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Secretary General

Satoshi Inoue IAPH Head Office



HE Port of Livorno is a multipurpose port where all kinds of cargo can be handled by all kinds of vessels. The term also includes passenger traffic, which can be divided as follows:

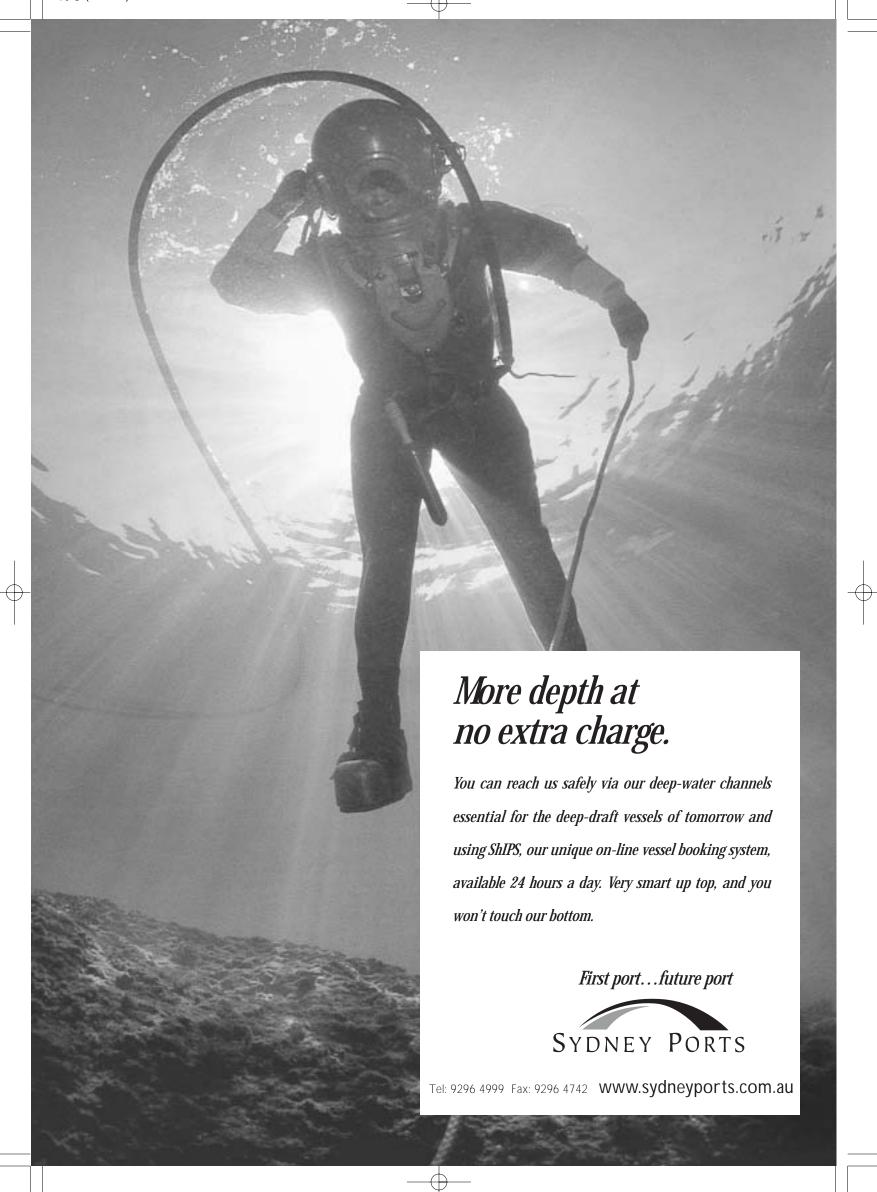
- Ferries: mainly ferries to and from Sardinia and Corsica The Port of Livorno is located at latitude 43° 32'.6

North, longitude 010°17'.8 East. In The Port of Livorno the first P. A. C. system (Port Approach Control) is now operating: it guarantees the safety of the shipping and the protection of the environment in and around the dock.

Distribution of the various kinds of traffic within the port is made in such a way as to allow as much uniformity of activity as possible in each area, and to avoid

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HE Executive Committee met in Auckland, New Zealand for two days on October 25 and 26 October 2001, at the Auckland Heritage Hotel, under the joint sponsorship of the Ports of Auckland Ltd (Mr. Geoff Vazey, Chief Executive), Port of Napier Limited (Mr. Garth Cowie, Chief Executive) and Westgate Transport Limited (Port Taranaki) (Mr. Roy J. Weaver, Chief Executive).

The Exco meeting was preceded by the IAPH/IMO Interface Group Meeting (chair: Mr. Pieter Struijis, Executive Director, Rotterdam

Municipal Port Management, the Netherlands) on October 24 2001.

The Exco Meeting included a Regional Exco Meeting in the morning hours of October 25 and was followed by three 3-hour sessions in the afternoon hours of the same day and of the following day. Delegates were invited to join the technical visit to the port organized on October 27, 2001.

THE SOCIAL and Technical Visit program was for (1) 1900: Thursday, October 25 2001, Dinner and Cultural Presentation at National Maritime Museum, Hobson Wharf; (2) 1900: Friday, October 26 2001, Dinner at Hilton Hotel, Princess Wharf; and (3) 1200: Visit to the Ports of Auckland on board the work vessel and visit to the AXIS Intermodal Terminal

Officers and Exco Members present were:

- Dr. Akio Someya, Nagoya Port Authority, as IAPH President, Japan
- Mr. Pieter Struijis, (as above), as the 1st Vice President, and Chair, IAPH/IMO Interface Group, the Netherlands
- Mr. Thomas Kornegay, Port of Houston Authority, as 2nd Vice President, USA
- Mr. John Hayes, Sydney Ports Corporation, as the 3rd Vice President, Australia

- Mr. Dominic J. Taddeo, Montreal Port Authority, as Immediate Past President, Canada
- Mr. Siyabonga Gama, National Ports Authority of South Africa, as Conference Vice President, South

Africa

- Mr. S.M.E. Luhigo, Tanzania Harbours Authority, Tanzania
- Mr. Goon, Kok-Loon, PSA Corporation, Singapore
- Mr. Sumardi, Indonesia Ports



22ND IAPH WORLD PORTS CONFERENCE

Corporation III, Indonesia

- Mr. Geoff Vezey, as above
- Mr. Susumu Naruse, Director, International Affairs Office, Bureau of Ports and Harbours, Ministry of Transport, Japan

Present by proxy were:

- Mr. Dennis Dunn, Associated British Ports, UK (Entrusted to Mr. Pieter Struijis)
- Mr. Kim, Young Nam, Director-General, Bureau of Ministry of Maritime Affairs and Fisheries, Korea (entrusted to Dr. Someya) (He was also represented by Mr. Yoon, Buyng-Gu, Director, Port Construction Division, Ports & Construction Bureau, Ministry of Maritime Affairs and Fisheries, Korea

Apologies were received from

- Datin Paduka O.C. Phang, General Manager/CE, Port Klang Authority, Malaysia
- Mr. Aliou Diallo, Director General, Conakry Port Authority, Guinea
- Mr. Bernard S. Groseclose, Jr., President & CEO, South Carolina State Ports Authority, USA
- Mr. Bruno Vergobbi, General Manager, Port of Dunkirk, France
- Mr. Eric Bryuninckx, CEO, Antwerp Port Authority, Belgium
- Mr. Errol L. Bush, Port Director, Port Authority of the Cayman Islands
- Mr. Gunnar Nygren, President & CEO, Port of Göteborg, Sweden
- Mr. Larry Keller, Executive Director,



Port of Los Angeles, USA

• Mr. Lu Haifu, Port Director, Shanghai Port Authority, China

Absent were the following two persons:

- Mr. David Bellefontaine, Former President & CEO, Halifax Port Authority, Canada, and
- Mr. Oliver F.L. Yu, Former Director, Kaohsiung Harbor Bureau, China

IAPH Legal Counselor present was:

 Mr. Anthony P. Morrison, Water Ways Authority, Australia as Legal Counselor

Also present were:

• Dr. Satoshi Inoue, IAPH Secretary

General;

- Mr. Rinnosuke Kondoh, Deputy Secretary General, IAPH;
- Mr. Peter van der Kluit, IAPH Representative in Europe and IAPH Liaison Officer with IMO;
- Mr. Garth Cowie (as above), as the Chair of the Finance Committee;
- Mr. Peter Mollema, Rotterdam Municipal Port Management, the Netherlands, as Member of the IAPH/IMO Interface Group, the Netherlands;
- Mr. Jules Yap, PSA Corporation, Singapore;
- Miss. Ritsukore Oharu, Nagoya Port Authority, as Secretary to Dr. Someya, Japan; and
- Capt. Takehiko Nakayama, ditto



A G E N D A

Thursday, October 25 2001

0900/1200: Asia/Oceania Regional Exco Meeting

- · Welcome and introduction by Regional Vice President
- **Apologies**
- Vacancy in EXCO created by departure of Mr. Yu: Process for electing a replacement with the Region
- Membership in the region
- · Issues f interest and concern to A/O Regional Members
- Planning for IAPH Conference in Durban,
- · Regional Meeting and full IAPH Board Meeting, 2002
- Exco Meeting, Kobe, Japan, October 2002
- Proposed joint meeting with UN ESCAP 2002
- · Forthcoming industry conferences

1400/1700: Exco Full Session 1

- Welcome by the Host, Mr. Geoff Vazey, CE, Ports of Auckland Limited.
- Remarks by President Someya to be followed by a moment of silent prayer for the loss of life of the Port Authority of New York and New Jersey
- · Consideration on further steps by IAPH for showing IAPH concerns and support to
- · Consideration on the impacts on the mostnearest mid-term Board meeting
- 2002 Mid-Term Board Meeting in Abu Dhabi, UAE
- · Financial reports by Mr. Cowie

Friday, October 26 2001

0900/1200: Exco Full Session 2

- Consideration and recommendation on the replacement for vacancies in the office of
- On the 2003 Conference: Joint presentation by Mr. Gama and Dr. Inoue based on the results of the questionnaires
- · Consideration on the Revision of the By-Laws: Presentation by Dr. Inoue and supporting remarks by legal officers

1400/1700: Exco Full Session 3

Reports and recommendations of the IAPH/IMO Interface Group

IT and IAPH: President's Letter to Mr. Groseclose, Long Range Planning/ Review Committee

Review of technical committee work sched-

Future meetings

- Schedules of regional meetings by Regional Vice Presidents
- 2002 Exco Meeting in Kobe, Japan
- 2004 Mid-Term Board Meeting (In the American Region)
- 2007 Conference (In the American Region)

Expressing Sympathy to the PANYNJ

OLLOWING the moment of silent prayers to the victims of the terrorist attack on September 11 2001, Dr. Inoue informed that a brief report on the actions taken by the Head Office concerning the matter was sent to all members on October 4, 2001. Exco unanimously agreed to send the

letter of sympathy addressed to Mr Richard M Larrabee, Director, Port Commerce Department, The Port Authority of New York & New Jersey, being signed by the Officers of IAPH. Mr. Kornegay assured that the letter is to be hand delivered to Mr. Larrabbee shortly when he visits New York.



INTERNATIONAL ASSOCIATION OF PORTS AND HARBORS (IAPH)

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Mr Richard M Larrabee

Director
Port Commerce Department
The Port Authority of New York & New Jersey

Expressing IAPH's Sympathies and Concern to The Port Authority of New York & New Jersey

We, undersigned, on behalf of the entire membership of the International Association of Ports and Harbors (IAPH), on this 25th day of October 2001 on the occasion of its meeting of the Executive Committee, Auckland, New Zealand hereby express renewed condolences for the people whose lives were lost in the terrorist attack of September 11 2001, and sincere sympathies to their family members, friends and colleagues.

Amongst others, we were saddened by the loss of life of many friends employed by the Port Authority with whom many of our people had enjoyed business and friendly relationships over the years. We wholeheartedly pray for their peaceful rest.

We were further shocked by the destruction of the World Trade Center New York which was indeed the headquarters of the New York and New Jersey Port Authority, a staunch supporter of the cause of our Association. The World Trade Center New York was not just the tallest building in New York but more importantly the symbol of free trade of the world. We are confident New York will remain an internation symbol of World Trade.

We are greatly encouraged by the effort exerted by the people of the Port Authority for carrying on with their daily business functions. Our admiration goes to each one of our colleagues of the Port Authority.

We all know, despite this savage and cruel attack, the torch held high for freedom by the Statue of Liberty and its spirit are not affected at all. We vow to work and go forward under the motto of "World Peace through World Trade, and World Trade through World Ports".

Faithfully yours.

President Akio Someya, Nagoya Port Authority, Japan

First Vice-President
Pieter Struijs, Rotterdam Municipal Port Manag

Second Vice-President H. Thomas Kornegay, Port of Houston, USA

Third Vice-President John Hayes, Sydney Ports Corporation, Australia

Immediate Past President
Dominic J. Taddeo, Montreal Port Authority, Canada

Conference Vice President Siyabonga Gama, National Port Authority, South Africa

Secretary General Satoshi Inoue, IAPH Head Office, Japan

"World Peace Through World Trade" - "World Trade Through World Ports' NGO Consultative Status: ECOSOC, IMO, UNCTAD, UNEO & WCO



WTO Ministerial Conference approves China's accession

Press/252 10 November 2001

HE WTO's Ministerial Conference approved today (10 November) by consensus the text of the agreement for China's entry into the WTO. China will become legally a member 30 days after the WTO receives notification of the ratification of the agreement by China's Parliament.

The documents adopted today by the Conference are the report of the Working Party for the Accession of China, the protocol of accession, which includes the terms of membership, and the schedule of China's commitments on market access for goods and services

"This is an historic moment for the WTO, for China and for international economic cooperation", said WTO's Director-General, Mike Moore, commenting on the approval of China's accession.

"China, one of the fastest growing economies in the world, has made tremendous progress in the last decade in reducing poverty thanks to an economic system increasingly open to trade and foreign investment. Now this economy will be subjected to the rulesbased system of the WTO, something which is bound to enhance global economic cooperation", said Mr. Moore.

After the approval of China's accession, the head of the Chinese delegation, Shi Guangsheng, Minister of Foreign Trade and Economic Cooperation, said "We need to invite all members to formulate the international trade rules of the new century through equal participation and consultation, so as to enable more developing countries to share the opportunities and interests brought about by the economic globalization and to avoid the further widen-

ing of the gap between rich and poor and protect some countries against being marginalized."

Under the chairmanship of Ambassador Pierre-Louis Girard of Switzerland, the Working Party concluded on 17 September almost 15 years of negotiations with China and agreed to forward some 900 pages of legal text for formal acceptance by the 142 Member governments of the WTO.

As a result of this negotiation, China has agreed to undertake a series of

important commitments to open and liberalize its regime in order to better integrate in the world economy and offer a more predictable environment for trade and foreign investment in accordance with WTO rules.

For more information, please contact:
World Trade Organization
rue de Lausanne 154,
CH-1211 Geneva 21,
Switzerland
Homepage: http://www.wto.org/

WTO: Conference ends with agreement on new programme

INISTERS from WTO member governments approved a work programme — which they called "broad and balanced" — that includes negotiations



Mike Moore

on a range of subjects and other tasks for the coming years.

"The success of our conference at this difficult time is ... especially important as a reaffirmation of the determination of the international community to work together to respond to these challenges for a better future," said Conference chairman, Qatari Finance, Economy and Trade Minister Youssef Hussain Kamal.

Director-General Mike Moore said: "This conference has been a remarkable experience for all of us. It has been difficult, because we have been dealing with some of the most sensitive issues in international trade policy, and many governments have had to move towards the positions of their partners to make this agreement possible.

I have been impressed by the readiness which so many ministers have shown to understand and accommodate the needs of others, and by the strength of the common determination to make the conference a success — not just for the sake of national interests, but very much because everybody appreciated the need to give a signal of confidence in this very difficult time of international uncertainty."

The work programme, spelt out in two

declarations — a main declaration and one on intellectual property (TRIPS) and public health — and one decision on implementation — i.e. developing countries' difficulties in implementing current WTO agreements.

The main ministerial declaration includes elaboration of objectives and timetables for the current negotiations in agriculture and services, negotiations or possible negotiations in a range of issues such as industrial tariffs, trade and investment, trade and competition policy, some aspects of trade and the environment, implementation, and so on.

The declaration gives a boost to developing countries and commits ministers to address "the particular vulnerability of least developed countries and the special structural difficulties they face in the global economy". Numerous items in the work programme deal with this.

Negotiations under the work programme are to be concluded not later than 1 January 2005. The only exception is the negotiation on improving and clarifying the Dispute Settlement Understanding, which is to conclude by the end of May 2003.

Other elements of the work programme are to be concluded by the end of 2002 or by the next Ministerial Conference — the conferences have to take place at least once every two years.

The declaration on TRIPS and public health spells out ministers' recognition of various flexibilities that the agreement gives to governments to deal with health problems. It also sets out specific tasks for the WTO TRIPS Council.

Agreement was reached on 14 November after all-night consultations on remaining disagreements.

Meanwhile ministers agreed to grant the European Union a waiver from its non-discrimination obligations, in order to enable it give preferential tariff concessions to the African, Caribbean and Pacific (ACP) countries that are former colonies of its member states.

Agreement on this also required intensive consultations because of concerns raised by some developing countries

that are not ACP members. Sent to IAPH members (World

IN PH

Association

World Ports

New IAPH Web site received 21,046 hits by November 20

APH successfully launched its totally redesigned Web site with a new domain name on 1 January 2001 at the start of the 21st century. The new site is now located at < "http://www.iaphworldports.org/" http://www.iaphworldports.org/ >

It is totally new in design and functions, and offers "Members Area" where only IAPH members with their user ID and password can enter and have access to the latest information on our activities including IAPH publications on-line.

