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Mid-Term IAPH Exco Meeting
New Orleans, USA
April 27-May 1, 1998

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- Kaohsiung: Recent Construction Projects
- Yokohama: Efforts for a User-friendly Port
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PSA-NUS ADVANCED PORT MANAGEMENT & OPERATIONS PROGRAMME (21 SEPTEMBER TO 2 OCTOBER 1998)
Jointly organised by the PSA Corporation Limited and the National University of Singapore (NUS)'s Faculty of Business Administration

FOR WHOM
Senior and middle management officers from:
- Port authorities, terminal operating companies and cargo handling firms.
- Government agencies responsible for port development and management.
- Shipping, inter-modal operations and freight-forwarding companies.

OBJECTIVES
Backed by PSA's extensive experience in port management and operations and NUS' academic excellence, the objectives of the programme are:
- To enhance conceptual understanding of the critical areas of corporate strategy, human resources, operations, finance and technology to effectively manage the multi-disciplinary functions of a modern sea port.
- To provide a forum for the exchange of ideas and experiences on port management and operations with counterparts from the maritime industry.

COVERAGE
- Maritime Transport • Port Organisation • Port Planning • Port Operations Management • Technology Management • Port Equipment Maintenance
- Port Safety and Security • Port Finance • Human Resource Management
- Adventure Learning

LECTURERS
The programme will be conducted by PSA managers and highly qualified lecturers from the Faculty of Business Administration of NUS.

VENUE
PSA Institute, PSA Corporation Ltd, Singapore.

FEE
S$4,200 (Singapore Dollars) per participant, excluding 3% Goods & Services Tax (GST). The fee covers cost of tuition, materials and daily refreshments.

CLOSING DATE OF APPLICATION
15 August 1998
THE 1998 mid-term meeting of the Executive Committee was held on Thursday and Friday, 30 April and 1 May, in a conference room in the Riverside Hilton Hotel, New Orleans, Louisiana, USA, hosted by the Port of New Orleans at the initiative of Mr. Ron Brinson, President and CEO. It was chaired by President Smagghe and attended by 22 Exco Members (there was six messages of regret, including two last-minute cancellations) as well as Legal Counselors, the Chairs of the Internal and Technical Committees present and the Secretary General. The Port of New Orleans provided valuable support in helping to coordinate the events. The number of participants was reported as 61 without counting 16 guests who accompanied the delegates.

Preceding the Exco meeting, from Monday to Wednesday, 27 to 29 April, the meetings of the three Internal Committees of Membership, Finance and Constitution & By-Laws, of the IAPH 2000 Special Task Force, the IAPH/IMO Interface Group, and of the Technical Committees of the Dredging Task Force, Cargo Operations, Ship Trends, Port Planning & Construction, Port Safety & Environment (jointly with Marine Operations), Trade Policy, Port Communications, Combined Transport & Distribution and Legal Protection, as well as the meeting of the Coordinating Committee.

Vice Presidents were held, both at the Port of New Orleans Administration Building and the Riverside Hilton Hotel. The two guest members attended some of the Technical Committees' meetings. They were Capt. Hans J. Roos, President of the International Association of Harbour Masters, and Capt. M. Pouliot, President of the International Maritime Pilots Association. The mid-term meeting of the Exco is intended to review and reexamine the activities of the Association since the previous conference, to help enhance preparations for future years and for the next conference. On top of these missions, the 1998 mid-term meeting covered a number of items of vital importance to the future direction of the Association.

The most extensive focus was on the action programs of IAPH 2000. Vice Presidents stressed the need for ports to be aware of the various on-going environmental and institutional requirements for the...
sustainable future which have been placed on the agendas of various inter-governmental institutions, certainly inclusive of the IMO.

There will be a few major actions to be mounted soon and reported to the 1999 Conference. One is to draft a comprehensive strategic plan for IAPH with a view to preparing for the on-going and on-coming changes. The next will be an extensive survey of the structure and business areas of the members, with the recognition that the institutional and business surroundings of ports have changed drastically in some cases and substantially in others. The structure of the Technical Committees of IAPH to take account of changes will be reflected in the terms of reference to be submitted to the 1999 Conference.

A very colorful overall program for the 1999 World Ports Conference (21st biennial conference) in Malaysia, from 16 to 21 May, 1999 was introduced by Datin O.C. Phang, Klang Port Authority.

Though detailed program is yet to be announced in the journal, it will include a keynote address by Dato’ Seri Dr. Mahathir Mohamad, Malaysia’s Prime Minister at the opening session, Hon. Tung Chee Hwa, Chief Executive, the Hong Kong Special Administrative Region, China, a session devoted to the presentation by the leaders of leading shipping companies and distributors, inclusive of Mr. M. Ikuta of Mitsui OSK of Japan and Mr. William R. Fields of Wal-Mart Stores of the USA.

The conference venue will be The Palace of Golden Houses of the Mines Resort City, located within the hub of the Multimedia Super Corridor. It is 20 minutes from Kuala Lumpur and 25 minutes from Kuala Lumpur International Airport.

Subject to Board approval, the registration fees will be: IAPH Members: RM4,500 (before 31 March 1999), RM5,700 (on or after 31 March 1999); Non IAPH Members: RM5,700 (before 31 March 1999), RM7,000 (on or after 31 March 1999); Additional Accompanying Person(s): RM1,300; Honorary Members: Free Registration (FOC)

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RM: Ringgit Malaysia – US$1 = RM3.8 as of April 1998

Conference Chairman: Datin O.C. Phang, General Manager/Chief Executive, Klang Port Authority, and IAPH Conference Vice President

An important item approved by the meeting was a program related to the take-over of IAPH Liaison Officer with
the IMO, based upon the IAPH/BPA Agreement on Representation of 1980. Though any official arrangement is yet to be implemented, the office of the IAPH Liaison Officer with the IMO and the IAPH representative in London, which has been carried by Mr. Alex J. Smith since 1980, will be handed over to Mr. Peter van der Kluit of Rotterdam, on the occasion of the 1999 World Ports Conference.

The Finance Committee observed that the financial situation of IAPH has been steady and recommended a revised budget, which was approved by the Exco meeting.

The Membership Committee strongly stressed the need to promote membership as an essential basis of IAPH and urged everyone to give their attention and cooperation to the membership campaign, and further indicated that the matter should also be referred to the action programs overseen by the IAPH 2000 Task Force.

During the mid-term meetings in New Orleans, there was a technical visit to the Port of New Orleans and observation of the waterfront development, widely known as the Riverside Walk. Prior to the tour Mr. Brinson addressed the delegates at the auditorium and made presentations on the port activity and its remarkable performance.

One evening, the delegates and their spouses were invited to a reception hosted by Nesser, King, LeBlanc, a law firm, a partner of which Mr. J. LeBlanc is a special advisor to the IAPH Dredging Task Force. The reception was held at the Plimsoll Club located on the top floor of the World Trade Center, New Orleans. On Thursday, 30 April, the participants enjoyed being guests at the reception and dinner held at the 'Horizon' restaurant on the top floor of the Hilton Hotel, hosted by the Port of New Orleans. There, President Smagghe officially expressed the appreciation of IAPH to Mr. Brinson and his team for the excellent arrangement which they have made for the IAPH gathering.

It was indeed a very busy time in New Orleans. The Computer Associates, a leading software firm was meeting with 31,000 employees and guests, utilizing four big cruisers berthed on the Mississippi to provide part of the accommodation. Among the list of guests, there were such celebrity names as Mr. John Major and Mr. Bill Gates. Furthermore, the world-famous Jazz Festival of New Orleans was on. On one weekend, it was reported that 72,000 visitors were out on the town in the French Quarter. The IAPH delegates and spouses certainly took back home plenty of good memories of the hospitality extended by Mr. Ron Brinson and his team and, needless to say, of the flavor of the birthplace of Jazz.
ADIIES and Gentlemen, Dear Friends, "Mes chers amis",

All of us know that there are still many big mysteries on this Earth of ours. One such puzzle which intrigued our scientists is the fact that many species of bird cross the oceans at very precise periods of the year, then settle temporarily in specific areas. The real problem, of course, is that nobody knows where the birds get their information from!

I imagine that if scientists from another galaxy were to interest themselves in the movements of the port officers of our planet, and assuming they had not taken out subscriptions to "Port and Harbors" journal, they would have the same difficulty in explaining our migrations!

We have a saying in French which goes, "il ne faut pas confondre les enfants du Bon Dieu et les canards sauvages", or, literally, "do not confuse God’s children with wild ducks.

"Obviously, the fact that port officers often meet in very smart places such as New Orleans has no real connection with the changing seasons or migratory instincts, but rather with world port interests - even though birds can be a major environmental concern with regard to the sustainable development of our ports.

I would like to thank all of you, from so many different parts of the world, for being here today in New Orleans. I am particularly pleased to see our distinguished colleagues, I refer, of course, to the members of EXCO and the IAPH Technical Committees, gathered here and properly supported by our ladies fan club. Ladies, thank you. We greatly appreciate your support for IAPH.

Speaking for all of us I am sure, I would like to express our most sincere thanks to Ron and the Port of New Orleans for the very warm hospitality we have received, and for the quality of the arrangements which have been made to ensure our comfort. In such a favorable environment we just have to do some really good work!

The main objective of IAPH is the improvement of international trade through the enhanced efficiency of ports throughout the world. Our Association should also continue to be the voice of the ports of the world in international bodies such as IMO, UNCTAD and UNEP.

Of course, everybody knows that we live today in a world ruled by the key word "globalization", and it is no longer realistic for anyone to entertain dreams of autarky. But as a consequence of this, the pressure exerted on ports by ship-owners and shippers is fiercer. At the same time, in order to improve efficiency, the fashion for port restructuring programs has spread around the world like a bush fire.

In the future, these changes may affect the IAPH membership as well as the policy and organization of our Association. It is for this very reason that we have set up the Special Task Force IAPH 2000, which is currently assessing the consequences of these changes on the future of IAPH today.

It is clear that IAPH has to alter its course continuously to adapt to the realities of the port industry, in order to meet the requirements of its members. We must bear in mind that the financial pressure on our ports is increasing steadily, and that every member wishes to get a good return on its IAPH investment.

While a biennial Conference, such as the one in London last year or that scheduled for Kuala Lumpur next year, provides the ideal opportunity for approving resolutions and taking formal decisions, a mid-term Conference is the most suitable occasion for putting forward proposals for the future of the Association which are both innovative and far reaching, while at the same time checking that the work carried out satisfies IAPH members.

I am happy to see that all hands are on deck tonight. The Technical Committees have been meeting during the last two days. This work represents a major part of the true value of our Association, and tonight I would like to take the opportunity to thank every member of the Technical Committees for their important contribution. I want them to know that not only the world's ports but also the relevant international organizations genuinely need their expertise.

I would also like to express my sincere gratitude to the Chairmen of the Technical Committees, who do such excellent work and give life to our Association by organizing meetings all over the world and, in the last few years, developing the concept of technical seminars backed by IAPH. This is a very positive trend for the future.

Also on deck are the Chairmen of our Internal Committees. They look after the financial, membership and legal aspect of the life of our Association, not forgetting, of course, the Secretary General Mr. Hiroshi Kusaka and his staff. I wish to thank them very much for their dedication.

During the next few days we have many matters to discuss, many decisions to take and many options to select. In a word, we have a lot of work still to complete – a situation the Vice-Presidents won't deny, and I would like to express my appreciation for the tremendous work which all of the Vice-Presidents put in, not forgetting our colleague OC Phang, who has a big burden on her shoulders, organizing the next Conference in Kuala Lumpur. But, and it's very big but, I also know that we will have to struggle resolutely to resist the attraction of this marvelous city of New Orleans.

I think that all of us must feel at home in this city, for two reasons at least: - firstly, because our hosts have made the best arrangements we could possibly have imagined for our comfort and the efficiency of our work. I wish to thank them again for their generous and kind hospitality, - and secondly, because New Orleans is a very beautiful city, where each one of us will find something of his or her own culture.

I firmly believe that, when Napoleon Bonaparte decided to sell New Orleans to the United State one hundred and ninety five years ago, he was very well advised – not only because he obtained a very good price, but more than that, because he understood that the future of New Orleans undoubtedly lay in a United States context.

Today, I am very happy that I can still meet French-speaking people in Louisiana. I was nevertheless intrigued to read, on the Port of New Orleans website, the injunction "Laissez le bon temps rouler". Well, we all know what that means: "Let the good times roll", or to follow the neat paraphrase suggested by Dominic Taddeo, "Enjoy yourselves". So be it, that shall be my conclusion today: "Laissez le bon temps rouler!"

Merci tous, vive l’IAPH a votre haute! Thank you.
List of Participants
Mid-term Executive Committee Meetings
New Orleans, USA, 27 April - 1 May 1998

EXCO MEMBERS PRESENT
("accompanied by spouse/guest"

Officers

Jean Smagghe*
IAPH President
UPACCIIM
Paris, France

Dominic J. Taddeo*
1st Vice President
Port of Montreal
Canada

Akio Someya
2nd Vice President
Nagoya Port Authority
Japan

Pieter Struijs*
3rd Vice President
Port of Rotterdam
The Netherlands

Datin O.C. Phang*
Conference Vice President
Klang Port Authority
Malaysia

African/European Region

David Jeffery*
Port of London Authority
UK

Patrick J. Keenan*
Port of Cork Company
Ireland

S.M.E. Luhigo
Tanzania Harbours Authority
Tanzania

Jean Michel Moulod*
Port of Abidjan
Cote D'Ivoire

Godfried C.G. van den Hgewel*
Port of Amsterdam
The Netherlands

Bruno Vergobbi
Port of Dunkirk
France

American Region

David Bellefontaine
Port of Halifax
Canada

Ron Brinson*
Port of New Orleans
USA

Errol Bush
Cayman Islands Ports Authority
Cayman Islands

Bernard S. Groseclose, Jr.
South Carolina State Ports Authority
Charleston, SC, USA

Alexander Krygsman*
Port of Stockton
Calif., USA

H. Thomas Kornegay
Port of Houston
Texas, USA

Charles Rowland*
Canaveral Port Authority
Florida, USA

Asian Region

John Hayes
Sydney Ports Corporation
Australia

Satoshi Inoue
Ministry of Transport
Japan

Tu Deming
Shanghai Port Authority
China

Geoff Vazey*
Ports of Auckland Limited
Auckland, New Zealand

IN ATTENDANCE

Hugh Welsh*
Chairman, IAPH Legal Counselors
Port Authority of NY & NJ
USA

P. J. Falvey
IAPH Legal Counselor
New York, USA

Committee Chairmen

• IAPH 2000 Special Task Force
  D. J. Taddeo (as above)

• IAPH/IMO Interface Group
  P. Struijs (as above)

• Finance
  George Murchison*
  Port of Long Beach
  California, USA

• Membership
  Ron Brinson (as above)

• Constitution and By-Laws
  Hugh Welsh (as above)

• Combined Transport and Distribution
  Hans-Ludwig Beth*
  Port of Hamburg
  Germany

• Port Safety & Environment
  (Marine Operations)

Peter van der Kluit
Port of Rotterdam
The Netherlands

• Cargo Operations
  Don G. Meyer
  Port of Tacoma
  Washington, USA

• Trade Policy
  Matt Baratz
  (On behalf of L. Borrone)
  Port Authority of NY & NJ
  USA

• Dredging Task Force
  Geraldine Knatz
  Port of Long Beach
  Calif., USA

• Legal Protection
  Bruno Vergobbi (as above)

• Ship Trends
  J.M. Moulod (As above)

• IAPH Liaison Officer and Assistant Officer
  Alex J. Smith*
  IAPH Liaison Officer with IMO
  IAPH European Representative
  London, UK
Bursary Recipient Announced

R. Goon Kook Loon (FSA Corporation), Chairman of the IAPH Committee on Human Resources, has recently approved the following individual as recipient of the IAPH Bursary.

Mr. Shakeel Goburdhene, Civil Engineer, Mauritius Marine Authority to attend the Port Planning and Operations course at IFER, Le Havre for the period 8-19 June 1998.
1. Agenda & Opening Remarks

The Chairman welcomed everybody to the meeting, and expressed his sincere gratitude to Mr. Paul Scherrer for his kind invitation to hold our meeting in Le Havre, addressed to us during our last meeting in Barcelona.

The Chairman also thanked Mr. Jose Perrot for attending the meeting, and all Le Havre team for their helpful co-operation in the organisation of the meeting.

Afterwards the Chairman referred to the apologies received for absence to this meeting from almost all the other members of the Committee: Marielle Stum (Inrets), Eric Loui, (Port of Singapore), Rick Pearce (Fraser River Harbour Commission), Hiroshi Koike, (Yokohama), Michael Vassiliades (Cyprus), Claude Mandray (Logistrade-Paris), John K. Hirst (Sydney).

The Chairman also informed that Mr. Smagghe, President of IAPH, had been officially invited to attend totally or partially the meeting. Mr. Perrot informed of a telephone call from Mr. Smagghe apologising for not attending the meeting due to previous commitments.

At this stage, the Chairman gave a warm welcome to the 3 new people joining the Committee. He therefore introduced Mr. E.-Mihaita Visoianu, new General Manager of the Port of Constanza and Mr. Ionica Bucur, Marketing Manager of the Port of Constanza, expressing the gratitude of all TFC members to Mr. Aurel Carp, former General Manager from the Port of Constanza for his contribution to TFC ongoing activities and for his attendance to all our previous meetings.

The last person introduced was Mr. Alan Long from the Port of Felixtowe, who will be attending the WCO Electronic Commerce Advisory Group on behalf of the IAPH.

After these presentations, the Chairman sought to obtain agreement from the Committee to the proposed Agenda and the sequence of Agenda Items, suggesting two changes: Agenda Item 7; point 2: "Presentation of EFI" to be done immediately and point 3 presentation of HPS/ADEMAR Information System to be done by the end of the meeting.

The agenda was approved in these terms.

Accordingly, Paul Scherrer introduced Mr. Yves Leon who made a presentation of the Electronic Formula Information (EFI).

