of how African ports can go green; we must come up with strategies, e.g. the introduction of carbon tax
- Strategies have to be developed and adopted by each port since the environment is not the same.
- Dumping in our oceans: PMAESA is in contact with IMO in order to prevent maritime pollution.
- There is need for the establishment of regular emergency response centre.
- This also depends on the jurisdiction of the port.
- Ports should develop an efficient management of ballast water.
- Ports in the region should develop measures to deal with the environment, for example, some of the trucks we use are too old and they emit a lot of gas, thereby polluting the environment.

PLENARY SESSION 4

U.S. COAST GUARD INTERNATIONAL PORT SECURITY PROGRAMME

LCDR Keith Donohue and LCDR Zachary Koehler

The International Ship and Port Facility Security (ISPS) Code was implemented as an amendment to the Safety of Life at Sea (SOLAS) Treaty of 1974. There are 131 nations which are members of the IMO and signatory to the SOLAS Treaty. Concurrent to the development of the ISPS Code, Congress wrote and passed the Maritime Transportation Security Act (MTSA) of 2002. The USCG is the Designated Authority that publishes and enforces regulations regarding port and vessel security, insures required assessments are conducted and plans prepared, and conduct port state control activities. The USCG International Port Security (IPS) Programme aims to engage in bilateral and multilateral security discussions

with trading nations, share and align maritime security practices and work with other regional international organisations to improve security worldwide. Its areas of interest are security organisation, physical security measures, security policies/procedures, security in ship/port interface operations and security training/exercises.

Whether the focus is anti-terrorism, counter-drug, counter-proliferation, or safeguarding surface deployments, the fundamentals of effective port security are the same.

The following are possible reasons for not conducting drills and exercises:

- Fear of excessive costs;
- Fear of shutting down operations;
- Fear of false alarm/panic;
- Fear of failure;
- Fear of injury;
- Fear of unknown;
- Lack of adequate budget;
- Lack of time; and
- Lack of guidance on how to conduct.

Communities should demonstrate a resolve to prepare for disastrous and catastrophic events. After the 9/11 attack in US, Rudolph W. Giuliani, former Mayor of New York City, said:

"We did not anticipate that airliners would be commandeered and turned into guided missiles; but the fact that we practiced for other kinds of disasters made us far more prepared to handle a catastrophe that nobody envisioned." This demonstrates that although they were not prepared for a disaster of such magnitude, at least there was some preparedness for some disaster.

IMO is developing "Port and Ship Security Manual" for "Contracting Governments, ship operators and other persons who have to implement" SOLAS Chapter XI-2 and the International Ship and Port Facility (ISPS) Code. The Security Manual will consolidate existing IMO maritime security-related material outlining:

- Security Responsibilities of Governments and National Authorities;

- Security Responsibilities of Port and Port Facility Operators;
- Security Responsibilities of Ship Operators; and
- Security Assessment Methodology for ports, port facilities and ships.

A VISION FOR VISUAL & ELECTRONIC AIDS TO NAVIGATION (AtoN) FOR AFRICA

Anthony Parker and Steve Nell

TIDELAND is a world leader in Aids to Navigation (AtoN). There are over 1000 port and coastal AtoN systems which are delivered worldwide. TIDELAND has been in business for over 50 years; it started as a supplier to offshore oil industry. Now it is a member of IALA, IAPH, UKHMA, RTCM, IEC, CIRM, and NAM.

TIDELAND's products include:

- Lighted Beacons and Floating Aids;
- Radio Aids and AIS AtoN;
- Audible Aids;
- Power Sources;
- Support Structures; and
- Remote Monitor and Control.

Its services are installation, maintenance and consultancy.

TIDELAND offers installation and maintenance of its products and all other manufacturers' products through its Safe Sea Services Company. This company provides the following services:

- Surveys;
- Installation of AtoN equipment;
- Deployment of buoys and other floating aids;
- Commissioning of fixed and floating aids;
- Design and maintenance of mooring systems;
- Risk Assessment; and
- Training.

TIDELAND's programmes are flexible. It also provides cost effective AtoN maintenance programmes which are tailored to the needs of the client.

It was concluded that:

- Visual AtoN systems retain a primary role for navigation in confined waters.
- Visual AtoN systems have a secondary role in open sea navigation and selected coastal navigation.
- Advances in technology support a user-focused approach.
- Buoy diameter and Focal Plane Height are no longer relevant.
- DTV and A/MER should be used to specify AtoN.
- Proposals in this presentation are generalised and subjective.
- AtoN providers should consider them in their local context.
- Advances in technology offer considerable scope for improved AtoN capability, as well as, extending maintenance intervals.

It was recommended that AtoN providers should consider a user-focused approach when specifying both the essential and optional extra AtoN equipment.