Such IDs and passwords were issued to the chief executive officer of every member port or organization in December 2000. Members are requested to share their own user ID and password among concerned staff of the organization.

In the Members Area, we have also installed the "Open Forum" where IAPH members may post their opinions or raise questions on any subject of common interest to initiate on-line discussion. In parallel with "Open Forum", the "IAPH Email Discussion" has also started, where members can exchange views and opinions regarding various issues by means of email. For better and enhanced communication, IAPH members are strongly requested to visit the new Web site and take part in these newly installed "Open Forum" and "IAPH Email Discussion".

ATTENTION!

Closing of IAPH's website < www.iaph.or.jp > as of 31 October 2001

APH has retained its domain name <iaph.or.jp> since it launched, in January 2001, its new website <www.iaphworldports.org> so that the visitors to our website <www. iaph.or.jp> are directed to the new website and their e-mail messages to the new domain. Please note that the domain name <iaph.or.jp. was closed as of 31 October 2001 and that this domain can no longer be accessed.

Correction to the Minutes of the Montreal Meeting of the Legal Protection Committee, as recorded in the October issue of this journal

At the advice of Chairman Vergobbi of the Committee, this is to add the names of Mr. Hugh Welsh and Mr. Jean Mongeau as Members of the Committee to the list of regrets as so recorded in the minutes

Head Office

WCO Checklist of **Precautionary** Measures in Mail Handling

Addressed to Customs Administrations -

Customs Organization, Brussels) prepared a list of precautionary measure in mail handling and sent to its member customs administrations (WCO Ref: 01.EL-376E/W.R.TE7-80, dated November 5 2001). Secretary Genera. Inoue, anticipating that these measures would be implemented in one way or another through customs administration at your port, sent the document to all regular members so that members are better prepared for cope with the initiatives to be taken by the customs agency at each port.

In doing so, Dr. Inoue invited to inform the Head Office of other precautionary measures implemented at member ports as such information would be of great reference to other ports. However, needless to say, it would be possible to do so only if and where the disclosure of such information is permissible.

For the WCO checklist, please see page 21 of this issue.

Dredging: the environmental facts - where to find what you need to know

joint product of International Association of Dredging Companies (IADC), IAPH, International Navigation Association (PIANC) and World

Organization of Dredging (WODA) was sent to all regular members on November 8 2001. For additional free copy, please write to the Head Office.



Visitors

N November 5 2001, Mr. Alexander Krygsman, Former Port Director, Port of Stockton, California, together with Mrs. Kyoko Krygsman, his wife, and Mr. Akira Yoshimura, Representative of the Port of Stockton in Japan, visited the Head Office and met Dr. Inoue and his staff. Mr. Krygsman was elected Honorary Member of IAPH at the Montreal Conference for his longstanding service as Exco Member.



N November 7, 2001, Mr. Erik Stromberg and Ms. Sarah Gaillard, Director for Business Development, North Carolina State Ports Authority (NCSPA), visited Tokyo on their way from the trade development mission to Asia. In Tokyo, at the arrangement made by Mr. Tadashi Aoki, the Japan representative of NCSPA, met with R. Kondoh of IAPH to exchange views on the recent trade affairs in the region.

N November 12 2001, Mr. Paul Jumelet, Reporter of Nieuwsblad Transport, the Netherlands, visited the Head Office and met with Mr. R. Kondoh to exchange views on the trades in the region.

Membership Notes

Changes (Changes involved are underlined)

Nanaimo Port Authority [Regular] (Canada) Chairman of Board of Directors:

Mr. Bryon E.W. Calverley

Port of Hamburg Marketing Association [B] (Germany)

Chairman & CEO: <u>Dr. Juergen Sorgenfrei</u>

Robert Brown Associates [A-3-3] (U.K.)

Vignes Grandes

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Address:

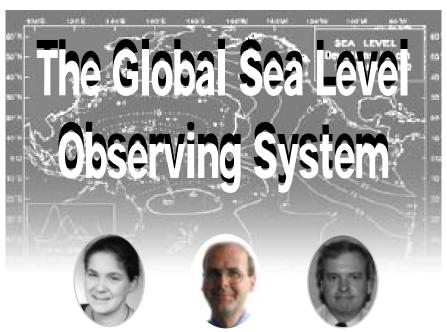
Contributors to the Special Port Development Technical Assistance Fund (IPD Fund) 2001

(in order of receipt) Organization US\$ Date of Receipt Port Autonome d'Abidjan 9-Aug-01 Port of Brisbane Corporation 4-0ct-01 Australia 1000 **Maldives Ports Authority Maldives** 9-0ct-01 Rotterdam Municipal Port Management Netherlands 1000 9-0ct-01 **Sydney Ports Corporation** Australia 1000 15-0ct-01 Dr. Susumu Maeda 1-Nov-01 Japan 200 Marine Department, Hong Kong China 500 16-0ct-01 Canada 500 19-0ct-01 Vancourver Port Authority Johor Port Authority Malaysia 1000 5-Nov-01 **Montreal Port Authority** Canada 500 8-Nov-01 Total 6930

As of November 15, 2001

^{*} Port of Brisbane Corporation: The amount is corrected from \$985 to \$1000. (Head Office)





Johanna Heilmanna, Thorkild Aarupa and Philip Woodworthb

- a Intergovernmental Oceanographic Commission, Paris, France
- b Proudman Oceanographic Laboratory, Bidston Observatory, UK

Introduction

HE subject of long term changes in global sea level due to climate change receives a lot of publicity because of the potential impacts on the environmental, economic and social infrastructure at the coast. According to the recent Intergovernmental Panel on Climate Change (IPCC) Third Assessment Report, global sea level increased within the range 10-20 cm during the last century, and could increase within the range 9-88 cm during the next, with a central estimated value of 48 cm. It is important to realise that many of the longest records of sea level at our disposal did not originate from 'scientific' studies, but were the by-product of measurements made for other purposes, notably harbour operations and navigation. Many of the great ports of the world have long sea level records stemming from the 19th century if not before: Amsterdam, Liverpool, New York, San Francisco, Bombay and Sydney are just a few examples. These records are now of great importance to sea level change studies.

The GLOSS Programme

In the 1980s, the Intergovernmental Oceanographic Commission (IOC) initiated a programme called the Global Sea Level Observing System (GLOSS). While many countries had donated (and continue to donate) their sea level data on a regular basis to the global sea level data bank (called the Permanent Service for Mean Sea Level, PSMSL), GLOSS was established to develop the worldwide network of tide gauges on a more professional basis with, as far as

Fig 1. GLOSS Core Network defined by GLOSS97

possible, common high standards for hardware and data transmission, and, consequently, common high standards for the resulting data sets. This development was analogous to the construction many years ago of coordinated global networks for meteorology with data shared between all participating national agencies.

GLOSS has now reached a level of development which can to some extent be considered a plateau. The GLOSS Core Network of approximately 280 stations around the world (Figure 1) is approximately two-thirds in place. However, there are important gaps in some regions, the most obvious being those for which access is difficult such as Antarctica. In addition, there are extensive parts of Africa, South America and Asia where help is required to complete the network. That is why we need once again the help of organisations such as the Association of Ports and Harbours, together with related national agencies such as Hydrographic Offices, if the network is to develop fur-

It is important to realise that sea level data are not required simply for long term Mean Sea Level change studies. Sea level data have many applications in what is sometimes called 'operational oceanography'. For example, GLOSS has established a 'Fast Centre' at the University of Hawaii through which we are attempting to establish a route for the transmission of data from gauges to international data banks within a few days. These data can then be used by oceanographers, together with data from satellites (Figure 2), within ocean numerical models in order to predict 'ocean weather' in analogous fashion to the use of air pressure and wind data within operational weather forecasts.

orecasts.

Sea level data also have a wide range of regional, national and local (e.g. port) applications. That is why the GLOSS programme has worked to effectively densify the Core Network in certain regions. For example, there are sub-programmes in the Pacific,

ERS-I astellate alternate paint Dorsa strates topography Lone attended topography

Fig 2. Schematic Showing the complementarity between measurements of sea level from space (the ERS-2 satellite rader altimeter in this case) and from tide gauges

Caribbean and Mediterranean which have a greater number of gauges than the average of the Core Network because of their particular oceanographic requirements. At the national levels, many countries have networks for flood warning from storm surges and share those data at a regional level with their neighbours. And, of course, at the local level nearly all ports have some kind of system in place to measure sea level for their own operations. Such a system may range from a modern digital sea-level recorder which displays the measurements in real-time and records the observations on a computer. to a traditional analogue system that records observations on a paper chart from which it is possible to digitise the observations if required.

A purpose of this article is to ask for the help of the Association in ensuring that, whenever gauges are installed, consideration is giving to the potential multiple usage of the data. That may mean that hardware installed might be more expensive than the port was considering initially. However, the same data should then be exploitable by a wider range of users, which should lead to cost savings and efficiency gains overall. The same gauge data might then be used in real-time for:

• The provision of operational sea level

OPEN FORUM

data to ships entering or leaving harbour.

The delivery of data to storm surge and

- The delivery of data to storm surge and tsunami warning systems
- The management of sluices and barrages

In addition, the same data can be used in delayed mode for:

- The determination of tidal constituents for application to tidal prediction
- The computation of 'extreme levels' (the probabilities of exceeding given levels in terms of 'return period') for input to coastal engineering design including work on sea defences and port development
- The wide range of scientific studies including those of long-term changes of Mean Sea Level and the statistics of extremes for insurance purposes.

All of these applications interact to some extent. For example, a global sea level rise will impact the growing population in the coastal zone, with the most serious impacts including increased coastal erosion, restriction of run-off, salinisation of estuaries, and increased risk of coastal flooding. At present, this is mostly a 'scientific' study. However, it will clearly have very practical appli-

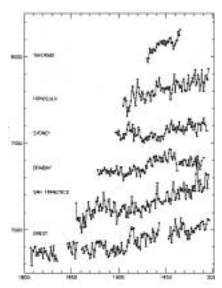


Fig 3. Long sea level records from each continent: Takoradi, Ghana (Africa), Honolulu (Pacific), Sydney (Australia), Bombay (India), San Francisco (USA) and Brest (France). Each record has been offset vertically for presentation purposes. Observed trends for the twentieth century are 3.1, 1.5, 0.8, 0.9, 2.0 and 1.3 mm/year respectively. The effect of postglacial rebound as simulated by the Peltier ICE-3G model is less than or of the order 0.5 mm/year at each site. Trends for the next century are estimated by the IPCC to be several times larger.

cation as time progresses. A second example concerns the rapid development of models of the ocean (temperature, salinity, currents, water quality etc.) which assimilate sea level measurements along with other parameters to provide the most reliable forecasts. These modelling products may in a few years become standard operational tools with, for example, currents made available to vessel traffic service centres and as navigational overlays on electronic chart systems.

It is clear that we have to monitor sea level changes in order to provide the necessary real-time information for operational purposes, and also to derive the long-term scientific insight by which we may understand better how the ocean works, and thereby make predictions on different time scales. That is what the GLOSS programme is trying to do.

Requests to Ports and Harbours

There are several ways in which ports and harbours and other national agencies can contribute to the enhancement of the GLOSS Core Network and its sub-networks.

Upgrade and Renovation of Tide Gauges -

As mentioned above, sea level measurements in ports and harbours are often required by a wide range of users. The different applications imply different standards: real-time operations such as ship movements demand accuracies of around 0.1 m whereas longterm monitoring of sea level trends (Figure 3) calls for accuracies of order 0.01 m or better. However, in practice there are advantages in making all observations to the highest standards so that the data are available for all applications. The difference in cost between a high quality sea level gauge and a lower quality one is small. Many harbour agencies will in the coming years upgrade and renew their tide gauges. Therefore, we would encourage harbours to aim if possible for replacement by high quality gauges. Advice on types of tide gauge technology is available from the PSMSL Training web page mentioned in the Table.

Data submission -

Each country will have 'GLOSS Contacts' who are people nominated by their Governments to keep in touch with the GLOSS programme (and especially with the GLOSS Technical Secretary at IOC), deliver status reports on their national sea level recording to

IOC, and aid the flow of data to international data centres. Consequently, good communication should exist between the Contacts and the people responsible for the gauges in the ports. Data submission to the international data banks such as the PSMSL has always been of great importance in delayedmode, and near real-time delivery of data for local operational purposes and for delivery to the GLOSS Fast Centre is becoming increasingly more important. Consequently, there are increasing demands on GLOSS Contacts to communicate effectively. The help of port authorities is requested to make national dialogues work as efficiently as possible, so that international communications between Contacts, IOC and data banks can in turn be improved further.

Historical Sea Level Data – Data Archaeology

GLOSS has a particular interest in the continuation of sea level recording at sites with very long historical records whether those sites are formally in the GLOSS Core Network or not. Historical tide gauge data are usually in the form of paper charts and tabulations, and their conversion to modern computeraccessible media is called 'data archaeology'. These data sets are of potential great value to the sea level community in a range of applications, of which the most obvious is the extension of existing sea level time series as far back as possible in order to understand more completely the timescales of sea level change. Information about the extent of historical records is currently being collected by the GLOSS programme, and port authorities are asked to inform GLOSS if they have archives of such information in their organisations. Information may be sent to the GLOSS Technical Secretary in IOC.

Summary

GLOSS operates in the framework of the United Nations (i) to promote the establishment of networks of well-maintained tide gauges, (ii) to facilitate the exchange of sea level data, and (iii) to provide technical and scientific advice on sea level to both governmental and non-governmental bodies. In order to achieve these objectives, GLOSS must work with all other relevant organisations, of which the Association of Ports and Harbours is one example. To summarise the above short note, GLOSS hopes for the continued active participation by ports and harbours to:

- Upgrade as far as possible to high quality tide gauges when renovating national tide gauge networks or individual gauges
- Improve data delivery for GLOSS gauges and
- Help in the identification of historical sealevel data sets

Additional Information on GLOSS and Related Organisations

Global Sea Level Observing System (GLOSS)

Contact:

Intergovernmental Oceanographic Commission (IOC) UNESCO

1, rue Miollis 75732 Paris Cedex 15, France Attn: Dr. Thorkild Aarup

Tel: +33 (0) 145 684019

Fax: +33 (0) 145 685812

http://www.pol.ac.uk/psmsl/programmes/gloss.info.html Email: t.aarup@unesco.org

For more information on GLOSS download a copy of its Implementation Plan via the above web page or contact Dr. Thorkild Aarup via the above email. The same web page also provides a link to various other related reports and data sets concerning GLOSS.

Permanent Service for Mean Sea Level (PSMSL)

http://www.pol.ac.uk/psmsl/ Email: psmsl@pol.ac.uk

The PSMSL is the global data bank for long term sea level change information. Its data bank consists of approximately 50000 station-years of monthly and annual means of sea level. The PSMSL also functions as the long term GLOSS International Archiving Centre. The PSMSL also provides a range of information on its Training Web Page (Information, Reports, Manuals, Tidal analysis software etc.) accessed via the above address.

University of Hawaii Sea Level Center (UHSLC)

http://www.soest.hawaii.edu/UHSLC/ Email: markm@soest.hawaii.edu

The UHSLC hosts the Joint Archive for Sea Level and maintains a Research Quality Data Set of hourly, daily and monthly values of sea level for several hundred stations primarily but not exclusively in the Pacific. The UHSLC is now the nominated GLOSS Fast Centre for the collection and transmission of near-real time data.

Other Sea Level Programmes and Data Sets

See http://www.pol.ac.uk/psmsl/programmes/

Visit the new IAPH website launched on 1 January 2001 at

http://www.iaphworldports.org/

to find out more about IAPH and the world port industry IAPH represents.

For IAPH members to enter the "Members Area",
you need a user ID and a password assigned by the IAPH Secretariat in Tokyo.

NB.: Our group email address is now <info@iaphworldports.org>, while ourformer email address at
<iaph@msn.com> was closed and terminated in November 2000.

Emerging Issues in Transport, Communications and Infrastructure Development: Globalization and Integration of Transport

(Item 5 (a) of the provisional agenda)

REGIONAL SHIPPING AND PORT DEVELOPMENT STRATEGIES

INTRODUCTION

- 1. The economies in the ESCAP region control around 40 per cent of the world's shipping fleet. In the container sector, out of the world's top 20 container shipping operators, 11 are based in the ESCAP region and control 28 per cent of world 20-foot equivalent unit (TEU) capacity in service.
- 2. Major maritime countries in the region such as Japan, China (including Hong Kong, China and Taiwan Province of China), the Republic of Korea and Singapore are net suppliers of maritime services.
- 3. The ESCAP region accounts for more than half of the world port container throughput. The four busiest container ports in the world are in the ESCAP region, handling 25 per cent of world container throughput.
- 4. It is estimated that about 60 per cent of the world's seafarers are supplied by countries in the ESCAP region. More than 60,000 seafarers are being trained at maritime training institutes in the region every year.
- 5. The ESCAP region dominates the world shipbuilding industry. More than 80 per cent of new ships are built at shipyards in the region. Two shipbuilding countries in the region, Japan and the Republic of Korea, account for 63 per cent of world shipbuilding capacity.
- 6.These statistics, however, do not tell the whole story of the maritime sector in the ESCAP region, where countries are at different levels of development.
- 7. Container shipping lines, faced with intensified competition in the liner market over the last two decades, have had to adopt innovative, productivity-enhancing and cost-cutting strategies. Seeking further economies of scale, shipping lines continue to rationalize services, deploying larger ships to call



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(Presentation made at Ministerial Conference on Infrastructure held on November 12-14, 2001 in Seoul)

SUMMARY

COBALIZATION has brought changes in the structure of the world economy and the shipping and port industries have responded to the challenges and opportunities that have arisen as a result of the structural changes. There is an urgent need for Governments to review policies and implement more robust strategies if the public and private sectors are to be successful in maintaining access to efficient and competitive shipping and port services.