Mr. Yves Leon provided all TFC members attending the meeting with a full set of information specially prepared for the occasion. The presentation was divided in two parts in accordance with the following topics: EDI and Internet (State of the Art and Prospects), and Dangerous Goods management at the Port of Le Havre (Electronic Forum Interchange).

The first topic was dealt with through four chapters. One included the definitions (EDI context), following with a second chapter on EDI-Internet complementary view. The third one developed the Standards and Architectures describing the present and future standards and E-business and architecture. The final chapter treated the matter of safety and security.

As per the Dangerous Goods management, Yves León called for attention to three basic points: better control of the risk; local, national, European regulations; management of the information flow. He also talked about EDI/EFI in the following context: EDI as Electronic Data Interchange between companies, between computers, between applications; and EFI as Electronic Form Interchange from PC applications, with EDIFACT translating runtime and with communications interfaces (X400 or Internet).

Finally, a very interesting practical demonstration was made, concluding with a debate among all the presents.

The Chairman thanked Mr. Leon for his excellent presentation of the subject, and moved to the next point in the Agenda.

2. Reports to the Committee

The minutes of the Barcelona TFC meeting were read by Santiago Mila and were adopted with minor amendments suggested by Paul Scherrer.

The Chairman presented his report prepared for the EXCO Meeting that will take place in New Orleans in late April.

In third place, and regarding the Technical Committee’s Terms of Reference, the Chairman exposed the action done by TFC Secretariat informing IAPH President, Vice-President and Secretariat about TFC members’ concern on the TOR of the new Trade Policy.
Committee and a possible overlapping of their future activities with the Trade Facilitation Committee’s ongoing activities which are clearly explained in the work programme included in the above-mentioned Chairman’s report to the ExCo meeting.

The TFC has not yet received a proper official answer after the information exchanged and the personal meetings held on this matter with the IAPH maximum representatives, in which our clearly stated concern seemed to be shared. José Perrot then expressed that the IAPH is of course concerned about any overlapping or duplicity between committees’ activities and explained that this is one of the main objectives of IAPH Task Force 2000, adding that TFC should not be worried about this matter which will be solved in the very next future, encouraging TFC to go ahead with their ongoing activities.

Ian Flanders said that we should once more and for the last time express our concern, emphasizing that our aim is always to cooperate with our colleagues and all other IAPH Technical Committees.

Emil-Mihai Visoianu also supported the idea that was welcomed by the rest of TFC members.

In order to conclude with this subject it was unanimously agreed that TFC Secretariat will send a letter to the IAPH high officials with the following contents:

- TFC has expressed its concern and is sure that Task Force 2000 will take care of this subject and will avoid any overlapping regarding the work programmes.
- In order to help as much as possible to solve the above mentioned problem, TFC has decided to eliminate from its work programme the item “traffic statistics” so that the Trade Policy Committee can take full responsibility on this subject. TFC will contact them and send them all the information about this matter as well as offer its full co-operation for a smooth migration.
- TFC wants to conclude with this debate, as its major concern is to put all the effort in its ongoing activities.
- TFC wants to point out very clearly that it is always open and ready to cooperate with all other IAPH Technical Committees.

Action: TFC Chairman.

3. Membership of the TFC

The Chairman referred to the presentations made at the beginning of the meeting, and welcomed again the above-mentioned new members of the Committee.

Regarding the incorporation to the Committee of the Port of Felixtowe, the Chairman informed that he had delivered a letter to Mr. Tweddle of the WCO requesting that Mr Long attend the WCO Electronic Commerce Advisory Group on behalf of the Chairman himself, as Liaison Officer between the IAPH and the WCO.

This was considered to be really good news for the Trade Facilitation Committee, because the follow-up of Electronic Commerce developments has been (and it will continue being) a key matter for the TFC, and therefore Alan Long’s attendance to this group and his subsequent reporting to the TFC and - by extension - to all IAPH organisation will be highly appreciated.

Then the Chairman informed that during his last meeting with Mr. Caselli of the Port of Genoa (Italy) he explained to him the TFC activities, and Mr. Caselli expressed a high interest in them, so Port of Genoa is now on the way to join the IAPH and subsequently the TFC.

4. IAPH Information Technology Award

Santiago Mila presented the leaflet produced by the Tokyo Secretariat. Its contents were carefully revised, and a special mention was made to the new category established for non-port organisations, that is, universities, institutes of transport, non-governmental organisations, and any other non-commercial institution dedicated to investigation, study and research in the field of maritime transport and the port industry.

The selection criteria for this second category entries will be as follows: innovation, interest for maritime transport and the port industry, and possible potential for implementation.

It was also agreed that all TFC members will send to the Secretariat a list of possible candidates for this second category in order to send them the leaflet.

The post of the TFC in the selection committee was entrusted to Assemian Kablan (Port of Abidjan), who kindly accepted the nomination.

Santiago Mila will deliver to Tokyo Secretariat all TFC members’ suggestions in this regard, so that the mailing for both categories can be made as soon as possible.

Action: TFC Secretariat

5. Information Model

Santiago Mila informed of his contacts with Marielle Stum, as decided in the Barcelona meeting, in order to have a presentation and the results of the questionnaire Cost 330. She said she would be ready to provide TFC with that information as soon as works were finished, expected for late June.

6. Traffic Statistics Exchange

The Chairman referred again about the proposal of an IAPH Statistics Service and referred to the current situation about this matter. He then asked for the opinion of the members in the meeting. Paul Scherrer expressed his opinion that this subject would fit better in the activity of the Trade Policy Committee and, in this sense, as TFC main concern is to avoid overlapping, he suggested that this matter be under said Trade Policy Committee work programme.

The suggestion was fully supported by the present, asking the TFC Secretariat to contact the Trade Policy Committee accordingly, providing them with all the information and work so far carried out by the TFC in this regard, and expressing the TFC’s willingness to help and cooperate.

Santiago Mila presented the MARINFO Project, led by the U.N. Economic Development
and Social Commission for Asia and the Pacific. He explained that the aim of the project is trying to develop standard uniform MARINFO formats for use in the Internet websites of each national focal point and maritime transport related companies and organisations. In accordance with the agreement previously adopted, this information will be delivered to the Trade Policy Committee so that a due follow-up of the matter can be made.

Action: TFC Secretariat.

7. Regional and Information Technologies Developments

The Chairman, on behalf of all TFC members attending the meeting, thanked Mr. Michael Vassiliades, Cyprus Port Authority general Manager, and Mr Christodoulou-Papyanii for providing TFC the interesting document on Port Operations System which is included in the dossier.

8. New Electronic Commerce Developments

Santiago Mila presented the most relevant news about the Bolero Project, focusing on the Launch Programme under way, a guide for companies interested in participating in the Bolero launch.

In this regard, he informed of the trip made with Mr. Josep Oriol (Information Systems Director of the Port of Barcelona Authority) to meet Bolero management team in London. Also commented was the import/export chain which might be established in Barcelona in close connection with the Bolero launch programme.

Concerning the State of the Art, and as agreed in TFC previous meeting, a document prepared by Santiago Mila and Dae Won Choi, a Senior Korean economist working for the UN in co-operation with the WTO was presented as a synopsis of International Organisations and activities in relation to electronic commerce.

Also in reference to the WTO a brief document was handed to the presents as a summary of the contents of the "Electronic Commerce and the role of the WTO", paper which had just been released a few days before. The summary reflected a proposed definition of Electronic Commerce as "the production, advertising, sale and distribution of products via telecommunication networks", the different stages in the electronic transactions, and the main issues of the matter.

Paul Scherrer mentioned the report prepared by French Administration on electronic commerce pointing out as a substantial matter that encryption had been legalised under certain circumstances.

The Chairman then asked Paul Scherrer if he could provide the TFC Secretariat with this document, encouraging the rest of TFC members to send all kind of relevant information they could get on this matter.

It was also discussed the problem about the non-existence of a clear definition of Electronic Commerce. TFC will work on this subject and during the next meeting it will try to reach an agreement on a definition.

Afterwards Santiago Mila presented different documents included in the dossier produced by UNCEFACT Electronic Commerce Ad Hoc Group, paying special attention to the SITPRO UK Paper named "Electronic Commerce need for a global facilitation approach".

Concerning the UNCTAD invitation to participate in their meeting to be held in Lyon next November 1998, the TFC proposal is upon the work of the Barcelona IAPH Electronic Commerce Seminar to be held immediately before.

Action: Secretariat.

Santiago Mila went on explaining the works on electronic commerce currently carried out by the Paris-based ICC (International Chamber of Commerce), a project relying on three working parties on digital authentication, electronic terms, and electronic trade practices, and defining the electronic trade & settlement complete scheme.

A two-page document was handed to the presents as a complement to the documentation contained in the dossier. The briefing consisted of a quick overview of the Electronic Commerce Project and the GUIDEC, for the presents to have a rough idea about.

Santiago Mila also commented a very interesting document -included in the dossier- that is the report of the Joint Technical Committee of the International Organisation for Standardisation (ISO) and the International Electrotechnical Commission (IEC).

Finally, a diskettl witht a Simple EDI full report produced by UN/CEFACT was delivered to all TFC members present at the session.

9. IAPH Electronic Commerce Seminar

The Chairman informed about the current situation of the works related to the organisation of this seminar. First of all, he informed that the three main topics of the Agenda, as had been suggested during the Barcelona Meeting, had been delivered to many people and organisations involved in electronic commerce in order to get their opinion about them.

The main topics are as follows:

- Electronic Commerce and EDI in the Port Community.
- Electronic Customs Clearance.
- Electronic Commerce and Internet.
- Practical implementations.
- Legal framework and security measures concerning Electronic Commerce.

All the suggestions and opinions received were analysed and will be taken into account when the agenda is definitively closed. Jose Perrot suggested that the target audience for the seminar was defined. It was agreed that the target audience will be mainly composed by Port Authorities, Port Community members like freight forwarders, shipping agents, customs brokers, etc., and of course it will be open to public or private companies involved in the international trade.

It was also fixed that the Seminar will take place in Barcelona the 5th and 6th of November 1998.

The structure of the Seminar will be organised, in principle, in 5 main two-hour sessions. Each session will be presented and moderated by one relevant person introducing three or four speakers who will speak for twenty minutes each. A debate will follow at the end of each session.

It was also discussed the possibility of accepting private presentations during the Seminar, so that different companies could rent a space to show their products.

Everybody agreed that TFC will hold its next meeting in Barcelona one day before the beginning of the Seminar, and that Trade Policy Committee and any other IAPH Technical Committee will be invited to also hold their own meetings there.

Likewise, other International Organisations such as UN/CEFACT, Internet, Chamber of Commerce, UNC/TAD, World Customs Organisation, etc. will be invited to the Seminar to present their work on this field.

The next step to be done is that each member of the Committee will make a first proposal about possible speakers and the sub-topics they could talk about. This information will also be sent to Mr. Baratz, Trade Policy Committee co-ordinator, so that it is discussed during its next meeting in New Orleans and we can later have their proposals.

Tokyo Secretariat will also be informed about these discussions and we will treat with them how to handle the budget for the Seminar. It was by all the presents understood that it will be covered by the attendance fees, sponsors, space commercialisation, and also by the IAPH itself.

As none of us can travel to New
WTO Trade Facilitation Symposium
Geneva, 9-10 March 1998
Report by Santiago Mila
IAPH Trade Facilitation Committee
Vice Chairman, UN CEFACT

An important Symposium on Trade Facilitation was organized by the WTO on 9-10 March in Geneva. Leading corporations and industrial groups presented the practical problems which traders face when moving goods across borders. In addition, a number of non-governmental organizations representing trade and transport explained their role in international trade. The intergovernmental organizations including UN/ECE, UN/ESCAP, UNCTAD, ITC, WTO, IMF, the World Bank and WTO described their activities in the field of facilitating and simplifying trade.

The Symposium referred to the WTO Singapore Ministerial Declaration of 1996 to "undertake exploratory and analytical work drawing on the work of other relevant international organizations, on the simplification of trade procedures in order to assess the scope for WTO rules in this area."

Exploratory work already carried out by WTO included a background paper on work achieved in the area of trade facilitation by other organizations including UN/ECE. The Symposium aimed at providing a deeper understanding of nature of administrative barriers, with the objective of identifying the main areas where traders face obstacles when moving goods across borders, and also sought to provide an interface between the practical level and the trade policy level.

In addressing the Symposium, the WTO Director-General, Mr. Ruggiero, declared that, as the classical trade barriers - tariffs and quantitative restrictions - had reached the lowest levels ever as a result of the Uruguay Round, attention had turned to the costs resulting from documentation requirements, procedural delays and the lack of transparency and predictability in the application of governments rules and regulations.

Representatives from trade and industry confirmed in their presentations the practical problems encountered by the parties involved in international trade. At the same time, the intergovernmental and non-governmental organizations described their ongoing activities aiming at facilitating international trade transactions.

The WTO concluded by stating that a variety of problems were still to be solved in international trade but that the Symposium had provided a basis for future analytical work on trade facilitation.
The twenty-first meeting of the London Convention Scientific Group (LC/SG21) was held at the University of Cape Town Breakwater Facilities in Cape Town, South Africa, April 6-9, 1998. The meeting was attended by 39 representatives and alternates from 18 Contracting Parties, 7 observers from 5 non-contracting parties, and 8 observers from 6 non-governmental organizations (NGOs). The NGO representatives included Ms. Geraldine Knatz – Chairman, and Mr. Richard Peddicord-Scientific Advisor, of the International Association of Ports and Harbors (IAPH) Dredging Task Force.

Major agenda items included technical cooperation and development of waste-specific assessment guidance for assessment of wastes on the “reverse list” other than dredged material (for which the Dredged Material Assessment Framework has already been adopted); Several issues potentially important to the future of dredged material management under the Convention were discussed. This report summarizes the actions of LC/SG 21 and their implications for IAPH.

1. KEY ISSUE FOR IAPH – Action Lists

LC/SG21 devoted little specific attention to action lists or action levels (e.g., concentrations of chemicals or other indicators used to determine the acceptability of a waste for ocean dumping). The following papers related to action levels were presented and received with some discussion but little controversy:

- "Underlying Principles for Describing National Action Levels" presented by IAPH
- "Application of Biological Assessment Techniques" presented by the Netherlands
- "Comparison of Sediment Toxicity with Predictions Based on Chemical Interpretation and Impact" presented by the Netherlands

2. OTHER ISSUES OF INTEREST

2.1 Waste-Specific Guidance

LC/SG 20 recommended the Consultative Meeting adopt waste-specific assessment guidance on (1) Inert, inorganic material of geological origin, (2) Bulky items primarily comprising iron, steel, concrete and similarly unharmonious materials, and (3) Fish waste, or material resulting from industrial fish processing operations. The Consultative Meeting requested the Scientific Group to construct the guidelines in two-column format parallel to earlier drafts so that changes would be apparent. LC/SG21 performed this task and forwarded to the Consultative Meeting for consideration for adoption waste-specific assessment guidance for:

- Inert, inorganic geological material
- Bulky items primarily comprised of iron, steel, etc.
- Fish waste, or materials resulting from industrial fish processing operations

Waste-specific guidance continued for further consideration by LC/SG 22 include:

- Sewage sludge
- Vessels
- Platforms or other man-made structures at sea
- Organic material of natural origin.

2.2 Technical Cooperation

IMO/UNEP/IWC, in close collaboration with the Government of South Africa, held a Workshop on Waste Management and Marine Pollution Prevention in Southern and Eastern Africa from 1-4 April in Cape Town. Over thirty delegates from 15 countries participated in the Workshop. This was the first such technical cooperation workshop held under the LC. The extensive feedback from participants will have a major influence on the content of a similar workshop planned for Asian and Pacific countries in Australia in conjunction with LC/SG 23 in 2000.

2.3 Environmental Measurement Techniques Under Development

The United States described research on a biomarker-based screening assay for measuring the concentration of certain organic chemicals in sediments at roughly one-tenth the cost of traditional methods. With further development, this has the potential to become widely used and offer analytical savings to ports and others when analysis for certain compounds is required. However, the process is still developmental, and IAPH should remain alert to any pressures for premature implementation on this new technique.

2.4 Dredging Activities

Several organizations made presentations in addition to those mentioned above related to IAPH interests in dredged material management, including:

- United States (Corps of Engineers) – announced the availability of (1) Guidance for subaqueous dredged material capping, and (2) Environmental effects of dredging and disposal literature data base.

- Permanent International Organization of Navigation Congresses (PIANC) – announced the availability of (1) Guidelines on handling and treatment of contaminated dredged material from ports and inland waterways, and (2) Dredged material management guide.

- Central Dredging Association (CEDA) - provided each participant with copies of the third of seven guides on environmental aspects of dredging. This guide, entitled "Investigation, Interpretation and Impact" summarizes pre-dredging characterization of materials and potential placement sites. CEDA also announced the 15th World Dredging Conference to be held in Las Vegas, Nevada, USA, June 28 – July 2, 1998.

3. LC/SG FUTURE WORK PROGRAM

Activities on the Work Program for LC/SG 22 of particular interest to IAPH include:

- Waste-specific assessment guidance. As guidance is developed for the remaining categories of waste, it will be important to guard against language or concepts that would be contrary to IAPH interests if interjected into the Dredged Material Assessment Framework in the future.

- Underlying principles for describing
action levels. Action levels will play an important role in dredged material regulation under the LC. If not established on a sound basis and implemented properly, they are likely to be expensive, unnecessarily restrictive and of little environmental benefit. The IAPH Scientific Advisor, Dr. Richard Peddicord, is participating in a by-invitation-only IOC/UNEP/IMO GIPME Workshop on Marine Sediment Quality Guidelines that will complete its work in late 1998. It appears that LC/SG 22 will be asked to endorse the report of this Workshop as the SG guidance on action levels. Therefore, it will be important for IAPH to participate in the completion of this report.

