

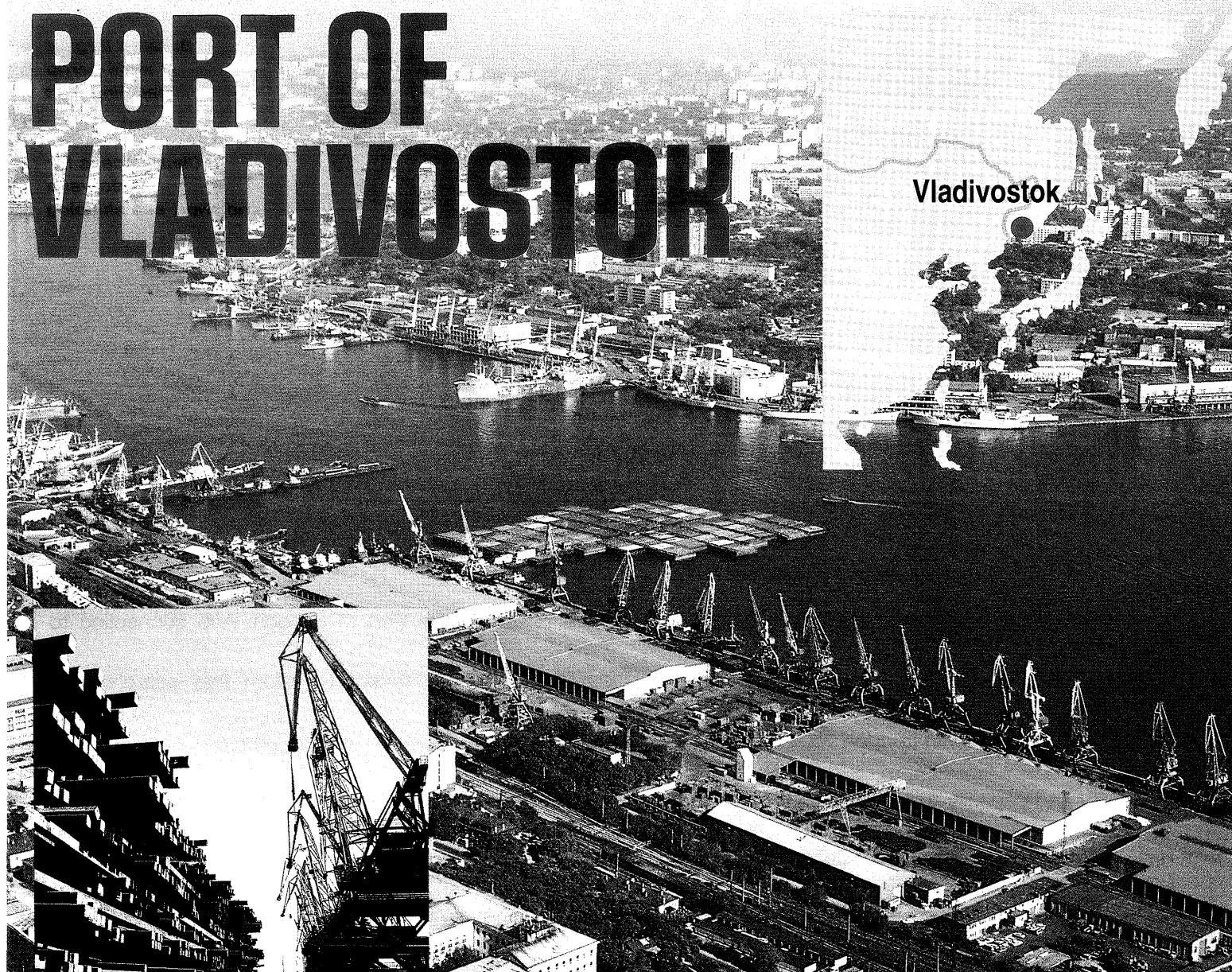
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PORT OF VLADIVOSTOK



**IAPH Information
Technology Award
1997: Conditions for
Entries announced**

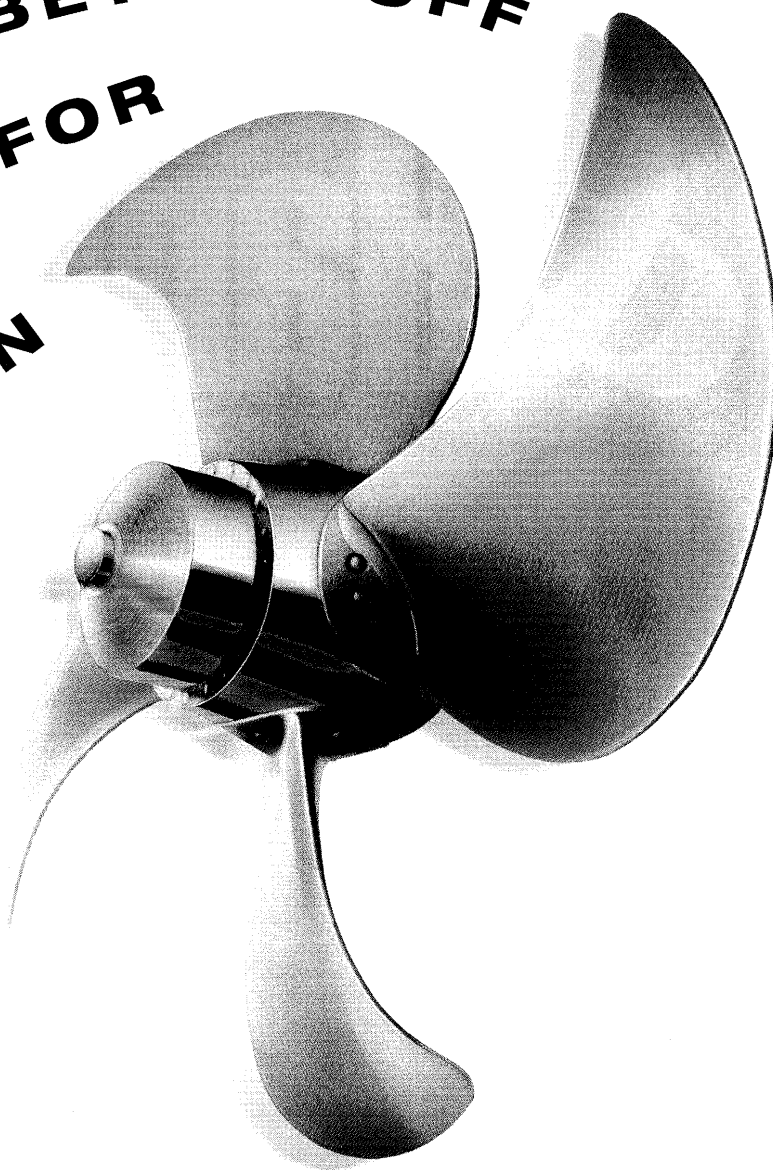
**Measuring the Financial
Bottom Line:
A Process
by Prof. Thomas J. Dowd**

**President
Ramos
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The Port of Vladivostok – Main Gateway on Russian Pacific Coast, page 30

In 1992, the Port of Vladivostok, which had been closed to foreign visitors and merchant ships over the past quarter of a century with just a few exceptions, was opened to the world. Mr. Robkanov, President of the Commercial Port of Vladivostok, outlines the past, present and future of the Port, one of the biggest and most modern ports in the region. He envisages that its convenient geographical position and the new political situation in his country will undoubtedly promise commercial prosperity for the Port in the years to come and welcomes visits by potential business partners and ships. Page 30



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OPEN FORUM

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INTERNATIONAL MARITIME INFORMATION

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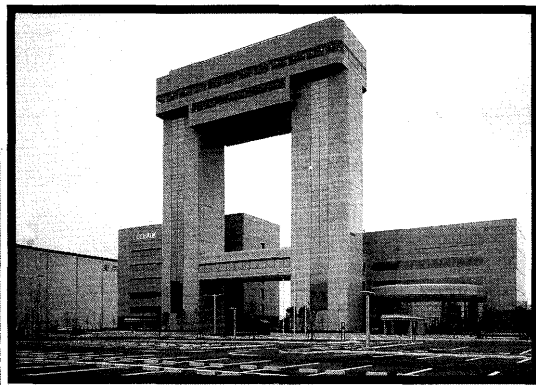
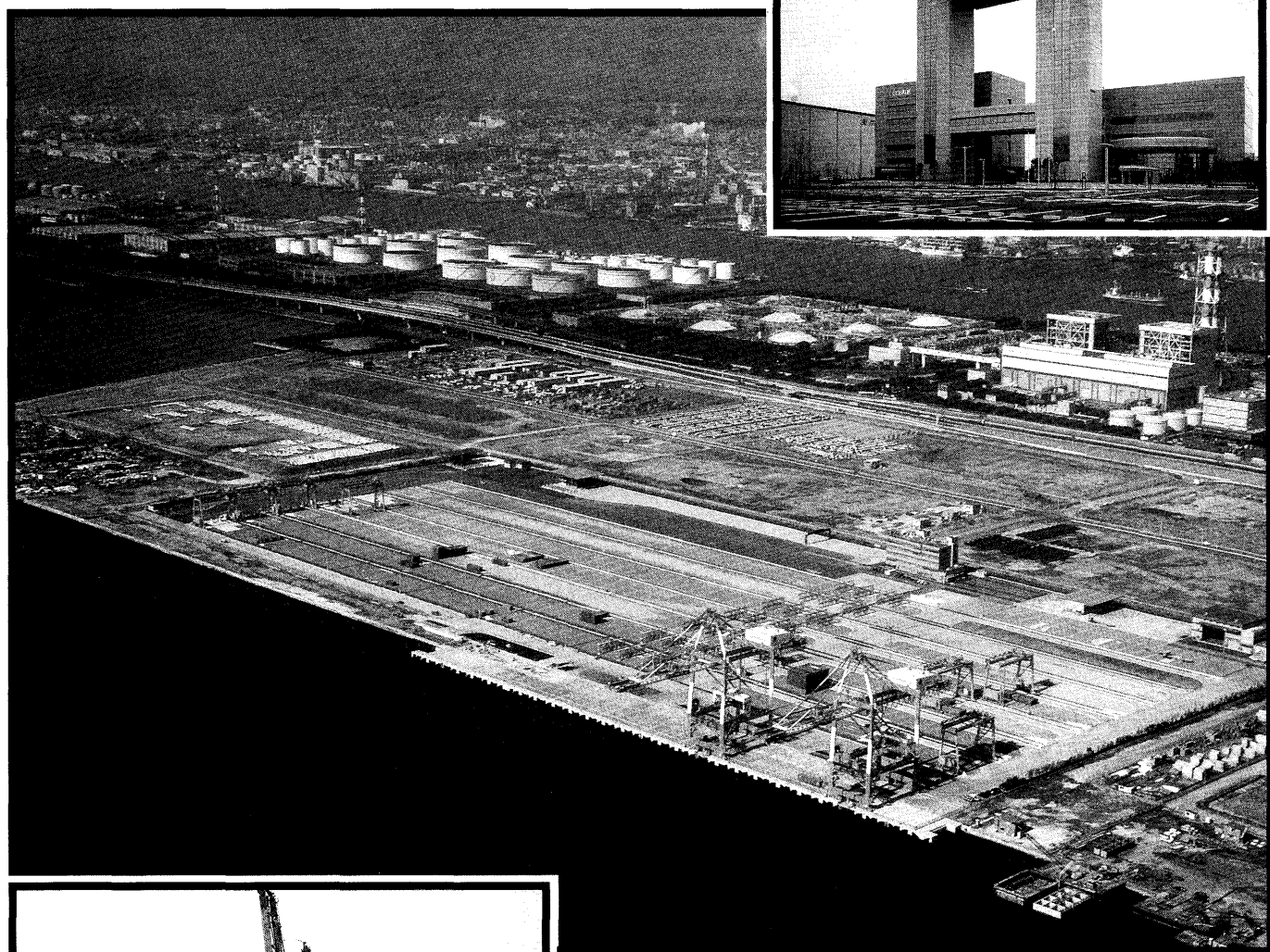
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IAPH ANNOUNCEMENTS AND NEWS