To provide countries with a planning context for shipping and port development strategies, the secretariat has recently undertaken a study to forecast trade flows, port container throughputs and shipping and port capacity requirements through to the year 2011.

The present document reviews the changes in the maritime environment and provides a background for discussions on the future prospects for regional shipping and port development.

- at a limited number of efficient ports with extensive, integrated feeder networks connected to regional hinterlands. Ports, if they aspire to hub status owing to the intense port competition, are required to provide the necessary facilities and services for trans-shipment and logistics.
- 8. In view of the size of the investments being made by global shipping lines and major ports, it is an increasing challenge for developing economies in the region to maintain competitiveness in the area of providing maritime services. For countries that are reliant on using maritime services provided by foreign fleets, maintaining a competitive environment is of paramount importance.
- 9. To provide member countries with a planning context for the development of shipping and port development strategies, the secretariat has recently undertaken a study utilizing the maritime policy planning model (MPPM) developed by ESCAP to forecast trade flows, port container throughputs and shipping and port capacity requirements by route, port and country through to the year 2011.
- 10. This document reviews the changes in the maritime environment and provides a background for discussions on the future prospects for regional development of the maritime sector.

I. CHANGES IN THE MARITIME ENVIRONMENT

A. Concentration of container shipping and port services

11. Over the last two decades there has been an increased reliance on international trade as the primary engine of economic growth and development. Many countries have in the past pursued development strategies

that have emphasized self-sufficiency and the protection of domestic markets. However, in the recent past there has been a growing consensus that the route to prosperity lies in integration within the global economy.

12. This in turn has led Governments to adopt policies that reduce barriers to both trade and investment. The reduction of trade barriers has stimulated the growth in trade volumes, while increased foreign direct investment (FDI) has accelerated the shift from low- to higher-value commodities. These two trends have worked together to promote new and expanded opportunities for liner shipping companies, while at the same time advances in global communications and logistics management have increased performance expectations.

13. Global container shipping companies are under intense pressure to provide shippers with services that include fast transit times, high frequency and low cost. This has given rise to two trends: (a) deployment of increasingly large ships to achieve economies of scale and (b) alliances and mergers/acquisitions of carriers as an approach to rationalizing investment, spreading risk and reducing administrative costs.

14. Increasing vessel size is not new in container shipping: a progressive increase in maximum vessel size has taken place throughout the history of containerization. By the mid-1970s, the 1,000- and 1,500-TEU ships of the first and second generations were being replaced by ships of 2,000 TEU plus, signalling a trend of gradual increases that led eventually to the 4,000-TEU-plus Panamax vessels that most major lines were ordering in the early 1990s. However, there was an uncharacteristically rapid increase in vessel size during the mid-1990s, as the post-Panamax concept, pioneered by APL as early as 1989, really took hold. By 1996, vessels of around 6,000 TEU had appeared on the scene, followed by vessels of over 7,000 TEU, which are now in service. Some carriers are considering constructing and deploying even larger ships with the possibility of capacities approaching 12,000 TEU and beyond. The implications of such increases in ship size will be an even greater focus on the hub and spoke system, in which the biggest ships will call at only a limited number of very efficient ports on the main trunk routes, with other ports being linked by extended feeder networks. Through this approach, carriers will maximize the utilization of vessel capacity and reduce port/transit time.

15. Cooperation between container shipping companies in many different forms of partnership such as slot purchase, slot exchange, vessel-sharing agreements or joint services has been an essential feature of the industry for a long time. These forms of carrier cooperation tended to be on a tradespecific basis. However, in recent years there has been a growing trend towards carrier alliances on a global basis. Carriers entered into partnerships that covered their operations worldwide - or at least on the main East-West routes - rather than on a single trade lane. This offered significant additional advantages in container logistics and the rationalization of port terminals, while allowing shipping lines to retain their distinctive marketing identities and ownership.

16. The industry consolidation has been accelerated by a rash of mergers and acquisitions since the end of the 1990s. As a consequence of these developments, the 20 largest carriers now control around 57 per cent of the world container fleet and the top 5 lines own or operate more than 25 per cent.

17. In parallel with the concentration of container shipping, container throughputs are growing more quickly at hub ports and at newly emerging ports that can offer international standards of service. The world's top 20 container ports handled 96 million TEU in 1999, accounting for 52 per cent of world container port throughput. In the Asian and Pacific region, the concentration of port throughput is even more prominent, with the 10 busiest ports handling 62 million TEU or 65 per cent of the region's total throughput in 1999.

18. In the intensified battle for hub status, international container terminal operators are extending the scope and scale of their activities and are operating terminals in ports around the world.

19. Some major shipping lines also control international terminal networks. Some are focused primarily on controlling stevedoring for their own vessels. Others, however, have developed facilities that are clearly intended to serve a range of shipping lines, including allies and competitors.

20. It would appear that where the private sector has participated in port development, management and operation, there has been an improvement in service levels and productivity

while handling costs have been reduced.

B. Deregulation and liberalization of maritime transport

21. Over the last 20 years or so there has been an increasing tendency towards economic liberalism in the shaping of industrial policy, and there has been increased reliance on competition as the primary force of economic activities. In line with this trend, Governments have in general looked at the activities of shipping conferences less favourably and sought regulatory changes to redefine the limits of collaborative arrangements between carriers.

22. Perhaps more important for the ESCAP region, maritime transport services are included in the General Agreement on Trade in Services (GATS) within the multilateral framework of the World Trade Organization (WTO). During the Uruguay Round, international maritime transport was recognized to be already highly liberalized, and maritime auxiliary services and access to and use of port services were therefore included in the maritime schedule for discussion. The negotiations are due to resume within the WTO framework and may be extended beyond auxiliary services and ports to include aspects such as multimodal transport, inland waterways and the land transport leg of international maritime transport.

23. For countries in the region, particularly developing countries which are becoming increasingly reliant on shipping services provided by foreign fleets, it is of paramount importance to review policies and strategies to ensure that they can maintain access to efficient and competitive shipping services. At the same time, there is an increasing concern with respect to the impact of liberalization of maritime services on national shipping fleets and the possibility that this may lead to the diminishing participation of countries in the region in the carriage of their sea-borne trade.

II. PROSPECTS FOR REGIONAL SHIPPING AND PORT DEVELOPMENT

24. To assist countries in responding to the rapidly changing maritime environment and in formulating appropriate shipping and port investment strategies, the secretariat has undertaken the maritime policy planning project, utilizing the MPPM developed

by ESCAP to forecast trade flows, port container throughputs and shipping and port capacity requirements by route, port and country.

25. A new study has recently been completed by the secretariat, in collaboration with the Korea Maritime Institute. The study undertook analysis of the likely maritime development scenarios across the region within a comprehensive planning context and investigated international container trade flows to provide medium- and long-term forecasts of the region's container shipping and port capacity requirements through to the year 2011.

A. Forecast of regional container trade growth

26. During the 1980s and 1990s, international container trade continued to increase at a rate far exceeding that of maritime trade as a whole. A large portion of the growth can be attributed to several factors including liberalization of international trade, globalization, containerization and the emergence of China as a major new container market.

27. None of these trends have yet run their course, and the study forecasts the total number of full containers shipped internationally around the world to grow to 122.7 million TEU by 2011, compared with an estimated 59.0 million in 1999.

28. Asian container trade is expected to increase more rapidly than the world average during the period from 1999 to 2011, i.e., 7.2 per cent per annum compared with the world average of 6.3 per cent. Asia's share of world containerized exports will rise from 46.4 per cent in 1999 to 51.5 per cent in 2011, the share of containerized imports rising from 40.0 per cent to 44.1 per cent. Rapid expansion of container traffic is expected as a result of further economic development across the region, particularly in China and in the countries of Indo-China and the Indian subcontinent owing to the substantial potential for further container penetration.

B. Shipping service structure and fleet composition

29. It has become increasingly clear that there are no insurmountable technical barriers to the future increase in ship size. In order to explore the implications of the ship size increase for the region, the ESCAP study developed two scenarios on the future network of liner shipping. The "base

case" explores a relatively conservative hypothesis, in which the growing demand for the carriage of containerized cargoes will be met by a continuation of the slow "creep" in ship size, allowing for an increase in scale of the largest vessels in service, up to 8,000 TEU in 2006 and 12,000 TEU in 2011. This is combined with an increase in the number of "strings" that are operated in each of the major trades. The

number of ports included on each string is similar to the number included on the major services of today. Under this "base case" scenario, by 2011 there will be a need for around 950 vessels with a capacity of more than 3,500 TEU on the trans-Pacific, Far East-Europe and North American Atlantic Coast services. Of this, only 30 ships would be in the range of 9,000-13,000 TEU capacity.

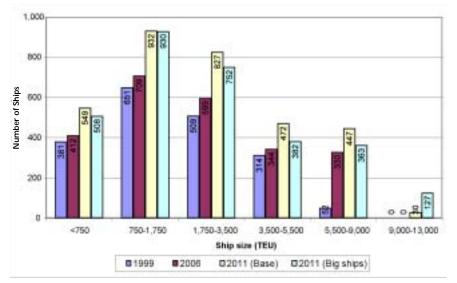


Figure I. Required number of container ships by size

30. The "big ships" scenario starts from a different assumption, i.e., that the major carriers will attempt to achieve further economies of scale and deploy vessels of 9,000-13,000 TEU on the major trade lanes calling at only one or two ports in Asia. Some of these radically streamlined routes appear to have potential in the Europe-Far East trade and on the Suez route to the United States of America, while the trans-Pacific route appears less promising for streamlined large ship service. Under this "big ships scenario, around 870 vessels with a capacity of more than 3,500 TEU will be in service by 2011, including 127 ships of 9,000-13,000 TEU capacity. This implies that some of the intercontinental services in the base case operated by vessels with 3,500-9,000 TEU capacity would be replaced by the streamlined East-West services deploying the bigger ships.

C. Trans-shipment

31. It is estimated that under the "base case" scenario the total volume of containers trans-shipped within the

ESCAP region will increase from an estimated 26 million TEU in 1999 to 64 million TEU in 2011. The share of trans-shipment in total port volume is expected to increase from 28 to 30 per cent during the period.

32. It is expected that the new ports of Gwangyang (Republic of Korea) and Tanjung Pelepas (Malaysia) and the trans-shipment hub emerging in Shanghai will all capture substantial trans-shipment volumes. The traditional port centres of Singapore, Kaohsiung and Hong Kong are expected to retain their importance throughout the period.

33. If the "big ships" scenario does eventuate, it will have implications for both total trans-shipment volumes and the distribution of trans-shipment opportunities between ports. Since the "big ships" scenario depends to a greater degree on hubbing at key trans-shipment centres, the regional trans-shipment volume would be 4.5 per cent higher than the "base case" scenario by a total of around 3 million TEU per annum. The major beneficiary from the streamlining of routes is

Table 1. Estimated trans-shipment shares, 2011

(Thousands of TEU, percentages)

		Base case			Big ships	
	Total	T/S	Share	Total	T/S	Share
Colombo	5 372	4 051	75.4%	6 879	5 559	80.8%
Singapore	30 940	23 145	74.8%	33 145	25 351	76.5%
Port Klang	7 598	4 228	55.6%	7 459	4 089	54.8%
Tanjung Pelepas	4 472	3 720	83.2%	3 817	3 065	80.3%
Hong Kong	25 322	5 272	20.8%	25 317	5 267	20.8%
Kaohsiung	12 780	5 691	44.5%	12 702	5 613	44.2%
Shanghai	19 040	7 768	40.8%	19 622	8 350	42.6%
Busan	12 488	4 859	38.9%	11 913	4 284	36.0%
Gwangyang	8 876	4 155	46.8%	8 796	4 075	46.3%
Tokyo/Yokohama	6 554	561	8.6%	6 634	641	9.7%
Kobe/Osaka	4 957	486	9.8%	4 974	503	10.1%
Total	138 400	63 938	46.2%	141 258	66 797	47.3%

Singapore, as shipping lines operating very large vessels would be forced to concentrate their calls on the port with the most extensive shipping network. Shanghai also appears likely to benefit from this consolidation. It would appear that Colombo could also gain in this scenario, consolidating its position as the gateway to the subcontinent.

D. Forecast of container port volumes

34. It is forecast that the total volumes of international containers handled in the ports of the ESCAP region will increase from 94 million TEU in 1999 to over 155 million TEU by the year 2006. By the end of the forecast period in 2011, the total volumes will grow to around 216 million TEU. This implies an average growth rate of 7.2 per cent per annum.

35. A forecast of port container throughputs of individual economies in the region is provided in table 2. The most striking feature of the table is the increasing dominance of China, which is expected to be clearly Asia's largest generator of containerized cargo by 2006. It is estimated that the container throughput in the Chinese ports will increase at an annual rate of 12 per cent through the year 2011. China, when combined with Taiwan Province of China and Hong Kong, China, will account for 40 per cent of the total container throughput of the ESCAP region. Among the East Asian economies, the Republic of Korea is also expected to experience rapid container growth, particularly owing to the emergence of the port of Gwangyang as a trans-shipment hub. 36. Another notable feature is the rapid increase in container handling in the ports of Malaysia, mainly due to expansion of the trans-shipment business. It is estimated that Malaysian port international container throughput will increase at an annual average rate of 12 per cent from 3.8 million TEU in 1999 to 14.6 million TEU in 2011, of which trans-shipment will account for 7.9 million TEU or 55 per cent. In the South-East Asia subregion, high annual container growth is expected in Viet Nam (8.3 per cent) and Brunei Darussalam (14.0 per cent) from the current low level of container penetration.

37. Countries in the South Asia subregion are also expected to experience high increase rates of port container throughputs during the period from 1999 to 2011, i.e. 10.0 per cent in Sri Lanka and 9.4 per cent in Bangladesh and in India.

E. Investment requirements

38. Under the "base case" scenario a total of 1,350 new container ships will be required in order to meet the

Table 2. Forecast of port container throughputs by economy (2011, base case)* (Thousands of TEU)

Economies	1999 (CIY**/other sources)	2006 (ESCAP MPPM)	2011 (ESCAP MPPM)
Australia	2 651	3 550	4 061
Bangladesh	392	770 1	151
Brunei Darussalam	62	188	300
Cambodia	n.a.	64	103
China	12 004	28 466	46 219
Democratic People's Republic of Korea	n.a.	161	614
Fiji	47	94	136
French Polynesia	31	137	189
Guam	123	223	284
Hong Kong, China	16 211	19 678	25 322
India	2 186	4 216	6 410
Indonesia	2 784	4 582	6 145
Islamic Republic of Iran	340	510	774
Japan***	11 503	15 221	18 953
Malaysia	3 775	8 444	14 556
Myanmar	118	182	270
New Caledonia	52	75	104
New Zealand	845	1 374	1 808
Pakistan	697	981	1 323
Papua New Guinea	138	215	291
Philippines	1 696	2 716	3 761
Republic of Korea	7 473	16 516	22 772
Russian Federation (Far East)	125	289	481
Singapore	15 945	23 393	30 940
Sri Lanka	1 704	4 447	5 372
Taiwan Province of China	9 758	13 245	16 874
Thailand	892	4 328	5 808
Turkey****	687	1 051	1 347
Viet Nam	653	1 185	1 701

^{*} Domestic coastal traffic is excluded.

^{**} Containerisation International Yearbook

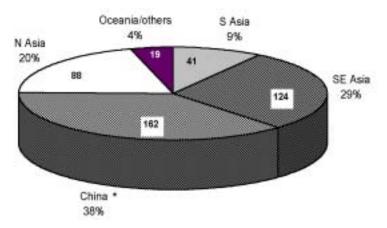
^{***} Based on an official forecast made by the Japanese Government through to 2010.
**** Figure includes statistics from the ports of Mersin and Izmir only.

increased demand for container shipping services in 2011, while under the "big ships" scenario 1,155 ships will be required.

39. At the current level of newbuilding prices available, it is estimated that the liner shipping companies operating to/within the ESCAP region will be required to commit capital investments of approximately US\$60 billion up to 2011. This does not include newbuildings for the replacement of ageing ships. Since at the end of 1999, 1,088 vessels or 43 per cent of the world container ships fleet was over 10 years old, the investment

requirements for newbuildings of container ships will be considerable.

40. In order to handle the anticipated port container traffic in 2011, it is estimated that a total of 434 new container berths will be required. The largest number is accounted for by China (including Hong Kong, China and Taiwan Province of China), which will require over 160 new berths by the end of the decade. South-East Asia's requirements are 124 berths, of which Singapore alone will require around 43 berths. North Asia (excluding China) and South Asia will require 88 and 41 new berths, respectively.