MARITIME DOMAIN AWARENESS SOLUTIONS FOR IMPROVED MARITIME SAFETY AND OPERATIONS

Steve J. Nell, Marine Data Solutions

Marine Data Solutions assists Maritime Authorities and Associated Industries to achieve their desired business objectives through the provision, maintenance and support of World Class Maritime Technology Solutions, such as Domain Awareness, Management Information Systems, Software Solutions, Docking Aid Systems, Aids to Navigation and Maritime Simulators.

The challenges facing the Maritime Industry include:

- Safety of Navigation;
- Piracy;
- Port Safety;
- Protecting the Environment,
- Preventing maritime accidents / Pollution;
- Risks of terrorism;
- Identification and tracking of vessels;

- Classification of vessels - “friendly” and “unfriendly”;
- Knowing what type of cargo vessels are carrying;
- Visibility of their Coastlines;
- Limited Resources (Technology, Patrol vessels, aircraft, etc.);
- Effective and Efficient Supply Chains;
- Profits; and
- Planning of Resources.

The situation before Maritime Technology:

- Manual processing of documents.
- No real ‘control/visibility’ of shipping (specifically passing by).
- No visibility of the high seas.
- Wasted resources.
- Congestion.
- Challenges in communication.
- No visibility of subsea activities.
- No statistics for business intelligence.
- Poor visibility in bad weather conditions.

What is Maritime Domain Awareness Solutions?

- Vessel Traffic Management and Information Systems.
- Port and Coastal Surveillance Systems.
- Automatic Identification Systems (AIS).
- Satellite AIS.
- Long Range Identification and Tracking.
- Over the Horizon Radars.
- Underwater Protection Systems.
- Management Information Systems.
- Integration with CCTV, sonars and other sensors.
- Maritime Training AIDS.
- Precision Navigation Systems.
- Aids To Navigation (ATON).

Main external sensors include:

- Radar (mono-static, bi-static, networked);

- Direction Finder (DF), Electronic Surveillance Measures (ESM);
- Closed Circuit Television, Infra-Red, Thermal Imagers;
- Automatic Identification System (private, universal);
- Satellite AIS;
- Over the Horizon Radars;
- Satellite imagery (geo-stationary, radar, visual);
- Sonar (passive, active);
- Vessel tracking systems (Purplefinder, fishing fleet, etc.);
- Meteorological (wind, humidity, visibility, temperature, etc.); and
- Hydrological (current, sea-state, temperature, etc.).

The information provided by Maritime Domain Awareness Solutions includes:

- Vessel Information;
- Accurate and autonomous identification of vessels (territorial waters, EEZ & High Seas);
- ETA, position, speed;
- Dimensions, Draft, type of cargo;
- Pictures, Video Streaming;
- Classification of Vessels;
- Alerting authorities of history;
- Resource information;
- Status of Berths / occupied, unoccupied;
- Depths – linked to Hydrographical Data;
- Teams on duty and their cost; and
- Support Vessels like Tugs, Pilot Boats.

The benefits of using Maritime Technology Solutions are:

- Increased visibility of coastlines, EEZ and High Seas;
- Automatic Collision Warnings in designated areas;
- Critical Vessel Information available to competent Authorities ahead of vessel arrival;
- Previous Ports visited;
- History of possible offences;
- Cargo Types (dangerous cargo);
- Previous registration details (if vessel has changed names/details);

- Oil spill Detection as well as source;
- Facilitate Data / information sharing ;
- Local Authorities (Defense Intelligence, Navy, etc.);
- Regional cooperation;
- Supporting and where necessary enforcing best practice;
- Reducing Risk;
- Improved Search and Rescue (SAR) operations;
- Operations/Efficiency;
- Real-time tracking of vessels and cargo/containers;
- Improved resource planning and scheduling;
- Capturing data at the source;
- Information Sharing with key stakeholders;
- Ship Agents;
- Port Terminal Operators, Rail Operators;
- Readily Providing Business Intelligence;
- Statistics;
- Planning of future infrastructure; and
- Supporting and where necessary enforcing best practice.

It was concluded that:

- The Maritime Domain presents the greatest opportunity for economic growth, but, unfortunately, also for the growth of illegal activities (piracy, drugs, etc.);
- Maritime Domain Awareness will feature on the priority list of governments;
- Achieving Maritime Domain Awareness will require international cooperation and the implementation of technology that facilitates the detection, identification, classification and surveillance of vessels and sharing of relevant information with the right people at the right time;
- Global Supply Chains will be more visible and stakeholders can plan with more confidence and exploit more opportunities; and
- There will be improved efficiency.