IAPH Information Technology Award 1997

TFC Announces Conditions for Entry

The Committee on Trade Facilitation at its meeting held in Cyprus on 15 March 1996, considered, among other subjects, the arrangement for the IAPH Information Technology Award 1997. Mr. Ian Flanders, Trade Services Manager, Port of London Authority, who serves as Secretary to the Trade Facilitation Committee, has recently provided the Tokyo Head Office with a report of the Cyprus meeting and the updated conditions of entry to the IT Award 1997, which we introduce here.

It is hoped that as many entrants as possible will be able to participate in the 1997 competition. Further to the information contained in a poster outlining the conditions which was sent to all members from the Tokyo Head Office, the relevant terms are introduced in this issue.

Name of Award: The award is known as the International Association of Ports and Harbors Award for the Application of Information Technology in Ports.

Concepts: IAPH demonstrates its commitment and leadership in promoting the use of information technology in ports by presenting the award for the outstanding application of information technology in a port, as decided by a distinguished panel of judges. The award is now presented biennially. The 1997 presentation will be made during the 20th World Ports Conference of IAPH, to be held in London (31 May-6 June 1997).

Award Criteria: Any Regular or Associate Member of IAPH will be eligible to submit an entry for the award. Any application of information technology within a port may be submitted, whether purely internal to the port authority or involving other outside organisations in such areas as EDI. The winner will be the entrant whose project or application, implemented in the previous two years, has resulted in the greatest benefit to the port as judged by the Selection Committee on the following criteria:-

Lower costs and increased revenues, improved safety, environmental protection and enhanced efficiency

It is explicitly envisaged that these criteria will enable ports in less developed countries, with limited resources and different circumstances, to compete for the award alongside those who already use the available technologies extensively. Relative improvement for a port will be the key factor of comparison. Gold, silver and bronze plaques will be presented.

Selection Committee: The Selection Committee of four will receive, review and judge the merits of all entries. it will comprise:-

- the Chairman, IAPH Trade Facilitation Committee;
- a representative of the host port organisation at which the award will be presented (Port of London Authority);
- a representative of the IAPH secretariat; and
- a member of the Trade Facilitation Committee from a region not represented by the other three members.

Nomination Process: Nominations for the award are to be directed to the IAPH secretariat, which will ensure distribution to all members of the Selection Committee. The nomination must take the form of a written document substantiating the reason for the nomination, along with supporting evidence. Should there be more than one entry nominated per organisation, these entries will be considered separately.

Contacts: For both nominator and nominee, supply name, address, telephone number and fax number of the organisation and person concerned.

Description of Information Technology Application:

1. Summary – Briefly describe (up to 400 words) the application, including the business problem, the technology solution, the time taken to achieve results and the date of implementation.
2. Results (up to 400 words) – Provide specific performance measurements which show the improvement brought about through the IT application, e.g. increase in revenues, decrease in costs, percentage change in results, time savings, operating impact, increase in port capabilities.
3. Technology or Services Used (up to 200 words) – List hardware, software and services that were used in the application.
4. Obstacles Overcome (up to 300 words) – Explain the primary problems (technological, organisational, human or other) or difficulties overcome or avoided that threatened the success of the project, and the measures used to overcome these problems.
5. Technology Base (up to 300 words) – Give an indication of the level and extent of technology in use within the organisation before implementation of the project or application submitted.

Language: English

Deadline: Entries must be received at the IAPH Head Office Secretariat by 4 p.m., Japan time, 31 December 1996. To allow the judging to be carried out effectively, entrants must adhere to this deadline. Entries received after the deadline will not be judged.

Winners: Winners of the gold, silver and bronze awards will be notified in good time to allow presentation of the awards to be made during the 20th World Ports Conference of IAPH in London (31 May-6 June 1997).

Publicity: Any entry and/or related presentation material submitted for the award may be published in the IAPH magazine, Ports and Harbors.

Entry submission by Mail or Fax to:

Information Technology Award
c/o The International Association of Ports and Harbors

Kono Building
1-23-9 Nishi-Shimbashi
Minato-ku, Tokyo 105 Japan
Tel: +81-3-3591-4261
Fax: +81-3-3580-0364
E-Mail: iaph@msn.com

IAPH Trade Facilitation Comm. Meets in Cyprus

The IAPH Trade Facilitation Committee met in Cyprus on 15 March under the chairmanship of David Jeffery (Port of London Authority). The meeting was attended by:

Joseph Bayada, Cyprus Ports Authority
Leandre Amargos, Port of Barcelona
Santiago Mila, Port of Barcelona
Paul Scherrer, Port of Le Havre
Violeta Limona, Constantza Port Administration

In welcoming Committee members to the meeting, David Jeffery expressed sincere thanks to Joseph Bayada for hosting the meeting and also for the comprehensive arrangements that had been made for the Committee members. He commented on the high level of attendance by members of TFC meetings, consider-

ing individual travel situations, which was very encouraging.

The matters discussed included:

Report to the Executive Committee

The Chairman's interim report to the Executive Committee was finalised.

Committee membership

It was noted that membership of the TFC remained stable and it was suggested that representation from South America should be pursued, perhaps involving the next IT (Information Technology) award as a vehicle. It was also noted that an imbalance in favor of European representation on the TFC existed and that efforts should be made to promote close involvement with members in the Far East.

IAPH IT Award

Detailed discussion of the IAPH IT Award led to a number of criteria and parameters being proposed with a schedule being suggested for the 1997 award (to coincide with the IAPH Conference in London) commencing with publicity being promoted in June 1996 and a deadline of receipt of entries by 31.12.96.

Information Exchange

The subject of the exchange of IT information and experience was discussed at length and included a detailed questionnaire. This will be used as an approach to all IAPH members in an effort towards making valuable information widely available. The target is the 'sharing of experience', not simply the establishment of a database.

Local Developments

Information on local systems and EDI (Electronic Data Interchange) developments was then shared, with particular reference to links with Customs routines.

Training

The subject of training requirements in the field of IT in ports, the associated difficulties and recent progress was discussed. Further avenues were highlighted and will be pursued.

Involvement with Other Organisations

'Involvement with other organisations' is a regular agenda item of the TFC. Comments were made on involvement at WCO (World Customs Organisation) meetings, the work being carried out in that forum (Kyoto Convention) and also the aims of the MARIS project.

Customs Procedures

Customs procedures in the various countries represented by



From left: Violeta Limona (Constantza), Santiago Garcia Mila (Barcelona), Leandre Amargos Torruella (Barcelona), David Jeffery (London), Ian Flanders (London), Paul Scherrer (Le Havre) and Joseph Bayada (Cyprus)

members are also subject to discussion at the TFC, and the sensitivity of attempting to modify and improve routines is recognised. The application and development of 'Charters' was highlighted as a possible way forward, with the possibility of using the UK version as an example.

Electronic Links between TFC Members

The use of electronic means of data transfer was discussed at length, especially in the context of applications to communications within the IAPH and TFC arenas. Approaches to the Sea-Trade group have suggested that the TFC might be the appropriate vehicle for pursue developments in this area.

20th IAPH Conference 1997 LONDON

The Chairman reported that plans were proceeding well. Emphasis had been placed on a valuable business related programme but with social events of a high standard also being arranged.

Committee Chairmanship

David Jeffery then referred to the situation regarding his relinquishing of the TFC's Chairmanship. He expressed his pleasure that Leandre Amargos was now prepared to take the Chair and emphasised that he expected good progress to be made under Leandre's guidance. This now needed to be confirmed by the Executive Committee.

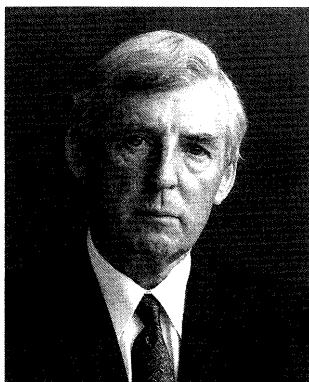
Leandre Amargos confirmed his willingness to accept the chairmanship and indicated that he had the full support of the Spanish ports. He added that he would hope to involve Santiago Mila, an international data specialist, and, from the University of Barcelona, an international lawyer. Use could also be made of the UN library which is housed in Barcelona.

Mr Jeffery said that he would now seek approval for Mr Amargos' appointment by following the appropriate protocol.

President Cooper Changes Role At Ports of Auckland

The IAPH Head Office has recently been informed that Mr. Robert Cooper, President of IAPH, retires from the position of Chief Executive of Ports of Auckland Limited with effect from 30 June, while he continues to act as Adviser to the Board of Ports of Auckland Limited, and in this capacity he will continue to head IAPH throughout the period leading up to the London Conference next year.

Under the date of 24 June 1996, President Cooper wrote a letter to the members of the Board and Executive Committee to let them know directly about this situation. Mr. Cooper's letter follows:



Robert Cooper
President, IAPH

Dear Board and Exco Members:

As inevitably there will be some publicity about a change in my role at Ports of Auckland Limited, I am writing to you as a member of the IAPH Board of Directors to let you know directly about this.

I have decided to retire from the position of Chief Executive of Ports of Auckland Limited with effect from 30 June 1996. However, I have acceded to the request to remain as advisor to the Board, and will continue to represent Ports of Auckland in its IAPH activities.

I discussed this change in detail with the Vice Presidents, the Secretary General and our legal counsel, so that they were well aware of the proposed changes, and considered them in the context of the IAPH Constitution and Bylaws.

It follows that I will continue as President of the Association for the remainder of my term, and I want to assure you that there will be no lessening of my commitment to the Association's wellbeing and progress. Indeed, the decreased daily workload will enable me to devote more time to IAPH.

As you know, the business of ports is so incredibly fascinating that a lifelong interest is only to be expected.

My successor here is Geoff Vazey, and as he is already a member of the Legal Protection Committee, I know that this port's commitment to IAPH will be on-going.