Total number of additional berths required: 434 *Including Hong Kong, China, and Taiwan Province of China

Figure II. Port capacity requirements in 2011

41. This will entail very significant capital expenditure and precise investment requirements will depend on the particular conditions that prevail at each new development site. Based on typical costs to develop new infrastructure and procure the handling equipment required to allow the terminal to operate at a satisfactory level of efficiency, the total capital required has been estimated at US\$27 approximately However, substantial additional investment will also be required to secure adequate access to the terminals by road, rail and inland waterways, which will be essential for the effective distribution of containers to expanded port hinterlands. The additional costs of dredging, the provision of breakwaters and the establishment of land transport links and intermodal interchanges could easily double this total. It is also noted that MPPM covers only port-to-port trades. It does not, therefore, provide a basis for assessing capacity and investment requirements for hinterland linkages.

III. EMERGING ISSUES FOR CON-SIDERATION

42. Within the context of the changing maritime environment and future prospects described above, there are critical issues that require urgent attention in the shipping and port sector.

A. Preparing for a deregulated/liberalized environment

43. Maritime policy changes brought about by countries in the ESCAP region over the last two decades are part of a much broader movement towards the deregulation and liberalization of world trade and industry. Policies in both the United States and Europe have been moving towards greater reliance on deregulated market mechanisms by limiting the scope of cooperative arrangements between shipping lines. The Uruguay Round failed to produce a specific agreement

on maritime transport. Negotiations are, however, expected to resume under GATS within the multilateral framework of WTO. The Conference may wish to urge the following:

- (a) At the national level. Countries could undertake detailed studies to review the new environment within which they should shape their maritime policies and strategies. Governments could collaborate with the private sector and industry to review national positions with respect to the timing and sequencing of deregulation and liberalization:
- (b) At the regional level. Regional and international organizations and agencies could assist member countries in examining policies and strategies by undertaking a regional in-depth assessment of the possible impact of deregulation and liberalization of maritime services on national shipping fleets. Regional and subregional seminars could be organized to provide the opportunity for the exchange of experience and views on the latest developments in deregulation and liberalization, including WTO/GATS negotiations.

B. Identifying niche markets for developing country shipping services

44. The majority of ESCAP member countries seek to develop national shipping services to carry a portion of their external trade. However, with the massive investments and extensive network of global services required to participate in container shipping, it is difficult for developing country fleets to maintain a presence in this intensely competitive industry. The Conference may wish to urge the following:

- (a) At the national level. Countries of the region could identify areas where their fleets have a comparative advantage or strategic necessity. Policy makers and industry could also critically review the viability of national fleets and the present levels of direct and indirect support provided:
- (b) At the regional level. Regional and international organizations and agencies could undertake a study of the direct and indirect support provided to national fleets by Governments within and outside the ESCAP region and organize regional meetings of experts to review the study findings and experiences. Regional and international organizations could also study "best practices" to assist countries in formulating and implementing policies and strategies.

C. Increased capital commitment

45. With increased demands for capital investment in ports, prioritization of port development projects and promotion of private sector participation will become increasingly necessary to avoid wasteful investment and to ensure that funds are available for port development projects. Private sector investments in the ports in ESCAP countries have been successful. However, lack of transparency and continued resistance from labour have been cited as major obstacles to further private sector involvement. It may become more difficult to attract private capital in the future, as private investors become more discriminating in the choice of projects. The Conference may wish to urge the following:

- (a) At the national level. Countries could prioritize national port development projects, taking into account their economic and social benefits and financial viability, the results of which could be also made available to potential private sector partners Governments, in collaboration with their financial institutions, could institutionalize a range of mechanisms for public-private partnerships, which offer varying levels of risk, resource inputs and ongoing involvement of the partners. For example, a joint venture, in which both the Government and the private sector contribute assets, resources, technology, management and operational expertise, could ensure sharing of the related risks and benefits between public and private sector partners
- (b) At the regional level. Regional and

international organizations and agencies could assist countries of the region in evaluating projects from an international perspective. Training programmes could be organized to assist member countries in enhancing capabilities for project evaluation and prioritization. Relatively simple software programmes such as the ESCAP/UNDP financial economic planning models could be disseminated to countries for application. Regional and country-level seminars could also be organized to help Governments to exchange regional experiences of best practices in creating favourable public opinion with regard to private sector participation in ports.

D. Improving port productivity

46. Given the port development task forecast by the MPPM study, it is clear that an increased focus on port productivity can reduce the need to invest significant quantities of new capital in expanding port facilities. Substituting productivity gains for new port development will have the additional advantage of avoiding the conflicts between environmental and economic objectives that will inevitably and increasingly accompany new port development. The Conference may wish to urge the following:

- At the national level. Countries could review the productivity of their ports and identify major impediments;
- At the regional level. Regional and international organizations and agencies could undertake a region-wide survey to assist countries in benchmarking the best models in port operation and management. Assistance

could be provided to regional ports in applying information and communications technologies (ICT) to enhance port productivity, particularly through networking of regional ports for exchanging data, information and software.

E. Expanding the hinterland for intermodal integration

47. The increased volumes of containers moving through the ports will place great stress on the land transport interface and generate a need for faster and more efficient intermodal connections to the hinterlands. At the same time, the demand of shippers for "seamless" logistics is likely to continue and intensify. There is an urgent need for ports to play a lead role in providing the necessary facilities for logistics growth. The Conference may wish to urge the following:

- (a) At the national level. Countries could review their transport and logistics systems to identify current bottlenecks in the national and regional transport and logistics chain and ensure the provision of efficient intermodal transport and logistics systems supported by high-quality infrastructure, particularly to expand port hinterlands:
- At the regional level. Regional and international organizations and agencies could provide assistance to member countries in developing integrated transport and logistics systems, which increasingly require sophisticated planning tools. Organizations and agencies could help countries of the region to forecast trade and capacity requirements for hinterland linkages.

Launch of Tokyo News Service's Website

Tokyo News Service, Ltd. has posted its website "S&TN OnLine" on the Internet. Provided on this homepage for easy reference are liner shipping schedules and related data extracted from Shipping and Trade News and Sea Sprite.

With use of the website initially being offered free of charge, we would like to invite you to sign up to access the latest updates on the homepage by first entering the information requested on the registration page.



URL: http://www.tokyonews.co.jp/marine

Information posted: 1. Sailing schedules a. Liner shipping schedules (export/import) to and from Japan b. Liner schedules (export) from Asian countries other than Japan c. Feeder schedules to and from Singapore

2. Ship details 3. Telephone and fax numbers of shipping firms and agents 4. Surcharges 5. News (in preparation)

Tokyo News Service, Ltd.

INTERNATIONAL MARITIME INFORMATION



BIMCO: Courses for 2002

21st Century Shipping

24 January, Durban, South Africa

This course will deal with a wide range of shipping topics including arrest, agency law and stowaways/illegal immigrants. Liner shipping, bills of lading, and chartering are also to be covered in the programme as well as a workshop with case studies.

Shipping – Changes and Challenges

22-23 February, Chennai, India

This ICS/BIMCO seminar will deal with various topics covering all vital aspects of the shipping industry including workshops with case studies.

The Shipping Business a practical approach

20-21 March, Jakarta, Indonesia

This course will deal with chartering topics including laytime and bills of lading. Insurance, recycling and arbitration are other topics covered in the programme. This course will also include workshops with case studies.

Shipping in Change

10-11 April, Kiev, Ukraine

A two-day course dealing with chartering topics including laytime, bills of lading, trading restrictions and the GENCON C/P. The course will also address topics such as insurance, arrest, maritime education, recycling and ship registration and flagging. Case studies will also form part of the programme.

For further information, please contact: **BIMCO-The Baltic and International** Maritime Council

161 Bagsvaerdvej, DK-2880 Bagsvaerd, Denmark

+45 4436 6800 Tel: +45 4436 6868 Fax: Website: http://www.bimco.dk

CMT(Centre for Management Technology):

2 Chemical Logistics **Conferences**

6th China Chemical Logistics & Distribution

7-8 March 2002, Shanghai, China Main Highlights:

- WTO/Beijing Olympics and its impact on China's Chemical Logistics
- Key Ports Customs clearance
- Transportation of hazardous chemicals : bulk and liquid - Responsible Care
- Emergency Response to chemical spills
- Intermodal transportation and Supply Chain Management
- Inhouse Vs 3rd Party Logistics CASE

Changing Dynamics of Asia Chemical Logistics & Supply Chain -

New Challenges

20-21 March 2002, Singapore

Main Highlights:

- Chemical shipping patterns in the region & outlook of traffic
- Impact of chemical mergers on Asia's logistics structure
- Development of specialised port facilities to handle new projects
- Port Development & Expansion Plans

For more information, please contact: Attn: Cynthia

(65) 346 9132 Tel: (65) 345 5928 Fax: email: cynthia@cmtsp.com.sq Homepage: www.cmtevents

IMPA: 16th IMPA - Congress and General Meeting

in Hamburg / Germany July 28th to August 2nd, 2002

"Challenges for the Future"

Venue:

Congress Centrum Hamburg (CCH), which has a direct access to the SAS-Radisson Hotel

> Keynote speakers: William O'Neil Secretary General, IMO

Thomas A. Mensah

Judge, Intern. Tribunal for the Law of the Sea **Kurt Bodewig**

Minister of Transport, Building and Housing, Germany

Dr. Margit Wetzel

MP, Germany

Rear Admiral Bruce Richardson, President **IHMA**

Hosted by:

Bundeslotsenkammer

(The German Federal Chamber of Maritime Pilots)

Preliminary Congress Programme and Call for Papers

Registration

Sunday, July 28th, 2002 14:00 - 18:30 Monday, July 29th,2002 08:00 - 16:00

Monday, July 29th, 2002

09:00 - 11:00 Opening Ceremony 11:30 – 16:00 First Session: Pilots serving the Public Interest

Tuesday, July 30th, 2002

09:00 - 13:00 Second Session: Pilots -Partners with Ports

14:30 - 16:00 Third Session: Developing Navigational Technology - Its Potential and Limitations

Thursday, August 1st, 2002

09:00 – 11:00 Fourth Session: Fatigue and Pilots/ Masters/ Crews

11:30 - 13:00 Fifth Session: Training and Certification of Pilots

14:30 – 16:00 Sixth Session: Pilot Transfer Arrangements

Friday, August 2nd, 2002

09:00 – 16:00 Closed Session (for pilots only)

Registration fee:

Delegate/ Observer Euro 750,-Accompanying Person Euro 650,-

For more information, please contact:

Bundeslotsenkammer

Nikischstraße 8

22761 Hamburg/ Germany +49 - 40 - 890 52 50 Fax: e-mail: blkgak@aol.com

International Maritime Pilots' Association (IMPA)

Homepage:http://www.impahg.org/

INTERNATIONAL MARITIME INFORMATION



PIANC

Implications of Habitats Directive, art. 6, for Port Expansion in EU

Brussels, Thursday, 31 January 2002 Auditorium Conscience Building, Boulevard Roi Albert II, 15,

International Navigation Association
(PIANC)
Institute for Infrastructure, Environment and

Innovation (IMI-Europe) United Kingdom Major Ports Group (UKMPG)

Seminar on the Implications of the EU Water Framework Directive

Brussels, Wednesday, 6th February 2002 Auditorium Conscience Building Boulevard Roi Albert II, 15,

For more information, please contact: **PIANC General Secretariat**

Email: info@pianc-aipcn.org URL: www.pianc-aipcn.org

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ESPO: Positions on three topics related to marine environment and safety

ESPO statement on ship emissions

30 October 2001

ONCERN is growing about gas emissions and their effect on climate change. Shipping can clearly make a contribution to the problems that are occurring across Europe. Sound environmental practices in ports complement the environmental advantages of shipping.

The European Sea Ports Organisation (ESPO) represents since 1993 the interests of port authorities and port administrations at EU level. Part of its mission is to encourage ports to be pro-active in protecting the environment.

Given the fact that regulation of ship emissions is envisaged at EU level, ESPO would like to give its input to the process of reflection concerning the reduction of SO₂ and NOx exhausts.

ESPO favours any attempt to make maritime transport as environmentally friendly as possible because this could contribute to improving the image of SSS and enhancing its attractiveness compared to other transport modes. Shipping generated exhaust emissions of VOC and CO are relatively insignificant in comparison to land-based sources. If efforts were made on reductions of SO₂ and NOx, the overall contribution of ship emissions to atmospheric pollution would be very little compared to other modes and would make maritime transport the best alternative mode.

However, the approach to reduce ship emissions should be balanced and it should be borne in mind that an inappropriate initiative could have negative consequences for ports.

1. Practical and operational aspects

As a first remark, ESPO would like to highlight the dangers of any isolated EU action aimed to reduce SO_2 and/or NOx emissions from ships.

If ships were required to install certain types of equipment or to use a certain type of fuel to comply with the emission levels set in EU legislation, this could lead to distortion of competition and trade. It could also result in transfer of emissions to other parts of the world. Moreover, practical problems related to transiting ships would occur, as it would be difficult to assess their emissions if they sailed in EU waters without stopping in EU ports.

ESPO would rather support an approach within IMO having the effect of reducing such emissions worldwide and not only in EU waters. Moreover, in that context, ESPO wonders how an EU proposal would be combined with the recent designation of the North Sea as an SOx Emission Control Area.

Second of all, it seems rather difficult to check that ships effectively use low sulphur fuels and to assess the impact of ship emissions compared to the overall industrial emissions in big ports. It can be questioned how the compliance with such requirements could be ensured. Small ports would especially face practical problems in that respect.

2. Differential charging aspects

Another possibility that is sometimes envisaged for the regulation of ship emissions is the introduction of differential charges for ships using a certain type of fuel or fitted with adequate equipment.

Even though ESPO supports the objective of protecting the environment, it very much questions the practice of using port charges as an instrument of environmental policy.

Differential charging may be used to encourage good environmental practice in ports (some ports already do so). However, it is a matter for individual ports based on their own circumstances. Ports are commercial operators and their charges are designed to reflect commercial realities and to ensure that port users make a fair contribution towards the cost and the services which they enjoy.

Ports should be able to choose, if they wish to do so, to structure their charges in a way which favours environmentally friendly vessels, but ESPO opposes any initiative imposing such practice on a European wide basis.

INTERNATIONAL MARITIME INFORMATION

ESPO statement on "ports of refuge"

30/X/01

THE European Sea Ports Organisation represents since 1993 the interests of port authorities and port administrations at EU level. Part of its mission is to promote the highest possible safety standards in European ports and to encourage ports to be pro-active in protecting the environment.

Maritime safety is therefore an issue which is of major concern to the port sector. As all bona fide players in the chain, port authorities are ready to take up their responsibilities in this respect, notably as far as accommodating ships in distress is concerned, provided that some basic principles are taken into account.

A topical issue at EU and international levels

The concept of "ports of refuge" has gained more political attention since the Erika accident in December 1999 and the incident with the Castor earlier this year.

Both the EU and IMO are calling for a legal framework to accommodate ships in distress:

• The European Commission has included a provision on ports of refuge in its Draft Directive for a Community monitoring, control and information systems for maritime traffic. The European Parliament, in its opinion in 1st reading on the proposal, widened the concept of "place of refuge" by including protected zones along the coastline as well as places of anchorage. It also provided for prompt compensation for a port which accommodates a ship in distress and for compulsory insurance of the ship and its cargo.

ESPO welcomes the developments at EU level and notably the amendments proposed by Parliament, as it will be explained in the following paragraphs.

 The International Maritime Organisation is dealing with the issue as a matter of priority. The Sub-Committee on Safety of Navigation will develop Guidelines to help States and masters deal with a situation in which a ship in distress seeks a place of refuge.

ESPO believes that maritime safety is a global issue and that efficient action in this field cannot be taken on national level only, but requires international co-ordination. In this respect, ESPO welcomes the European Parliament's plea for joint EU/IMO guidelines for assistance to ships in distress and, more in particular, for ports and anchorages of refuge.

A balanced approach is needed

The decision to impose on a ship to seek a port of refuge is always difficult. It requires a realistic assessment of the risks involved, either in refusing port access in order to keep the pollution or explosion away from the coast or in requiring a ship in a precarious condition to head for a port in order to keep the ship and its crew safe and to avoid sea pollution. Indeed, a port may be putting itself at considerable risk by accepting a ship in distress, endangering local inhabitants and the environment, especially as the areas concerned, particularly estuaries, are often areas which are environmentally very vulnerable. Moreover, the commercial and operational activities in the port may be hampered.

This is the reason why a port should still have the possibility to refuse access to a ship in distress if the accommodation of this vessel would endanger the safety of the port, its wider community, environment and economy.

ESPO recommends that a checklist be developed in order to help decision-makers to assess a request for access to a port of refuge from a ship of distress. However, the final decision should in any case be left to Member States.

Moreover, accommodating a ship in distress entails considerable financial risk for the port, notably because it is often left with paying the costs of the cleaning up. As a result, ESPO welcomes the principles supported by the European Parliament, as they ensure a certain guarantee to ports on financial aspects:

- a port which accommodates a ship in distress should be able to count on prompt compensation of the costs and the potential damage involved in this operation.
- a port should be able to require that a ship which calls demonstrates that it is adequately insured in the event of finding itself in distress and in search of a port of refuge.

It should be borne in mind that at present there is no international requirement for ships or cargo to carry third party insurance. As a result, ESPO calls on the international community within the IMO to address the issue of compulsory insurance of vessels and their cargoes as a matter of priority.

Moreover, the international compensation fund relates only to pollution caused by spills of oil carried as cargo; it does not cover spills of bunker oil or pollution caused by other types of cargo. ESPO welcomes the moves within IMO (notably concerning pollution from ships'

bunkers) but urges it to make rapid progress on these issues.

A seaport is not necessarily the best "place" of refuge

ESPO furthermore believes that a ship in distress does not necessarily need to find shelter in a port. What it needs is access to relatively sheltered waters so that whatever operations must be performed to make the ship, its crew and its cargoes safe, can be done with minimum risk to either the ship, the coastal State, the environment or indeed the salvors themselves. There is therefore no need for accommodation in a port.