- LC Terms of Reference. These are out of date and need to be consistent with the 1996 Protocol. However, consideration of the terms also provides a potential opening to de facto broaden the scope of the Convention.
- Risk as assessment procedures in waste management. Quantitative risk assessment is being touted as a new basis for environmental evaluations. While the approach has merit, it can easily be misused, and distinct advantages for ports over the present approach to environmental assessment have yet to be demonstrated.
- Technical cooperation. This offers IAPH the opportunity to have a positive influence on the attitude of developing countries toward their ports through participation in environmental training activities.

4. FUTURE IAPH ACTIVITIES

4.1 Waste-Specific Guidance

As guidance is developed for other listed materials, IAPH should remain vigilant to avoid LC/SG acceptance of language or concepts that could later be leveraged into the dredged material guidance to its detriment.

4.2 Action Levels

IAPH should continue to see that action level guidance remains flexible, considers bioavailability, allows effects-based evaluations (e.g., direct toxicity tests of the dredged material in question), and provides for management of material to make ocean dumping acceptable. IAPH should participate in completing the report of the IMO/UNEP GIPME Workshop on Marine Sediment Quality Guidelines later this year.

4.3 IAPH Scientific Papers

IAPH should identify opportunities to maintain its status as a respected contributor to the SG, and to enhance the image of the ports as leaders in environmental protection. The future work program provides potential opportunities to submit papers demonstrating port leadership in:

- Impact hypotheses – Description of use of impact hypotheses in dredged material disposal site selection
- Waste management options – description of theory and practice of evaluating dredged material placement options, including beneficial uses, to identify the environmentally preferable alternative consistent with the dredged material assessment guidance
- Use of Geographical Information Systems (GIS) in dredged material management
- Application of quantitative risk assessment in dredged material management

5. CONCLUSIONS

- IAPH is respected as a valuable contributor to the work of the SG. This status should be carefully maintained because dredged material is by far the largest class of material covered by the LC, and thus will always be a subject of SG interest.
- IAPH should encourage member ports to urge their national delegations to the LC and SG to support IAPH positions, especially on not using action levels on a pass-fail basis, and avoiding port responsibility for upstream control of pollution sources for dredged material.
- Action levels, and perhaps alternative waste management options and impact hypotheses, are the scientific topics with the greatest potential to affect IAPH interests in the near future. IAPH should act to protect the interests of ports as these topics are considered by the LC/SG.

WASTE ASSESSMENT GUIDANCE

ROLE of the International Association of Ports and Harbors

The International Association of Ports and Harbors (IAPH) represents the worldwide port industry, with over 400 member ports in 83 nations. Since 1980 IAPH has been an active participant in the work of the London Convention regarding the management of dredged material for the protection of the marine environment.

The ports of the world play a vital role and serve important national, regional and global interests in carrying out waterborne trade and commerce. This intra- and inter-national commerce is essential to the national economies of the port countries, as well as countries that rely on the transportation services they provide. The port operations are not only essential elements of many national economies, but are also a fundamental basis for commercial, legal, and political relationships between states. Port organizations are especially important for many developing countries that rely heavily on marine commerce to sustain their economic growth and development.

Most of the international ports of the world are located near the sea. They have a universal problem of continuous sediment deposition in waterways, which must be dredged periodically to maintain the water depths required for navigation of vessels engaged in international trade. The volumes of sediment that must be dredged for each port may range in the hundreds of thousands to millions of cubic meters of sediment annually. The vast majority of this sediment is essentially free of contamination and can be used for a variety of beneficial purposes or can be placed on land or in the ocean without environmental concern.

IOC-UNEP-IMO-GIPME Workshop on Marine Sediment Quality Guidelines

The sponsoring organizations convened a Workshop on Marine Sediment Quality Guidelines at IMO in May of 1997. The purpose was to develop scientifically sound concepts and principles for establishing sediment quality guidelines to distinguish among natural conditions, anthropogenic disturbances and adverse effects for regulatory purposes. The concepts and principles from the Workshop were summarized.
for the Scientific Group in LC/SG 20 Working Paper 4. The Workshop participants are now in the process of preparing a final report describing their findings, conclusions and recommendations.

IAPH commends the leaders of IOC, UNEP, IMO and GIPME who recognized the need for such a Workshop and took the initiative to sponsor and organize it. IAPH also wishes to acknowledge the scientists who participated in the Workshop and are preparing the report on the Workshop findings. They are recognized leaders in the various technical fields necessary to properly address a subject as complex as development of scientifically sound marine sediment quality guidelines. IAPH appreciates the time and effort contributed by the individuals who organized and participated in the Workshop, and the support of their governmental, academic and private organizations that makes the work possible.

The findings of the Workshop provide an objective scientific assessment of an important issue before the Scientific Group. The stature of the authors, the importance of the subject, and the timelines of the subject all urge the Scientific Group to seriously consider its findings in reaching decisions on action level guidance.

Endorsement of Workshop Concepts and Principles

The concepts and principles from the Workshop are consistent with many submissions on marine sediment quality guidelines made to recent Scientific Group meetings by a number of Contracting Parties, Observer States and Non-governmental Organizations. IAPH considers the concepts and principles fundamental to development of scientifically sound and practically implementable sediment quality guidelines, and urges the Scientific Group to incorporate them in its decisions on action levels. Some of the Workshop concepts and principles IAPH considers most important to the development of workable action level guidance include:

* Present knowledge does not allow development of scientific numerical sediment quality guidelines for global application. The complexities of physical-chemical-biological interactions in sediment and the interplay with site-specific environmental conditions are insufficiently understood to develop scientifically sound sediment quality action levels applicable world-wide. It may be possible to develop such values for application

within a single watershed or perhaps a regional area with reasonably uniform sediment and environmental characteristics. The Scientific Group guidance should ensure that action levels are developed with a geographic focus consistent with sound science.

* Globally applicable and useful guidance on sediment management in the absence of sediment quality action levels is available in the WAF and the Dredged Material Guidelines. The Scientific Group should take every opportunity to encourage widespread use of this guidance in the absence of sediment quality action levels while scientific understanding advances, and in conjunction with action levels as they are developed and implemented.

* Numerical sediment quality guideline development can be initiated as sufficient scientific knowledge becomes available, but the development process must be flexible enough to accommodate whatever changes in values and implementation procedures may be required as a result of continuing scientific advances. In a field as young and complex as predicting environmental effects of sediments, a rigid and inflexible system for either developing sediment quality action levels or implementing them in a regulatory program would be most unfortunate. The Scientific Group guidance should ensure flexibility and periodic technical review of the processes for both developing and implementing sediment quality action levels.

* Numerical sediment quality guidelines should not be rigid standards used as the sole basis for evaluating a sediment. Numerous assumptions and simplifications are an inescapable part of any effort to express all the relevant physical-chemical-biological interactions in a single numerical value. In addition to scientific considerations, regulators must also consider socio-economic implications of their decisions. Therefore, the Scientific Group guidance should ensure that sediment quality action levels do not become de facto pass/fail standards, but are used on conjunction with other considerations in making regulatory decisions.

* Sediment quality guidelines must be based on a holistic integration of physical, chemical and biological interactions. The Scientific Group guidance should ensure that sediment quality action levels are developed in a way that gives full consideration to the complex interactions of physical, chemical and biological processes in the ocean, rather than only the level of contamination in sediment.

* Evaluation of potential ecological (as distinct from human health) effects should focus on maintaining populations rather than individual organisms. Certainly in the case of rare, threatened or endangered species, individual organisms are of concern, since effects on a few individuals might adversely affect the maintenance of local populations of such species. However, for most species this is not the case, and a focus on individual organisms would provide little ecological benefit but could result in unjustifiable social hardships. The Scientific Group guidance should ensure that action levels are developed with a focus on ecological populations so as to prevent harm to both the environment and society.

* Numerical sediment quality guidelines should be compatible with use in the risk assessment process. Action levels should be developed in such a way that they can be implemented in consideration of the potential exposure of organisms to sediment-associated contaminant’s under the conditions at a proposed ocean placement site. Exposure considerations will become increasingly important as the risk assessment process is refined into a practical tool for permit evaluation. The Scientific Group guidance should ensure that sediment quality action levels are developed in a manner consistent with use in the evolving risk assessment process.

Conclusions

IAPH commends the sponsors and scientists who participated in the IOC-UNEP-IMO-GIPME Workshop on Marine Sediment Quality Guidelines, and urges the Scientific Group to adopt their concepts and principles in developing sediment quality action level guidelines. The development of numerical sediment quality action levels holds promise for regulatory programs, and should be pursued. However, as evident from the Workshop concepts and principles, development or use of such action levels beyond the presently limited scientific knowledge would be unjustified, indefensible, and most unfortunate.
The Global Alliance Update

In September 1996, a special article entitled “Birth of Global Partnerships Era To Transform World Shipping” was featured in this journal by the courtesy of the Shipping and Trade News. Again in this issue, through the special arrangement of Tokyo News Service, the publisher of the Shipping and Trade News, we feature an updated report on the Alliance for the benefit of our readers.

The IAPH Head Office

The IAPH Head Office has recently learned from Mrs. Eileen M. Cavey that her husband Mr. J.H.W. Cavey, an Honorary Member of IAPH from Ottawa, Canada, passed away on February 25, 1998 after a very short illness.

Mr. Cavey, a member of the National Harbours Board, Canada, played a leading part in the growth and improvement of IAPH in the 60s and 70s. He served the Association as Alternate Director representing Canada, Exco Member, Chairman of the Constitution and By-Laws Committee and as a member of the Ways and Means Committee. In particular, Mr. Cavey led the task of reviewing our Constitution and By-Laws and contributed to their improvements. He participated in eight consecutive conferences of IAPH (1965 in London, 1967 in Tokyo, 1969 in Melbourne, 1971 in Montreal, 1973 in Amsterdam, 1975 in Singapore, 1977 in Houston, 1979 in Deauville) and served on various committees at these conferences.

In 1981 on the occasion of the 12th Conference in Nagoya, he was made an Honorary Member. IAPH Secretary General Mr. Kusaka sent a letter of condolence to Mrs. Cavey and expressed the deep appreciation of IAPH for the outstanding contribution Mr. Cavey made to the work of IAPH.

Membership Notes:

New Members

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Changes

Comero by National Ports Authority [Regular] (Cameroon)
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General Manager
General Manager: Mr. Alphonse Siyam Siwe
Deputy General Manager: Mr. Njoh Nseke

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Port of New Orleans [Regular] (U.S.A.)
Board Members:
Chairman: Mr. Alden J. McDonald, Jr.
Vice Chairman: Capt. Mark Delesdernier, Jr.
Secretary/Treasurer: Mr. James M. Baldwin, Jr.
Members: Mr. Michael C. Sport
Mr. Donald "Boysie" Bollinger
Mr. Walter J. Boasso
Mr. Francis E. "Hank" Lauricella

Visitors

On Monday, 6 April, at the IAPH Head Office, Mr. Coll M. Hunter, Senior Advisor and ACIS Coordinator of UNCTAD, conducted a demonstration of the systems, which is suited to the management of port and/or railway operations in developing countries. Attending the demonstration performed on a laptop PC, were Mr. S. Sasaki, a staffer of the International Business Office of the Bureau of Ports and Harbours, Ministry of Transport, Mr. T. Ikeda, Director, Social Infrastruc-
MEPC 41 was held at IMO Headquarters, London, UK from 30 March to 3 April 1998, under the chairmanship of Mr Michael Julian (Australia).

The session was attended by delegations from 67 Member States, an associate Member, a UN Specialised Agency, three inter-governmental organisations and 29 non-governmental organisations, including IAPH.

In his opening remarks, the Secretary-General, IMO, stressed that the deliberations of MEPC 41 would place a significant emphasis on the importance of ports in the effective implementation of IMO’s commitments to safer seas and cleaner oceans; and so it proved. The key discussion areas were the provision of adequate reception facilities at ports for MARPOL 73/78 wastes from ships; ballast water management; the use of anti-fouling paints; the prevention of air pollution from ships; and work carried out under the Oil Pollution, Response and Cooperation (OPRC) Convention.

2 Reception Facilities

It is a fact that IMO continues to receive reports of inadequate reception for ships’ wastes notwithstanding the obligation freely undertaken by parties to MARPOL 73/78 to ensure their provision. Even worse, it appears that compliance with the specific measures attaching to Special Area status, leaves much to be desired.

There was no shortage of documentary or verbal input to discussion of the subject. From an IAPH standpoint, I felt it necessary to intervene to draw attention to the importance of keeping matters in perspective. Complaints of inadequacy, or availability for example, were often the result of ship/shore communication problems and the respective priorities of ships and ports as regards their actual operational requirements. Furthermore, the primary responsibility for ensuring compliance lay with Governments whose communications with their respective ports as to specific requirements which need to be put in place, were often dilatory to say the least. IAPH however, continued to be supportive and positive in facilitating the general availability of adequate reception facilities.

At the behest of the Chairman, the Committee addressed the purported key issues of adequacy and remedial measures to be deployed; national approaches; the reporting process; and dissemination of information on availability of reception facilities.

MEFC 41 agreed that the detail of these matters should be addressed by a Port Waste Reception Facilities Working Group at MEPC 42 (2 to 6 November 1998). In the meantime, a Correspondence Group led by the United Kingdom will prepare a base document for consideration at MEPC 42 on the six tasks set out in the Working Group’s terms of reference, as follows:-

i) Review existing definitions of adequacy of port waste reception facilities as stated in IMO publication Comprehensive Manual on Port Reception Facilities or any other publication and receive input from interested parties on the meaning of “adequate”;

ii) Define the parameters for reception facilities based on the different types of ships’ waste identified in the Annexes to MARPOL 73/78;

iii) Determine a methodology or generic action plan to assist countries to undertake a review of their port waste reception facilities with the objective of:
   • Identifying any short fall
   • Identifying practical problems ports face in developing or implementing port management strategies
   • Identifying problems in relation to receiving, treating, collecting waste from ships including the interface between ships and waste reception facility providers and in disposing of waste.

iv) Develop measures to ensure improved communication between ships, ports and waste reception facility providers;

v) Develop criteria for the use of IMO in determining a list, for circulation, of ports with inadequate or no waste reception facilities;

vi) Develop a generic port waste management plan which could be used by the administration in any country to assist it in providing a national port waste reception strategy or national plan. This plan may be suitable for assisting ports in obtaining funding for the establishment of adequate port waste reception facilities;

vii) Provide an analysis of successful port waste reception regimes.

It is clearly essential for IAPH to provide a port-related input on these tasks to the Correspondence Group’s base document as a matter of urgency.

3 Harmful Aquatic Organisms in Ballast Water

It will be recalled from earlier reports that the IMO Assembly, by resolution A868(20), adopted Guidelines for the Control and Management of Ships’ Ballast Water for practical implementation by Governments. The Assembly had also asked MEPC to work towards the completion of legally-binding provisions on ballast water management in the form of a new Annex to MARPOL 73/78. Accordingly, therefore, a Ballast Water Working Group, which included IAPH representation, continued its work in these respects during the course of the week.

Draft provisions of the regulations to be included in a new Annex were considered together with a draft Ballast Water Management Code setting out technical requirements and implementation guidance drawing on the provisions of resolution A868(20). It is of particular interest to note in these respects that current thinking has moved towards the view that the general provision of reception facilities for ballast water is an impractical remedial option. It is very probable, however, that provision will need to be made for reception facilities for the environmentally safe disposal of ballast tank sediments.

By the end of the week, it was possible for the Working Group Chairman, Mr Denis Patterson, Australia, to report on a coherent work plan leading to a proposed Conference of Parties to MARPOL 73/78 in November, 2000. In furtherance of its work, the Working Group has also prepared a questionnaire for early circulation to Member States on the requirements which may have to be developed by Governments concerning...
ballast water control practices and related matters. It would be helpful in that regard if IAPH would invite members to complete the questionnaire for their respective port areas. The data should then be provided to their respective Governments for possible inclusion in their submissions to IMO. Copies of the data should also be provided to IAPH.

The Working Group's intention is to work to the completion of the draft regulations and Ballast Water Management Code during MEPC 42. Attention will also be given to the development of education and awareness material for use by both seafarers and shore-based personnel of Port State authorities.

The Working Group also evaluated the status of a UNDP/IMO/GEF project to assist developing countries to identify and remove barriers to the effective management and control of ships' ballast water. It will be recalled in that regard that IMO had identified IAPH as a potential sponsor and participant in the project.

A report was provided to the Working Group on project implementation to date, consisting of the collection of data for incorporation in a major US$3 to 5 million project to be submitted for approval by the GEF Council in October 1998. IAPH's interest in and commitment to the project was reiterated. My understanding is that IAPH will be invited to participate directly on the Project's Steering Committee.

4 Anti-fouling Paints for Ships

Mixed views continue to be expressed on the harmful effects of anti-fouling paints for ships with the possible exception of TBT based paints, the use of which could very possibly be the subject of total prohibition by States acting individually or collectively within regions. States in favour of such action would ideally prefer a world-wide ban in an international maritime trading context. Investigations and research into harmful effects will, however, continue.

MEPC 41 concluded that a working Group should be established at MEPC 42 with the following terms of reference:-

i) The Guidelines of Application of the Precautionary Approach (resolution MEPC 67(37)) shall apply to the work of the Group.

ii) Identification of the different legal mechanisms available for effecting a global phase-out of tri-organotin anti-fouling systems on ships.

iii) Two important issues to be developed for inclusion in the appropriate legal instruments are:-

- a mechanism that allows anti-fouling systems other than tri-organotins to be considered for possible future action; and
- a provision calling upon Parties to continue to promote scientific and technical research on the environmental impacts and efficacy of anti-fouling systems.

iv) Recommendation to the Committee of what year or time frame is most appropriate for effecting a prohibition of tri-organotin anti-fouling systems in light of the relevant technical, environmental, legal and market factors.

v) Preparation of a draft legal mechanism to allow action to be taken regarding anti-fouling systems, in particular to global phase-out of tri-organotins as a marine anti-fouulant.

vi) Preparation of a report to MEPC, including the draft legal instrument and a draft schedule for review and adoption of the draft instrument.

vii) Development of a draft assembly resolution for its 21st session urging IMO Member States to encourage application of less harmful alternatives to tri-organotin anti-fouling systems pending entry into force of a mandatory instrument.