I look forward to meeting you again in London, if not before.

With kind regards,

New Appointments

IAPH/IMO Interface Group

Captain Mark Heah, Port Master of the Maritime and Port Authority of Singapore, has taken over from Mr. Goon Kok Loon of the Port of Singapore Authority, as a member of the IAPH/IMO Interface Group. The newly established MPA (an IAPH Regular Member from Singapore since 1996) has agreed to assign its Port Master to serve on the Group and the appointment has been authorized by President Cooper.



Mr. Bernard Coloby, Director, International Affairs, Port of Le Havre, has taken over from Mr. Philippe Prevot as a member of the IAPH/IMO Interface Group due to some internal changes in their organization. The appointment has recently been confirmed by President Cooper in accordance with the proposal earlier made and with the endorsement of Mr. Smagghe, Chairman of the Group.



Trade Facilitation Committee

Mr. Hiroshi Koike, Director General, Port and Harbor Bureau, City of Yokohama, has recently been appointed by the President to the Committee, in replacement of Mr. Kazunori Hosokawa, who has been transferred from the Port of Yokohama.



Port Planning & Construction Committee

Mr. Akio Miyama, Executive Director, Port of Hakata, Fukuoka City, has been appointed by the President to serve on the Port Planning & Construction Committee, in replacement of Mr. Teizo Ishibashi, who has retired from the Port as Deputy Executive Director. The appointment was confirmed on 5 June in accordance with the recommendation by Mr. Philip Ng, Chairman of the Committee.



CORRECTION

In the June issue of this journal on page 27, in the article announcing the newly appointed Committee members, **Mr. Tetsuo Omura** was erroneously referred to as Mr. Tetsuo Kimura. **Mr. Omura, Director General of Kitakyushu Port and Harbor Bureau**, has been appointed by President Cooper to serve on the Cargo Handling Operations Committee. We apologize to Mr. Omura for this error.



IAPH Head Office

Braems of Dunkirk Represents IAPH at UNCITRAL Meeting

The IAPH Secretariat has recently received a report prepared by Mr. J. Braems, Port of Dunkirk, on his attendance at the third session of the United Nations Commission on International Trade Law (UNCITRAL) Working Group held in Vienna from 19 to 26 May 1996. Mr. Braems' participation in the meeting had been arranged through Mr. Paul Valls, Chairman of the IAPH Legal Protection Committee, at the request of Mr. Patrick J. Falvey, Chairman of the IAPH Legal Counselors, as he was unable to take part himself.

Fortunately, Mr. Falvey was available to attend the UNCITRAL meeting on Electronic Commerce held on 14 June 1996 and he has recently come up with a report for reference to the President, the Exco members and Chairmen of the Trade Facilitation and Legal Protection Committees.

The reports from Mr. Braems and Mr. Falvey are introduced in this issue.

Summary of the Report of J. Braems Representing IAPH at the 30th Session of the UNCITRAL Working Group on EDI

Project Inception

Due to the steady expansion of exchanges of goods and services, to the need to shorten



the transmission time of data following these flows and to the development of efficient and user-friendly computer approaches, electronic data interchanges have won an increasingly commanding status in domestic and international trade. This situation, which has been forced upon operators and national and international authorities alike, was followed by very different legal provisions depending on the countries concerned to provide against third parties' action on all the data interchanges.

The international community became aware of this problem and the United Nations Commission on International Trade Law (UNCITRAL), a body of the UN General Assembly which facilitates the elimination of commercial law barriers to international trade, was entrusted with the conduct of this work following a long process started in 1984 when the Commission examined a report submitted by the Secretary General entitled "Legal aspects of automatic data processing".

In 1985, the General Assembly approved a recommendation whereby governments and international organisations were required to introduce legal safeguards in the use of EDI in international trade.

Objectives assigned to the Model Law

The ultimate objective of the Member States is to introduce more legal security against the consequences of EDI by ensuring that whatever could be binding on parties or could entail legal consequences using a paper instrument should be achieved in the same way through EDI.

It was therefore deemed appropriate not to vary the statutory or contractual provisions applying to paper instruments and merely to devise a separate, generic law which would govern how such a legal provision or other - so far on paper - instruments should be applied in the EDI environment.

The provisions of the Draft Model Law are theoretically meant to achieve this objective. In actual fact, one has to realise that the legal security, which is the ultimate objective of the working group, will not be achieved unless and until a group of countries of sufficient economic weight enforce the provisions of the Model Law.

There is no assurance in that respect since the various countries may simply set the draft Model Law aside, or only retain a few provision thereof, which would not promote the uniformity of regulations.

This risk should not be ruled out, but the new legal concept of a Model Law seems to be a trade-off which allows every country to retain its full freedom of action against a full or part of application of the principles underlying the draft law.

Furthermore, such flexibility entails some pragmatic aspects since the working group suggested backing the draft law with an implementation guide, the subject of its 29th session.

The status of the various laws under evaluation at the 30th session

The following drafts prepared by the working group after the 28th, 29th and 30th sessions should be submitted for adoption at the 29th session of the working group from 28 May to 14 June 1996.

1) Model Law

- Art. 2 - Definitions
- Art. 12 - Acknowledgement
- Art. 13 - Execution and validity of agreements
- Art. 14 - Message transmission and reception time and place

Art. X specifically concerning the "contracts of goods carriage involving data messages" was adopted by the 30th session of the working group.

2) Implementation guide

This document was adopted by the 29th session of the working group (cf. Doc..) and should be complemented by the Secretariat to reflect the working group's comments on Art. X.

n.b. Articles 1 and 3 to 11 have been adopted by the Commission.

A specific case: the Bill of Lading

The terms of the problem

Bearing in mind its sophisticated legal functions, the Bill of Lading was subject to a special assessment in order to ascertain whether the Model Law could be adapted and to suggest supplementary provisions if required. This is just what Art. X is all about.

The bill of lading functions are as follows:

- 1) carrier's receipt for the goods
- 2) document evidencing the contract of carriage,
- 3) document vesting rights in the holding (right to give directions to, and to claim the goods from the carrier)

The following features derive from the B/L functions:

- It is a negotiable instrument.
- The original document is of paramount value and should be in one copy only, but in practice several copies are used to meet customs and banking requirements.

It should be remembered that the Sea Way Bill is not negotiable and is generally used on short-haul routes, but its use is now expanding into the North Atlantic/Western Europe trade. However, this should not be expected to replace the B/L in the foreseeable future, since a written B/L is mandatory in some countries.

It appears from a functional analysis of the B/L that, generally, the first two functions are admittedly easy to cover by EDI. Furthermore, the third feature requires specific provisions which, in turn, could be applied to EDI as used for other types of documents.

This is the subject of Art. X

Some provisions of the article only point to the articles of the draft Model Law which apply to the B/L, while others are just filling gaps in the type law.

Focuses for future work

Future focuses will be:

- functions performed by shipping documents and international conventions.

The assessment should be conducted in liaison with the organisations concerned, viz. CMI, ICC, IUMI, FIATA, ICS and IAPH, in accordance with the following guidelines:

1. - The standardisation of electronic signature has been ruled out.
2. - The criteria and standardisation of registries should be assessed.
3. - The incorporation by reference should be evaluated with the registries and the service contractors.
4. - The relationship between EDI service suppliers, users and third parties should be assessed.
5. - An EDI-oriented examination of international conventions in co-operation with W.P. 4 should be carried out.

Such future work is indeed an important task for the ports.

Future action by the CLP

There are clearly implications for ports in the work being undertaken by UNCITRAL, and in this respect the IAPH Committee on Legal Protection (CLP) will be examining the possible courses of action to be taken within IAPH for proposal to the parties concerned.

UNCITRAL Model Law On Electronic Commerce

Report by Patrick J Falvey

Chairman of the IAPH Legal Counselors
New York (submitted to President Cooper)

At its meeting on 14 June 1996, the United Nations Commission on International Trade Law adopted the above captioned Model Law with a recommendation that all Member States adopt it by national legislation.

Please particularly note Part Two, which specifically would implement the Model Law for Transport contracts and documentation. If enacted by trading nations, the Law would make it possible to trade on a paperless basis.

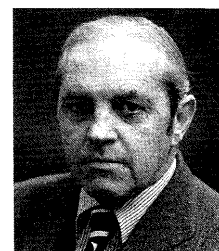
The action followed thirteen days of discussion and debate on four years of earlier work by Committees of the Commission. I attended ten of these sessions as an observer on behalf of IAPH.

I believe that the Model Law is a good beginning of the process of moving toward Electronic Commerce. The Commission itself noted the need for future work for its 1997 meeting to address the possible need for a registry and exchange system and rules for service providers in order to put on flesh the principles of the Model Law that the data messages must be reliable, secure and authentic in order to serve as functional equivalents of the paper based system.

The necessity of protecting commercial information from disclosure and from tampering was recognized. Referring to encryption systems as possible safeguards, the Commission did not feel it was advisable to propose any specific system.

This and other important practical operating considerations are discussed in a Guide to Model Law which will be issued by the Commission together with the Model Law.

I will provide this Guide and further analysis when it is available. As to additional future work, the Commission will also circulate a request for comment as to whether further Commission work is required to update and harmonize transport conventions for the electronic age. The U.S. State Department is forming a study group on this matter and has asked that I work with this group, which I will be pleased to do if IAPH agrees.



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Fax: +81-3-3580-0364 (unchanged)
E-mail: iaph@msn.com

A Summary Report

on the combined meeting of IAPH Committees on Port Safety and Environment and Marine Operations, 28/29 March 1996 in Rotterdam, the Netherlands

By Peter van der Kluit & Alex J Smith

Following the successful combined meetings in Hong Kong in 1994 and in Durban in 1995, the pattern was repeated this time in Rotterdam, with similar results.

The more significant issues dealt with in an extensive agenda included:

1 Funding and Sustainable Financing of Reception Facilities for Ships' Wastes

The subject matter's importance to ports stems from a tendency in many parts of the world for governments to want to devolve responsibility for the provision of reception facilities to local Port Authorities. The logistics of assuming such responsibility need to be fully examined in the context of local circumstances and after an assessment of available options.

It was therefore agreed to seek ExCo's approval for a carefully worded questionnaire to be circulated to IAPH Member Ports. Approval was subsequently given. A useful number of responses have been received to date. After analysis the data obtained will be submitted to IMO.

2 Air Pollution from Ships including Fuel Oil Quality

If agreement can be reached on a number of contentious issues IMO will prepare a new Annex to the MARPOL 73/78 Convention dealing with Air Pollution. Ideally ports should be detached from this development. As matters stand at the present time however some proposals involve ports directly in fuel quality control and others have an impact on inter-port competition. IAPH has questioned the validity of such proposals.

The situation is under close review and every effort is being made to protect port interests.

3 Unwanted Aquatic Organisms in Ballast Water

The full extent of the problem on a global scale is as yet unclear and much scientific research needs to be carried out before practical solutions can be put in place.