Moreover, sheltered waters may provide much better guarantees to limit overall risks than ports. Pollution controls are indeed easier to carry out in such sheltered waters because, in case of accident, the environment, safety and economy of the port is not endangered and, the ship being close to the shore, pollution remains limited to a restricted area.

Conclusion

In the context of the topical discussions on maritime safety, at European as well as international level, ESPO believes that the following principles should be taken into account in the development of legislation on safety of navigation and more specifically on "places of refuge" and of Guidelines on the accommodation of ships in distress:

- Maritime safety is a global issue; as a result, efficient action in this field requires international co-ordination.
- Port authorities are ready to take up their responsibilities with respect to accommodating ships in distress.
- However, as accommodating ships in distress entails considerable risk for ports and requires a balanced approach, ports should benefit from the following guarantees:
- Ports should be able to refuse access to a ship in distress if the accommodation of this vessel would endanger the safety of the port, its wider community, environment and economy.
- Ports should be granted prompt compensation for accommodating a ship in distress.
- Insurance of the ship and its cargo should be made compulsory. The relevant international conventions should be brought into force at the earliest opportunity.
- A ship in distress does not necessarily

need to find refuge in a port; access to sheltered waters constitutes a sufficient quarantee.

 International cooperation between Member States on measures to prevent and respond to pollution incidents should be encouraged.

ESPO statement on TBT.

10 October 2001

ESPO welcomes the progress which has been made within the International Maritime Organization (IMO) in developing a Convention which will lead to the banning of the use of TBT in anti-fouling paint.

ESPO further expresses the hope that Member States of the IMO will speedily ratify the Convention in order to allow it to come into force by the target date of January 2003.

In the meantime ESPO welcomes the

moves by shipowners to start using alternative anti-foulings on a voluntary basis.

Since 1993, ESPO represents the port authorities, port associations and port administrations of the seaports of the European Union. The mission of the organisation is to influence public policy in the EU to achieve a safe, efficient and environmentally sustainable European port sector operating as a key element of a transport industry where free and undistorted market conditions prevail as far as practical.

For more information, contact the ESPO secretariat at:

Michelangelolaan 68 Avenue Michel-Ange – B-1000 Brussel / Bruxelles

Tel: + 32 2 736.34.63 Fax: + 32 2 736.63.25 E-mail: mail@espo.be equipment suitable for rail-related applications including rail-mounted gantry cranes (RMGs) and rubber-tyred gantry cranes (RTGs) for high throughput terminals and reachstackers for smaller terminals and for support tasks at the bigger facilities. The reachstacker, being able to load and unload containers from not only the nearest track but also a second track (subject to model type and lift capacity) has proved to be a very flexible machine in rail terminal operations.

For further information, please contact David Cheslin or Daniella Hawkins at Dunella Place Relations:

Tel: +44 20 7480 0600 E-mail: info@dunelmpr.co.uk



WCO: Sends List of Precautionary Measures in Mail Handling to Customs Administrations

(World Customs Organization, Brussels), in their circular letter addressed to Customs Administrations (Ref: 01.EL-376E/W.R./TE7-80, dated November 5, 2001) sent a document entitled WCO List Precautionary Measures in Mail Handling. It specifically notes, "Customs administrations may find this Check List useful when reviewing their post opening and handling procedures. Each Customs administration will have different arrangements and the risks involved will also vary, but there are some basic principles for handling letters and packages that we should try to develop. Please do not treat this exhaustive and it may not offer total protection against the risks against biological dangerous substances, but the list may be of assistance when reviewing or adjusting your own procedures for receiving and handling mail.

Secretary General Inoue sent it to all regular members on November 8 noting that each Port will have readily developed, or yet to do so, its own measures with consultation with the pertinent local authorities or agencies involved in these affairs. In doing so, coordinated action with the customs administrations at their port will be essential. For this purpose, please refer to this document.

He further noted, IAPH members are invited to inform this office any particular steps and measures taken for the better-

Kalmar: Life cycle costs swing it for Austrian Railways

ALMAR Industries has signed a highly significant contract with Austrian Railways (ÖBB), valid for 4 + 1 years, whereby ÖBB plans to purchase between five and ten ContChamp reachstackers over the next few years. Kalmar expects to receive orders for the first machines quite soon.

According to Kalmar Austria's managing director, Jürgen Wurzer, this contract is a breakthrough in that ÖBB has agreed to a price not based simply on the purchase price of the hardware but on the lifetime cost of the machines.

"This ÖBB deal is in fact a new and innovative way of purchasing hardware whereby the life time costs become very much part of the purchase criteria.

In this case, it takes into account the life cycle cost (LCC) over five years and also includes a five-year contract maintenance package.

"Through our experience with Kalmar Solutions, we are very aware of the maintenance costs of our machines and we have developed a global capability in terms of servicing. We were able to put together a very attractive package, the main strength being our confidence in our products' ability to perform reliably."

ÖBB has been expanding and renewing its intermodal rail terminals in a number of locations and will continue to do so. As Kalmar is particularly strong in Austria, this order is extremely important, says Mr Wurzer:

"We were able to provide ÖBB with the data they required and this enabled them to calculate LCC costs. They were so satisfied that they decided to include a full service contract for the machines to include everything except the operator and fuel."

The precise specifications of the reachstackers to be ordered will be decided on a case by case basis to suit individual terminal requirements. Kalmar expects 6m, 7m and 8m wheelbase machines to be required, fitted with spreaders for handling containers, swapbodies and trailers.

Kalmar manufactures a wide range of



The second-rail capability of the ContChamp is clearly demonstrated in this view of operations at ÖBB's Terminal

ment of port security, if such information can be disclosed. This office believes that such information will be of value to other ports. Therefore, at a proper interval, this office plans to introduce such news in the journal or via homepage.

WCO LIST of Precautionary Measures in Mail Handling

Post Opening Procedures (24/10/01)

Following the recent incidents of Anthrax contamination it is important that all Customs personnel take sensible precautions to protect themselves and the general public for unnecessary exposure. Customs administrations may find this Check List useful when reviewing their post opening and handling procedures. We recognize this list not to be exhaustive. If your Administration can make any improvements to the list, please contact Mr. Will Robinson:

Tel: +32-2-209-9303 Fax: +32-2-209-9493 e-mail: will.robinson@wcoomd.org

Check List

- All postal packages should be delivered to a Post Opening Room (not connected to the air conditioning system and capable of being sealed off);
- Ensure all incoming post is opened in the Post Opening Room (none delivered elsewhere in the building unopened);
- Restrict access to the Post Opening Room to minimize risk (only permitted personnel):
- If necessary provide another adjacent room to keep overalls, shoes and other protective clothing, if possible with washing facilities (basic isolation system);
- Provide staff with disposable gloves, masks (correct mesh size), bacteriological soap, paper towels and plastic bags for disposing of used items:
- Insist that staff wear gloves and masks when opening mail and encourage them to wash hands and face thoroughly with bacteriological soap after post opening. Dispose of paper towels, gloves in closed plastic bags and masks every day;
- Provide access to telephone and emergency telephone numbers on notice board in the Post Opening Room;
- Maintain an emergency procedures "File" of instructions for the Post Opening Room and ensure evacuation/protection/training;
- Implement containment and evacuation plans if suspect packages are found;
- Provide emergency "File" of instructions in the Post Opening Room for those opening the post;
- 11. Provide instructions to post opening staff telling them exactly what to do (a) if a sus-

pect package is identified, and (b) if a package with a substance inside is found (first aid, identification of those affected and provision of safety/medical care) and include it in the file:

- 12. Provide "Symptoms" list to manager and staff and include in the file;
- 13. Circulate simple precaution and symptoms list to all staff;
- 14. Perform risk assessment of incoming mail; separate mail from known sources from unknown sources. Inspect unknown sources against a risk profile (hand written packages and letters from risk locations);
- 15. Put risk packages into plastic bags for further examination;
- 16. Provide staff with large plastic bags to put suspect packages into;
- 17. Implement contingency medical plans in line with Health Ministry or local authorities;
- Arrange access to government emergency response unit (Anthrax can be identified quickly);
- 19. Write to Members and regular customers and ask them to stamp the outside of the package (with official stamp), so that we can readily identify normal incoming mail from them.

New Publications

ISO:

"New edition of ISO 9000 Compendium includes ISO 9000:2000 series"

SO (International Organization for Standardization) has published a new edition of the ISO 9000 Compendium which includes the revised ISO 9000:2000 series of its quality management system standards.

The ISO Standards Compendium ISO 9000 - Quality Management (ISBN 92-67-10340-7), 424 pages, costs 280 Swiss francs and is available (in English only) from ISO national member institutes (full contact details of these are posted on the ISO Web site: www.iso.org) and from ISO Central Secretariat (sales@iso.ch).

The latest edition of the ISO 9000 Compendium is the ninth published by ISO since 1991, indicating the strength of demand for the ISO 9000 standards. At the end of 2000, a worldwide total of 408 631 certificates of conformity to ISO 9000 standards had been issued in 158 countries, according to The ISO Survey of ISO 9000 and ISO 14000 Certificates.

The compendium gathers in one volume the 14 standards and technical reports currently making up the ISO 9000 family. This includes the revised ISO 9000, ISO 9001 and ISO 9004, which were published on 15 December 2000. These standards underwent a major overhaul, based on feedback from ISO 9000 users around the world, to focus them sharply on helping organizations to achieve customer satisfaction and continual improvement.

The ninth edition of the ISO 9000 Compendium also includes the drafts of three additions to the ISO 9000 family: ISO 19011 on joint ISO 9000 quality and ISO 14000 environmental management system audits, ISO 10012 on measurement control systems and ISO 10013 on quality management system doc-

umentation.

For more information, please contact:

Roger Frost

Press and Communication Manager

Public Relations Services
Tel.: +41 22 749 01 11
Fax: +41 22 733 34 30
E-mail: frost@iso.ch

INTERTANKO:

"Multiphase Crude Oil Cargo Guidelines"

THE objective of this document is to provide tanker officers with methods and information that can assist with a more effective and efficient transport and handling of crude oil cargoes with respect to:

- vapour pressure release from tankers, minimising the impact of vapour or sludge on cargo operations with a fully laden crude oil tanker
- less cargo remaining on board after discharge when transporting some of the more difficult types of crude oils
- minimising loss to the atmosphere during transportation of more volatile crude oils.

The methods described are generalised but will supply indications of the expected behavioural characteristics of specific crude oil types and may serve as guidelines to improved operational decisions during transport and discharge.

Price (Member): **USD 60** Price (Non-member): **USD 120**

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The Americas

AAPA: David E Bellefontaine honored with Distinguished Service Award

AVID F. Bellefontaine, PPM, who retired this July after a 33-year career with the Port of Halifax, was honored at the Quebec Convention with the presentation of a Distinguished Service Award for his many years of service and selfless dedication to the Association and to the public port industry.

Mr. Bellefontaine joined the port in 1968 when it was administered by Canada's National Harbours Board (NHB) and rose rapidly through its managerial ranks, holding positions of increasing responsibility, including Director of Finance.

In 1984, after the dissolution of the NHB, he became General Manager and Chief Executive Officer of the newly constituted
Halifax Port
Corporation.
In 1988,
through a
corporate

re-organiza n i za tion, he
became President and Chief
Executive Officer and continued in
that role with the Halifax Port

Authority, which replaced the Port Corporation in 1999.

Mr. Bellefontaine served as AAPA Chairman of the Board in 1992-93, several terms on the Executive Committee and Board of Directors, and as a member of both the Projects & Publications and Curriculum Committees. He received the Association's Professional Port Manager (PPM) certification in 1997

(AAPA ADVISORY)

companies in the world are regular customers of the Port of Halifax including such industry leaders as Carnival Corporation, Royal Caribbean International, P&O Princess Cruises, and Norwegian Cruise Line. "There has been very positive feedback on the Halifax experience and the cruise lines are responding with greater presences in our port," said Ms. McDermott.

Already 87 cruise ship calls bringing more than an estimated 150,000 passengers are scheduled for 2002. There are 12 inaugural call vessels scheduled.

HPA is currently moving forward with plans to redevelop its Seawall properties, the principal cruise ship facility in the Port of Halifax, and has entered into exclusive negotiations with a private sector group led by Greenwood Lane Inc. to jointly establish a comprehensive agreement. This development plan will further enhance HPA's position to expand this important component of the Port's business.

HPA is a Government Business Enterprise mandated by the Federal Minister of Transport. The HPA leads in the development of the Port of Halifax, serving as a catalyst for the local, regional and national economies. It has a mandate to operate in a financially viable manner.

Halifax: Posts Record Cruise Season for Fifth Straight Year

ITH the cruise season for Halifax completed on November 1st, the Port of Halifax concluded a fifth consecutive year of record cruise passenger volumes.

"For the first time, we welcomed over 160,000 cruise passengers to Halifax, an increase of 16 percent over the previous year," said Patricia McDermott, Vice President, Marketing for the Halifax Port Authority.

The 2001 cruise season was also the longest ever with 200 days of cruise ship visits between April 16th and November 1st. During this period, 96 cruise ship calls utilized the HPA's facilities, often accommodating multiple cruise ships on the same day.

This sector of the Port of Halifax's business contributed more than \$13 million in cruise passenger spending to the local economy over this seven month period.

Halifax is the number one cruise ship destination in Atlantic Canada, a flagship port on the Canada/New England cruise itinerary. The largest cruise line



LA: Box Traffic performance for September

HE Port of Los Angeles handled 484,654 TEUs during the month of September, up almost 15% as compared to September 2000. (TEUs stands for 20-foot equivalent units, maritime terminology used when counting marine cargo containers of varying lengths.)

Imports totaled 267,579 TEUs, compared to 220,572 in a year-to-year comparison, an increase of 21%. Likewise, exports showed an increase of 4% with the movement of 81,806 TEUs. Overall, imports and exports increased almost 17% with 349,385 TEUs as compared to September 2000 with 299,112 TEUs.

Larry Keller, executive director for the Port, commented "In the aftermath of the tragic events of September 11 and the military actions which have followed, we are hopeful that our shipping activities can help to bolster the global economy. The September statistics reflect cargo already in the logistics pipeline and we are doing all that we can to continue to move cargo safely and efficiently to consumers for the



approaching holiday season."

Calendar year figures indicate a 5.5% overall increase in cargo container movement with 3.7 million TEUs. Fiscal year figures to date (July · September) show 1.4 million TEUs, a 6.5% increase over last year.

Nanaimo: Appointment of Bryon E.W. Calverley to the board of directors

R A N S P O R T
Minister David
Collenette today
announced the
appointment of Bryon
E.W. Calverley of
Nanaimo to the board of
directors of the Nanaimo
Port Authority, effective October 16,
2001.

Mr. Calverley has experience in the lumber industry, most recently as a general manager for Doman Forest Products Ltd. where his duties included supervising the shipment of lumber to ports in the United States and Europe. He was involved in the operations of seven sawmills and was responsible for over 750 employees. Mr. Calverley also received the B.C. Hydro Power Smart Award for Best Design for his work as designer and supervisor in the construction of a \$16 million plant in Chemainus, B.C.

"Mr. Calverley's extensive business experience will serve him well as he takes up his duties on the board of directors of the port authority," said Mr. Collenette. "I am pleased that he has agreed to take on this responsibility."

The Nanaimo Port Authority is the Canada Port Authority (CPA) established to manage the Port of Nanaimo, effective July 1, 1999, under the Canada Marine Act. As a CPA, the Nanaimo Port Authority benefits from greater management flexibility, including increased freedom to develop contracts and borrow money from commercial lenders.

Nanaimo is a major entry point for vehicle transportation and cargo on

Vancouver Island. In 2000, approximately 2 million vehicles and 5.8 million passengers moved through the port. Total cargo traffic in 2000 was nearly 2.1 million metric tonnes. The main imports were petroleum and forest products, while the main exports were lumber, pulp and other related forest products.

North Carolina: Erik Stromberg receives Award for Distinguished Service to Agribusiness

C State Ports
Authority
Executive
Director Erik Stromberg
received the 2001
Governor's Award for
Distinguished Service to

Agribusiness from the NC Agribusiness Council at their annual meeting in Raleigh on September 28, 2001.

Since becoming the Authority's executive director in 1995, Mr. Stromberg has strengthened the service to North Carolina's agribusiness interests provided by North Carolina's Ports in Morehead City and Wilmington. In addition, Mr. Stromberg has initiated projects that offer the state's agribusiness exciting new opportunities for continued growth in international markets.

Agribusiness has long been a significant contributor to the cargo handled at North Carolina's Ports. Agribusiness commodities comprise nearly 60% of the total volume, and include fertilizers such as potash, meal bone, phosphate, potassium nitrate, sodium nitrate and calcium nitrate; forest products such as lumber, paper, woodpulp and wood chips; food, especially containerized shipments of frozen poultry and meats, and tobacco.

With an eye toward addressing current and future requirements of agribusiness customers, Mr. Stromberg is guiding the Ports Authority through several capital development projects. At the Port of Morehead City, where agribusiness cargo equates to 69% of the total tonnage, two large warehouses were targeted for rehabilitation through the State Repairs and Renovations Fund to accommodate increased shipments of import fertilizers.