CRUISE INDIAN OCEAN ASSOCIATION (CIOA) INITIATIVES

Thomas Mathibela, Secretariat, CIOA

Vision & Mission of CIOA

- To position the Southern & East Coast of Africa and the Indian Ocean Islands as an attractive destination for cruise liner itineraries.
- To create an enabling environment for the development of the Southern & East Coast of Africa and the Indian Ocean Islands as a destination for cruise liner itineraries.

Objectives

- To jointly promote and market the southern and eastern seaboard of Africa and the southern Indian Ocean Islands as a destination for cruise itineraries;
- To maintain a research and knowledge management system regarding port networks and other strategic information pertaining to cruise tourism;
- To foster cooperation between the regions ports, government and cruise operators;
- To encourage the development of cruise business in the region;
- To keep members of the latest developments in this industry by attending cruise related conferences and joining relevant international bodies;
- Ensuring that the regions tourism stakeholders get involved in/ participate in cruise tourism promotion;
- Urge members to use PMAESA Ports as a base for cruise operations; and
- Provide a regional forum for an integrated and unified approach to cruise tourism.

Positioning and Branding

- Key differentiator or distinctive experience offered by the East Coast of Africa and the Indian Ocean Islands as a destination for cruise liner itineraries.
- Developing a destination brand that offers a promise of a unique or distinctive experience.

Project

CIOA launched at Indaba 2009 in Durban

CIOA Brochure and Website launched

SeatradeAfrica Forum 2011 in Durban

THE CLUSTER CONCEPT

***Suresh Dwarika, Director, Centre of Excellence, The eThekweni Maritime Cluster, Lecturer
ISPS Code***

The cluster concept was created out of the need for more organised and orchestrated response to the supply chain disaggregation. Seamless interaction of stakeholders seemed to be a pipe dream. There was need for stimulus resulting in more engagement. There was a need for stimulus for interaction. The management of the city of Durban took a strategic and internationally accepted view that the port is the economic driver of the city and should be nurtured and stimulated.

Macro Targets have to be aligned on order to:

- facilitate and enhance the expansion of international trade and tourism in general and exports in particular.
- ensure cost effective and efficient shipping operations.
- promote international relations with other countries and international organisations involved in maritime activities.
- promote a well-defined regulatory framework that is flexible enough to changing needs and circumstances and to ensure orderly safe and reliable maritime offerings.
- increase access to employment opportunities.
- promote social integration.

The following are key interventions for economic growth:

- Having a defined maritime Skills strategy - Centres of Excellence;
- A focus on SHREQ, ISPS, Piracy;
- Maritime Economic empowerment – a key institution strategic objective of SAMSA;
- Environmental Sustainability GHG COP 17;
- Maritime awareness - National and World Maritime Day; and
- Multilateral maritime strategy involving PMAESA, SADC, COMESA, NEPAD, IMO, Intl. Assoc. of Ports and Harbours IAPH and the IOMOU.

The two main areas of focus are maritime skills development and safety.

DISCUSSION

- Use of armed guards on vessels- the bill for this is in the making.
- New guidelines are expected to come out soon to regulate the use of armed guards in merchant ships.
- An international convention was adopted on implementation of ports' call on coast guards to inspect their facilities to ensure that ships call at their ports.

CLOSING REMARKS: 29 NOVEMBER 2011

The CEO of NAMPORT, Bisey Uirab, thanked the PMAESA Board for giving Namibia the opportunity to host the 37th PMAESA Conference. He also thanked the presenters and other delegates to the conference. Uirab said that the papers presented were of high quality and that they generated enriching discussions. Delegates at the conference were able to have constructive engagements. Delegates were able to learn from each other and to establish business and social links. Uirab said that when these links develop, people will say it was in Swakopmund, Namibia, where it all started. He commended the high integrity of the delegates noting that they were well behaved throughout the Conference period. Uirab paid tribute to NAMPORT and PMAESA teams for organising the Conference. He said the NAMPORT team members, the PMAESA AMBASADORS, had made NAMPORT and Namibia proud by the splendid job they had done in organising a world class conference.

The Chairman of PMAESA, Tau Morwe, said that the Conference had been rare in that during the second day of the Conference, the conference hall was still full. Morwe thanked the delegates for staying until the last day which he said was not the case in most conferences. The Chairman said there was still a lot of work to be done in order to leave a good legacy for future generations. He said some of the major challenges that the organisation was faced with were piracy and attracting investment in ports. There was going to be a meeting later on to pick on the issues that came up from this Conference. Morwe thanked the sponsors, NAMPORT for successfully hosting the Conference, speakers, Transnet for the diner and cocktail at the Seaside Hotel, Old Mutual for the diner and

cocktail in the dunes, PMAESA Ambassadors for the excellent organisation, the Mayor of Swakopmund and the people of Swakopmund for their hospitality.



Figure 6 It was a Sea Affair!

END OF CONFERENCE PROCEEDINGS