IAPH developed a position on this subject for submission to a previous MEPC meeting. The question now is whether, in the light of the Working Group's terms of reference additional material needs to be prepared as a precursor to active participation in the Working Group at MEPC 42.

5 Air Pollution from Ships

Having agreed by Protocol to amend MARPOL 73/78 by adding a new Annex VI on Regulations on the Prevention of Air Pollution from Ships, the Conference of Parties to MARPOL 73/78 held in September 1997 also adopted 8 Conference Resolutions the implementation of which MEPC is obliged to oversee.

The substance of the Conference Resolutions has been reported on previously. Much of their substance is not of direct interest to ports. Some matters, however, do need to be drawn to the attention of IAPH members.

The wishes of North Sea States to establish the North Sea as a sulphur oxide emission control area will be given further consideration at MEPC 43 (28 June to 2 July 1999).

IMO's Design and Equipment Sub-Committee has been tasked to develop guidelines on representative samples of the fuel delivered for use on board ships, as a high priority. That work will have regard to ISO Technical Report number "ISO TR 13739 Petroleum Products - Methods for specifying practical procedures for the transfer of bunker fuels to ships".

MEPC 42 intends to consider carbon dioxide emissions from the transport sector together with proposals on technical and operational options for emission control.

6 OPRC Convention

The standing Working Group on implementation of the Convention and Conference Resolutions was able to prepare a draft Protocol on Preparedness, Response and Cooperation to Pollution Incidents by Hazardous and Noxious Substances, for submission to MEPC 42 and consideration by a Conference in 2000. IAPH has expressed its support of the general intent of the Protocol in a position paper submitted to a previous MEPC meeting.

7 Other Matters of Interest to Ports

MEPC 41 gave its support to an International Symposium on Marine Pollution to be held in Monaco from 5 to 9 October 1998. The Symposium is co-sponsored by IMO, UNEP, UNESCO, amongst others, as a contribution to the 1998 International Year of the Ocean.

MEPC 39 had decided that information on North West European Waters met the criteria for designation as a Special Area under Annex 1 of MARPOL 73/78. One of the principal criteria is the provision of adequate reception facilities for oily wastes from ships. All coastal States bordering the Special Area had notified MEPC 41 that reception facilities in each State were adequate and in full conformity with MARPOL requirements. The decision was therefore taken to notify Parties to MARPOL 73/78 on 1 August 1998 that Special Area status would have effect from 1 August 1999.

Information was provided to MEPC 41 by the IMO Secretariat on the IMO/UNDP/GEF Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas. A new large scale project has been agreed for the next 5 years supported by the region's States, donors and the private sector.

The Committee's work programme and that of its subsidiary bodies was agreed. It will be closely examined by IAPH's Committees in accordance with their usual practice.

Finally, it was agreed that MEPC 42 would be held from 2 to 6 November 1998, and MEPC 43, tentatively, from 28 June to 2 July 1999.
F

OR the world’s liner shipping industry, 1998 began with service reorganization on principal trade routes.

Two major alliances made a renewed start, each with a modified membership. They are the new Grand Alliance of Nippon Yusen Kaisha (NYK Line), Hapag-Lloyd A.G., P&O Nedlloyd Container Line, Orient Overseas Container Line (OOCL) and Malaysia International Shipping Corporation Berhad (MISC) and The New World Alliance (TNWA) of Mitsui O.S.K. Lines (MOL), American President Lines (APL) and Hyundai Merchant Marine Co., Ltd.

In addition, Kawasaki Kisen Kaisha (“K” Line), so far operating on the Asia/Europe and transatlantic routes in partnership with China Ocean Shipping (Group) Co. (COSCO), will extend its tie-up with the Chinese carrier to the transpacific route and commence joint service in this trade as well from this month under a space charter arrangement.

Apart from its partnership with COSCO, “K” Line also engages in a similar form of cooperation with Yangming Marine Transport Corp. on three routes—Asia/Europe, transatlantic and transpacific.

Therefore, the inauguration of its joint service with COSCO on the transpacific route amounts to the realization of a partnership between the Chinese and Taiwanese carriers, COSCO and Yangming, which will allow globe-circling operations, with “K” Line acting as the link between them.

Partnerships which stayed outside the latest reorganization drama are also moving toward the revamping of their services. The three-carrier group of Hanjin Shipping Co., Ltd., DSR-Senator Lines GmbH and Cho Yang Shipping Co., Ltd. has expanded the scope of partnership and is increasing its service routes.

The Maersk Line/Sea-Land Service, Inc. grouping is also commissioning newly built vessels and re-examining their service set-up.

Furthermore, carriers operating on their own are also expanding their service networks and enlarging their fleets according to their respective strategies.

A close look at these developments on trunk routes reveals that each alliance and each individual carrier are obviously thinking in terms of global-scale service, rather than service only on particular routes, in planning and implementing route management strategies.
They seem to be laying prime emphasis on how best to ensure efficiency in the flows of container equipment and rationality in route management, without being preoccupied only with a business strategy for market expansion through the enlargement of operational scale. This, it may be said, reflects the fact that a rate-cutting race on trunk routes, which has lasted for two years now, has greatly detracted from the profitability of all carriers involved, plunging them into a crisis that could even endanger their survival.

The reorganization of consortia on trunk routes carried out two years ago turned out to be untimely and resulted in triggering a rate-cutting race. Since then, freight rates for the transpacific and Asia/Europe trades have remained at a low level.

Under these circumstances, there has been a series of moves for inter-corporate consolidation as instanced by the merger of P&O Containers Limited and Nedlloyd Lines, the takeover of APL by Neptune Orient Lines (NOL) and Hanjin Shipping's acquisition of an equity share in DSR-Senator. And these moves have brought on an additional round of reorganizations.

The latest regrouping drama coincides with ongoing moves among carriers on all trade routes to join hands for the realization of rate restoration. It is to be hoped that the reorganization effort will bring about a new orderly service regime on each route.

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**Reborn Alliance Looks Just Grand**

**Grand Alliance**

NYK • Hapag-Lloyd • P&O Nedlloyd • OOCL • MISC

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The five member carriers of the new Grand Alliance have constructed a far-flung service network connecting the Big Three trunk routes – transpacific, Asia/Europe and transatlantic – with a combined fleet of 91 containerships. Regarding the Asia/North America route, the Grand Alliance provides five weekly sailings, including a twice-weekly pendulum service that extends to the East Coast of North America and further to Europe and the Mediterranean.

The Super Shuttle Express (SSX) service to the West Coast of North America (six 4,900-TEU containerships) is the fastest service linking Southeast Asia, Hong Kong and Taiwan to the PNW and also includes a call at Colombo. The AEX, for its part, links Asia with the East Coast of North America via Suez and the Mediterranean. Its calls at Mediterranean hub ports enable the acceptance of cargoes between Asia and the Mediterranean and between the Mediterranean and the East Coast of North America.

The Pacific Atlantic Express (PAX) (13 vessels of between 2,800 and 3,000 TEU) is the fastest service linking Southeast Asia, Hong Kong and Taiwan with the North American Pacific Southwest (PSW).

The Far East Express (FEX) service (five 4,000-TEU containerships) extends from Hong Kong, Taiwan and Keihin (Tokyo/Yokohama) region ports to PSW and Pacific Northwest (PWN) ports on the eastbound voyage and covers three Japanese ports and Hong Kong on the westbound voyage. It is the fastest service from the Keihin region to the PSW.

The alliance plans to successively replace the present vessels with larger 4,600-TEU containerships.

The Japan China Express (JCX) service (five 2,900-TEU ships) covers Shanghai and Qingdao in China as well as Japan. In particular, it is known for offering the only direct service from Sendai Port (Japan) to the PSW.

The Pacific Northwest Express (PNX) service (14,300-TEU vessels) links up with the Asia East Coast Express (AEX) service to the East Coast of North America and together forms a pendulum service on the Asia/West Coast of North America/Asia/Mediterranean/East Coast of North America/Mediterranean/Asia route.

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TEUs) is a pendulum service connecting Asia and northern Europe via the West and East coasts of North America.

Regarding the Europe trade, the Grand Alliance provides a total of six weekly sailings – five loops on the northern European route and one loop on the Mediterranean route.

Loop 1 (eight vessels of between 5,800 and 6,600 TEUs – the largest in the alliance’s fleet) offers the fastest super-shuttle service between Japanese ports-Singapore and four major European ports.

Loop 2 (eight 4,500-TEU ships) is a shuttle service between Pusan and northern Europe covering Taiwan, Hong Kong, Singapore and Port Kelang on the Asian side. Its major characteristic is that British ports are visited first on the westbound voyage to Europe.

Loop 3 (eight 4,000-TEU ships) features a call at Qingdao, China, in addition to South Korea, Taiwan, Hong Kong and Singapore. On the westbound voyage, it calls first at ports on the European continent; on the eastbound voyage, direct service is offered from Britain to Asia.

Loop 4 (eight 4,700-TEU vessels) covers Hong Kong, Singapore and China’s Shanghai, Ningbo and Shenzhen. Its port rotation also includes Port Kelang and Colombo on the eastbound voyage and Mediterranean hub ports on the westbound voyage.

Loop 5 (eight 3,000-TEU vessels) is a shuttle service between South China and Europe. The westbound voyage covers Colombo and Jeddah, while the eastbound voyage includes calls at Mediterranean hub ports and Jebel Ali as well as Jeddah.

Loop 6, exclusively for service to the Mediterranean, connects Japan, South Korea, Hong Kong, Singapore and Port Kelang with Mediterranean ports. Assigned to this service are eight 3,000-TEU ships, but they will be successively replaced with 3,500-TEU vessels.
## OPEN FORUM

### Grand Alliance, Europe Routes

<table>
<thead>
<tr>
<th>Loop 1</th>
<th>Loop 2</th>
<th>Loop 3</th>
<th>Loop 4</th>
<th>Loop 5</th>
<th>Loop 6 (MED)</th>
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<tbody>
<tr>
<td>Ves 5,400-6,600 TEU x 8</td>
<td>Ves 4,500 TEU x 8</td>
<td>Ves 4,000 TEU x 8</td>
<td>Ves 4,700 TEU x 8</td>
<td>Ves 3,000 TEU x 8</td>
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<td>Pusan</td>
<td>Kaohsiung</td>
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</table>

offered on other transpacific routes – 16 days from Laem Chabang, Thailand, to Los Angeles; eight days from Pusan to Los Angeles; and eight days from Tokyo to Seattle.

Concerning the transpacific route to the East Coast of North America, TNWA's weekly East Coast Service (ECS) includes a direct voyage from the Far East-Japan to Manzanillo in Colon, Panama, which is followed by passage through the Panama Canal and a voyage to the East Coast of North America.

As regards the Asia/Europe route, TNWA provides a total of four weekly sailings – three sailings to northern Europe and one sailing to the Mediterranean. The service to northern Europe features the shortest transit times of 23 days from Tokyo to Rotterdam, 25 days from Tokyo to Hamburg, 15 days from Singapore to Rotterdam and 13 days from Colombo to Southampton.

Moreover, direct calls at China's Shanghai and Yantian are included, putting TNWA at a great advantage in regard to the Chinese market as well.

In respect to the weekly service to the Mediterranean, Asian countries are connected with Jeddah in the Red Sea, and Port Said, Genoa, Barcelona and Fos in the Mediterranean.

### Plenty of Coverage on Offer From Non-Alliance Carriers

#### CMA

**C**OMPAGNIE Maritime d’Affretement (CMA) and Yangming Marine Transport Corp. jointly operate a fixed-day weekly service on the Asia/Mediterranean route with eight containerships.

This service's Asian ports of call include not only Taiwan, Hong Kong and Singapore, but also Port Kelang and Colombo. Moreover, Manila is also covered on the eastbound voyage.

In the Mediterranean, many ports are covered, enabling this service to gain a high reputation for its direct calls at numerous ports in that region. Furthermore, CMA boasts an extensive feeder network encompassing the entire Mediterranean, including the western Mediterranean and North African ports, with the eastern Mediterranean as the base. The use of this feeder network puts the joint service of CMA and Yangming at a great advantage.

**CMA • Yangming Line**

CMA also operates service on the Asia/Red Sea-Mediterranean-northern Europe route. In Asia, it is characterized by the wide coverage of Chinese ports, such as Shanghai, Ningbo and Chiwan, in addition to Pusan, Hong Kong and Singapore.

Ports of call on the westbound voyage to Europe include Jeddah in the Red Sea and Malta in the Mediterranean. On the European side, such ports as Le Havre, Hamburg, Thamesport, Rotterdam and Zeebrugge are covered. The eastbound voyage includes a call at Khor Fakkan in the Middle East.

#### Evergreen • LT

**E**VERGREEN Marine Corp. and Lloyd Triestino di Navigazione S.p.A. (LT) jointly operate a fixed-day weekly service on the Mediterranean/Asia/PNW (West Coast of North America) route.

The two carriers have deployed a total of 15 containerships to provide a pendulum service with Asia as its base.

The service rotation is Southeast Asia, the Far East, Japan, the PNW, Japan, the Far East, Southeast Asia, Colombo, the Red Sea, the Mediterranean, the Red Sea and Southeast Asia in that order.
The westbound voyage from the PNW to the Mediterranean includes direct calls at four Japanese ports — not only Tokyo and Osaka, but also Sendai and Hakata — under a policy of taking care of local port cargo as well.

The eastbound voyage from Asia to the PNW and also from the Mediterranean to Asia includes only two Japanese ports of call — Tokyo and Osaka. However, Evergreen has set up a system of feeder transport to and from Shimizu, Nagoya and Hakata in Japan by utilizing its round-the-world service.

Evergreen

In addition to its joint service with LT, Evergreen provides two loops — east- and westbound — in its round-the-world service, which is a major route for the carrier, and a twice-weekly shuttle service between Taiwan-Hong Kong and the West Coast of North America.

Evergreen's eastbound service on the round-the-world route extends from Asia to the West Coast of North America, Panama and the East Coast of North America, then to Europe and the Mediterranean, and finally back to Asia. A total of 12 containerships are assigned to this service, which features extensive coverage in Japan with calls at five ports — Tokyo, Shimizu, Nagoya, Osaka and Hakata.

The westbound round-the-world service runs from Asia to Europe, then across the Atlantic Ocean to the East Coast of North America, and back to Asia via Panama and the West Coast of North America.

This service, with 10 containerships, is known for its speed because it limits direct calls to principal ports.

Concerning Evergreen’s shuttle service between Taiwan-Hong Kong and the West Coast of North America, one of its two sailings heads from Hong Kong and Taiwan to Los Angeles, Oakland and Tacoma on the eastbound voyage and calls at Tokyo on the eastbound voyage and calls at Tokyo and Osaka on the return voyage; the other sailing extends from Taiwan, Hong Kong and Pusan to Los Angeles and Portland on the eastbound voyage and covers Tokyo, Shimizu and Nagoya in Japan on the return voyage.

<table>
<thead>
<tr>
<th>Evergreen/LT</th>
<th>Port Schedule</th>
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</thead>
<tbody>
<tr>
<td><strong>PNW-Far East Med. Service</strong></td>
<td><strong>Vessels 2,700-3,000 TEU x 10</strong></td>
</tr>
<tr>
<td><strong>Evergreen</strong></td>
<td><strong>Port Schedule</strong></td>
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<tr>
<td>Singapore</td>
<td>Tue-Thu</td>
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<tr>
<td>Laem Chabang</td>
<td>Fri-Sat</td>
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<td>Keelung</td>
<td>Thu-Fri</td>
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<td>Osaka</td>
<td>Thu-Fri</td>
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<tr>
<td>Tokyo</td>
<td>Thu-Fri</td>
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<tr>
<td><strong>Tacoma</strong></td>
<td><strong>Vessels 3,400-4,200 TEU x 12</strong></td>
</tr>
<tr>
<td><strong>Vancouver</strong></td>
<td><strong>Port Schedule</strong></td>
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<tr>
<td>Singapor</td>
<td>Thu-Fri</td>
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<tr>
<td>Shanghai</td>
<td>Thu-Fri</td>
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<td>Ningbo</td>
<td>Fri-Sat</td>
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<td>Chongqing</td>
<td>Fri-Sat</td>
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<td>Hong Kong</td>
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<td>Singapore</td>
<td>Fri-Sat</td>
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<tr>
<td><strong>Jeddah</strong></td>
<td><strong>Mon-Wed</strong></td>
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<tr>
<td><strong>Suez Canal</strong></td>
<td><strong>Thu-Fri</strong></td>
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<tr>
<td><strong>CMA/Yang Ming Line</strong></td>
<td><strong>Port Schedule</strong></td>
</tr>
<tr>
<td><strong>MLX Service</strong></td>
<td><strong>Vessels 1,980-3,538 TEU x 8</strong></td>
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<tr>
<td><strong>Koehiing</strong></td>
<td><strong>Fri-Fri</strong></td>
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<tr>
<td><strong>Keeling</strong></td>
<td><strong>Mon-Mon</strong></td>
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<tr>
<td><strong>Singapore</strong></td>
<td><strong>Sat-Sun</strong></td>
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<tr>
<td><strong>Inland</strong></td>
<td><strong>Mon-Mon</strong></td>
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<tr>
<td><strong>Colombo</strong></td>
<td><strong>Thu-Thu</strong></td>
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<tr>
<td><strong>Suez</strong></td>
<td><strong>Fri-Sat</strong></td>
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<tr>
<td><strong>Damietta</strong></td>
<td><strong>Sat-Sun</strong></td>
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<tr>
<td><strong>Malta</strong></td>
<td><strong>Tue-Wed</strong></td>
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<tr>
<td><strong>Genoa</strong></td>
<td><strong>Thu-Fri</strong></td>
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<tr>
<td><strong>Valencia</strong></td>
<td><strong>Thu-Fri</strong></td>
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<tr>
<td><strong>Barcelona</strong></td>
<td><strong>Sat-Sun</strong></td>
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<tr>
<td><strong>Genua</strong></td>
<td><strong>Tue-Wed</strong></td>
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<tr>
<td><strong>Livorno</strong></td>
<td><strong>Tue-Wed</strong></td>
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<tr>
<td><strong>Naples</strong></td>
<td><strong>Fri-Sat</strong></td>
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<tr>
<td><strong>Malta</strong></td>
<td><strong>Mon-Mon</strong></td>
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<tr>
<td><strong>Swaziland</strong></td>
<td><strong>Mon-Tue</strong></td>
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<tr>
<td><strong>Cape Town</strong></td>
<td><strong>Tue-Wed</strong></td>
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<tr>
<td><strong>Singapore</strong></td>
<td><strong>Sun-Mon</strong></td>
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<td><strong>Menara</strong></td>
<td><strong>Wed-Thur</strong></td>
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<td><strong>Kochiung</strong></td>
<td><strong>Fri-Fri</strong></td>
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</table>

**CMA French Asia Line**

| **Port Schedule** |
| **Vessels 3,500-4,000 TEU x 9** |
| **Pusan** | **Sat-Sat** |
| **Shanghai** | **Mon-Mon** |
| **Ningbo** | **Wed-Thu** |
| **Chongqing** | **Fri-Fri** |
| **Hong Kong** | **Fri-Fri** |
| **Singapore** | **Tue-Tue** |
| **Jeddah** | **Wed-Thu** |
| **Suez** | **Fri-Sat** |
| **Le Havre** | **Sun-Sun** |
| **Hamburg** | **Mon-Mon** |
| **Thessaloniki** | **Wed-Thu** |
| **Rotterdam** | **Wed-Thu** |
| **Zeebrugge** | **Thu-Fri** |
| **Malta** | **Sat-Sun** |
| **Suez** | **Sat-Sun** |
| **Jeddah** | **Mon-Mon** |
| **Khor Fakkan** | **Sat-Sat** |
| **Singapore** | **Sun-Sun** |
| **Hong Kong** | **Wed-Thu** |

**Open Forum**

HANJIN Shipping Co., Ltd., DSR-Senator Lines GmbH and Cho Yang Shipping Co., Ltd. operate joint services on three trunk routes — Asia/North America, Asia/Europe and transatlantic — with a combined fleet of 59 containerships.