At the Port of Wilmington, the deepening of the Cape Fear River navigation channel to 42 feet in 2003 will enhance the ability of North Carolina's agribusiness interests to reach global markets. For example, the additional river depth

will allow a container ship to carry approximately 800 additional containers, thereby increasing the volumes of frozen poultry and meats that North Carolina's farmers can export. The extra depth also will enable ships to bring in greater volumes of fertilizers which will reduce the costs per vessel which can be translated into savings to the farmer.

Seattle: Hanjin offering new weekly service

ANJIN Shipping Company Ltd. has announced it will offer a new weekly vessel call at the Port of Seattle as part of its Pacific Southwest Pendulum Service II (PS-PDM II). The service makes Seattle the final stop for loading North American exports before heading to Taiwan, Hong Kong and Singapore. The service then transits the Suez Canal, calls on ports in Northern Europe, and returns via Colombo, Port Kelang, Hong Kong, Pusan, Osaka, Tokyo, and Long Beach. The first vessel on the PDB service to call Seattle will be the Portugal Senator on October 5.

The PS-PDM II service includes 10 ships with a capacity of 4,500 container TEUs (twenty-foot equivalent units) each, and two 5,300 TEU-capacity vessels.

"Adding Seattle to the port rotation of this service at a time when overall volumes on the West Coast are down is a sign of the vitality of the trade corridor served by the Port of Seattle," said Steve Sewell, Managing Director of the Port of Seattle's Seaport Divsion.

"This is very exciting for Hanjin in Seattle," said Beth Ann Savre, Regional Manager for Hanjin. "It's just another way to prove to the shipping community that we will remain strong in the Pacific Northwest and that better things are yet to come."

Hanjin has been one of the Port's largest container shipping lines for more than 20 years. In March Hanjin and the Port signed a new lease agreement that will keep the shipping giant on Seattle's waterfront for up to 15 more years and provide room for the carrier to grow its business here.

"The new lease agreement was designed to bring additional business to our Port, and to give Hanjin an opportunity to grow and prosper here," said Sewell. "I think this demonstrates that we're on the right track."

The Port will make substantial

improvements to Terminal 46, where Hanjin vessels call in Seattle. Those improvements will include a new truck gate, three new container cranes, improvements to the container storage yard, and a new administrative building.

The addition of a new service by a major container carrier is in line with the recommendations of a recent report by a citizens advisory committee, which

supports efforts to grow the seaport's container terminal line of business. The report, known as Harbor Development Strategy 21, includes a wide range of recommendations for the future of all of the seaport's lines of business.

Hanjin already calls Seattle with a pair of express services linking the Port to major Asian markets. The new service will bring the number of Hanjin's weekly vessel calls in Seattle to two.

Constanza: Shows gains in marine & river cargo traffic for first 9 months of 2001

HE global traffic (maritime plus river) for the first 9 months of 2001 was 25,661,000 tons which means a slight increase comparing to the figure for the first 9 months of last year which was 24,907,000 tons.

The container traffic for the first 9 months of this year was 89,137 TEUs, 12% higher than last year's figure which was 79,608 TEUs.

Significant increases were for the following:

Type of cargo	9 months 2001	9 months 2000
Cereals	1,793,000 t	914,000 t
Crude oil	3,526,000 t	2,057,000 t
Oil products	3.158.000 t	1.795.000 t

Significant decreases were for the following:

Type of cargo	9 months 2001	9 months 2000
Ferrous ore, scrap	5,293,000 t	7,095,000 t
Nonferrous ore	1,644,000 t	2,680,000 t

Africa/Europe

ABPH: Ross Sayers to be next Chairman

SSOCIATED
British Ports
Holdings PLC
is pleased to announce
that Ross Sayers has
joined the Board as a
non-executive director. He
will succeed Sir Keith Stuart
as non-executive Chairman when Sir
Keith retires from the Board, after serving 20 years as Chairman, following
next year's Annual General Meeting, to
be held on 16 April 2002.

Ross Sayers, 60, is Chairman of Innogy Holdings plc, which he joined in July 2000. Prior to that he spent 7 years as Managing Director and Chief Executive of CLP Holdings Limited, the Hong Kong electricity utility group. He has also held senior management positions at New Zealand Railways



Sir Keith Stuart com-

mented:

"We are very pleased to have attracted Ross Sayers to be the Company's next Chairman. He brings a depth of independent knowledge and experience to the Board and his proven skills and abilities in energy and transport industries will help us to continue with the implementation of our growth strategy."

Hamburg: Farewell to the head of Port of Hamburg Dr. Beth

EPRESENTATIVES of the City ■ Hamburg and the port business community flocked to a reception at the Hafenklub on Friday to take leave of Dr. Hans-Ludwig Beth, 65, on his retirement. In their Hamburg's speeches Minister of Economics Dr. Thomas Mirow and HHM supervisory board chairman Martin Reinhold applauded Dr. Beth's achievements, his immense dedication and internationally acknowledged competence.



Dr. Hans Ludwing Beth



Dr. Jürgen Sorgenfrei

Algeciras: Six firms bid for quay building phase 1 work

Total investment for the two projects calculated at £28.1 million (4,679 million pesetas)

total of six companies are presently vying for the Quay Adjacent the Breakwater in the Port of Algeciras Bay, which, with a budget of €20.7 million (3,447 million pesetas), is one of the main expansion projects for Spain's number one port. The companies bidding for the work are: Construcciones y Estulios SL; Ferrovial Agroman SA; UTE Corsan-Corviam/Jan de Nul; UTE Dragados Obras y Proyectos

SA/SA Trabajos y Obras; UTE FCC Construccion SA/Terratest Tecnicas Especiales SA and Necso Entrecanales Cubiertas SA.

Another six companies have presented tenders to build the Esplanade Enclosing Moat in the Crinavis facility, an investment of €7.4 million (1,232 million pesetas). The construction companies vying for the execution of the first phase of development work in Campamento are: ACS Proyectos, Obras y Construcciones SA; Construcciones y Estudios SL; CORSAN CORVIAM SA; UTE Dragados Obras y Proyectos SA/Sociedad Anonima Trabajos y Obras; FCC Construccion SA and Necso Entercanales Cubiertas SA.

In 1992 Dr. Beth then accepted the invitation of the Port of Hamburg business community to become managing director of Hafen Hamburg Verkaufsförderung und Werbung (HHVW). As such, he became the man responsible for the marketing of the port. In 1992 the great upheavals following German reunification were still in progress. Budgets were also growing, and HHVW was still acting in an advisory capacity in preparing cargo booking procedures for cargo-handling

companies. Existing competition compensation aid also came to be applied in order to compensate for Hamburg's disadvantages on pre-voyage and postvoyage runs vis-á-vis ports further west.

The association has very frequently acted flexibly in response to fresh demands from the market, from its members and the port's customers, repositioning itself by offering new ranges of services. The services offered and HHM's organisational structure have been adapted to meet both the demands of the development of the port as a whole and changes in the market. Such changes have been harnessed to make an effective impact externally.

Over almost a decade in the service of the port operating community, Dr. Beth's dedicated work has essentially set the tone for a revamping of the association, ensuring among other things that its membership has risen to the present total of 220 companies.

As chairman of the IAPH Combined Transport & Logistics Committee, Beth has also maintained contact at international level with other ports and succeeded in bringing his immense knowledge to bear on projects undertaken by IAPH.

As Dr. Beth's successor, Dr. Jürgen Sorgenfrei, 46, now takes over as chairman of Port of Hamburg Marketing. Dr. Sorgenfrei possesses many years of experience of ports and shipping. In his new assignment he will initially be concentrating on drawing up a marketing-oriented plan for the association.

import total is strongly influenced by the proportion of liquid bulk cargo (crude oil).

Indeed, the port of Livorno is traditionally oriented towards the East Coast of North America (USA and Canada), channeling cargo flows from several Italian regions.

Moreover, the port of Livorno is leader in new cars traffic: more than 600,000 new cars, imported from Asia, Japan but also South America and Europe, are handled yearly, making the port of Livorno the Italian hub for this kind of traffic.

The port of Livorno plays a vital role for its industrial hinterland: more than 1.1 million tons of dry bulk (sands, clay, zirconium, coal, etc.) feed the ceramic industry in Tuscany and Emilia-Romagna (in this region there are the most important manufacturers of tiles, well known all over the world).

Furthermore, more than 2 million tons of forest products, mostly wood pulp, are unloaded in Livorno and directed to the most important Italian area for paper making, near Lucca (40 km from Livorno).

Very good performances in the port of Livorno relate to the ro/ro sector too, which experienced considerable growth mostly thanks to the Mediterranean traffic.

Indeed, the port of Livorno maintains excellent relationships with ports in the western Mediterranean, both members and non-members of the European Union: last year the ro/ro traffic amounted to 6,604,972 tons (+20,61%).

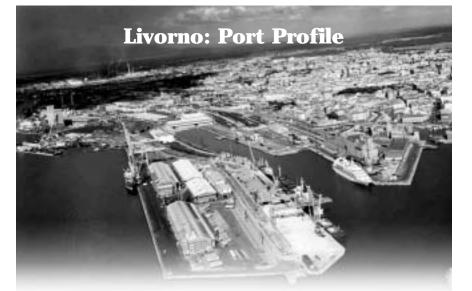
Container traffic in 2000 amounted to 501,399 teu (+9,5% compared to 1999).

Darsena Toscana is the most important container terminal, with a potential capacity of almost 800,000 teu per year: with a total surface area of 412,000 sqm, 1,600 m of quay,180,000 sqm of storage yard,49,500 sqm railway terminal, 10,000 sqm for reefer containers and 13 m draught.

The multipurpose nature of the port of Livorno is confirmed by the presence of a wide range of other traffic: project cargo, fresh fruit, frozen cargo, machinery and chemicals which make Livorno an important chemical bay for all the region.

But the port of Livorno, with over 270 calls a year, has become one of the most important Italian ports for cruise traffic too.

Thanks to its strategical position, Livorno is the gateway to Tuscany, the beautiful Italian region with its cities: Florence, Pisa, Siena, Lucca and many small suggestive villages where the



HE port of Livorno has existed since the 13th century, but it is officially founded in the 16th century by the Medici, the powerful Florentine family, the Grand Dukes of Tuscany.

The town was fortified: the "Fortezza Vecchia" (Old Fortress), one of the most important coastal defences in the Mediterranean, still proudly represents the power of both the town and the port.

Between the 18th and the 19th centuries the port of Livorno strenghtened its position becoming a dynamic emporium port and a cosmopolitan market: Greeks, Dutchmen, Germans, British, Armenians, Jews, felt at home in Livorno.

Nowadays this cosmopolitan past is visible from important buildings such as the Orthodox, Armenian and

Protestants churches, the Jewish synagogue and cemetery, the British cemetery.

Heavily damaged during World War II, the port of Livorno was completely rebuilt and today is one of the most important in the Mediterranean, linked with more then 300 ports all over the world.

Livorno is a multipurpose port, where all kinds of cargo can be handled by all types of vessels.

The port of Livorno's total throughput in 2000 amounted to 24.583.107 tons, representing an increase of 2,840,031 tons,that is a percentage rise of 13.06%. Goods unloaded amounted to 15,941,222 tons while goods loaded totalled 8,641,885 tons.

This would seem to contradict the fact that the port of Livorno is mostly involved in exportation: in fact, the



A view of Darsena Toscana Container Terminal and RO-RO Terminal

pace of life follows ancient rhytms and the local cuisine (and wines!) is famous all over the world.

As a result of the privatisation process begun by the Port Authority, major changes have been taking place also in the passenger and cruise traffic scetors.

The work of the "Porto di Livorno 2000" company, set up ad hoc in 1996 to manage the Passenger Terminal, has contributed to the 50% growth in cruise traffic in just three years.

Separated from the commercial area of the port, the Passenger Terminal is connected by a system of bridges to the most suggestive part of the town which, due to its canals, is called "Venezia" (Venice).

In year 2000 ferry traffic amounted to 1,488,535 passengers (+17%): most of the traffic is to / from Sardinia and Corsica (the last one connected also with an high speed vessel service), ideal places for summer holidays.

Cruise traffic amounted to 228.996 passengers and 286 ships.

New infrastructures have been built by the Port Authority in order to face the growing ferry and cruise traffic: moreover an ancient silo, placed in the cruise area, is planned for conversion into a luxury hotel.

Very close to the port there is the Tuscan Intermodal Center "Amerigo Vespucci," a fundamentel infrastructure serving the economic and manufactur-

ing basin of Western Tuscany.

The Intermodal Center, which works together with the port of Livorno and the Pisa Airport, will bring enormous benefits to the transport system and could be used as a distripark too.

This infrastructure covers a surface area of 2,500,000 sqm and a first stage is already in operation and further projects are exected to provide more operating facilities.

But the port of Livorno doesn't mean only maritime traffic: indeed, the most important Italian private shipyard has its seat in Livorno.

The "Cantiere Navale Fratelli Orlando" (Orlando Brothers Shipyard) was founded in Livorno in 1866; completely restructured in 1960, since 1996 the shipyard has been run by a cooperative company, which controls the whole production and repair process independently.

Since 1996, twelve ships have been completed, mostly chemical tankers, and a kind of ship technologically advanced and highly specialised.

But the Fratelli Orlando Shipyard is involved in the building of ferries too: indeed, it has already delivered a passenger ferry able to carry 1,800 passengers and 550 vehicles: it is a ship of great size and potential, perhaps nearer to a cruise ship than a ferry.

The second ferry of the same kind will be delivered soon.

PLA: London is all set to get brand new image

new look branding for the Port of London is being unveiled today (Thursday, 4 October) by the Port of London Authority (PLA) to better identify the Port's commercial activities in today's competitive global marketplace.

To be introduced to all commercial activities and communications from 1 January 2002, the new brand takes as its identity the famous oxbow bend in the River Thames around the Isle of Dogs. Using the colours red, white and blue, the bend has been stylised to create a striking symbol supported by the words "Port of London".

Whilst adopting a modern commercially orientated image to reflect the Port of London's flexible service capabilities, the familiar coat of arms with the full title "Port of London Authority" is being retained by the PLA for its regulatory activities.



Initially to be used by the PLA's port promotion department, the new brand is also being adopted by other members of the port community and shipping lines that are regular port users.

Unveiling the new brand, PLA Chief Executive, Steve Cuthbert said: "This new identity provides the Port of London community with a strong symbol that will become instantly recognised as standing for quality of service.

"Over recent years the global ports industry has become more competitive. Whilst the traditional PLA coat of arms continues to be appropriate in regard to regulatory responsibilities, it does not reflect the commercial services offered by the London port community.

"The new commercial identity follows on from the successful "Target London" marketing campaign of four years ago. Since then the PLA has canvassed London's port community for their views on the need and type of new identity, with a number of design ideas considered and discarded as the global markets have changed."

"The new brand makes an unequivocal statement – "This is the Port of London" – with immediate access to the markets of London and the south east of England."

The first airing of the brand will be seen on all commercial literature and correspondence produced by PLA port promotion, including the Port's flagship publication – the 2002 Port Handbook. In addition, all advertising, exhibition stands and promotional material will adopt the brand, including the PLA's purpose-built mobile exhibition unit, which travels the UK and Europe promoting the services and facilities of the Port.

A number of the independent terminal operators have already agreed to use the identity, using the symbol as a "marque" on their own corporate stationery and literature, thereby strengthening and developing the identity of the port community with the Port of London.

Suggestions for its use by the port community include permanent location signs at the terminal gates and berths, while one shipping company with a regular service between London and Europe is considering including the brand as part of the livery on its ships.

Rotterdam: First Permanent Oil Boom

OTTERDAM Municipal Port Management has brought into use the first section of a permanent oil boom for the Maasvlakte Oil Terminal (MOT). The boom, which will ultimately stretch 750 metres, will be completed in the middle of next year. The port authorities chose a permanent boom due to the strong current in the Beerkanaal, which links the oil terminal with the North Sea.

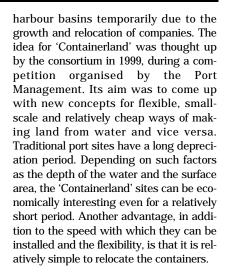
This current produces a high risk of consequential damage and leaks must therefore be contained as quickly as possible.

Rotterdam, along with Singapore and Houston, is one of the largest petrochemical ports in the world. Around 100 million tonnes of crude oil are transshipped here annually. The nine oil docks are spread over a distance of 25 kilometres. At the MOT, about 180 oil tankers transship approximately 35 million tonnes of oil a year. Shareholders in this storage company are British Petrol, Exxon, Kuwait Petrol, VOPAK, Shell and Total.

Boompool

Containing spills is a job for the port authorities. 90% of the annual 450 spills involve less than 50 litres. To deal with these, the RMPM patrol vessels have absorbent oil booms. For larger spills more than 250 litres - a number of companies in the port area have synthetic booms to avert the oil. With the founding of a so-called Boompool - a partnership between the government and business community - the booms can be used more efficiently.

The booms can be found at strategic points in the port and are stored in one-TEU containers. During incidents, the fire brigade collects the oil booms and puts them into service.



Rotterdam: Container Status on website ECT

ROM 3 September on, www.ect.nl offers the status of containers on the ECT terminals. Around the clock general information (expected arrival and departure) is available for everybody by using the container number. More specific information is available on a protected part of the site by using a username and password. In the future authorized users will be offered more services on reporting and order handling. More information: Tony Kolff, manager electronic services ECT: tony.kolff@ect.nl



Rotterdam: Old containers make new land

N the port of Rotterdam, a new concept for temporarily converting water into land, bearing the name 'Containerland', is being tested. At the beginning of October, four packages with a total of 24 containers were set down on the bed of the port. In the period ahead, they will be covered with sand and then paved. The containers will remain in this trial position until the beginning of next year. In the meantime, practical trials will be carried out to test the concept.