An IAPH survey of the amounts of ballast water loaded and discharged at member ports is continuing. Results obtained thus far do however clearly show the enormous amount involved and already demonstrate the impracticability of discharging ballast water to shore reception facilities.

Nonetheless IAPH continues to support IMO in its efforts to find an acceptable solution to the problem.

4 An Environmental Policy for Ports

The essential elements of an Environmental Policy Statement which could be endorsed by ports generally are currently under consideration. Amongst other things the Statement would serve as an umbrella for sub-policies on Waste Management and Health and Safety, on which work has already started.



5 Health and Safety at Ports Newsletter

As a follow-up to an ExCo decision at the Seattle Conference much progress has been made in developing a Newsletter format and content list to the point where it can be submitted for ExCo's approval.

The intention is to circulate the Newsletter to IAPH members on three occasions during a one-year experimental period to gauge Members' reaction. Appropriate financing is being requested.

Note: At the Bali meeting, Exco took the views that this project should be looked more carefully in the context of the entire budget of IAPH.

6 The Use of Tri-butyl-tin (TBT) on Ships' Hulls

TBT as an anti-fouling measure can have an adverse effect on a port's water quality, and over time end up in spoil which can give rise to disposal problems. This issue is currently being addressed by IMO and, whilst it is primarily a shipping problem the spin-off effect on ports cannot be disregarded. An information paper for IAPH members on the implications for ports is therefore under development.

7 Emergency Preparedness and Response

The Committees have been advised of the need to develop basic guidance to ports on the preparation of plans dealing with the range of emergencies likely to have an effect on ports, with the exception of those relating to oil and chemical incidents. Preliminary advice from members is being incorporated in a draft for consideration at the next meeting.

8 Bulk Carrier Safety

The Committees have taken part in the development of a ship/shore safety checklist for bulk carriers for distribution to and implementation by ports, terminals and bulk carrier shipping worldwide.

Under the aegis of IMO, consideration is now being given to ways and means of giving effect to what is generally agreed to be a very useful input to securing bulk carrier safety.

9 Hydrographic Surveying/Charting

Efforts are being made to identify problems and possible solu-

tions to inadequacies in hydrographic survey and charting which are apparent in various parts of the world. A specific input is also being made to related and on-going work being carried out by the Southern African Ad Hoc Regional Co-operation Group in Tanzania and Kenya.

10 VTS and Ship Reporting

Earlier advice on VTS provided by IAPH and circulated in Port Safety Guidelines needs to be updated in accordance with current developments in IMO on this subject. Emphasis has been placed on providing concise and impartial information on VTS capable of being adapted for local use by the smaller port members of IAPH.

11 Wreck Removal from Port Waters

Note has been taken of the need to provide a technical port-oriented input to work being carried out by IMO on a draft Wreck Removal Convention, the current priority of which is low. Preliminary consideration, is being given, however, to issues which should be addressed, including the reception of disabled ships into port waters.



12 Next Meeting

It is highly likely that the joint Committee meeting approach will be continued at the next meeting scheduled to be held in Houston on 9/10 December 1996 though that will be confirmed later. Information on matters which should be included on the agenda will be welcome.

Use of paints containing TBT on ships' hulls

IAPH participated in the discussion in IMO's Marine Environment Protection Committee.

TBT paints are used to prevent the fouling of ships' hulls, which causes reduced speed and increased fuel consumption. TBT is a poisonous compound.

At first glance, the environmental aspects of the use of TBT paints would not seem to concern ports. Poisonous emissions, however, not only take place at sea but also when ships are in port. Port waters are liable to TBT contamination. That, in turn, may lead to pollution of dredgings with consequent disposal problems, particularly where dredging disposals at sea or on land are strictly regulated. In such situations, even minor pollution may cause serious disposal problems. Furthermore, TBT emissions may also adversely affect fish breeding grounds.

Questions regarding the use of TBT paints on ships' hulls need, however, to be put into a total environmental perspective which has regard to the effects on both water quality and air pollution.

It is said that, in the course of maritime trading, ship propulsion and the use of auxiliary machinery produce carbon dioxides, nitrogen oxides and sulphur (di)oxides, which are said to contribute to acid rain and the greenhouse effect. Hence the need for

a balanced discussion.

An environmentally friendly yet less effective anti-fouling system may lead to environmental gains for the marine environment, which are in turn offset by increased negative effects on air quality.

The IAPH view is that ports generally should recognise the need for reducing and ultimately eliminating the use of TBT paints. Ports should stimulate and support initiatives aimed at replacing TBT paints by environmentally friendly and commercially attractive alternatives. IAPH believes that such initiatives would ultimately not only benefit the environmental condition of ports but the marine environment as a whole.

At the present time evidence suggests that tin-free products cannot as yet match the resistance to fouling, especially heavy fouling, and give the long term protection and economy provided by organotin-co-polymer based paints, which have been shown to allow dry docking intervals of up to five years.

Nevertheless, where ships have a requirement for shorter dry-docking intervals comparable with the lifespan of tin-free products, these products could be used economically.

Ports therefore need to assess the influence of TBT on their



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respective environments. If it has a significant and adverse impact, consideration should be given to inviting respective governments to ban its use on these ships.

The use of Tri-butyl-tin on ship's hulls

Draft submission to MEPC by IAPH

1. The International Association of Ports and Harbors (IAPH) recognises the need for ports to become clean as a prerequisite for ultimate survival.
2. IAPH recognises that shipping may be one of the causes of (accidental) pollution in ports.
3. The use on ship's hulls of anti fouling paint containing harmful substances such as Tri-butyl-tin (TBT) may contribute to that pollution, in that it may contaminate the port's waters. TBT may also adversely affect the breeding grounds of fish.
4. IAPH recognises the need for reducing and ultimately eliminating the use of TBT, and to stimulate and support initiatives which are aimed at replacing TBT by environmentally friendly and commercially attractive alternatives on a global scale, in view of the fact that the above activities will not only benefit the environmental condition of ports, but the marine environment as a whole.
5. However, there appears to be evidence that tin-free products cannot as yet match the resistance to fouling (especially in heavy fouling environments) and the long term protection and economy offered by organotin-co-polymer based paints, which have been shown to allow prolonged drydocking intervals of up to five years.
6. Ships with dry docking periods which are comparable with the average lifespan of tin-free products could use these products economically.
7. Ports which consider it desirable to reduce the emission of TBT in their port, following an assessment of the influence of TBT on their port's environment, may invite their governments to ban the use of TBT paints on the ships mentioned in paragraph 6.
8. It is also believed by some that, in the course of sea-trading, the propulsion and auxiliary machinery of ships produces carbon dioxides, nitrogen oxides and sulphur (di)oxides, which contributes to the greenhouse effect and acid rain. This would suggest that, in the best interests of the environment, there needs to be a balance between achieving an effective anti-fouling system, high fuel economy and consequent low harmful emissions.
9. An environmentally friendly, yet less effective anti-fouling system may lead to a situation in which the environmental gains for the marine environment may well be offset by increased negative effects on the quality of the air. One should carefully weigh the environmental gains against the environmental losses.
10. The above leads to the conclusion that environmental aspects of the use of the TBT-matter should embrace both the effect on water and that on air quality, i.e. they should be approached in terms of the total environmental profile.

Eleven pledge to sponsor IAPH publication

At the mid-term Exco meeting held in Bali in April, the Finance Committee again recommended that the Association should seek ways in which the revenues of IAPH can be enhanced through means other than raising dues. For this purpose the Secretary General made an appeal to the members at large to advertise in "Ports and Harbors" and in the "IAPH Membership Directory". More particularly, the Secretary General sought sponsors to cover the production cost of the Report entitled "The Future Role of Ports in Combined Transport and Distribution Centres", which will be completed by the Committee on Combined Transport & Distribution, chaired by Mr. Wennergren of Goteborg, later this year.

To answer the call, the following members have paid or pledged funds to sponsor the publication. (As of July 10, 1996)

Sponsors	Funds paid or pledged
1. Commercial Port of Vladivostok, Russia	US\$1,000
2. Maritime and Port Authority of Singapore, Singapore	US\$1,000
3. Port of Houston Authority, USA	US\$1,000
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5. Kelang Container Terminal BHD, Malaysia	US\$1,000
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7. Sri Lanka Ports Authority, Sri Lanka	US\$1,000
8. Port of Goteborg AB, Sweden	US\$1,000
9. ENAPOR (Empresa Nacional Adm Portos), Cape Verde	US\$1,000
10. Bintulu Port SDN BHD, Malaysia	US\$1,000
11. Port Management of Amsterdam, the Netherlands	US\$1,000

Membership Directory '97: Members' Entries Sought

Towards mid-July, all IAPH members will receive a circular from the Secretary General requesting the members' cooperation concerning the 1997 edition of the IAPH Membership Directory.

Effective from the 1996 edition, a new format in A4 size has been introduced aiming at cost-saving as well as ease of use by our members.

Upon receipt of the form, all members are requested to check the attached information and make the necessary corrections and changes. The completed form should be returned to the Head Office by September 30, 1996.

Members are also invited to run their advertisements in the Directory. For the convenience of our members, the advertising rates are again set at reasonable levels, which have been kept unchanged since 1994.

For previous editions some members have regrettably not returned the updated entry forms, and therefore reference to such members has been made from the information previously reported, with an asterisk*, and thus most cases the information had to be limited to the name and addresses only.

We urge all members to make the latest situation concerning their respective organizations available to the Head Office in time for insertion in the new edition of the Directory.

Advertising rates for the IAPH Membership Directory 1997 are as follows:

Space/Location	Width	Height	Cost (Japanese Yen)
Inside 1 page (Black & White)	176mm	250mm	¥80,000
Inside 1/2 page (Black & White)	88mm	250mm	¥50,000
Inside 1/4 page (Black & White)	88mm	125mm	¥30,000
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 Mailing Addressee: Mr. Tesuo Ikeno, Executive Director,
 Port and Harbour Bureau
 Administration/Construction Departments
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 Service Center Building, 6-1, Nagisa-cho, Izumiotsu City 595
 Tel: 0725-21-1411/7216/7217/7248/7249
 Fax: 0725-21-7259/7284
 Port and Harbour Policy Office
 Address: 5th Fl., Kokumin-Kaikan/Sumitomo-
 Seimei Building, 1-2, Otemae
 2-chome, Chuo-ku, Osaka 540-70
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 Mailing Addressee: Mr. Geoff Vazey, Chief Executive

Port of Singapore Authority [Regular] (Singapore)
 Mailing Addressee: Mr. Khoo Teng Chye
 Chief Executive Officer/Executive
 Director

Membership Notes:

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Regular Member

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 (Mexico)

Address: Av. Marina Mercante No. 210, 7
 Piso, Veracruz, Ver. 91700
 Mailing Addressee: Mr. Juan J. Sanchez, Port Director
 Tel: 52 (29) 32-1319/31-8300
 Fax: 52 (29) 32-3040/31-7429
 Port under Administration: Port of Veracruz
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OPEN FORUM

MEASURING THE FINANCIAL BOTTOM LINE: A PROCESS

Thomas J. Dowd, FCIT –
Affiliate Professor
University of Washington/Washington
Sea Grant

"You can not manage what you do not measure"
Prof. Tom Peters, Harvard Business School

Introduction

Today there is no shortage of management challenges for port authorities. Among the more significant challenges is that of finding *valid* ways to measure, in a quantifiable manner, how well a port is doing financially and to integrate that information into the port's decision making process.