The three carriers provide seven sailings per week on the North American route and two sailings per week on the European route. In particular, their containerships are operated with high efficiency through three pendulum-type ship deployment schemes — that is, two loops (FS/PDM-I, II) linking the West Coast of North America and Europe via Asia and
ONE LOOP CONNECTING ASIA AND EUROPE VIA THE PACIFIC SOUTHWEST AND EAST COAST OF NORTH AMERICA

### Hanjin/DSR-Senator/Cho Yang Line, North America Routes

<table>
<thead>
<tr>
<th>Vessels</th>
<th>(2,700-2,800 TEU x 6)</th>
<th>(2,700 TEU x 6)</th>
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</thead>
<tbody>
<tr>
<td><strong>CAI-I</strong></td>
<td>CAX-I (China-America Express-I)</td>
<td>CAX-II (China-America Express-II)</td>
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<tr>
<td>Port Schedule</td>
<td>Port Schedule</td>
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<tr>
<td>Shanghai</td>
<td>Sun-Tue</td>
<td>Sun-Tue</td>
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<tr>
<td>Long Beach</td>
<td>Thu-Fri</td>
<td>Thu-Fri</td>
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<tr>
<td>Oakland</td>
<td>Tue-Wed</td>
<td>Tue-Wed</td>
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<tr>
<td>Tokyo</td>
<td>Mon-Mon</td>
<td>Mon-Mon</td>
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<tr>
<td>Osaka</td>
<td>Mon-Mon</td>
<td>Mon-Mon</td>
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<tr>
<td>Pusan</td>
<td>Thu-Fri</td>
<td>Thu-Fri</td>
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<tr>
<td><strong>Hanjin’s NDR Service</strong></td>
<td>Sun-Mon</td>
<td>Sun-Mon</td>
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</tbody>
</table>

| **PS/PDM-I** | PS/PDM-II (Pacific Southwest/Pendulum-I) | (Pacific Southwest/Pendulum-II) |
| Port Schedule | Port Schedule |
| Shanghai | Sun-Tue | Sun-Tue |
| Long Beach | Thu-Fri | Thu-Fri |
| Oakland | Tue-Wed | Tue-Wed |
| Tokyo | Mon-Mon | Mon-Mon |
| Osaka | Mon-Mon | Mon-Mon |
| Pusan | Thu-Fri | Thu-Fri |
| **Hanjin’s NDR Service** | Sun-Mon | Sun-Mon |

| **PNX-I** | (Pacific Northwest Express-I) |
| Port Schedule | (Pacific Northwest Express-I) |
| Shanghai | Sun-Tue | Sun-Tue |
| Long Beach | Thu-Fri | Thu-Fri |
| Oakland | Tue-Wed | Tue-Wed |
| Tokyo | Mon-Mon | Mon-Mon |
| Osaka | Mon-Mon | Mon-Mon |
| Pusan | Thu-Fri | Thu-Fri |
| **Hanjin’s NDR Service** | Sun-Mon | Sun-Mon |

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### Hanjin/DSR-Senator/Cho Yang Line, Europe Routes

<table>
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<tr>
<th>Vessels</th>
<th>(4,000-4,500 TEU x 12)</th>
<th>(4,000-4,500 TEU x 12)</th>
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<tbody>
<tr>
<td><strong>PS/PDM-I</strong></td>
<td>PS/PDM-II (Pacific Southwest/Pendulum-I)</td>
<td>(Pacific Southwest/Pendulum-II)</td>
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<tr>
<td>Port Schedule</td>
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<tr>
<td>Shanghai</td>
<td>Sun-Tue</td>
<td>Sun-Tue</td>
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<tr>
<td>Long Beach</td>
<td>Thu-Fri</td>
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<td>Oakland</td>
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<tr>
<td>Pusan</td>
<td>Thu-Fri</td>
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<tr>
<td><strong>Hanjin’s NDR Service</strong></td>
<td>Sun-Mon</td>
<td>Sun-Mon</td>
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| **PNX-I** | (Pacific Northwest Express-I) |
| Port Schedule | (Pacific Northwest Express-I) |
| Shanghai | Sun-Tue | Sun-Tue |
| Long Beach | Thu-Fri | Thu-Fri |
| Oakland | Tue-Wed | Tue-Wed |
| Tokyo | Mon-Mon | Mon-Mon |
| Osaka | Mon-Mon | Mon-Mon |
| Pusan | Thu-Fri | Thu-Fri |
| **Hanjin’s NDR Service** | Sun-Mon | Sun-Mon |

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**NORASIA Lines and Mediterranean Shipping Co. S.A. (MSC) presently deploy three and seven containerships, respectively, for a fixed-day, weekly service on the Asia/Mediterranean-northern Europe route.**

Although their service includes no direct calls at Japanese ports, cargoes from Japan are carried to Singapore for transshipment to the two carriers’ vessels.

For this transport to Singapore, Norasia uses other carriers’ vessels, which makes it possible to cover various Japanese ports and thus puts Norasia at a great advantage. Meanwhile, MSC uses vessels of its own service to Australia for transport to Singapore.

Moreover, both Norasia and MSC are strong in the Mediterranean service, each having an extensive feeder network of its own with Piraeus as a hub. Their service thus features transport to all parts of the Mediterranean.

In Asia, direct calls are paid to Shanghai, Qingdao, Xingang, Chiba, Hong Kong and Kaohsiung in an effort to establish a firm foothold in the Chinese market.

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**Oceanic Service**

**SEA-LAND Service, Inc. and Maersk Line formed an “alliance” in 1991 and expanded it on a global scale in 1995, cooperating in ship deployment on trunk lanes around the globe, including the transpacific, Asia/Europe and transatlantic routes.**

At present, they together operate a
total of 200 containerships which boast a combined hauling capacity of 450,000 TEUs.

The two carriers currently provide seven sailings a week on the transpacific route and four sailings a week on the Asia/Europe route. However, in February, they announced a plan to revamp their Asia/North America service. The plan features opening direct service between the Middle East and the West Coast of North America, increasing the frequency of the Hong Kong/Long Beach service to twice a week, starting a direct call at Port Kelang and increasing reefer transport to Asia from the Pacific Northwest (PSW) on the West Coast of North America.

The planned revamping of the two carriers’ service is designed to cope with the present economic crisis in Asia and downward pressure on freight rates in the eastbound trade. The aim is to rebuild an effective ship deployment structure while adjusting and consolidating transpacific services.

Sea-Land Service and Maersk are now working out port rotations, with the details of the revised service schedules yet to be announced.

**Westwood Shipping**

WESTWOOD Shipping Lines provides its Japan/North America service on three routes – one route for exports and two routes for imports – with a fleet of seven vessels comprising two 1,681-TEU and five 2,029-TEU ships.

The carrier’s service has the following characteristics: (1) Its vessels are equipped with 40-ton cranes to enable the loading of not only container cargoes but also non-container cargoes, such as project cargoes, and (2) Westwood Shipping, as a niche carrier, provides the broadest port coverage in Japan for the North American trade, ranging from Tomakomai in the north to Hakata in the south.

In the future, the carrier may be fully expected to pay direct calls to China and Japan’s local ports on a full scale through the deployment of additional vessels. It is now studying plans for building ships with an eye to the 21st century.

**UASC**

UNITED Arab Shipping Company (UASC) provides a fixed-day, weekly service from Japan to the Mediterranean and Europe by way of Asia.
and the Middle East with a fleet of 13 containerships.

Major ports on the Japan/Asia-Arabian Sea/Red Sea/Mediterranean/Europe route for the service are used as hub ports for feeder networks that cover all regions.

The carrier will successively assign a series of new large-sized vessels to this service from March this year to replace the present fleet with 10 high-speed ships. As a result, the average hauling capacity per vessel, now at 2,200 TEUs, will be increased sharply to 3,800 TEUs. Moreover, the maximum speed will be raised to 24 knots.

Therefore, even though the number of vessels will be reduced to 10, the port rotation will remain unchanged, while the transit time will be shortened significantly.

The main features of UASC's service are as follows: (1) in the Mideast Gulf region, vessels plying the Asia/Europe route - not feeder ships - call directly at Dubai and Khor Fakkan, while other local ports are covered by the carrier's own feeder network; (2) it provides the only direct call at Valencia from Japan; and (3) since UASC is an independent carrier, it is capable of coping with dangerous and oversize cargoes with almost no limitations.

The planned upgrading from this spring is likely to further boost demand for the carrier's service.

### Wilhelmsen Lines

**Wilhelmsen Lines** operates a twice-monthly route on the route linking Singapore, Hong Kong, Ningbo, Qingdao, Kobe, Nagoya, Yokohama, Los Angeles, Colon, Miami, Savannah, Baltimore, Norfolk, New York, New Orleans and Mobile with nine ro/ro vessels.

The vessels assigned to this service are capable of flexibly coping not only with containers, but also with vehicles and project cargoes.

Extensive feeder networks ensure transport to inland areas as well as the Caribbean and Latin American regions.

### Zim

**ZIM** Israel Navigation Co., Ltd. provides a fixed-day, weekly service on the route linking China, Taiwan, South Korea, Japan, the West Coast of North America, the Caribbean, the East Coast of North America and the Mediterranean.

Since last year, the carrier has assigned a series of eight containership newbuildings to this service as replacements for older tonnage.

The 3,429-TEU Zim China, which started to call at Japanese ports in January this year, was the last in this series of new large-sized vessels.

The commissioning of these containerships has boosted Zim's hauling capacity on the route by about 25 percent. As a result, Zim has begun to call at Shekou in China, which is now growing fast.

Zim's service boasts the following characteristics: (1) its service route covers five major ports - Long Beach, Kingston, Savannah, New York and Halifax; (2) Zim's own feeder network, established in the Caribbean and Latin American regions, makes it possible to provide stable service; and (3) a well-organized service is available on the East Coast of North America, based on many years of experience, while the newly launched service to Shekou in China is being improved to cope with increasing cargo volumes.

Moreover, Zim provides a fixed-day, weekly service to the Mediterranean with 10 vessels. Cargo from Yokohama, Nagoya, Osaka and Kobe are carried to Pusan by feeder ships for transshipment to vessels bound for the Mediterranean.

Furthermore, feeder services are operated from Haifa in Israel to eastern Mediterranean and Black Sea ports, such as Limassol, Constantza, Istanbul, Izmir, Odessa, Mersin and Salonica. In addition, service to such countries as Austria, Switzerland and Hungary is available via Trieste and Koper.

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**UASC, Europe Routes**

<table>
<thead>
<tr>
<th>Far East Panama North America Route Service</th>
<th>Vessels</th>
<th>1,846-3,800 TEU x 13</th>
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<tbody>
<tr>
<td><strong>Port</strong></td>
<td><strong>Schedule</strong></td>
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<tr>
<td>Nagoya</td>
<td>Mon-Mon</td>
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<tr>
<td>Yokohama</td>
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<tr>
<td>Kobe</td>
<td>Wed-Thu</td>
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<td>Pusan</td>
<td>Fri-Sat</td>
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<tr>
<td>Hakata</td>
<td>Sat-Sat (Bi-weekly)</td>
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<tr>
<td>Keelung</td>
<td>Tue-Tue</td>
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<tr>
<td>Hong Kong</td>
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<tr>
<td>Singapore</td>
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<tr>
<td>Port Kelang</td>
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<tr>
<td>Khor Fakkan</td>
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<tr>
<td>Dubai</td>
<td>Thu-Thu</td>
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<td>Gola Tauro</td>
<td>Thu-Thu</td>
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<td>Valencia</td>
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<td>Rotterdam</td>
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<td>Hamburg</td>
<td>Sat-Sun</td>
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<td>Felixstowe</td>
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<td>Valencia</td>
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<td>Algeciras</td>
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<td>Jebel Ali</td>
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<td>Dubai</td>
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<td>Khor Fakkan</td>
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<td>Port Kelang</td>
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<td>Nagoya</td>
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**Zim Israel Navigation, Mediterranean Routes**

<table>
<thead>
<tr>
<th>Mediterranean Service</th>
<th>Vessels</th>
<th>1,700-1,900 TEU x 9</th>
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<td><strong>Port</strong></td>
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<td>Wed-Thur</td>
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<td>Qingdao</td>
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<td>Shanghai</td>
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<td>Shenzhen</td>
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<td>Hong Kong</td>
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<td>Yokohama</td>
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<td>Colombo</td>
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<tr>
<td>Mobile</td>
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**Westwood, North America Routes**

<table>
<thead>
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<th>Import Service-1</th>
<th>Import Service-2</th>
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<tbody>
<tr>
<td><strong>Vessels</strong></td>
<td><strong>Port Schedule</strong></td>
<td><strong>Port Schedule</strong></td>
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<tr>
<td>2,039 TEU x 5, 1,681 TEU x 2</td>
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<td><strong>Port</strong></td>
<td><strong>Schedule</strong></td>
<td><strong>Port</strong></td>
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<td>Wed-Thur</td>
<td>Vancouver</td>
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<td>Osaka</td>
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<td>Vancouver</td>
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<td>Seattle</td>
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<td>Long Beach</td>
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<td>Tokyo</td>
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<tr>
<td><strong>Vessels</strong></td>
<td><strong>Port Schedule</strong></td>
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<tr>
<td>2,039 TEU x 4</td>
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<td><strong>Schedule</strong></td>
<td><strong>Port</strong></td>
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<tr>
<td><strong>Vessels</strong></td>
<td><strong>Port Schedule</strong></td>
<td><strong>Port Schedule</strong></td>
</tr>
<tr>
<td>2,039 TEU x 1, 1,681 TEU x 1</td>
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<tr>
<td><strong>Port</strong></td>
<td><strong>Schedule</strong></td>
<td><strong>Port</strong></td>
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26 PORTS AND HARBORS June, 1998
Cardiff ‘Waterfront 98’
For Developers, Operators

WATERFRONT 98 – the 2nd international event for developers and operators of waterfront and marina facilities – will be held at the St David’s Hotel and Spa, Cardiff from 20 - 22 October 1998.

Cardiff is enjoying a period of major expansion and revitalisation, which is expected to continue well into the next millennium, and Cardiff Bay Development Corporation (CBDC) is an integral part of this vibrancy. Covering 2,700 acres (one-sixth of the city) the waterfront already comprises a successful combination of commercial, industrial, retail and residential developments – together with the construction of a barrage from Penarth Head to the Queen Alexandra Dock, creating a 500 acre freshwater bay. Cardiff Bay is recognised as being Europe’s most exciting waterfront, with 1.5 million admissions to waterfront attractions in 1996. And plans for further development are still underway.

Organised by Baltic Conventions and supported by CBDC, an exciting lineup of international speakers will describe the challenges faced by Cardiff Bay in developing the waterfront, explore the potential for further expansion within Cardiff and the South Wales region and analyse trends for future waterfront developments around the world.

Delegates will have the opportunity to:
• hear how Cardiff Bay Development Corporation set about planning, developing and transforming the waterfront
• examine the challenges involved in integrating a wide mix of industrial, retail, commercial, leisure and housing activities
• learn the secrets of attracting the finance necessary to develop a waterfront and the advantages of public/private sector partnerships
• find out how a successful, maturing waterfront is able to track retail and visitor trends in order to adapt to a changing profile
• see what has been achieved in Cardiff during the guided city site visits and special interests tours of the surrounding area
• network and find out what further potential exists – both for Cardiff and other waterfronts around the world, large or small

Attendance at this event is essential for property developers, architects, financiers, town and commercial planners, port and local authorities, marine surveyors and engineers, as well as those involved in the development or operation of leisure facilities, retail outlets and housing, construction and industry.