The containers in the trial project are stacked three high. Every package of six containers is fitted with concrete slabs at the top and below, so that the pressure is directed to the corners of the containers.

Old containers are used for the project, in which holes are bored to allow them to fill with water.

After a number of practical trials have been conducted, in which trucks, for example, will be driven over the new site and the quay will have to bear large quantities of sand, the containers will be removed from the water in January to see if that is just as easy as positioning them. If everything goes according to plan, RMPM wants to test 'Containerland' on a larger scale in the course of next year, at a location where the site is used daily.

'Containerland' is a patented concept devised by a consortium of Dutch contractors that works closely with Rotterdam Municipal Port Management (RMPM). It is designed for use at locations where it could be desirable to 'fill in'



Port of Rouen

• 2000-2001: A "Transitional" Campaign for Rouen

SINCE the reform of the Common Agricultural Policy in 1992, the grain market has undergone major adjustments which have held back the activity of Rouen Port and all operators in this industry. The endeavour to win back the French domestic market has led, in the case of Rouen Port, to major fluctuations in results.

The 2000-2001 campaign has a "transitional" character since the next campaign will occur in a different context, given that French wheat will need to cope with the world market without the benefit of export refunds - without, in other words, export subsidies. Hence the importance

of the Grain Conference and particularly its round table on wheat quality

Rouen grain campaigns (millions of tonnes)

1995/96 1996/97 1997/98 1998/99 1999/2000 2000/2001 6.5 5.5 8.0 8.3

• ROUEN'S SPECIALTIES

- Grain export: The leading European port
- Flour export: No.1 French port
- Agrifood and agroindustry: No.1 French port
- · Fertilizers:
- No.1 French port
- Paper products: No.1 French port
- Containers consolidated (on N/S routes): No.1 French port
- General cargo (conventional): No.2 French port
- Container (TEU): No.3 French port

A new Image for French grain

As the fourth ranking wheat producer worldwide and either second or third among sellers of wheat according to the year, France exports half its output, French producers have numerous advantages: climate, soil, agricultural infrastructures, expertise, and so on.

But the real challenge is to adapt more effectively to market demands, such as those of the Mediterranean basin, with finer-grained segmentation of loads; drier wheat, delivery of more uniform loads, increased protein content, improved grain traceability, etc., the goal being to achieve a set of specifications available to private sector International buyers if they import from Rouen: "our wheat is much better than its reputation" was in fact the message from Pierre-Olivier DREGE, CEO of the Office National Interprofessionnel des Cereales (ONIC) (National intertrades grain bureau).

Goals and issues for the 21th century

Philippe CHALMIN, an economist, introduced the third round table on goals and issues for the 21th century. He observed at the outset that everywhere in the world this is a time of "redefinition of agricultural policies.

Carol BROOKINS, President of World Perspectives, did in fact point out that farmers and growers "no longer trusted the market to provide them with sufficient income" and were counting on a new Farm Bill that would be generous to American producers, whereas Lars HOELGAARD, Director of the Division responsible for organisation of plant markets at the European Commission, confirmed that the allocation of export refunds was increasingly exceptional. that intervention stock levels were falling and budget expenditure stabilising. He ended his paper by underlining that the level of support provided by the United States to its agricultural sector was now higher than in the European Union.

• Cruise Liners at Rouen and Honfleur 33 calls in 2001

URING the summer season Rouen Port is expecting calls from 31 cruise liners, 12 of these will berth at Rouen, 17 at Honfleur, and 2 others at both Rouen and Honfleur.

Cruise business is expanding year by year: there were 26 calls last year. This is therefore a confirmation of the interest taken in the Seine valley by tour operators and shipowners and encouragement for Association Rouen Croisieres and those partners who have devoted much effort to this sector, notably raising their profile through commercial actions such as the "Seatrade Cruise Shipping" trade fair in Miami in which they regularly take

VISITORS

- Last January, Rouen Port received a visit from a Madagascan delegation representing the port of Tamatave.
- In April, Rouen welcomed ten CEOs of West African ports during the Africa Days organised by CFME-ACTIM.
- In April, the Port Authority met with His Excellency Alassane Salif N'Diaye, Ambassador for Ivory Coast in France, who provided an update on the current situation in his country.
- In May, there was a working session in Rouen for those attending the annual congress of the European Maritime Pilots' Association.

Port of Vlore: Launches its website on July 12, 2001

HE Port of Vlore is launching its website today on July 12, 2001. The website is an important step in the strategy of our organisation to improve customer service and fully exploit the benefits of e-business. The website is graphically designed to accommodate the specific needs of our customers for easy access of information and through use of most advanced programming techniques several facilities for our clients are provided. The website includes access to our Employee INTRANET that would enable our employees to improve their skills through working in teams. Shippers and forwarders would find all the information they need in our pages. Travelers would find up to date information on ferries. Importers and exporters would be encouraged to use our competitive services. Direct support is also provided through integration of text and voice customer support in our pages. Search and Index engines ease browsing and retrieving information on the fly. All in all this excellent website would be of great help to all our customers and to the passengers going in and out Vlore city and region. Indeed, as part of our dedication to community we have not forgotten to include information on tourism in the beautiful city of Vlore and links to travel agencies.

And this is just a start. We will improve



the website constantly to make it more functional and easier to navigate. The located website is on http://www.portofvlore.com in servers with fast connections to the Internet backbone.

We are also soon to launch our PROMO-TION CD-ROM, which includes full information on our organisation.

For further information, please contact: PORTI DETAR VLORE sh.a Attn. PETRIT TAFILI, General Director I. PAVARESIA Rr. Sadik Zotaj Vlore, Albania Fax: +355 63 29417

Asia/Oceania

Brisbane: Trade results for 2000/2001

HE Port of Brisbane maintained positive growth during the past financial year despite the low Australian dollar and variable economic conditions, Transport and Main Roads Minister Steve Bredhauer said today.

Mr Bredhauer said total tonnage through the port increased by 97,859 tonnes to almost 23.15 million tonnes – an increase of 0.42 percent.

"This is a sound result given economic conditions as well as high oil prices, drought and increased levels of inflation," Mr Bredhauer said.

The value of trade through the port increased by 18 per cent to \$17.8 billion.

"Record export shipments of meat products, cotton and cotton seed have ensured that Brisbane has maintained its position in terms of Australian market share of these commodities at more than 50 per cent," Mr Bredhauer said.

Container throughput increased 4.79 per cent and total export trade increased by 2.42 per cent to more than 10.85 million tonnes. Import tonnage decreased by 1.28 per cent to more than 12.29 million tonnes.

Other key export growth areas included:

- tallow increased by 8.4 per cent
- hides and skins increased by 21.2 per cent
- meat and bone meal increased by 26.9 per cent
- refined oil increased by 9.3 per cent
- coal increased by 8.9 per cent

Drought was a factor in a 40 per cent decrease in cereal exports while the slowing Japanese economy was a factor in falling exports of woodchip.

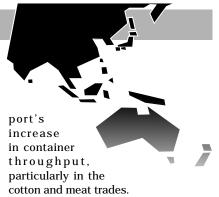
A downturn in the housing industry affected imports of timber, cement and iron and steel.

Drought also impacted on imports of fertilisers and chemicals.

Imports that increased over the year included motor vehicles, fruit and vegetables and dairy products – particularly milk powder.

Port of Brisbane Chief Executive Officer Graham Mulligan said steady growth in containers through the Brisbane Multimodal Terminal underpinned the





"The recent Sofrana decision to direct containers from southern points through the Multimodal Terminal, on the Papua New Guinea and Solomon Islands service, highlights the strategic importance of the terminal and the Port of Brisbane," Mr Mulligan said.

Brisbane: Refueling trucks and drivers

AJOR fuel stop operator, North Eastern Travel Stops Pty Ltd, will be bringing an impressive range of services to its new facility to be situated on a two-hectare site at the Port of Brisbane's new Whyte Island Estate near port facilities at the mouth of the Brisbane River.

The \$4.5 million development will be located next to the intersection of Port Drive and Howard Smith Drive, under a ten-year lease agreement with up to two options each of five years.

Nine companies were invited to tender, including all those who had shown an interest during concept development, as well as every major fuel supplier.

According to Chris Morris, Managing Director of successful tenderer, North Eastern Travel Stops, "This was a very attractive proposition because a very definite need exists in the area due to the high volume of transport and the concentration of transport companies.

"There is a need not only to refuel trucks, but also to refuel their drivers and support staff. That's why our truck stop will include a restaurant with seating for over 72 people at any one time, as well as takeaway."

In addition there will be a drivers' lounge, laundry and showers, Internet access and telephones. There will be parking for up to 70 trucks, with further room for expansion, as well as 20 car parks, with additional parking for boats, caravans and four-wheel drives. There will also be a truck wash and capacity to refuel six trucks at a time.

"With the wide range of services on offer, we anticipate that this new facility will create between 30 and 36 jobs," Mr Morris said.

Preparation of the site is currently underway, with construction scheduled to begin in early November for completion mid-2002. The improvements will be owned and leased by the Corporation.

Fremantle: Naming and blessing of Fremantle's new pilot boat

REMANTLE Port's new pilot boat made a colourful entry to the Inner Harbour today for a naming and blessing ceremony. The vessel was escorted into port by the Fremantle Port emergency response vessel, FP Response, with water cannon providing a traditional welcome.

Planning and Infrastructure Minister Alannah MacTiernan named the boat, Parmelia.

The name was chosen by a panel of judges from entries in a Name the Pilot Boat Competition for schools in the Fremantle area, with the honours going to 12 year old Kate Mead of Samson Primary School. The boat is named after the sailing ship Parmelia which arrived in 1829 with Lieutenant Governor James Stirling to establish the Swan River Colony.

The blessing was conducted by the Reverend Dennis Claughton, Chaplain of the Flying Angel Mission for Seafarers and Sister Kathryn Summerfield, Chaplain and Director of the Stella Maris Seafarers Centre.

Fremantle-based company, Thornycroft Maritime and Associates (Australia) Pty Ltd won the contract for building this newest addition to Fremantle Port's pilot boat service, and the boat was built locally at Henderson.

The new pilot boat, built at a cost of \$1.6 million, is a proven second generation Nelson craft design, widely favoured around the world for pilot operations. It was chosen for its ability to cope well in Fremantle Port's strong sea breezes and rough winter weather.

Fremantle is one of the world's windiest ports, with sea breezes that regularly reach between 30 and 35 knots. Its pilot boats must be able to handle the varying weather conditions, waves, swells and tides. They must be robust and easy to manoeuvre.

The hull and superstructure of the 16-metre boat are constructed of glass re-

inforced plastic. The vessel is powered by twin V12 engines.

Safety has been an important consideration. Among the features of the new boat is a dedicated VHF radio for the pilot, enabling communication with the ship and Fremantle Port's signal station without the pilot having to leave the seated position. This reduces the risk of falling when the boat is rolling and heaving in rough conditions.

Helping to protect Fremantle Port's investment in this boat is an advanced type of fendering not seen before in Australian waters. This will absorb heavy impacts when coming alongside moving ships.

Fremantle Port conducts about 3700 pilot transfers annually, putting pilots on inbound ships as they approach the port and disembarking them at sea from departing vessels.

Fremantle: Dynamic Underkeel Clearance

REMANTLE Port continues to use Dynamic UnderKeel Clearance technology to maximise ship drafts (and vessel loadings) through the shipping access channels.

The technology has recently undergone a significant upgrade to DUKC Series II, which went into service at the beginning of August.

The most significant aspect of this upgrade is that any ship will now be able to take advantage of the technology. The initial technology was restricted to particular classes of ships, but this restriction will be removed.

By making simulations of channel transits specific to individual ships and their load condition at the time, the predictions made also become totally specific. This enhanced information increases the reliability of the management of deep draft shipping in any of the port's shipping channels.



Oil tankers visiting the Refinery Jetty at Kwinana, in Fremantle Port's Outer Harbour, will benefit from the upgraded Dynamic UnderKeel Clearance system.

Fremantle: Sees strong growth in box trade

REMANTLE Port's container trade grew by 18 per cent in the 2000/2001 financial year. The total of 354,222 TEUs was well ahead of the targeted four per cent growth, and continues an upward trend that has seen the Port's container trade increase by 193.6 percent since 1990/91. This translates to an average annual rate of 11.4 per cent during that period.

There were 45 additional container vessel visits, compared to last year, and Fremantle Port's container crane rates rose by an outstanding 31.6 per cent to be the highest in Australia.

However total trade was below the targeted levels, reflecting the fall in grain exports following difficult seasonal conditions.

Non-containerised cargoes that showed strong growth in Fremantle Port's Inner Harbour in the last financial year were live sheep exports, which increased by 11.3 per cent and new motor vehicle imports which were up by 12.3 per cent.

Imports from Japan and Korea accounted for 57.8 per cent and 18.7 per cent respectively of the 50,611 new vehicle imports.

Victoria Quay facilities dedicated to the motor vehicle trade were expanded during the year to enable further onwharf processing.

HKSAR: New initiative to cut time lag for release of port statistics via Internet

N keeping with the world trend and the Hong Kong Special Administrative Region Government's information technology policy, the Hong Kong Marine Department will provide more comprehensive monthly/quarterly port statis-



The Marine Department will release more details of its monthly/quarterly port statistics report via the Internet by the end of 2001.

tics report via the Internet by the end of 2001.

The new initiative will reduce the time lag for releasing port statistics to nine weeks instead of the present two-and-a-half months. The move will substantially boost the Marine Department's current practice of providing only key port statistics at its web page.

Kaohsiung: KHB's excess corridor project approved

HB's external links project was recently approved by the Executive Yuan, and is to be conducted in two stages, scheduled to finish by the end of 2001. Upon completion, Kaohsiung Port's links with its hinterland and the transportation within Kaohsiung city will be effectively integrated, which in turn will increase the efficiency of port transportation, lower the impact on the development of nearby areas, and promote port competitiveness.

Since there are no dedicated thoroughfares between the freeway and Kaohsiung port, all vehicles going in and out of the port must pass through downtown, resulting in the peripheral roads of the city becoming congested.



The project team plans to build elevated roads upon the existing roads between the freeway and port areas. Elevated roads will also be built in those port areas where traffic congestion is a problem. The project will be completed in two stages: the short term and medium term.

Short-term plan:

A road link will be built between Container terminals No.3 and No.5, which both deal with a large volume of container traffic. The road will connect to The Kaohsiung city in order to solve the problem caused by escorting goods. Secondly, the primary external links between port areas will be enlarged to increase road capacity and allow vehicles to pass smoothly.

Medium-term plan:

Commences upon completion of the short-term plan.

It is expected the completion of the project will facilitate port area transportation and reduce any negative impact on city development, decrease manpower spending on escorting goods, cut operation costs, and enhance the development of a global logistics center.

Kaohsiung: NYK Continues its Berth No.121 lease contract

lease contract between Japanese shipping company NYK, lessee of Berth No. 121 of Container Terminal No.4, and KHB was signed in Linden Hotel, Kaohsiung, on July 27, by NYK Executive Vice President Yu Zi Hirano and KHB Director Huang. The term of the lease will run from May 14, 2002 to May 13, 2007, a total of 5 years.

NYK is now ranked the world's largest shipping company in terms of shipping scale and capacity. NYK's container volume for the first half of this year has increased 5.3%, compared to the same period last year. In recent years, NYK has been extending its business operations in Taiwan: establishing a Taipei branch in 1998, and opening new shipping routes. Beginning this year, a further six 6000-TEU cargo ships will be launched to increase container capacity. Furthermore, in March 2001 NYK bought 3 gantry cranes and 8 transtainers, confirming NYK's intention to remain a permanent fixture in Koahsiung Port.



Mr. Huang and Mr. Hirano present a medal each other for cooperation

The Executive Vice president of NYK, Mr. Hirano, noted that the 21st century

shipping industry is focused on providing satisfactory service to its clients. For this reason, and in terms of its vessels, warehousing, and transportation services, Kaohsiung Port cannot be better. Moreover, the present government has been actively developing Kaohsiung into a world-class transshipment port. In reply, Director Huang noted that NYK has rented Berth No.121 since 1990 and that NYK's contribution to Kaohsiung Port should not be overlooked. Both parties were confident NYK would share in Taiwan's future bright economic prospects.



*Photos Courtesy of the Maritime and Port Authority of Singapore

Opening Address by Mr. Yeo Cheow Tong

Minister for Communications and Information Technology

At The International Conference on Port and Maritime Research & Development and Technology

Monday, 29 October 2001 Shangri-La Hotel, Singapore

am very happy to be here this morning at this inaugural International Conference on Port and Maritime R&D and Technology. First, let me extend a very warm welcome to all the guests, speakers and participants, and especially to our friends from abroad.

Port and Maritime R&D and Technology

Rapid advances in information technology have transformed the way in which we do

business. Adapting to change is always a challenge, but those who are able to grasp the challenge by the horns have become more efficient, more productive and more competitive. Some of the transformations include reengineering the organization so that better quality products are produced, but engineered so that they can be made at a lower cost and with much shorter design cycles. Gone also are the days when we had to wait days or even months for news.

Information is now transmitted around the world instantaneously, and transactions can be concluded with a simple keystroke.

The shipping industry is also facing the winds of technological change. Information Technology is bringing about significant transformations. These include the ability to deliver products to different parts of the world in a much faster time. And shippers can now keep track of their specific containers and goods enroute to their final destination. Marine technology has changed tremendously too. IT, combined with advanced engineering technology, has made the ships of today bigger

and faster, yet safer and less labour-intensive. To keep up, ports too, are relying increasingly on computers and automation to load and unload cargo within the shortest possible time.