Just as there is no lack of port management challenges, there is also no lack of financial performance indicators that purport to provide a quantifiable means to measure how well a port is doing financially. Unfortunately, many of these measurement methodologies fail to provide a *VALID* way to measure a port's financial performance.

This paper will provide an overview of how port authorities can use management accounting, examine several financial performance indicators that are applicable to ports, discuss the strengths and weaknesses of these indicators, recommend those indicators that validly measure the financial performance of the port's operations, provide examples of how to present management accounting data in a useful/understandable format and provide the analysis process and techniques required to transfer the data into decision making input that can be used in port management.

Management Accounting

"Accounting" is defined as the language of business. An "accounting system" is the formal mechanism for gathering and communicating data to those outside the organization (primarily through the Annual Financial Report) as well as internally within the organization. The process of providing accounting data to those outside of the organization (e.g. customers, banks, suppliers, stakeholders and the general public) is called "Financial Accounting" and the process of providing data to decision makers within the organization (e.g. managers, staff and directors) is called "Management Accounting".

Thus, Management Accounting focuses on providing data to decision makers in order to allow them to more effectively fulfill the organization's goals/objectives. Management Accounting quite often provides this data in a format that uses financial performance indicators.

Financial Performance Indicators

Financial performance indicators measure/quantify financial performance. They are the early warning signs for potential port management problems. They do not define these problems!

Financial performance indicators are used to alert decision-makers to changes. Once alerted, the decision-makers can deter-



mine why these changes occurred and decided if there is a problem. If it is determined that there is a problem, financial performance indicators allow the decision-makers to judge the magnitude of the problem.

Format

The Key to effectively using financial performance indicators as input into the port's decision making process is to create a format that presents data to decision-makers in a readable and understandable manner.

The table below illustrates the appropriate format for a port authority. This format is very basic and readily allows performance analysis on a very broad basis – the entire port and all its operations, functions and projects. It provides a means to access a port's overall financial performance. This format also provides the raw data and financial performance indicators for use by decision-makers.

	1995	1994	1993
Operating Revenues (OR)	\$15,039,391	\$14,912,556	\$14,204,515
Operating Expenses (OE)	\$6,948,046	\$6,798,756	\$5,925,946
NET OPERATING INCOME (NOI)	\$8,091,345	\$8,113,800	\$8,278,569
Non-Operating Revenues	\$720,523	\$676,506	\$716,617
Non-Operating Expenses	\$2,746,524	\$2,803,016	\$2,361,856
NET INCOME "A" (NI"A")	\$6,065,344	\$5,987,290	\$6,633,330
Depreciation	\$3,298,420	\$2,879,587	\$2,711,903
NET INCOME "B" (NI"B")	\$2,766,924	\$3,107,703	\$3,921,427
Net Capital Assets (NCA)	\$76,104,000	\$70,390,000	\$62,597,000
Total Assets (TA)	\$117,422,000	\$113,917,000	\$109,934,000
OPERATING ACTIVITY INDICATORS:			
Operating Margin (NOI/OR)	53.80%	54.41%	58.28%
Operating Ratio (OE/OR)	46.20%	45.59%	41.72%
ROI INDICATORS:			
Operating ROI (NOI/NCA)	10.63%	11.53%	13.23%
ROI "A" (NI"A"/TA)	5.17%	5.26%	6.03%
ROI "B" (NI"B"/TA)	2.36%	2.73%	3.57%

Definitions

Prior to any discussion of indicators, it is necessary to define two terms.

OPERATING REVENUES are revenues derived *directly* from the use of port services and/or facilities (e.g. wharfage, dockage, storage, lease/rental income). It does not include such non-operating items as investment income or funding from government

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sources.

OPERATING EXPENSES are *direct* expenses incurred in operating and maintaining port facilities, lands and/or equipment. It does not include depreciation.

The Indicators

Because port authorities are a unique form of enterprise, not all financial performance indicators are applicable to them.

These financial performance indicators are the most valid for port management:

- Operating Margin
- Operating Ratio
- Current Ratio
- Cash Flow
- Return On Investment (ROI):
 - a) On net capital assets (Operating ROI)
 - b) On total assets

Operating Margin/Operating Ratio

Operating Margin (net operating income divided by operating revenues) and Operating Ratio (operating expenses divided by operating revenues) are the two most consistently valid port financial performance indicators. The Operating Margin provides a quantifiable indication of the port's ability to make a profit on its operations. It measures the percentage of the port's gross operating revenue that eventually ends up as Net Operating Income.

Operating Ratio is the reciprocal of Operating Margin. Operating Ratio provides a quantifiable indication of the port's ability to control expenses. It measures the percentage of the port's gross operating revenue that is expended on operating expenses.

Because these two indicators are the product of calculations using very basic accounting data, they tend to be totally objective.

Current Ratio

Current Ratio (current assets divided by current liabilities) is a valid way to quickly determine the immediate financial strength of a port. Because this indicator is the product of a calculation using very basic accounting data, it tends to be totally objective.

Cash Flow

Cash Flow – or more specifically “Cash Flow From Operating Activities” or “Cash Flow From Operations” – is a valid port financial performance indicator because of its objectivity.

This indicator uses “real money” not “accounting money.” For example, most accounting systems will include all money owed to a port, regardless of whether that money is actually paid to the port. This is because the accrual method of accounting treats all revenues “earned” as though they were revenues paid.

If a port has a negative Cash Flow From Operations, this means that the port is paying out from Operations more than it is taking in from operations. This indicates that it will be necessary to use money from other sources (e.g. Retained Earnings) to pay current operating expenses.

Return On Investment

Despite its extensive use as a port financial performance indicator, Return On Investment (ROI) often falls short of being a valid port financial performance measurement tool.

The single exception to the previous statement is when ROI is used in an feasibility study for a new project. In this instance, when used in conjunction with other feasibility tests such as net present value and internal rate of return, ROI is a valid performance indicator.

The major problem with using ROI is that it relies on asset value. Thus, how a port computes the value of its assets signifi-

cantly affects the validity of ROI as an indicator. Valuing port assets at “book value” (cost less accumulated depreciation) virtually ensures that any ROI computation will be more of an accounting exercise than a practical one. Using book value to determine asset value gives you more of an academic/theoretical answer than a practical/“real world” one.

In addition, using book value also penalizes the growing port since it values new facilities at today's cost (market/replacement value without any depreciation) while other ports value their assets at a much lower value (original cost less depreciation). Book valuation also favors the stable income port since it allows it to have an increasing ROI based on the identical earnings year after year because the “value” of the assets declines as more depreciation is accumulated.

Unfortunately, the alternative to book or depreciated cost valuation are either extremely expensive or only marginally more valid. Current market/replacement valuation would be ideal but it requires that a port revalue its assets each year – a very time consuming and costly process. Using some form of indexing in asset valuation would be an attempt to value assets in “today's dollars” – a highly subjective process and one that may or may not provide a practical “real world” valuation of port assets.

In summary, unless a port uses current market/replacement to value its assets, the results of any ROI indicator calculations will produce a questionably valid port financial performance indicator. This is especially true if the ROI indicator will be used as an input to a management decision making process.

Analysis

Several port financial performance indicators have been identified and discussed. Since it would be extremely time consuming to use each of these indicators to measure a port's performance, a method has been devised to expeditiously and accurately provide an assessment of a port's financial performance. If problem areas are discovered, then additional analysis using other financial performance indicators may be undertaken.

The Quick and Easy (Q&E) Method of analyzing a port's financial performance would include a test and analysis using only four financial performance indicators. If this analysis indicates problems or provides inconclusive information, then further analysis using additional indicators should be undertaken to determine problem areas and/or the extent of a specific problem.

The initial step in this analysis is to determine if the port makes a profit before depreciation (Net Income “A” on the format sheet). If this is a negative number (a loss), then the port is in extremely poor financial condition and immediate action should be taken to reevaluate the port's budget and its goals/objectives.

The second step in this analysis is the Cash Flow From Operations which is found in the port's financial statement. Of course, if this is a negative number, there is obviously a problem, despite the fact that the Income/Expense Statement might indicate otherwise.

The third step in this analysis is the Operating Margin. Trend analysis using Operating Margin provides a valid quantifiable indication of the operating profitability of a port. Trend analysis using this indicator also provides a valid indication of the efficient management of a port.

The final step in this analysis is to determine the Current Ratio. This indicates the immediate liquidity of the port.

The information provided by this Quick and Easy (Q&E) Method of analysis allows port management to make better informed decisions regarding 1) effectiveness of the port's management; 2) the validity of the port's long term goals/objectives and its operating and capital budgets. This type of analysis is an effective way to monitor the port's operational performance as part of the strategic planning process.

International Maritime Information **WORLD PORT NEWS**

ABS Launches Products To Advance Ship Safety

At a special presentation held at the Posidonia International Maritime Exposition in Greece, American Bureau of Shipping (ABS) Chairman Frank J. Iarossi announced the introduction of two new products: SafeHull '96 and SafeNet™.

SafeHull '96 is an extension of ABS' revolutionary SafeHull™ system – a dynamic-based method for design and evaluation of ship structures. The SafeHull™ '96 initiative extends this technology from tankers and bulk carriers to container ships. It also introduces more flexible and user friendly features including Windows PC and workstation operating environments. Dedicated training and support teams have been added, as well, to better serve users.

"The capability to perform dynamic analyses through SafeHull™ has armed ABS with a unique and powerful tool. This gives us the capability to analyze ship structures from a real life, first principles basis, in a way not previously available to the marine industry," Mr. Iarossi said. "Having developed its use to identify critical structural areas during the design and evaluation phase and to realistically account for the dynamic loading pattern a ship experiences throughout its lifetime at sea, ABS is now taking the application of SafeHull™ into another dimension by incorporating it into an entirely new ship-management product called SafeNet™."

SafeNet™ is a lifecycle ship management and information network designed to assist shipowners with the increasingly complex task of managing their vessels. The network will give owners the capability to directly access all classification-related technical and survey information for both the machinery and hull structure on their ABS vessels. ABS and the owner will be able to work together to continually assess the integrity of both hull and machinery in order to develop a planned maintenance program for executing surveys, maintenance, and repair.

"This will take the world of shipmanagement into the next century, and it will never be the same. SafeNet™ will allow an owner to formulate detailed and efficient planned maintenance programs to execute survey, repair, and maintenance work that can incorporate SafeHull™ analysis defin-

ing critical areas of the hull structure throughout the life of the vessel. Among other noteworthy features, SafeNet™ also includes a periodically updated and advanced Survey Status database, ship's drawings, condition photographs and various directories and references," stated Chairman Iarossi.