For information on exhibition and sponsorship opportunities or registration details, please contact Helen Coffey at Baltic Conventions:
Tel: +44 181 892 2892
Fax: +44 181 892 6767
email: baltic.conventions@btinternet.com

Leading Multinationals
Vote Confidence in Asia

RESULTS released of a worldwide survey of leading multinational companies find that overall confidence in East and South-East Asia as a destination for foreign direct investment remains unshaken, despite the financial crisis in the region.

One in four of the companies polled said it plans to increase direct investment over the short and medium term, while 62% are continuing with their existing plans. Almost all firms covered by the survey make a positive long-term assessment, taking the view that direct investment prospects are either unchanged (81%) or have improved (13%).

The results are based on replies from 198 firms of 500 polled – an impressive response rate of 40% – in a joint survey by the United Nations Conference on Trade and Development (UNCTAD) and the International Chamber of Commerce (ICC). The survey was conducted in mid-February.

Announcing the outcome of the survey at a news conference on 18 March, UNCTAD Secretary General Rubens Ricupero said: “The results clearly show that multinational corporations are keenly interested in the region for direct investment in the production of goods

The Conference audience is specially targeted at professionals from Shipping Lines, Port Authorities, Maritime Safety Agencies, Research Institutions, Navies and Hydrographic Offices.

For further information, please contact:
International ECDIS Conference Manager
C/O SAFE Enterprises Pte Ltd.
3 Lim Teck Kim Road
#02-02 Singapore 089394
Tel: (65) 228 0980/910
Fax: (65) 226 3733
Email: events@cyberway.com.sg
MPA Conference Website: http://www.mpa.gov.sg
Enquiries: iec98@mpa.gov.sg

Int’l ECDIS Conference
In October in Singapore

THE Conference Organisers, the Maritime and Port Authority of Singapore (MPA) and the United Kingdom Hydrographic Office (UKHO), are convinced that Electronic Chart Display and Information System (ECDIS) will contribute to maritime safety. In 1997, MPA and UKHO embarked on sea demonstrations using ECDIS with official chart data covering shipping routes from Southampton to Singapore to Hong Kong. Feedback from the participating ECDIS equipped vessels has been positive. With this successful demonstration, an International ECDIS conference has been organised to promote ECDIS, with the following conference theme:

“ECDIS – An Effective Tool For Safe Navigation”

International experts will gather in Singapore for three days (26-28 October 1998) at the Pan Pacific Hotel, Singapore to share their experience on the latest in ECDIS development and its related applications.
Cattaui said: “This is a resounding vote of confidence in the economic fundamentals of East and South-East Asia and the region’s long-term prospects. Business still sees enormous investment opportunities to be derived from the projected growth of Asian markets in the 21st century.”

Ms Cattaui added: “Foreign direct investment by its nature requires commitment over the long haul. That commitment is fully demonstrated by the results of this survey.”

Responses are remarkably consistent, both by main business sectors and also by home regions – Europe, North America, Japan and developing Asia.

An overwhelming majority of respondents from each of the regions and the main sectors – primary, manufacturing and services – report that their long-term views remain unchanged.

Among European firms in particular, 34% are actively seeking to increase their operations in Asia. The comparable figures for North America and Japan are 19% each, and 10% for developing Asian countries. Karl P. Sauvant, senior UNCTAD investment expert, said: “In the short and medium term, lower costs for multinationals in the most affected countries – including the effect of devaluations – create immediate incentives for additional direct investment. They also open up additional export opportunities, helped by the privileged access to the regional and global distribution networks of their parent firms.”

Mr Sauvant added: “Most important, however, is that the principal determinants of foreign direct investment in Asia ensure that long-term prospects for such investment in the region remain excellent.”

At the same time, he noted that a contraction in growth would reduce demand in some Asian domestic markets. In the short to medium term, that could slow down inward flows of foreign direct investment for industries oriented to domestic markets.

This is borne out by the UNCTAD/ICC survey, which shows that 12% of all responding companies intend to reduce or make of their investment projects over the short and medium term. For services companies, which in most cases are heavily dependent on domestic sales, the comparable figure is 18%. Looking at the long term, only 6% of companies indicate that their confidence in FDI profitability in Asia has diminished.

Another finding is that the direct investment intentions of most Asian firms will remain focused in Asia itself. The crisis is likely to restrict the financial ability of some of these companies to invest abroad. Devaluations make it more expensive for firms from the most affected countries to finance their foreign operations.

The survey further showed that – independently of their continuing commitment to Asia – 37% of the firms consulted contemplated increasing direct investments in Latin America. Some 27% look to increased FDI to Central and Eastern Europe, while 18% expect to step up their direct investments in South Asia.

“Emerging markets in general continue to be viewed by large multinationals as good prospects for foreign direct investment. This is in line with a trend that began in the mid-1980s and has led to developing countries now attracting close to 40% of the world’s direct investment flows of some $350 billion,” Mr Sauvant commented.

ICC Secretary General Cattaui said that the survey underlined a key distinction between the reactions of direct investors and those of portfolio investors and banks, whose decisions about international financial capital movements have so far been the centre of attention during the Asian crisis.

“Capital investments by portfolio investors focus on shorter term financial gains and tend to be volatile. In contrast, direct investors are mainly concerned with visible economic transactions, such as the establishment or expansion of plants, the operation of internationally integrated production systems, the international transfer of technology, and the distribution of intermediate and final products in world markets,” Ms Cattaui said.

“Their investments are motivated by strategic interests, such as market access and access to resources of various kinds, and tend to involve long-term relationships,” she added.

These features of foreign direct investment underline many of the survey’s findings about investors’ decisions and expectations. UNCTAD figures show that, while foreign port folio equity investment and bank lending to the most affected Asian countries reversed direction during the latter half of 1997, flows of foreign direct investment to the region are estimated to remain close to pre-crisis levels.

UNCTAD Secretary General Ricupero pointed out that direct investment flows have a moderating effect on the volatility of total private capital flows. “In the same way that the debt crisis of the 1980s led governments to appreciate the non-debt creating nature of foreign direct investment, the current crisis may lead them to appreciate the relative stability of FDI flows, apart from the other contributions such investments can make to growth and development,” Mr Ricupero said.

The complete analysis of the survey is contained in a background note which can be obtained from UNCTAD or ICC. The analysis, together with the accompanying press release, is also published on the ICC and UNCTAD web sites: www.iccwbo.org and www.unctad.org

ECS System for Tracking Container Movements

W ITNESS a major breakthrough in the world of technology with the introduction of a revolutionary wireless container tracking and monitoring system. Local electronics firm, P-Serv Technologies Pte Ltd, developed the Electronic Container Seal (ECS) System specifically for port’s users aimed at improving the efficiency of port’s operations worldwide.

“Our aim is to achieve large-scale operations worldwide through international standardisation of communication protocol,” said Mr Paul, General Manager of Electronic Seal Pte Ltd (ESPL). ESPL envision itself as a provider of low-cost electronic tagging and monitoring system.

The ECS System consisting of 3 peripheral’s modules – Base Reader (BR), Interfacing Software (IS) and the Handheld Reader (HHR) – is an active wireless transmitter powered by battery and equipped with embedded seal number and feature optional key-in of information.

The system is designed with a Radio Frequency (RF) of 315mhz using the frequency shift key technique (FSK), and an effective communication range of 3 to 5 meters with transmitting power of 1mW or less. The ECS consists of a Radio Frequency Identification (RFID) unit incorporated into the present container seals.

The ‘brain’ of the entire ECS System is the Integrated Circuit (IC), a transmitter of FSK that can be fitted on all different models of seals, thereby increasing its range of usage. There is a
huge market potential for ECS due to its distinct advantages and wide applications. "The seal can be easily adapted to other applications such as air cargo and luggage tags, further boosting its market potential," said Mr Ronald Teo, PSA’s Senior Regional Manager of International Business Division. The newly developed ECS enables checks to be done electronically on every container with an electronic seal, phasing out the old process whereby checks are carried out manually on randomly selected containers at the gates, thereby ensuring 100% seal checks. This new technology will save manpower costs, time and improve operational safety as physical checking at port's entrance or exit is eliminated. Security is enhanced, as ECS is tamper-proof and equipped to track container movements and to detect any tampering thus deterring pilferage. Results of the seal checks are also accurately electronically captured on the PSA computer system, and information received will then be transmitted instantly to port users notifying them of its status. The ECS is economically priced, of which the cost invested is less than the amount of savings generated from the benefits of using it thus making ECS a viable long-term investment, and only one ECS is required per container. Furthermore, it offers an unprecedented level of security and reliability. "PSA together with Electronic Seal Pte Ltd is poised to change the entire logistic infrastructure of the nation and is ready to set the pace and changes for the future," said Mr Tan Eow Huang, Director of Electronic Seal Pte Ltd.

Conference Report: International Symposium on Liner Shipping VI

Editors: Prof. Dr. Manfred Zachcial, Christel Heideloff; 304 pages; ISSN 0174-5727; Price: DM 165; plus postage and packing, in case of inland sales plus VAT (MWSL)

INTERNATIONAL Symposium on Liner Shipping VI was an extraordinary event in 1997. The Symposium was organised by the Port of Hamburg in cooperation with the Container Intermodal Institute (New York), Japan Maritime Research Institute (Tokyo), Maritime Institute (Gdansk), and the Institute of Shipping Economics and Logistics (Bremen). The conference has taken place every four years under the direction of Dr. H. L. Beth of the HHVW board (Port of Hamburg Marketing and Public Relations).

In 1997 participants from over 40 nations informed themselves about the present situation and development of liner shipping. On this opportunity, worldwide recognised experts were analysing the latest market trends in view of politics, shipping companies, forwarders and port industry.

The Institute of Shipping Economics and Logistics (ISL) in Bremen has now published the "Conference Report" in its book series representing a documentation of experts' knowledge as well as a precious source of information for maritime economy.

The "Conference Report" can be ordered directly from Institute of Shipping Economics and Logistics (ISL) Universitätsallee GW 1 28359 Bremen, Germany Tel.: +49-421-22096-38 Fax: +49-421-22096-55 E-mail: subscription@isl.org

ISL Shipping Statistics Yearbook 1997

Editors: Prof. Dr. Manfred Zachcial, Christel Heideloff; ISSN 0721-3220, 510 pages; Price: DM 330; plus postage and packing, in case of inland sales plus VAT (MMSL)

With its extensive coverage on developments and trends in shipping, seaborne trade, commodity markets, freight rates, shipbuilding and port traffic the ISL Shipping Statistics Yearbook is a complete statistical reference source to anyone whose business is concerned with shipping. The various statistical tables are supplemented by clear and informative charts. Moreover the latest development trends are summarised in an introductory comment.

The source of reliable insider information is designed particularly to meet the requirements of shipping companies, shipyards, port operators, and brokers. But also banks, consulting companies and research institutes belong to the subscribers of the ISL Yearbook.

Features included in the three main sections of the ISL Shipping Statistics Yearbook 1997 are as follows:

Shipping Market: This part of the yearbook focuses on world shipping supply and demand indicators. The supply of shipping services is highlighted by a detailed overview on structural features of the world merchant fleet with a breakdown by ship type. As the trend towards flagging out continues ownership patterns of the world merchant fleet is a focal point for the statistical analysis. This is also true for the fleet profiles of major shipping nations. The demand for shipping services is presented by comprehensive statistics on world trade and seaborne trade development as well as by information on major world commodity markets. Moreover, focus is put on the presentation of long-term time series on freight rates illustrated by a large number of charts.

Shipbuilding: World shipbuilding statistics are based on data concerning order activities and output figures. ISL analyses not only global long-term
developments in world shipbuilding but presents also detailed information with regard to specific market segments/ship types and major shipbuilding nations. Analytical data is in most cases also provided in cgt related tonnage figures.

**Ports and Sea Canals:** This section contains data of more than 250 ports in 80 countries. The figures inform not only about the ranking of ports in terms of cargo and container traffic, but also about growth patterns of individual ports. Statistical analysis is founded on the ISL Port Data Base. In addition to port data the Yearbook also shows the transit traffic of the leading world sea canals.

The *Yearbook* and also the monthly publication *ISL Shipping Statistics and Market Review* can be ordered directly from:

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E-Mail: subscription@isl.org

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**International Coal 1997 Edition**  
(1995-1996 Data)


**World Container Terminals:**  
**Global Growth and Private Profit**

The global container terminal industry is set for a period of unprecedented expansion, and consequent opportunity for investors and operators. It is forecast that the sector, clearly the most dynamic in the world port industry, needs to provide over 100 million teu of additional annual handling capacity by the year 2005, according to the new Drewry Report *World Container Terminals: Global Growth and Private Profit*.

The forecast growth, which will lead to a 60% increase over current levels of activity, translates into a massive estimated investment requirement of up to $29bn in the same period. In simple terms it indicates a need for the equivalent of over 200 new container terminals in the next eight years, despite the slower market growth which is anticipated after the Asian financial crisis.

But, in many ways, investment requirements merely represent the tip of the information needs for the container terminal industry at this time. The incessant requirement for additional container port capacity has certainly speeded up the near-global move towards privatisation, which has seen private capital, expertise and management establish a significant and growing presence in the industry. The first international port operators have emerged, including two – Hutchison and P&O Ports – which have taken a possibly decisive lead over other aspirants in building up a network of strategically located terminals, though the newly corporatised PSA shows signs of responding to the challenge.

The competitive pressures in the industry – already intense because of carrier cost cutting imperatives – have been further increased as local markets have been invaded by ultra-efficient private sector stevedores which have set new international benchmarks for operating efficiencies, tariff levels and profitability. The wide variations in regional handling charges not only point up the importance of being competitive within a given port range, but also warns of the dangers for high revenue terminals which may soon find themselves subject to the trend for price convergence under carrier negotiating pressure.

The proven track record of the international operators has attracted a plethora of willing local partners, lenders and equity investors eager to share in the often substantial returns which are being achieved – and which dwarf those obtainable through investment in other sectors of the container industry.
INTERNATIONAL MARITIME INFORMATION

Clearly, existing terminal operators need to know the economics of the international majors, and must ensure that they can match the performance – financial and operational – of the global stevedores if they, too, wish to attract new investment funds for expansion.

Variation in Global Container Handling Charges
(45 sample ports)

<table>
<thead>
<tr>
<th>Price per loaded teu</th>
<th>Percentage of ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $80</td>
<td>6.8%</td>
</tr>
<tr>
<td>$80-100</td>
<td>11.4%</td>
</tr>
<tr>
<td>$100-120</td>
<td>9.1%</td>
</tr>
<tr>
<td>$120-140</td>
<td>4.5%</td>
</tr>
<tr>
<td>$140-160</td>
<td>6.8%</td>
</tr>
<tr>
<td>$160-180</td>
<td>16.0%</td>
</tr>
<tr>
<td>$180-200</td>
<td>9.1%</td>
</tr>
<tr>
<td>$200-220</td>
<td>18.2%</td>
</tr>
<tr>
<td>$220-240</td>
<td>6.8%</td>
</tr>
<tr>
<td>$240-260</td>
<td>6.8%</td>
</tr>
<tr>
<td>$260+</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Source: Drewry Shipping Consultants Ltd

Certainly, larger terminals offer scope for substantial scale economies – the new Drewry report World Container Terminals: Global Growth and Private Profit assesses the annual operating cost advantage at around $12 per teu, for instance, for a 600,000 teu per annum facility compared with one a third the size.

World Container Terminals: Global Growth and Private Profit, 132pp, is published by Drewry Shipping Consultants Ltd. Individual copies of the Report are priced at UK£750 postpaid to anywhere in the world. For further information regarding World Container Terminals: Global Growth and Private Profit, or any enquiries regarding the Report, please contact Paula Puszet at the address below.

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E-mail: enquiries@drewry
Internet: www.drewry.co.uk/drewry/

The Impact of Changes in Ship Design on Transportation Infrastructure and Operations


This report focuses on the potential impact of so-called mega-container ships on the U.S. freight transportation network. It is based on input received by the U.S. Department of Transportation from four regional meetings conducted last year on the need to improve infrastructure links to ports to cope with the expected growth in container traffic volume.

For example, the report finds that:
- Containerized sea trade is growing at annual rates of 9.9% worldwide and 9.6% and 1.5%, respectively, at U.S. and Canadian ports.
- 90% of world liner general cargo trade will be containerized by the year 2010, compared to just 55% at present.
- Every major container port is projected to double or triple its throughput by 2020.
- In 1990, less than 6% of U.S. containerized cargo was carried on vessels of 4,000 TEUs or more. By 2010, 30% is projected to be handled on ships in the 4,000 to 6,000 TEU class, and more than 9% in those in the 6,000 to 8,000 TEU range.
- Megaships of 4,500+ TEU capacity and/or fully-loaded drafts of 40 to 46 feet cannot be handled at "some major U.S. ports."
- Ships in the 6,000 to 9,000 TEU capacity range will account for about 9.5% of the world containership fleet by 2010.

Based on a survey of technical data, the report identifies these "parameters for an optimized megaship terminal."
- Minimum of 2,500 linear feet of berthing (two megaship berths @ 1,250 feet each).
- Up to 3,000 linear of berthing (three post-Panamax berths @ 1,000 linear feet) to accommodate a mix of vessels.
- 50-foot water depths at berth.
- High berth occupancy rates (with 50% as the target).
- A minimum of three "Beyond Post-Panamax (BPP) cranes (outreach of more than 158 feet) per berth.
- Upgraded wharf load-bearing capacity to support the BPP cranes.
- Up to 75 terminal acres per megaship berth or 50 acres per standard berth (150 acres for 2,500 to 3,000 liner feet of berthing).
- State-of-the-art gate complex and on-dock rail.

Such a terminal could achieve throughput of between 450,000 and 900,000 TEUs annually, "depending on
The report examines the issues of transshipment terminals and especially the capacity of landside rail and truck systems to accommodate the huge volumes of traffic that would be generated by even a single megaship. It also discusses how various technologies and modified labor practices could improve container terminal productivity, citing as examples the impressive efficiencies already achieved at "the best Asian ports."

The report of Corps to/from the terminal. "

The Americas

Halifax to Redevelop Pier 21 Annex Bldg.