These advancements have come about because of the port and maritime industry's commitment and efforts on R&D. Despite the current global economic slowdown, the industry cannot afford to be complacent. It must continue to invest in R&D, and develop new processes, equipment and systems in order to contribute to global economic progress and growth.

For example, if ships are able to travel faster, propelled by engines and fuel which are more efficient and less pollutive, goods can then be shipped around the world at a lower cost, and the industry would also be contributing positively to the marine environment.

In Singapore, we see port and maritime R&D as an important factor in maintaining our position as a major global hub port and an international maritime centre. In this regard, the Maritime and Port Authority of Singapore, or MPA, has formulated a strategic plan to develop Singapore into a centre of excellence for maritime R&D. The MPA has launched several initiatives, and I would like to briefly highlight some of them.

The MPA and the Singapore Maritime Academy have embarked on a project to establish an Integrated Simulation Centre, or the ISC. The Centre will be equipped with state-of-the-art marine simulators that can provide comprehensive and fully-integrated simulation training in ship handling, crisis management and vessel traffic services. The Centre will also be focusing on R&D in marine simulation.

MPA will be partnering the industry and tertiary institutions to expand maritime R&D in Singapore. It has already concluded maritime R&D MOUs with the National University of Singapore and the Nanyang Technological University. These collaborations have resulted in the successful completion of projects that will help enhance the safety of shipping movements and the prevention of marine pollution in our port. One of the projects in the Electronic Ferry Enforcemnt System, which is now being used to automatically monitor the movements of regional ferries in our waters.

The MPA and Nanyang Technological University have also jointly set up an MPA-NTU Maritime Research Centre in February this year. The main objective of this Centre is to undertake research to develop technologies and IT applications in the port and maritime field.

The MPA has also been extending R&D collaboration beyond our shores. It signed an MOU on Maritime R&D, Education and Training with the Research Council of Norway (RCN) last year. The MPA-RCN collaboration is progressing well, and a number of meetings have already been held in Singapore and Norway to work out the projects to be pursued under the MOU.

I would encourage more joint maritime R&D collaborations between local and overseas companies and research institutions. They can tap the R&D infrastructure in Singapore and use the Port of Singapore as a test-bed to test and showcase new maritime technologies and innovations. Through such collaborations, we will be able to create a larger research network and generate more opportunities for mutual benefit.

To provide guidance and expertise in the formulation of a maritime R&D programme for Singapore, the MPA is also planning to set up a Maritime R&D Advisory Panel. Its members will be drawn from the maritime industry, academia, the MPA and relevant government agencies. The Panel will help to identify the sectors in Singapore with maritime R&D potential and the type of R&D projects that will have industy-wide interest and application.

The panel will help link local research institutions with appropriate overseas counterparts, so that they can jointly undertake some of these projects.

This Conference will help to drive home the importance of investing long term in port and maritime R&D. It brings together some of the best experts and professionals in their fields from around the world.

I urge you to share your experiences and ideas with one another. I hope that arising from these exchanges, something concrete will eventually emerge which will be of significant benefit to the maritime industry.

On this note, it is now my pleasure to declare the inaugural International Conference on Port and Maritime R&D and Technology open. I wish all of you a fruitful and enjoyable conference.

MPA: Sets up Maritime R&D Advisory Panel

O provide guidance and expertise in the formulation of a mar $itime \ R\&D \ programme \ for$ Singapore, the Maritime and Port Authority of Singapore (MPA) set up a Maritime R&D Advisory Panel. This was revealed, October 29, by Mr. Yeo Minister Cheow Tong, Communications and Information Technology at the Opening Ceremony of the inaugural International Conference on Port and Maritime R&D and Technology. The Conference was jointly organized by the MPA, the National University of Singapore (NUS), the Nanyang Technological University (NTU) and the Singapore Maritime Academy (SMA).

The establishment of the Maritime R&D Advisory Panel is the MPA's latest initiative in its efforts to develop Singapore into a centre of excellence for

maritime R&D. Among other things, the Panel will help identify the sectors in Singapore with maritime R&D potential, develop a list of specific R&D projects with industry-wide interest and application, and assist in establishing linkups between suitable local and overseas research institutions, maritime companies and organizations, to embark on these projects. Its membership will be drawn from the maritime industry, academia, the MPA, as well as other related government agencies.

In his opening address, the Minister also highlighted other initiatives by the MPA towards building Singapore into a centre for maritime R&D. These include the signing of a number of Memoranda of Understanding to collaborate on maritime R&D with various local and overseas research institutions; the establishment of a Maritime Research Centre with NTU; and the development of a state-of-the-art Integrated Simulation Centre



Mr. Dominic J. Taddeo (left), Immediate Past President of IAPH, President & CEO, Montreal Port Authority, as Chairman of Session and Mr. Pieter Struijs (right), Executive Director, Vice Chairman of the Board, Rotterdam Municipal Port Management, IAPH 1st Vice President, as Speaker (Please see his paper as appeared in November issue of the journal.)

PSA: Cotton boom promotes fast, effective supply chain

XPLOSIVE growth in international demand for quality cotton has intensified the shipping task for Australia's largest cotton exporter Queensland Cotton over the past 10 years.

Now producing/exporting more than five times the volume of 13 years ago, Queensland Cotton has simplified its complex transport task by using relay services via PSA Corporation (PSA) in Singapore.

Through relay services, Queensland Cotton has gained access to multiple sailings, larger vessels and more competitive rates for its export shipments to Asia

With a massive 39% of Australia's total cotton export market, Queensland Cotton exports approximately 9000 FEUs annually to Indonesia, Bangladesh, Thailand, India, Spain, Italy, Japan, China and Korea.

Queensland Cotton's Export Manager Hossein Davoudi, said that access to more shipping lines was the major reason the company used relay over direct services.

"50-60% of shipping lines are servicing Asia transship via PSA. The lines offer increased schedules and larger vessels out of Singapore," he said.

"Larger vessels mean more competitive rates and greater efficiencies for the line, also improving Queensland Cotton's bottom line."

While Davoudi admitted that it was no faster relaying than using direct services, he said there was greater flexibility in supplying overseas markets, making it easier to re-allocate shipments if needed.

"Transshipment allows us to create contingency plans in case there is an order cancellation mid transit." he said.

"As the world's largest transshipment hub, PSA has the capabilities to handle large volumes and the flexibility to switch to another carrier (and destination) at the last minute, thus keeping our inventory costs to an absolute minimum. Direct services cannot offer this same service," Davoudi said.

PSA's free trade zone allows shippers such as Queensland Cotton to hold their cargo while the shipment is relocated. Once a suitable vessel is located, PSA ensures the turnaround is seamless.

PSA's Australian Marketing Representative Richard Stevens said that PSA's ability to handle large volumes of cargo coupled with its access to a large number of shipping lines,

Singapore: Statistics of The Port of Singapore

(1) VESSEL ARRIVALS AND SHIPPING TONNAGE(>75 GT) Numbers Million GT 1991 70345 536.62 1992 81334 578.50 1993 92655 623.84 1994 101107 678.56 1995 104014 710.57 1996 117723 768.52 1997 808.31 130333

140922

141523

145383

857.66

877.13

910.18

1998

1999

2000

(2) VESSEL ARRIVALS (>75 GT) BY TYPE FOR YEAR 2000				
Type of Vessel	Number	Million GT		
All Type	145383	910.18		
Container	16971	337.58		
Freight	5178	37.50		
Coaster	3678	1.70		
Bulk Carrier	4291	132.49		
Tanker	15885	294.50		
Passenger	1222	19.21		
Regional ferries	53029	10.14		
Barges	19972	21.97		
Tugs	14874	2.52		
Miscellaneous	10283	52.57		

(3) TC	OTAL	
CONT	AINER	
THROU	GHPUT	
Year	Million	
	TEUs	
1991	6.35	
1992	7.56	
1993	9.05	
1994	10.40	
1995	11.85	
1996	12.94	
1997 14.14		
1998	15.14	
1999	15.94	
2000	17.09	

-	(4) TOTAL CARGO (Million Tonnes)					
n	Year	Total	General	Cargo	Bulk	Cargo
Ц		Cargo	Containerised	Conventional	Oil	Non-oil bulk
	1991	206.43	90.68	17.50	91.51	6.73
	1992	238.45	108.95	16.76	105.44	7.28
	1993	273.72	127.07	15.57	123.48	7.60
	1994	290.07	142.24	15.01	124.08	8.75
	1995	305.48	154.50	15.24	126.37	9.36
	1996	314.16	160.28	14.80	129.88	9.20
	1997	327.51	170.14	15.42	129.79	12.16
	1998	312.32	160.32	12.65	127.17	12.19
	1999	325.90	176.57	11.98	124.39	12.96
	2000	325.59	185.86	13.72	113.33	12.68

	(5) BUNKER SALES (Million Tonnes)						
Year	Total	Marine	Marine	Marine	Fuel Oil	Others	
		Diesel	Diesel	180 cst	380 cst		
		Gas	Oil				
1991	12.50	-	-	-	-	-	
1992	16.31	1.16	0.88	5.34	7.19	1.74	
1993	16.72	1.34	0.87	5.34	7.73	1.45	
1994	17.64	1.46	0.84	5.26	8.49	1.59	
1995	17.49	1.32	0.70	4.76	9.40	1.32	
1996	16.94	1.21	0.56	4.25	9.80	1.13	
1997	16.94	1.23	0.48	3.94	10.30	0.98	
1998	18.06	1.36	0.42	3.66	11.82	0.80	
1999	18.89	1.34	0.40	3.66	12.75	0.74	
2000	18.75	1.26	0.30	3.18	13.24	0.68	

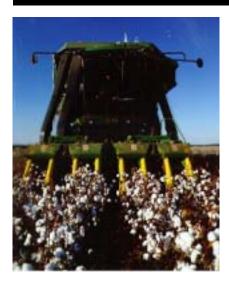
` '	(6) SINGAPORE SHIP REGISTRY					
Year	Number	Million				
		GT				
1991	1823	9.56				
1992	2087	10.74				
1993	2394	12.16				
1994	2647	13.20				
1995	2910	14.96				
1996	3157	18.24				
1997	3380	20.77				
1998	3412	22.03				
1999	3360	23.75				
2000	3335	23.04				

Source: "SINGAPORE MARITIME & PORT JOURNAL 2001" published by Maritime and Port Authority of Singapore (MPA)

made it a perfect hub for exporters such as Queensland Cotton.

"For an exporter such as Queensland Cotton, the existence of direct services to a minimum of eight Indonesian ports, in most cases with daily frequencies, provides very significant supply chain flexibility," he said.

"The same is true for main ports in Thailand and Bangladesh. Such service capability explains why about a quarter of all Australia's containerised exports and imports now move via Singapore. This volume is only slightly less than



the international container volume handled each year by either Melbourne or Sydney."

Overseas demand for cotton has increased dramatically with 3.3 million bales of cotton exported in 2000, contributing to a 65% increase in exports over the past five years. Davoudi attributes this to increased demand for quality cotton.

"Australia is the leader in cotton production and as demand increases for quality clothing, linen and carpets we have grown to meet this demand," he said.

PSO: Functions of IAO (International Association Office)

Introduction

The newly founded I.A.O. which functions as the only internationally oriented department within the ports and the Shipping Organization of the Islamic Republic of Iran, rigourously seeks the development of the info-technical and techno-scientific cooperation between P.S.O. and the international maritime organizations and associations through realization of the following strategies:

- Establishing marine specialized info-technical data bases for maritime terminology and usage of the relevant jargons.
- Carrying out studies to promote technoscientific cooperation between P.S.O. and the international organizations and associations
- Reviewing proposed plans and programs pertaining to P.S.O.'s international communications and ties.
- Carrying out specialized studies and researches on maritime regulations to be

applied in the draft agreements between P.S.O. and other international organizations and agencies.

- Making specialized analytic comments on the contracts to be signed between P.S.O. and the foreign contractors.
- Establishing effective relations and exchanging information with related international organizations and associations.
- Coordinating and orienting P.S.O.'s international relations in order to facilitate and develop these linkings and connections.
- Cooperating with international organizations and coordinating due schedules developed for holding international maritime workshops/seminars.

A new approach P.S.O. pursues

I.A.O., as the progressive advisory office in charge of orienting P.S.O.'s foreign relations, honors all proposals and comments which foster the achievement of the aforementioned objectives and entails further effective collaboration between P.S.O. and internationally concerned maritime agencies and organizations/thus, given the peerless geo-strategic location of Iran as a gateway for international trade, to get a high market share, all international organizations, agencies, associations, multinational companies, secretariats of the symposiums/seminars,etc., with port and maritime industries know-how are kindly invited to forward their comments, proposals, and relevant issues and subjects 751 Enghelabe Ave.,15994,Tehran,Iran, Mr. Hassan Mirfakhraee or through the current Email. <asadi@ir-pso.com>

Sydney: Namoi Cotton wins Sydney Ports Export Award

ollowing a good growing season, record levels of production and increased export volume, Namoi Cotton Cooperative Ltd. was the recipient of the Sydney Ports Corporation sponsored award - "Highest Export Growth through Sydney Ports," last night at the Premier's NSW Exporter of the Year Awards presentation.

Sydney Ports Senior Trade and Development Manager, Mr Phil Rosser, said the awards recognise export excellence and through The Australian Institute of Export (NSW) Ltd, and with Sydney Ports' support, the drive for export excellence can be recognised.

"During the past financial year, Sydney Ports recorded high export growth for cotton with an impressive 355,000 mass tonnes or 28,000 TEUs*, 35.0 per cent higher than the previous year - of this, Namoi was the biggest exporter including growing volume through Sydney's ports," he said.

"Recent improvements to both rail access into the Port Botany container terminals and service arrangements to the network of rural intermodal terminals – particularly Moree, Wee Waa, Narrabri, Warren and Trangie, have enabled cotton shippers to have much greater confidence in achieving designated arrival times at the port, in line with shipping line schedules.

"Improved stevedoring performance and maintaining fixed-day sailings have added greatly to the overall reliability of the total logistics movement from growers to buyers

Mr Rosser added that shipping services from Sydney Ports to South East Asia, Japan and Korea, the major markets for Australian cotton, provide yet another advantage to exporters of cotton

"Services from Sydney to these markets total 27 sailings per month to South East Asia and 17 to Japan, making Sydney the preferred port for exporters to Asia. This represents on average of more than one sailing per day to these areas," he said.

Cotton is not the only rural export product to have increased during the year through the ports of Sydney. Containerised meat and wine increased substantially from last year and a relatively new development, containerised wheat, increased by 250 per cent from last year.

Approximately 150,000 rural origin TEU* exports go through Sydney's ports per year.





HE "PORT 2000" Project was the main focus of the Trade Development Mission of the Port of Le Havre this month in Singapore, Tokyo and Osaka. The Mission, led by Mr. Christian Leroux, Vice Chairman of the Board, organized trade seminars for the representatives of carriers, manufacturers, bankers and investors in each city.

The "Port 2000" Project, involving an investment of nearly a US\$6 b. is a national port development plan initiated in 1998. Making the most of its geographical advantage as the first port of call in northern Europe, the project aims to make the Port of Le Havre a hub port in Europe by means of newly creating six container terminals on the banks of the Seine at which ships can berth without having to pass through the lock, and further reinforcing commodity distribution capacities by constructing state-of-the art multi-purpose value-adding storage yards as well as speedy connections with highways, railways and inland waterways to/from various corners of Europe.

The construction work started in November, expected to be completed over the next 3 years. The first stage work will include 4 CTs and will be oper-

ational in July 2004. Another two CTs will be completed in January 2006. Thus, Mr. Jean-Marc Lacave, Executive Director, Port of Le Havre, noted that the capacity of the container terminals of the Port of Le Havre is to be almost doubled as the "Port 2000" project reaches completion.

One remarkable aspect of the Port of Le Havre presentation for The "Port 2000" Project was that it was pushed forward by all Sectors of Le Havre's port community. Mr. Patrick Deshayes, Secretary General, Personnel General Trade Union, noted in his presentation that the dockers

and employees of the Port of Le Havre have been taking firm and solid steps toward the creation of a "Reliable Port" and that they have been taking part in every important decisions as they are represented on the Port's Board of Directors. Admitting that there have been difficult times in the past, he stressed the solidarity

and partnership apparent in the "Port 2000" project. In an interview with the author, Mr. Deshayes commented that he was very pleased to visit Asia as such an opportunity truly enabled him to visualize the faces of the people behind the cargoes they handle and feel much inspired to handle cargo with personal care and attention for the mutual benefit of all involved.

Other members of the Mission included Mr. Pierre-Yves Collardey, Commercial Director; Mrs. Florence Aubergier, Area Manager Asia/Oceania; Mr. Thierry Destribois, Logistics Development Manager, Commercial Direction; Mr. Georges Krumeich, General Affairs, Public Relations; Mr. Jean-Rene Rio; Mr. Philippe Silliau, Representatives of Port Workers and Employees; and Mr. Jerome Clausen, Investment Advisor, Le Havre Developpement.

For more information, please contact:

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Terre-Plein de la Barre

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From L to R:Yves Gasqueres (Japan Representative), Jean-Marc Lacave (Executive Director), Christian Leroux (Vice Chairman of the Board), Jean-Rene Rio (Representative of port workers), Pierre-Yves Collardey (Commercial Director), Philippe Silliau (Representative of port workers), Patrick Deshayes (Personnel General Trade Union)