European Consortium To Develop IPSI

Norway's Kvaerner Ships Equipment is leading a Pan-European consortium which has been given the task of developing an improved port/ship interface (IPSI) for Europe to take the shipping industry well into the next century.

The project will result in lower cost port facilities and cargo handling equipment, as well as new ship types, cargo handling technology and management/information exchange systems.

The contract to carry out the IPSI project, awarded by the European Union in Brussels, is being undertaken to improve door-to-door logistic chains in Europe by increasing the use of waterborne transport, both short sea and inland waterways.

Besides consortium leader Kvaerner Ships Equipment, one of the world's leading designers of cargo access equipment for all types of ship and a member of the international Kvaerner Group of companies, the other major players in IPSI are:

- SAGA of France – transport and port operations in Europe and Africa
- PTC (Port and Transport Consulting Bremen GmbH) of Germany – the consulting company of the ports of Bremen and Bremerhaven
- Jebesen Eurocarriers of Norway – specialist short sea shipping company
- SINTEF and MARINTEK of Norway – well known research and development institutions
- Fraunhofer Gesellschaft of Germany – another internationally well respected research and development institution

This consortium forms a unique combination of expertise related to the project and with little overlapping in their respective areas of experience, all potential prob-

lem areas are accounted for.

The goals of the IPSI project are as follows:

- Develop new concepts for flexible port/ship interface in the context of added value, intermodal logistics (where applicable) in Europe, based on increased use of waterborne transport, including the utilisation of inland waterways
- Develop methods and equipment for effective transfer of cargo and information about cargo in the above mentioned land/water interfaces, with focus on high efficiency and low investment
- Demonstrate the new "port/ship and ship/ship interface concept" to verify the effectiveness of multimodal cargo exchange in a "door-to-door" context

The challenges for the IPSI consortia are the following.

- In order to succeed in transferring much of the transportation of goods in Europe from land to sea, the complete logistic chain, using waterborne transport as a major component, must be competitive, both in terms of cost and reliability
- Since cargo must be moved between ship/barge and land transport systems twice, the efficiency of the port/ship interface in the multimodal context of a door-to-door logistics chain is of vital importance
- The challenge to the ports is that they must become more important interfaces in the transport chain as efficient and cost effective logistics hubs where all available modes of transport can be effectively interconnected. This applies to sea, rail, road and to inland waterways as well
- The interconnection of alternative modes of transport must be based on competition and flexibility, i.e. interchanges between the various modes of transport must be possible wherever necessary and applicable

The IPSI project, which officially started on 11 April 1996, is scheduled to last 36 months, at the end of which the results and conclusions will be made public.

A key element in the IPSI project, with

regard to port facilities and cargo handling equipment, is that adequate infrastructure, such as quays and equipment for the prestow, handling and interchange of cargoes, must be available at lower cost than today and without necessary new investments in order to decrease overall port costs.

New vessel types, both short sea, inland waterways craft and combined sea/river ship types, will be developed; all capable of handling a wide variety of cargoes. Going hand-in-hand with the development of new ship types, will be the development of new cargo handling technology and management and information exchange systems.

The transfer of much of the transportation of goods in Europe from land to water will result in benefits for both the economies of the European Nations as well as improved social and ecological implications.

New Publications

Containerisation International Yearbook 1996

The Balance of Power

"1996 will witness a massive concentration of power in the hands of a few carriers. Alliances coming into force this year are global and more significant in scale and extent than anything that preceded them."

The four mega-groups announced last year have several common features:- the provision of very frequent services through a series of separate loops; deployment of larger container ships; operational co-ordination extending to cover terminals, feeder services, equipment and inland transport; and continued competition between group members.

In her opening comments in the recently published *Containerisation International Yearbook 1996*, editorial director Jane Boyes comments that the 14 members of these four mega-groups presently control nearly one-third of the world's shipboard slot capacity. The new agreements will collectively control as much as 50% of capacity on the east/west trades.

To achieve the necessary economies of scale, these alliances have accelerated

orders for larger vessels, and the *Yearbook's* "Register of Container Carrying Vessels" suggests an expected growth rate of 11.9% in world container-ship capacity during the 12 months to November 1st 1996. This compares with forecasts of 6-7% growth in maritime containerised trade over the next few years.

Port traffic figures collated for the *Yearbook's* annual "World Container Port Traffic League" show that 1994 saw a 10% increase in port handling activity compared with the previous 12 months. A total of 125 million TEU was recorded for 1994. Hong Kong, Singapore, Tokyo and Tanjung Priok were among Asian facilities experiencing the largest percentage gains in TEU.

A summary of *Containerisation International's* recent survey of ship-shore container gantries (also published in full as a "CI Market Analysis" report) shows that orders for construction during 1995-96 exceeded all previous records. Indications are that production levels may further increase from the present 125 units/year to 150 units/year during 1997-98.

While maritime container railroad traffic to/from US ports expanded during 1995, the domestic intermodal market experienced a sudden slowdown after 7-14% growth in the previous three years. Domestic COFC/TOFC operators suffered serious price competition from truckers. Preliminary forecasts suggest 3% expansion can be expected in 1996. Intermodal growth in Europe slowed to around 5% last year and users and intermediaries are now wondering when the liberalisation proposals from the European Commission will produce tangible competition between rail carriers, and a necessary reduction in costs.

An increase in worldwide demand for leased containers saw utilisation levels stabilise at around 90% during 1995. As prices for new containers have risen, operators have preferred to concentrate their financing on acquiring new vessels. The box builders themselves experienced a record year in 1995, breaking all previous production records with an output of 1.25 million TEU – an increase of over 15% from 1994.

Containerisation International Yearbook 1996 includes updated, comprehensive sections covering container carriers (routes, ports of call, vessels and boxes operated), a unique register of container-carrying vessels (listing over 6,000 ships in service and on order), containership managers and shipbrokers. The container leasing and repair sectors have separate

detailed listings, while the restyled equipment section now includes a classified Product Buyers' Guide, as well as the usual listings of container manufacturers (with annual production figures), and marine software suppliers.

Published by Emap Finance & Freight Ltd, *Containerisation International Yearbook 1996* is available now from:-

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India – The Emerging Economic and Industrial Power: The Potential Impact on World Shipping and Trade

The pending elections in India may go a long way towards establishing how quickly the country will finally shake off its mantle of Asia's sleeping giant and become a serious economic, industrial and trading power on the world stage. The process of economic liberalisation initiated by the Rao government has been gathering pace since 1991 unleashing tremendous ambition and entrepreneurial instincts that previously had been held in check by the virtually all-embracing arm of the state. Indeed, prior to 1991 the notion of privatisation was a taboo subject in India.

The current view is that the outcome will be a hung parliament with the ruling Congress party still the largest group represented despite substantial gains by the opposition Bharatiya Janata party. The other factor in the equation is a loose alignment of left wing groups – including Marxist groups and caste-based "social justice" parties – which collectively may gain a significant share of the vote. However, to confuse the picture still further the long established Marxist state government in West Bengal has a reputation of being one of the more successful in securing private sector/international investment.

India is the world's seventh and Asia's second largest country. For traders and investors the Indian market has been appealing for some time, the attractions including a large population (demand centre) – India's population is estimated at

almost 901.5 million – GDP growth of around 5%, an economically competitive workforce and a commitment to democracy. The gradual easing of the state's grip is enabling this appeal to turn into something more tangible with the result that Indian trade and Indian shipping is becoming an important factor in the international equation.

Drewry's latest report *India – The Emerging Economic and Industrial Power: The Potential Impact on World Shipping and Trade* concludes that, whatever the election result, few expect to see the liberalisation process reversed. However progress may not be as rampant as in other emerging economies and Drewry expects that political machinations may see developments take "one step back for every two steps forward" but, ultimately, backtracking is not a realistic option. Consequently, Drewry expects to see Indian exports expand over the next ten years by around 25-30 million tonnes. The major export cargo, iron ore, may show little growth but gains are expected in the agribulks sector (including rice, where India could become a major export force on the world stage), in alumina traffic and in the steel and manufactures sectors. By 2005, India imports – in tonnage terms – may be close to double current levels and in reaching this conclusion *India – The Emerging Economic and Industrial Power: The Potential Impact on World Shipping and Trade* takes a conservative view – compared with government announced plans – on key growth trades such as coal and oil/refined products.

Over the period from 1984-85 to 1993-94, India's total international seaborne traffic has grown from around 81 million tonnes to almost 137 million tonnes. Of the 1993-94 traffic volume, imports (76.63 million tonnes) accounted for 55%. Drewry assesses the current level of Indian international seaborne traffic at around 150 million tonnes (imports being close to 85 million tonnes and exports at around 65 million tonnes).

The biggest difficulty India faces is matching political will to programme funding. Domestic resources are insufficient to meet the requirements created by infrastructure and other projects. External funds – probably channelled through joint ventures – are vital, given reports that the states and India's financial institutions only have around US\$7 billion to cover all infrastructural spending. However, securing this is a fraught process that perennial problems of bureaucracy seem to be exacerbating – the requirements for approvals

and permissions can be both tortuous and time consuming. Vast sums are needed for industrial ventures and, especially, power generation projects – a sector being moni-

ship ownership or operation enter the market – particularly in the bulk sectors – baked either by domestic resources or overseas/joint-venture capital.

Indian Owned Overseas Trading Fleet – end 1995

Vessel type	No.	Total Dwt	Average (years) (dwt)	Average age (years)	No. of Operating Companies
Dry Cargo-Liner	42	697,866	14,539	18	3
Cellular Containership	7	117,812	16,830	9	3
Timber	3	19,645	6,548	17	1
Dry Bulk	144	5,856,379	40,669	13	21
Ore/Bulk/Oil	3	311,975	103,992	16	2
Product or Chemical Tanker	37	996,219	26,925	13	6
Crude Tanker	32	3,461,751	108,180	11	4
Acid Carrier	6	155,058	25,843	7	2
LPG	2	35,163	17,582	4	1
Total	276	11,651,868	42,217	13	–

Source: Drewry Shipping Consultants

tored closely by the world's coal suppliers. However, even more critical is the position of India's ports. Congestion is a serious problem and looks set to get worse before it gets better. Already there is talk of crisis in the ports. Paradip, Visakhapatnam and Kandla are said to be worst affected. However, this is in response to a claimed increase in total throughput of only around 10%. Drewry concludes that most cause for concern lies in the least sophisticated sector – general cargoes and some minor bulks. Contrasting planned capacities with residual traffic estimates there is a theoretical port capacity deficit (in part covered by minor facilities and working at anchorages) of around 1 million tonnes. More significantly, if trade growth – especially in the general cargo sectors – keeps pace with overall economic growth trends then in the early part of the next century this "deficit", even allowing for full implementation of the Eighth Plan by 1997, could be around 4-5 million tonnes. Much will depend on the ability to attract private capital and management expertise into India's ports and the adoption of reforms which will greatly increase cargo handling efficiency.