On March 27, 1998, the Board of Directors of the Halifax Port Corporation approved a $1.2 million redevelopment of the Pier 21 Immigration Annex Building on Terminal Road. The purpose of the project is to accommodate present tenants located in Pier 21 - Central Office Bay. These tenants consist of local craftspeople, sculptors, painters and other artisans, collectively organized as the Pier 21 Creative Artisans Association. The project will provide for appropriate tenant accommodations to support the HPC's rental revenue base.

Work will consist of the following:
- upgrading of the building to code specifications
- new windows, doors
- installation of interior partitions, electrical and mechanical upgrades
- exterior cladding
- installation of elevator and stairs.

In making the announcement, David Bellefontaine, President and CEO of the Halifax Port Corporation, stated that the development will dovetail with other changes in the Pier 21 area such as the planned Pier 21 Society Immigration Heritage Centre.

Ken Parsons, an architectural woodworker and Chair of the Pier 21 Creative Artisans Association, stated, "The development will create a long-term home base for many local artists and adds stability to our livelihood. We are most excited to be included in the Corporation's plans."

Merv Russell, Chairman of the Halifax Port Corporation, noted, "We believe that this development, and others which we are examining in the vicinity, will eventually transform this area of our city, creating a unique environment where our port meets the community." He further noted that the Corporation "is proud of its association with the unique Pier 21 artists' community in Halifax."

Construction is scheduled to begin in June '98 with completion in October '98.

‘Importance of US Port System’ – Highlights

U.S. foreign trade equals one-fifth of the U.S. Gross Domestic Product (GDP), U.S. ports annually handle in excess of $600 billion in international trade.

- Ninety-five percent of foreign trade originates in, or is destined for, approximately two-thirds of the nation and uses U.S. ports as gateways to conduct this trade. Regions that conduct the most international trade with the U.S. include Europe, Central and Latin America, and the Pacific Rim countries including Southeast Asia.

- Thirty-one states are predominately involved in foreign trade flows. Twenty-six states originate or are the destination for 95 percent of national waterborne imports and exports.

- Twenty ports handle most of the containerized cargo in the U.S. A variety of ports handle foreign cargo, but 20 ports handle 95 percent of total containerized cargo imported and exported from the U.S.

- Cities, states and regions don't rely on only one port for goods and services. The foreign trade activities of each state are supported by a variety of ports. On average, approximately 13 to 15 ports handle 95 percent of each state's import and export tons, import and export value and containers.

- Approximately 16 states trade the most non-containerized commodities measured by tons, using, on average, 27 ports as gateways. Twenty-one states, using 24 ports as gateways, are involved in 95 percent of commodity trade by value. The top five commodity groups based on tons are: crude petroleum, petroleum products, coal and coke, grain, and cement, lime and stone.

- Cities, states and regions don't rely on their own ports to facilitate their international trade. However, the remaining ports in the system can also contribute a significant amount of trade to these states. Land-locked states are dependent on the port system for efficient international cargo movements.

Highlights of the "Importance of the U.S. Port System" are excerpted from a report by Michael L. Sclar Associates, Inc. for the U.S. Army Corps of Engineers, Institute for Water Resources (IWR), Water Resources Support Center. Project direction was provided by Phillip J. Thorpe of IWR (tel: 703-428-7074).

AAPE: Handbook for Environmental Management

In many communities today, U.S. public ports have moved far beyond their traditional role of simply moving cargo and people from water to land modes of transportation. Increasingly, ports are being looked to for economic development and environmental stewardship. Existing environmental management guidelines vary in the types of issues covered and the institutional framework by which those policies
affect the decision-making process.

To address these concerns, AAPA is developing an environmental management handbook (EMH) for ports which will provide port managers a handbook of comprehensive environmental management practices that can be incorporated into their business practices. The EMH will identify the roles and responsibilities of ports, port managers and their employees and tenants as public custodians of natural resources within their jurisdiction. The EMH will serve as a guidance manual for ports wanting to develop or expand their environmental focus.

Specific objectives of the EMH are to:

- identify key environmental program areas for port operations and management; develop guidelines for best management practices in the key program areas; and develop a framework for consideration of environmental factors in the decision-making process that could be used by ports to serve as a tool to assist them in the outreach to, and education of, the public regarding port environmental practices.

The final document will be available by June 1998. For more information, contract Tom Chase, AAPA’s Director of Environmental Affairs, at (703) 684-5700.

**New Container Cranes Arrive at Savannah**

The Port of Savannah has taken delivery of two new post-panamax container cranes. Arriving at the Georgia Ports Authority’s (GPA) Garden City Terminal on March 15, 1998, the cranes were manufactured by Kone Crane Corporation of Helsinki, Finland and transported via SCANSCOT Shipping Services of Hamburg, Germany. The new cranes feature the speed, height and reach to effectively service the newest generation of container vessels. To be erected on-site at the GPA’s 838-acre Garden City Terminal, the cranes have a narrow wheel base to accommodate multiple cranes on a single vessel.

The acquisition of the new electrically-powered cranes enables the GPA to improve efficiency and productivity by increasing the terminal’s fleet of container cranes to 13 (11 of which are post-panamax capacity). The addition of these cranes will offer port users increased flexibility in equipment usage along more than 7,726 ft. (2,354.9 meters) of contiguous berthing, the longest of any facility on the U.S. East Coast.

“These new cranes represent the latest phase of our strategic plan to expand terminal operations,” stated GPA Executive Director Doug J. Marchand. “We will soon take delivery of two new rubber-tired gantries and two new toplifts to further enhance the efficiencies of container operations. All of this equipment will be put to productive use this summer when we commence operations at Container Berth 7.”

Future expansion plans at Savannah include the development of an on-terminal, 140-acre (56.7 hectare) Intermodal Container Transfer Facility (ICTF) within the next 18 to 24 months. This ICTF, the only one of its kind on the U.S. East Coast, will include almost four miles of total trackage for operation and storage.

An eighth container berth (CB 8) is also planned for development by the GPA at the Port of Savannah by 2001. CB 8 will provide port customers with an additional 93 acres (33.6 hectares) of paved storage and 1,200 feet (365.8 meters) of contiguous berthing.
WORLD PORT NEWS

Palm Beach District: Previous Records Broken

The Port of Palm Beach District has broken several previous Port records as indicated by results of the first six months of FY '98 versus FY '97. The following are some of the new threshold levels:

<table>
<thead>
<tr>
<th></th>
<th>FY '97</th>
<th>FY '98</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container Tonnages</td>
<td>443,431s/t</td>
<td>543,160s/t</td>
<td>+22.5%</td>
</tr>
<tr>
<td>Total TEUs</td>
<td>87,222</td>
<td>100,428</td>
<td>+15.14%</td>
</tr>
<tr>
<td>Total All Cargo (s/t/s)</td>
<td>1,542,409</td>
<td>1,763,986</td>
<td>+14.4%</td>
</tr>
<tr>
<td>Total Rail Cars</td>
<td>1,317</td>
<td>1,427</td>
<td>+8.4%</td>
</tr>
<tr>
<td>Vessel Port Calls</td>
<td>918</td>
<td>1,119</td>
<td>+22%</td>
</tr>
<tr>
<td>Rev. Passengers</td>
<td>120,160</td>
<td>216,702</td>
<td>+80.34%</td>
</tr>
</tbody>
</table>

These levels of activity are a source of pride to the Board of Commissioners of the Port of Palm Beach District, staff and residents of the Port District. They signal the overall solid position of the Port as the Gateway to the Americas.

Africa/Europe

2 Antwerp Organizations To Adopt Single Logo

In the past the Antwerp Port Authority and the Antwerp Port Federation (AGHA) tended to work in parallel, both promoting the port under their own flags. Since the establishment of the Port Promotion Co-ordinating Board, efforts have been combined and interests are promoted after consulting one another.

Consequently a renewal of the company style was obvious. The two organizations have decided to adopt a single logo.

The highly successful logo used by AGHA, known all over the world, has been updated. Although still essentially and recognizably the same, the revamped logo is the ideal embodiment of Antwerp's dynamism and can-do philosophy; a message it will carry to all corners of the world.

Hamburg: Maritime Trade With China Increasing

HAMBURG not only boasts a long tradition of maritime trade with China but also a current market that is still growing despite the economic crises in Asia. Although the leaps in growth of recent years are not expected now, substantial growth is still expected both in imports (with a growing proportion of finished goods) and exports via the Port of Hamburg.

Although foreign trade with China is still partly dependent on official approval, i.e. with centralized decisions and controls, there are clear signs of moves towards a market economy, for example in linear reductions of import duties. In the fourth quarter of 1997, import duties for about a third of all goods categories were reduced. Average duty fell from 23% to 17% and the highest rates were also cut. Further reductions have been announced.

Trade with China and Hong Kong is one of most important contributory factors to the Port of Hamburg's container turnover. In 1997 Hamburg's container terminals handled around 450,000 TEUs of outgoing and incoming cargoes. In the past five years the volume of cargo handled has increased by 50%. There are direct or indirect sailings from Hamburg to more than 60 ports in China while more than 30 regular services call in at Shanghai and Hong Kong, the main ports for incoming cargoes. Hamburg offers an ideal frequency of sailings to Chinese destinations and a broad range of shipping lines, including several sailing under Chinese flag.

Despite the rising proportion of finished goods and an associated increase in containerization, China is still a growing market for conventional cargoes. This applies, on the one hand, to project shipments for the continuing development of China's economy and on-going process of industrialization, and on the other hand to the steel business. Although steel consumption in Japan is falling, China's is expected to rise to 120 million tonnes a year by 2000, followed by rapid growth in subsequent years. In the dry bulk sector Hamburg only played a significant role in outgoing cargoes (mainly fertilizers).

In the long term, China will remain one of the Port of Hamburg's most important markets. As Dr H L Beth, Chairman of Port of Hamburg Marketing and Public Relations (HHWV) emphasized, that was why it was so important for Hamburg to participate at China Transport '98 with a joint port stand. This event, China's most important transport fair, has just taken place in Beijing. The fair was an opportunity not only for important talks with China's transport and foreign trade companies but also for Hamburg port training institutes and consultancy firms who were particularly interested in making contacts in their specialist markets.

34 PORTS AND HARBORS June, 1998

meters) of new berthing.

To complement landside improvements, the Georgia Ports Authority is aggressively pursuing a harbor deepening project to ensure the Port of Savannah's capabilities match the requirements of the next generation of deep draft vessels. Preliminary plans call for deepening of the Savannah channel from 42 feet (12.8 meters) at mean low water to 46 feet (14 meters) or more.
Kaohsiung: Recent Construction Projects

HARBOR Vessel Traffic Management System (VTMS)

Background: In order to cooperate with the government’s promotion of the Asia Pacific Regional Operations Shipping Center and to establish vessel traffic order, the “Kaohsiung Harbor Vessel Traffic Management System” (VTMS) is under preparation for construction.

Plan Content: The “Vessel Traffic Management Center” VTC tower on the north side of the second harbor entrance with five radar scanners, a telecommunication system, computers, and control panels, will be able to supervise the vessel movement situation inside and outside harbor and, furthermore, immediately issue an alert if necessary. It will have similar capabilities to an air traffic control tower.

Service Area: Taking the central point of the first and the second harbor entrances, the area has a radius of 20 nautical miles (covering the harbor area). Using radar, VHF/DF, CCTV and other equipment, all vessels within the service area can be continuously tracked or searched out. All the collected data will be sent back to the VTC tower for complete analysis, allowing the VTC center operators to immediately understand and deal with traffic conditions.

Handling Situation: China Port Consultants Inc. entrusted to conduct VTMS planning and designing, has drawn up mid and final stage reports according to the fixed schedule. The detailed designing is now under way after high level ratification of the reports.

To make the plan more far-reaching, Kaohsiung Harbor Bureau has invited Central Trust Bureau and Sun Yat-sen Scientific Research Institute experts to work with Kaohsiung Harbor Bureau to form an inspection team which will vigorously carry out its duties.

Detailed design work will soon be finished, and in March, 1998 the system facilities will publicly invite tenders. The project is scheduled to finish in June, 2000.

Expected Beneficial Results: The operation for vessels entering and leaving will be speeded up, and the port operation efficiency will be increased.

Traffic safety at sea will be strengthened, and incidents of vessel collision will also be reduced.

There will be effective prevention and control of marine pollution.

Ship Garbage Collection and Disposal System


This will be handled in accordance with the June 19, 1992 Executive Yuan ratified act, the “Kaohsiung Harbor Pollution Control Scheme”.

Plan Content: Reclamation of 22.5 hectares of new land from the sea area on the south side of the second harbor entrance near the Taipower Dalin coalyard.

Installation of a greenification administration center.

Purchase of ship garbage collection barges and an onshore collection system.

Construction of two 75 tons/day garbage incinerators, and oily water separating facilities.

Handling Situation: The environmental impact assessment specification was passed after inspection by the Provincial Government Environmental Protection Department on June 24, 1996.

The construction blueprint was passed in principle by Executive Yuan on June 3, 1997.

Should the construction be progressing smoothly, it is scheduled to finish and operate in June, 2001.

Expected Beneficial Results: Harbor water quality will improve. It is expected that the present A-C grade quality sea water will be upgraded to above B grade quality.

Other additional benefits: Bilge water and oily effluent from vessels in the port can be collected and need no longer be dumped into the port; the international profile of Port of Kaohsiung will be increased; international convention provisions can be met.

Kaohsiung Cement Sil Construction Scheme

Background: Cement is the basic material for all construction.

In recent years the government has been promoting public construction as well as many other kinds of construction schemes including privately operated construction growth. This has enabled local market demand for cement to continually increase.

South-West Taiwan limestone mining has been in a drought for a while. A large proportion of minefields will gradually lose their mining permits.

South-West cement factories will gradually move to the East, so South Taiwan’s demand must be satisfied by importing cement. Hence, “East to West cement transportation” has become a firm policy. Only marine transportation is dependable in offering a large supply of cement at reasonable fares. Therefore, all ports on the western coast must provide modern port facilities for cement carriers to berth and transferable work.

Investment Modes of Construction: In order to attract private capital into harbor development and encourage private business to operate port facilities, thus reducing government investment costs and increasing operation efficiency, the project has already signed up Taiwan Cement Corporation and 11 other companies to invest in construction.

Construction Sites and Quantity: Chongdao Commercial Harbor Area #33 will be equipped with 6 cement silos with a capacity of 90,000 tons.

Chongdao Commercial Harbor Area #44 and #45 will be equipped with 14 cement silos with a capacity of 266,000 tons.

Hsiaoqang Commercial Harbor Area #73 will be equipped with 4 cement silos with a capacity of 60,000 tons.

Cement Silos Specifications and Its Handling Equipment: Silo diameter is between 14-26m, height is 32-56m.

Totally automatic and watertight conveying equipment is used to prevent contamination.

Total Investment: NT$3 billion.

Scheduled Completion Date: June, 2000.
Old Harbor Area Redevelopment Plan

Background: Under the impact of changing times, Kaohsiung Old Harbor Area is unable to keep up with modern demands in terms of port capabilities.

Considering the aging port facilities, the fact that harbor and city mutually benefit from growth, residential recreation needs, the need to cooperate with the multifunctional finance and trade park area opening, and other considerations, Kaohsiung Harbor Bureau is beginning the Old Harbor Area development plan. It is hoped that the land adjustment and development at the Old Harbor can help revitalize the area.

This plan will use the harbor area space to the north of the Chiensch River and Basin No. 8, including Chongtiao, Lingya, Yenchuen, Chijin, and other commercial harbor areas.

Development Method: The Old Harbor Area will be open to tourist attractions and commercial business facilities. Then plan follows the “Encouraging Private Participation in Transportation Development Act” to execute lawful encouragement of private participation in investment development.

OE2, Oriana, Asuka Call at Yokohama

On March 2, three of the world’s large cruise ships – the OE2, the Oriana and Asuka – were all present at the port. Asuka arrived on Saturday, February 28, the OE2 on the Sunday and the Oriana on the Monday when all three were present. The calling of the three ships at the Port of Yokohama on their respective world cruises proved to be a huge and rare event for the city.

It is estimated that nearly 500,000 people turned out over the three days to watch the ships, and approximately 1.2 billion yen was generated. These numbers were way beyond expectations and even more remarkable considering there was a freak snow storm on the Sunday! It goes to prove what a massive interest in cruise ships there is among the citizens of Yokohama.

The event was extremely well publicized and covered by the national media including newspaper articles and live television broadcasts. There were even reporters from England to cover the event for British publications.

At the same time as this event, a British Fair was held in Yamashita Park (the area where the three ships were harboured) as part of the year-long Festival UK’98 that is taking place this year in Japan to promote Anglo-Japanese relations. This event showcased British products, music and culture to coincide with the visit of the famous British cruise ships.

Overall it was a spectacular event that gave pleasure to a great number of people and places Yokohama firmly on the map as a major world cruise port of call. We look forward to being able to play host to more and more cruise ships in the near future.

(Yokohama Port News)
In June 1997, the ‘Creation of a User-Friendly Port’ Promotion Committee was organized from 26 groups of the port-related administrative bodies and businesses to examine the above 4 subjects and formulate policies to tackle the problems of offering users high-quality service and reducing total costs. The final report on the present plans and the future proposals was released in March 1998.

Summary of the Final Report

Opening of Container Terminals
24 hours a day, 365 days a year
As for Sunday working which has taken place as a temporary measure after the Great Hanshin/Awaji Earthquake of 1995, the Committee is going to discuss lengthening working hours.

Reducing Total Costs Paid by Port Users
The main port charges are made up of facility use charges, port entry/exit charges such as pilotage, and handling charges.

With regard to facility use charges, the reduction of leasing fees for future container terminals which are currently under construction, is being discussed. In May 1997, charges for the use of wharves were substantially reduced by changing from a 24 hour system to a 12 hour system. Further, the committee will continue to look at reducing port entry charges and related charges in the future.