In 1994-95 the Indian shipping fleet reached an all-time high of 6.7m gt. This put the Indian fleet as the world's 17th largest with an average age of around 13 years – or around three years younger than the world average. Moreover, Drewry notes that the Indian-controlled merchant fleet is becoming progressively more diverse as the effects of liberalisation come to the fore and Indian companies new to

India – The Emerging Economic and Industrial Power: The Potential Impact on World Shipping and Trade is published by Drewry Shipping Consultants. Individual copies of the Report are priced at £385 post paid.

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The Americas

CN President Unveils New Corporate Vision

At Canadian National's first annual meeting with its shareholders on May 7, 1996 CN president and chief executive officer Paul M. Tellier said that his goal is "to make CN measurably the best North American railway."

The goal will be attained, he said, by following a four-part strategy:

1. Achieve cost competitiveness by increasing labour productivity and improving operations efficiency.
2. Deliver on customer commitments by implementing scheduled service, creating interline arrangements and alliances with

other carriers, and continuing to invest in innovations that improve service reliability.

3. Grow the business by working with customers to find ways to help them increase their traffic, positioning CN to handle more transborder traffic, and regaining market share from trucks.

4. Concentrate on what CN does best: running trains and providing superior line haul transportation services. To this end, the company will continue to apply advanced information and rail technology, rationalize its rail structure, and build on employee skills.

"These are the same pillars that have supported our business plan since 1992", Tellier told shareholders. "The strategy has been proven in action by the Class I railroads in the United States."

The shareholders meeting was the first in the company's 77-year history, and followed the successful privatization of the company in an Initial Public Offering last November in which 83.8 million common shares were sold by the Government of Canada.

Tellier acknowledged that the railway had a long way to go to become measurably the best railway in North America but it has picked up momentum. In 1992, CN's operating ratio stood at 97.1%. It has since dropped to 89.3%, and Tellier expressed his confidence that CN would reach its 1996 objective of 86.5%. The measurement of how much money it costs to earn a dollar of revenue, the operating ratio is considered a principal indicator of railway performance. CN's executive compensation package is tied to the railway hitting a 82% target by the year 2000.

The president emphasized that CN has gone through an enormous transformation in a very short time. "No other Canadian company has changed more," he said. But he added that the process of transformation was only just beginning. "Our employees are up to the challenge," he said. "They know that everything they do now has an overriding objective: to create value for the shareholder."

HPC to Redevelop 'Pier A' Terminal

The Halifax Port Corporation (HPC) will spend approximately \$5 million this year to redevelop its Pier A Terminal at Ocean Terminals. The project, which was approved by the HPC's Board of Directors in April, will improve the functionality of

the terminal by:

- creating an additional deep-water berth;
- permitting more efficient cargo handling; and,
- enabling the port to handle a growing volume of breakbulk cargo.

At the centre of the development is the construction of a new, modern 60,000 ft.² shed facility. The project will also include the demolition of existing Sheds 26 (in part) and 27; realignment of railway track; and regrading/repaving work. Tenders for the project will be received in May. The project is scheduled for completion by year-end.

David Bellefontaine, President & CEO of the HPC, noted: "Continuous cargo handling improvements contributing to business growth in 1995, together with sound prospects for future cargo developments, assisted in justifying this project."

The Halifax Port Corporation is a Federal Crown Corporation with a mandate to develop, market and manage its assets in order to foster and promote trade and transportation and serve as a catalyst for the local, regional and national economies. In 1995, general cargo volumes at the Port of Halifax showed significant gains. For the year, container cargo increased by 22%; labour intensive breakbulk cargo increased by 43%, due mainly to increased shipments of forest products, nickel sulphides and rubber.

Port of Montreal Is on the Internet

The Port of Montreal now has a World Wide Web site on the Internet.

The port's Web site includes features of the Port of Montreal, from information on shipping services and land connections to facilities and cargo. There is also information on the Montreal Port Corporation and the latest news on the port.

The site also includes a complete Shipping Services Directory featuring detailed information on trade lanes, shipping lines calling at the port, agents representing those shipping lines, and terminal operators and stevedores.

All information is available in both English and French.

The Web site is located at <http://www.Port-Montreal.com>.

The port's E-Mail address is PDMIMKG@Port-Montreal.com.

Port of Vancouver: Cruise Control Update

The Open Skies Agreement bilateral agreement between Canada and the United States has resulted in a greater number of air carriers providing service to and from Vancouver, and participating in the cruise sector. This has resulted in an increase in the number of air carriers interested in participating in cruise terminal check-in of baggage. The challenge of limited physical space in the terminal required a creative solution.

The result is that the Vancouver International Airport Authority has agreed to install common user check-in terminals at both Canada Place (8 terminals) and Ballantyne (6 terminals) cruise terminals, and to manage the scheduling of the terminals with the airlines based on the greatest loads anticipated from arriving vessels.

The revised system will allow us to increase the service to passengers by providing greater air carrier selection at the terminal, therefore allowing a greater number of travellers the opportunity of spending time in the downtown area prior to their flight departure.

US Waterborne Trade: 1995 Exports Up 15%

A tidal wave of export cargo swept U.S. seaborne trade to record highs in 1995.

In sum, more than 946 million metric tons of cargo carrying a value of \$573 billion were shipped by sea in 1995 between the United States and approximately 230 countries and territories around the world.

Much of last year's record performance can be credited to dramatic gains in export shipments to Asia, the Near East, Western Europe, South America, and Sub-Saharan Africa. Overall, U.S. exports rose 15 percent in volume and 22 percent in dollar amount compared to 1994.

Most dramatic was the 137-percent jump in U.S. cargo tonnage bound for China and more modest, though still impressive, upswings in other major Asian markets such as India (+48 percent), South Korea (+42 percent), and Thailand (+47 percent).

There were substantial gains for U.S. exports elsewhere, including Argentina (+49 percent), Australia (+109 percent), Denmark (+158 percent), Ecuador (+92 percent), Germany (+56 percent), Morocco (+88 percent), South Africa (+40 percent), Turkey (+53 percent), and Portugal (+155 percent).

Imports lost ground, falling by four percent in volume terms from their 1994 level. Nevertheless, there were important individual gains – by China (+16 percent), the nations of the European Free Trade Association (+14 percent), and South America (+5 percent), as examples.

Table 1 summarizes tonnage trends in U.S. trade worldwide since 1990.

**1. U.S. Waterborne Foreign Trade by World Region
(Metric Tons, 000s)**

Region	1995 Volume	1994 Change vs	1993	1992
Africa	111,379	-0.8%	2.8%	14.3%
N. Africa	29,916	6.4%	22.6%	-1.6%
Sub-Sahara	81,463	1.5%	5.6%	21.5%
Asia	225,437	14.2%	16.9%	14.0%
ASEAN(a)	29,673	-1.5%	19.9%	39.4%
China	28,448	53.0%	72.8%	80.4%
Japan	87,494	6.7%	1.3%	-4.3%
South Asia	8,913	13.3%	20.2%	3.1%
South Korea	35,737	31.2%	38.5%	18.7%
Taiwan	24,250	2.3%	-2.0%	-3.6%
Australasia	12,680	7.0%	6.0%	-15.9%
Caribbean	28,746	-9.7%	-8.3%	5.7%
Central America	12,232	7.4%	11.2%	45.3%
Eastern Europe	4,209	-6.1%	-0.3%	-44.7%
Former USSR	9,337	1.5%	-35.0%	50.5%
Near East	85,478	-5.8%	-10.9%	-13.0%
North America	140,861	1.0%	13.5%	19.8%
Canada	68,597	0.9%	11.4%	4.8%
Mexico	67,974	-4.9%	8.7%	30.4%
South America	165,151	7.2%	15.8%	34.7%
Western Europe	165,202	6.4%	19.5%	5.2%
Total U.S.	949,614	2.7%	7.5%	9.0%

(a) ASEAN = Association of Southeast Asian Nations.
Sources: U.S. Bureau of Census, FT 920 U.S. Merchandise Trade: Selected Highlights, December issues 1990-95.

Trade trends in dollar terms are similarly profiled in Table 2.

**2. U.S. Waterborne Foreign Trade by World Region
(Millions of U.S. Dollars, 000s)**

Region	1995 Value	1994 Change vs	1993	1990
Africa	\$20,145	8.3%	9.0%	8.2%
N. Africa	\$6,602	1.1%	6.7%	5.6%
Sub-Sahara	\$13,944	11.8%	10.0%	9.4%
Asia	\$298,565	9.7%	21.2%	47.6%
ASEAN(a)	\$45,722	13.2%	31.9%	94.9%
China	\$48,378	20.7%	49.1%	182.9%
Japan	\$123,552	2.5%	10.1%	21.3%
South Asia	\$9,531	26.5%	40.4%	67.1%
South Korea	\$26,809	19.6%	30.5%	9.5%
Taiwan	\$30,716	4.2%	6.3%	12.9%
Australasia	\$10,811	9.7%	15.0%	2.9%
Caribbean	\$12,007	10.6%	17.6%	36.7%
Central America	\$9,512	18.0%	23.8%	20.4%
Eastern Europe	\$3,055	5.3%	13.8%	7.2%
Former USSR	\$6,470	22.3%	37.4%	89.3%
Near East	\$24,030	9.6%	4.4%	11.2%
North America	\$16,482	-7.6%	-19.0%	-9.7%
Canada	\$6,558	-31.4%	-51.0%	-40.2%
Mexico	\$9,914	19.9%	42.5%	36.0%
South America	\$47,450	17.5%	31.6%	45.9%
Western Europe	\$120,108	13.2%	25.2%	16.4%
European Union	\$106,096	12.2%	23.4%	15.4%
EFTA (b)	\$15,386	19.9%	37.6%	35.9%
Total U.S.	\$572,513	10.7%	20.0%	31.8%

(a) ASEAN = Association of Southeast Asian Nations.
(b) EFTA = European Free Trade Association
Source: U.S. Bureau of Census, FT 920 U.S. Merchandise Trade: Selected Highlights, December issues 1990-95.

Twenty-five countries accounted for 80 percent of American's 1995 seatriade by volume and 81 percent by value.

Five countries alone – Venezuela, Japan, Mexico, Canada, and Saudi Arabia – accounted for 40 percent of total tonnage. Similarly, 45 percent of the dollar total came from U.S. trade with Japan, China, Taiwan, Germany, and South Korea.

(AAPA Advisory)

**Georgia Ports Authority –
<http://www.gaports.com>**

The Georgia Ports Authority has established a new World Wide Web site at <http://www.gaports.com>.

The Georgia Ports Authority Home Page includes a variety of information of interest to users and the general public. Topics currently include an Overview of the Georgia Ports Authority, a Terminal Facilities Guide, FY '95 Tonnage and Commodity Statistics and a Port Directory.

Information contained within the directory of key personnel, steamship lines, agents and various maritime related organizations allows customers to access important names, telephone numbers and addresses in a very timely manner. Users may also point and click to review Executive Director Doug Marchand's message and obtain a detailed description of the outstanding facilities, services and latest technology offered by the Georgia Ports Authority.