With regard to port entry/exit charges, in order to make the standard of operation of tugboats more efficient, there is a plan to reduce costs to users by shortening arrangement time and clarifying a standard number of necessary tugboats. There are also plans to reduce the amount of surcharge pilotage time and the cost of mooring and unmooring service charges.

As for handling charges, discussion will be held with the related industries to move towards improving productivity by work collaboration, thus realizing competitive charges.

Ensuring the Efficient Management of Port Facilities
Concerning new container terminals such as Minami Honmoku, efficient arrangements of various facilities for users will be examined. As a measure to maximize utility of existing container terminals, collaborative use by port operators will be discussed.

Furthermore, to promote efficient logistics, traffic access inside the piers will be improved, and a cargo carry-in/out reservation system will be put on trial from the spring of 1998 to reduce vehicles waiting at the container terminal gates.

Simplifying Port Procedures and Implementing EDI for Port Logistics
Among the documents that have to be handed in to the related public bodies when vessels enter or exit the port, 5 kinds will be integrated. Also, a meeting consisting of the relevant bodies will be established to examine the further simplification of the necessary procedures.

In order to increase the efficiency and speed of handing in documents to the related public bodies, the number of types of document that can be sent by fax to the Port and Harbor Bureau was increased from 6 to 24 in February 1998. Furthermore, to increase convenience for shipping companies, the number of customs windows which will receive

Yokohama Int’l Seamen’s Centre Under Construction
A new social welfare facility for sailors calling at the Port of Yokohama, tentatively called the Yokohama International Seamen’s Centre, will be built in the Shinko District of the Minato Mirai 21 Area.

Construction commenced in December 1997, and is scheduled to finish in 1999. Many countries are paying much attention to this facility because it will cater for sailors from all over the world. It will offer them various services from accommodation to currency exchange, a base for their activities, and opportunities for exchange with the citizens.

The Port of Yokohama puts much effort into enriching the social welfare of sailors. For example, we are the only port in Japan to hold International Seamen’s Sports Week every summer.

We are hoping that many sailors will visit our new facility and enjoy their time at the Port of Yokohama.
(Yokohama Port News)
the advanced Sea-NACCS (Sea-NIPPON Automated Cargo Clearance System).

These plans, leading the way among ports in Japan, will give an impetus to the attraction of vessels and cargo to the Port of Yokohama. Further, the attraction of a lot of vessels and cargo to the port is expected to promote man­
port-related industries and offer citizens imported goods at cheaper prices. The port will be the creator of economic effects and will contribute to all areas of economic activity in Yokohama.  

(Yokohama Port News)

Singapore: Licences to 2 Tug-operating Firms

The Maritime and Port Authority of Singapore (MPA) issued public licences on 27 Feb 98 to Sembawang Marine and Logistics Ltd (SML) and Keppel Smit Towage Pte Ltd for the provision of towage services in the Port. The public licence will be effective on 1 Mar 98 and will be valid for a period of 30 years.

These two companies have fully complied with the requirements set by MPA for the public licence. They will set up a manual tug operational system to service their customers. By 1 Jul 98, they will link up with MPA's computerised tug ordering and coordinating system.

Mr Chen Tze Penn, Director-General of MPA, said at a ceremony to give out the licences that the MPA expects both SML and Keppel Smit to deliver to their customers reliable and value-for-money tug services, thereby sharpening the competitive edge of the Port of Singapore. He added that the MPA will do its part to provide the necessary infrastructure and regulatory environment to enhance Singapore's status as a premier transshipment port.

Mr Er Kwong Wah, Executive Chairman of SML, said, "Over the past 4 years, we have been gearing up towards liberalisation, investing in newer and more powerful tugs. And today, we have a quality fleet which translates into greater operational efficiency and lower operating costs. So, we are definitely well positioned to give our competitors a run for their money and our customers value for theirs."

Mr Hans Van Rooij, Director, Keppel Smit Towage Pte Ltd, said, "Keppel Smit Towage is proud to be granted the public licence and looks forward to increasing its contribution to enhance Singapore as a megaport in the global market. Our company is gearing up to be a major player. We appreciate the tremendous effort by MPA to level the playing field and to promote competitiveness in the port."

MPA announced the liberalisation of tug services in the port on 26 Aug 97. The liberalisation is being carried out in phases and will provide port users with an alternative to the towage services provided by PSA Corporation Ltd, thereby improving the prospect of better service levels and more competitive rates.

S'pore: Electronic Chart For Safe Navigation

To further enhance navigational safety in Singapore waters, the Maritime and Port Authority of Singapore (MPA) has produced the Singapore Electronic Navigational Chart (Singapore ENC) for commercial use. The Singapore ENC was officially launched at a ceremony on 17 Mar 98 at the Pan Pacific Hotel.

The Singapore ENC is a digital database which contains hydrographic chart information necessary for safe navigation. Singapore is among the first in the world to release for commercial use ENC data that is compliant with the International Hydrographic Organisation S57 Edition 3 Standard.

The Singapore ENC also contains supplementary information not available in paper charts. It is used with the Electronic Chart Display and Information System (ECDIS). ECDIS is approved by the International Maritime Organisation (IMO) as a paper chart equivalent. Therefore, vessels equipped with ECDIS need not carry paper charts for their voyage as required under the Safety of Life at Sea (SOLAS) Convention.

The Singapore ENC is a powerful navigational tool. For the maritime community at large, the benefits of using this electronic tool are many. When interfaced with navigational sensors such as the Differential Global Positioning System (DGFS) and the ECDIS software, it is able to provide:-

- Real-time information on the actual position of a vessel.
- 24-hour operations in all weather conditions, night and day. This would increase a mariner's confidence in navigation, especially in confined waterways such as the Singapore Strait.
- Anti-grounding warnings
- Anti-collision warnings when interfaced with Automatic Radar Plotting Aid (ARPA) radar.
- Capability to carry out route planning, route monitoring and estimated time of arrival (ETA) computation.

All this greatly enhances safety to navigation and therefore helps to protect the marine environment.

The Singapore ENC, which covers our port waters and its approaches, has been tested on board ships plying between Singapore and Southampton and Singapore and Hong Kong under a programme called the Singapore-Hong Kong Admiralty Raster and ENC Demonstration (SHARED). The Programme was jointly undertaken by the MPA and the United Kingdom Hydrographic Office. The SHARED programme has been successfully demonstrated on board container ships and car carriers, and this has led to an extension of the programme to the region. The MPA is now working out the details of the SHARED Extension programme with the participating Hydrographic Offices in the region.

The Singapore ENC is available on CD-ROMs and may be obtained from authorised distributor(s). The ECDIS hardware and software are available commercially.

The MPA is convinced that the Singapore ENC, when used with the ECDIS, is the key to enhancing safe navigation at sea. MPA has already invested about half-a-million dollars in developing the Singapore ENC. It has also set up the supporting infrastructure such as the Differential Global Positioning System (DGFS) broadcast service for use with the ECDIS. DGFS positioning is widely used in navigation, marine surveys, offshore exploration, transportation and fleet management for obtaining positions of ships or other objects at sea. The DGFS signal can be received by ships as far as 200km from Singapore. The DGFS broadcast service is provided free-of-charge to port users on a round-the-clock basis.

In a speech at the launch ceremony of the Singapore ENC, Mr Peter Ho, Chairman, MPA and Permanent
Secretary (Defense Development) MINDEF, said, “The Singapore ENC is proof of MPA’s commitment to harness the latest technology to promote navigational safety in Singapore’s port waters. The MPA is committed to improving its service level by being a leading global player in the use of new technologies and maintaining its competitive edge so as to preserve Singapore’s position as the natural port of choice in this part of the world.”

**PSA Sets 2 Records In Container Handling**

PSA Corporation Limited (PSA) has set two records in the area of container handling in the first few months of 1998 – in terms of the number of containers handled in a single month and on a single vessel call.

**New Record for Throughput Handled In a Single Month**

In March 98, PSA set a new record for the number of containers handled in a single month. Despite the regional slowdown, PSA handled a record of 1.31 million Twenty-foot Equivalent Units (TEUs), the highest monthly throughput so far since containerisation began in the PSA in 1972. The previous record was established in October 97, when PSA handled 1.27 million TEUs. The record throughput handled last March was 10% higher than the throughput handled in March last year. The 1.31 million-TEU throughput is attributed to the good growth from West Asia, Oceania and South Asia, as well as the increase in the supply of empty containers from Europe and North America into the Southeast Asia region. The achievement is also a reflection of PSA’s continued efforts to improve its container-handling capability amid forecasts of slower container traffic growth. By customising its operations to customers’ requirements and by striving always to improve its operational performance, PSA ensures that customers’ containers are handled speedily and efficiently, saving time and costs for customers.

**Record Number of Containers Handled During a Single Vessel Call**

On 2 April this year, PSA also set another record – this time in terms of the total number of containers handled during a single vessel call. 5,600 TEUs were loaded/unloaded from the 6,600 TEU Susan Maersk at a vessel rate of 125 moves per hour (see Notes). This is the largest number of TEUs ever handled by PSA in a single call. This achievement was made possible by the close cooperation of Maersk and PSA. Over the years PSA has also built up its expertise to handle large container volumes per call and the attendant complexities of transshipment.

“The performance has surpassed our expectations, considering the economic slowdown that has affected the region. 1998 is expected to be a challenging year for PSA Corporation. The first few months’ results are positive and encouraging, and we would like to thank our customers for their continued support, without which these achievements would not have been possible. Our customers’ confidence and support motivate us to do even better in the months ahead,” said Mr Khoo Teng Chye, Group President, PSA Corporation Limited.

**Notes**

1. On average, PSA handles about 2,000 TEUs for a third-generation vessel.
2. PSA’s overall annual average container rate for 1997 is 88 moves per hour, which is the fastest in the world.
3. The average turnaround time for a vessel with 1,000 containers at PSA is about 11 hours.

**Management & Operations Programme by PSA, NUS**

This Programme is jointly organised by PSA Institute, the training arm of PSA Corporation Ltd and National University of Singapore’s Faculty of Business Administration.

**PSA Corporation Ltd**

After 179 successful years in the port business, PSA Corporation Ltd was formed from the corporatisation of the former Port of Singapore Authority. PSA Corporation is headed by Dr Yeo Ning Hong as Chairman and Mr Khoo Teng Chye as Group President.

PSA Corporation’s core business is in container operations. As the world’s largest terminal operator, PSA handles about one-tenth of the world’s container throughput, or more than 14 million TEUs (Twenty-foot Equivalent Units) a year. The Port of Singapore, a global port linked by 400 shipping lines to 600 ports worldwide, is the world’s busiest port with a combined shipping tonnage of over 700 million gross tons a year.

PSA Corporation has built up a strong reputation as one of the world’s most efficient container terminal operators. At PSA, a third generation container vessel is serviced at an average vessel rate of 88 containers per hour, the highest in the world. Eighty-two percent of container vessels are berthed on arrival and more than half of all containers is transshipped within three days.

PSA Corporation is actively exploring opportunities for co-operation in various parts of the world to invest in, operate and manage port terminals. PSA aims to be a global company, with plans to invest in international and regional ports, as well as related harbourfront developments. It is also developing its warehousing and logistics business, focusing on the development of a regional logistics network, providing a one-stop service for multi-national companies involved in regional distribution of high value-added products and services.

**National University of Singapore**

Since its origin in 1905, NUS has inherited a rich academic tradition from a lineage of distinctive predecessor institutions such as the University of Malaya and the University of Singapore. Today, NUS has eight faculties, four postgraduate schools, six national research centres, numerous faculty-based research centres and more than fifty teaching departments.

The Faculty of Business Administration is known for its leadership in management education and executive training and development. This reputation is based on its long history of excellence in teaching and research as well as its current vitality, creativity and commitment to its mission of improving the practice of management.

Teaching of business administration at the undergraduate level began in 1965. By the early 70’s, the Faculty was already offering business programmes at the postgraduate level. The 80’s saw the introduction and growth of executive development programmes for middle and senior managers operating in the Asia-Pacific region. Over the last decade, the number of executive development programmes has increased significantly. To date, the Faculty has trained some 7,500 managers from 77 countries. The Faculty offers more than
Faculty to jointly conduct executive programmes in English and Chinese every year. It has also attracted top business schools around the world to seek strategic alliances with the Faculty to jointly conduct executive programmes.

FOR WHOM
Senior and middle management officers from:
• Port authorities, terminal operating companies and cargo handling firms.
• Government agencies responsible for port development and management.
• Shipping, inter-modal operations and freight-forwarding companies.

OBJECTIVES
The objectives of the Programme are:
• To enhance conceptual understanding of the critical areas of corporate strategy, human resources, operations, finance and technology to effectively manage the multi-disciplinary functions of a modern sea-port.
• To provide opportunities to apply port management and operations principles and concepts through case studies and discussions.
• To provide a forum for the exchange of ideas and experiences on port management and operations with counterparts from the maritime industry.

COVERAGE
• Maritime Transport
  International competition and competitive strategies
  Economics and structure of world maritime trade
  Shipping de-regulations and competition

• Port Organisation
  Role and functions of sea-ports
  Types of port administration
  Port privatisation and impact on organisation and operations

• Port Planning
  Principles of port planning
  Port master planning and preliminary engineering
  Port infrastructure maintenance
  Planning and development of Brani Terminal – case study

• Port Operations Management
  Principles of operations management
  Forecasting and capacity planning
  Design of operations systems
  Inventory management/control scheduling
  Quality management/control
  Container terminal gate system – case study

• Technology Management
  Management of information and process technology
  Information flows and international standards for electronics documentation systems
  Automation of workflow in port operations
  Portnet (electronic submission of cargo/container documentation) – case study

• Port Equipment Maintenance
  Principles of replacement policies
  Equipment selection and procurement
  Maintenance information system

• Port Safety and Security
  Principles of port safety management
  Principles of port security management
  Use of technology in safety/security management

• Port Finance
  Principles of financial management
  Cost management and accounting
  Budgetary control

• Human Resource Management
  Organisation adaptation and human resource strategies
  Management of industrial relations
  Management of change
  Union-management relations
  Training of personnel

• Adventure Learning
  Communication
  Team-building

TEACHING METHODS
A variety of teaching methods such as lectures, case studies and small group discussions will be used. The medium of instruction is English. Participants will be expected to be proficient in the language.

Dates: 21 September to 2 October 1998
Venue: PSA Institute, PSA Corporation Ltd.
Fee: $8,200 (Singapore dollars) per participant. The fee covers cost of tuition, materials, and daily refreshments.
Lecturers: The Programme will be conducted by a team of highly qualified professors/senior lecturers from NUS and senior managers from PSA Corporation Ltd.

ADMINISTRATIVE DETAILS
Application
Applications should include a cheque or bank draft for the total amount of fee in Singapore dollars made payable to “PSA Corporation Ltd”. Applications should reach PSA Institute not later than 15 August 1998.

Accommodation
On request, PSA Institute will assist in booking accommodation for overseas participants at local hotels.

Visa and Travel Arrangements
Overseas participants will be required to make their own visa and travel arrangements to Singapore. PSA Institute will assist participants in submitting applications to the Singapore Immigration Department for valid passes to stay in Singapore for the duration of the Programme. Overseas participants are advised to take up travel, accident and medical insurance policies to cover them for the duration of their stay in Singapore.

Refund of Fee
Applicants selected for the Programme and who subsequently withdraw, will be refunded 50% of the fee, if written notice of withdrawal is received by PSA Institute before 31 August 1998. No refund will be made if notice of withdrawal is received after the stipulated date. Applicants who are not selected for the Programme will be refunded the full amount of fee.

Cancellation
PSA Institute and NUS reserve the right to cancel the Programme in the event of insufficient response or other unforeseen circumstances, without any financial obligation to applicants or their sponsors. Under such circumstances, a full refund of the fee will be made.

ENQUIRIES
For more information, please contact:
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PSA Institute
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Fax: (65) 276-9450
Internet: hhlee@hq.psa.com.sg.
Join us in IAPH's endeavours to pursue

**World Peace Through World Trade**  
**World Trade Through World Ports**

Since 1955

IAPH supports all efforts to prevent illegal trafficking of drugs!

Drug Trafficking through seaports is a global problem requiring vigilance and the co-operation of the World’s Port Communities.

World Ports must accept their responsibility to the World Community by working together to enhance security measures and improve communication of information to fight the illegal movement of drugs through ports.

The *International Association of Ports and Harbors* (IAPH) fully supports the efforts and initiatives of the World Customs Organization (WCO) in their fight against the illegal trafficking of drugs through ports.

IAPH will meet in Kuala Lumpur Malaysia from 15 to 21 May, 1999, at its 21st World Ports Conference

**Conference Theme:** Global Trade Through Port Co-operation  
**Conference Host:** The Klang Port Authority

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PORT OF TALLINN

GATEWAY BETWEEN EAST AND WEST

PORT OF TALLINN - favourably located on the tradeway between east and west, a harbour complex navigable throughout the year with depths down to 17.4 m, able to handle all vessels that can sail to the Baltic Sea through the Straits of Denmark.

PORT OF TALLINN - administers Old City Harbour, Muuga Harbour, Paljassaare Harbour and Paldiski South Harbour.

PORT OF TALLINN - a gateway for over 4.8 million passengers in 1997. The Old City Harbour with its four passenger terminals is an excellent harbour for both passenger ferry boats, as well as for hydrofoils and catamarans during summer season.

PORT OF TALLINN - equipped to handle all types of cargo and commodities. Total annual cargo turnover in 1997 was over 17 million tonnes.

Muuga Harbour - the largest and deepest port in Estonia. Excellent inland rail and road connections. Two modern, fully-equipped grain and reefer terminals. The first boasts a 300,000 tonnes silo able to handle 5 million tonnes a year; the second has refrigerated warehouse capacity (+16°C to -22°C) for 5,000 tonnes. Port handles dry bulk and general cargoes, as well as cereals and perishables. Good transshipment facilities for minerals, construction materials, and coal. There are five oil terminals operating in the port, the sixth will be completed this year.

PORT OF TALLINN - YOUR RELIABLE AND EFFICIENT PARTNER

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