The Georgia Ports Authority elected to utilize a magazine style approach to its Home Page to enhance its artistic design and make the information appealing to domestic and international audiences. With the first phase complete, future plans provide for expansion of the web site to incorporate interactive customer service information, strategic plans for the future, news releases, upcoming events and much more useful information.

**COSCO to Build 1st US
Terminal at Long Beach**

Officials from China Ocean Shipping Company and Port of Long Beach signed a letter of intent to build the Chinese carrier its first dedicated terminal in the United States.

The 130-acre container terminal will be located on the site of the former Long

Beach Naval Station, which was closed in September 1994. The port has negotiated for the transfer of the land from the U.S. Navy, and is expected to begin developing the property this summer.

"COSCO has been a valued customer of the Port of Long Beach for fifteen years, and is now one of the fastest growing carriers in the port," said Long Beach Harbor Commission President Roy E. Hearrean. "Thanks to COSCO's direct service to the booming markets in the People's Republic of China, and its excellent service throughout Asia, the company is registering double-digit growth. They need more space in Long Beach, and we are honored to provide them with their first dedicated U.S. home."

COSCO has shared space with other carriers at Pacific Container Terminal since 1981, and now calls twice weekly in Long Beach with both its Pacific Southwest and Pacific Northwest services. The company's Long Beach throughput soared by 40 percent last fiscal year.

"There is no doubt that we need more terminal space in Southern California," said Capt. Li Kelin, executive vice president of the COSCO (Group), who traveled to Long Beach from Beijing for the signing ceremony at the Port of Long Beach. "We explored several options, and determined that the configuration of the Long Beach terminal would best serve our needs."

COSCO's new terminal is slated to open in early 1988. It will feature 50-foot berth-side water depths to accommodate the company's new fleet of 5,250-TEU containerships, scheduled to be deployed later this year. The facility also will feature post-Panamax sized cranes to reach across 18 rows of containers.

The terminal will have direct access to the open seas and a dockside railyard to handle COSCO's intermodal shipments to the U.S. midwest, Gulf Coast and eastern seaboard.

"We value COSCO's business, and we are pleased to offer them a customized terminal that meets their future needs," said Port of Long Beach Executive Director S. R. Dillenbeck. "The agreement we signed today culminates many months of negotiations between COSCO and the port. They have put their faith in us to build them a terminal that will suit their individual needs. We intend to build them a facility of which they can be proud."

China Ocean Shipping Company is celebrating its 35th anniversary this year. The COSCO Group comprises more than 150 different companies in the People's

Republic of China. COSCO's shipping division has a fleet of 579 ships, including containerships, tankers, bulk and break-bulk carriers. The carrier calls in 150 countries and regions around the world.

Sister Port Relationship With 2 Chinese Ports

A three-member delegation from the Port of Redwood City signed documents in China initiating formal relationships with one burgeoning port and one new port on the famous Yangtze River in central China.

A memorandum of understanding (MOU) to establish a sister port with the Port of Nantong was signed by Port Commission Chairman Guy Smith and his Chinese counterpart, Shi Bo Xiang. Smith also signed an MOU to establish a "close cooperation" relationship with the Yangjiang Economic Development Zone of Changshu, which is building a new port at the historic Chinese waterfront city located north across the river from Nantong. Because the two Chinese ports are located in close proximity, the Chinese government preferred that one of the ports can institute a "sister port" relationship with the Port of Redwood City and the other a "close cooperation." Both ports are about two hours from Shanghai.

Smith, whom Commissioner Richard "Dick" Dodge and Executive Director Michael Giari accompanied on the trade development mission, said the intent of both agreements is the same.

"The purposes of the agreements are twofold," Smith said. "One is the promotion of foreign trade for commercial activities and possible joint ventures. The second is to exchange technical information on port management, planning, and operations, and the exploration of training internships for port personnel."

The Pacific Basin is the world's fastest growing trading region, Dodge added, which is why the Port of Redwood City is positioning itself for new markets.

Smith, Dodge and Giari discussed with their Chinese counterparts at both ports the possibility of scrap iron metal exports from Redwood City to China, future building materials trade, and the technology and possible exporting of recyclables like cardboard, paper, and plastics.

"The delegations from both Chinese ports are anxious to establish future trade relationships," said Smith. "China is growing rapidly, and looking to Pacific

Basin ports like Redwood City for imports and exports. Redwood City is unique in that we are a niche port, specializing in dry and liquid bulk cargoes."

Nantong Port, at the cross of the Yangtze River shipping line, has played an important part in China's booming economy since the early 1980s as a water transportation hub.

"With the transference of world economy from the Atlantic to the Pacific region and the rise of Pacific region economy, Nantong Port's economic and geographical advantages will be further displayed as a bridge for the Yangtze River region toward the world," Nantong Port Director Shi said through a translator.

Nantong Port consists of 11 wharves and 26 terminals. The Port handles 10 million tons of cargo annually. The main cargoes shipped through Nantong are timber, ore, steel, construction materials, coal, and animal feed.

Nearby Changshu is a historic Chinese city, dating back 3,500 years. A new 19-berth Port is under construction, with the first shipments expected this fall.

"Changshu is carrying out its strategic goal to build the city into a modern international and commercial port city," Director Hu Zheng Ming said through an interpreter. Foreign investors are contributing to the development.

"Like Nantong, the Changshu Port is looking to the West for possible imports of scrap metals," said Chairman Smith. Sims

LMC Metals recycles more than 250,000 tons of scrap metal annually for export from the Port of Redwood City.

"Doing business in China takes time," Smith said. "Most businesses have learned that the first step is to establish a relationship. We are excited over the enthusiasm displayed by the two Chinese port delegations over the possible future trade between us."

Smith said that the final agreements with the Chinese ports will be ironed out before the end of the year. Both Chinese ports said it is possible they will send delegations to Redwood City this year. A port delegation visited Nantong previously two years ago. The relationship with Changshu was sparked by Redwood City Councilman Richard Claire, who visited the city in 1994.

The Port and City of Redwood City also have a Sister Port and Sister City relationship with the City and Port of Zhuhai in southern China.

S.C. Ports Authority: Groseclose Pres, CEO

The nine-member board of the South Carolina State Ports Authority has unanimously selected Bernard S. Groseclose Jr., the port's current director of planning and development, as President and CEO. L. Duane Grantham, the port's current director of sales and marketing, was named executive vice president and chief operating officer.

"The opportunity to lead South Carolina's ports attracted many excellent candidates from around the world," said William L. Bethea Jr., Chairman of the Ports Authority, "but our two internal candidates surpassed even the best available from outside."

Groseclose joined the Ports Authority in 1985, after two years in real estate and six years with Rockwell International where he rose to the position of manager of financial analysis. He joined the Ports Authority as Manager, Business Analysis and later served as Executive Assistant to the Executive Director before becoming Director of Planning & Development.

Groseclose is currently Chairman of the South Carolina World Trade Center-Charleston, and has previously served on various professional organizations.

Grantham joined the Ports Authority in 1985 as Director of Sales and Marketing after serving six years in management with U.S. Lines. He is a graduate of Georgia Southern University.

The appointments will become effective on January 1, with Executive Director W. Don Welch remaining at the Ports Authority as a consultant for six months.

The South Carolina State Ports Authority operates seaport facilities in Charleston, Georgetown and Port Royal and last year handled more than 10 million tons of cargo valued at over \$20 billion.

Tacoma Takes Delivery of ZPMC Container Crane

The *Zenhua 3* sailed into Commencement Bay on Sunday, June 9 with the Port of Tacoma's newest container crane towering 261 feet above the ship's deck. The crane, manufactured by Zenhua Port Machinery Company of Shanghai, China, is the Port's third so-called "post-Panamax" container crane. The cranes are used to load and unload container vessels too wide to navigate the Panama Canal.



The Port of Tacoma's newest container crane aboard the *Zenhua 3*. (Port of Tacoma Photo by Mick Shultz)

The total number of container cranes at the Port now stands at 15.

The \$5.63 million crane will go into service at the Port's Terminal 4, which is leased by Evergreen Line. Taiwan-based Evergreen is one of the world's largest container shipping lines. Evergreen will bring its new "U" class of post-Panamax

vessels to the Port of Tacoma on June 30, with the arrival of the *Ever Ultra*.

The new crane took 13-1/2 months to build. The *Zenhua 3* sailed from Shanghai with the fully-assembled crane on May 20. The crane's reach, from rail to the end of the boom, is 151 feet, allowing it work vessels up to 17 containers wide.

Africa/Europe

Le Havre: Measures for Port Competitiveness

On May 19th inst., Alain Lamassoure, our French Minister of Budget and Government spokesman, was welcomed at the Le Havre's World Trade Center where he reported progress of the 60 customs measures intended for improving the competitiveness of French ports. A port charter was then signed by the Minister, the representatives of the Port of Le Havre Authority, the Union of Port and Associated Professions, the Le Havre Chamber of Commerce and Industry and Port Alliance which commits Le Havre customs to steadily search for the most suited measures to place the port of Le Havre in optimal competitive conditions.

In Le Havre, a certain number of actions scheduled as part of the Governmental Scheme has already been initiated in less than a year. Today, the Regional Customs Board in Le Havre commits itself further on and proposes all port operators a charter which is totally in line with the governmental scheme of October 26th 1995. In

order to foster the setting-up of logistics, industrial and commercial services and make customs work in closer cooperation with companies, the Le Havre's Customs Board commits itself to set up a single customs authority, in charge of all matters related to port measures as well as a consultancy service to companies whose aim is to provide technical assistance as regards customs regulations. The coming on stream of a single customs office, inaugurated as well by the Minister is also in keeping with the charter, with a view to speed up cargo flows.

It permits to get the various customs declarations of external trade more easily through the implementation of a procedure of centralization of the operators' requests. Moreover, with the Freedom project (a Customs Clearance System using a network of data exchanges), the port of Le Havre has a single forum of processing of maritime operations at its disposal. By federating private and customs port computer systems, it makes it possible to experiment with a real free zone together with a range of simple customs clearance procedures and advance clearance.

The French Minister of Budget, Alain Lamassoure, also inaugurated the "Sycoscan" (a scanning control system of maritime containers) set up by Customs in

the presence of Georges Charpak, a Physics Nobel prize-winner, who invented the particle detector. The use of the Sycoscan device avoids the transfer of loads by making it possible to visualize the cargo inside a container without having to strip it. Being inspected via the Sycoscan only stops the trailer 30 minutes on average, the Regional Customs Board claims.

When delivering his speech at the Le Havre's City Townhall, the Minister confirmed the State support to the "Port 2000" project: "we are going to follow up, work with and finalize the programme". He also affirmed again that "Le Havre was set for a promising future in North Europe".

Port 2000 of Economic Importance for the Nation

The Minister of Equipment, Housing, Transport and Tourism, Mr Bernard Pons, came to Rouen on March 4th to install the Seine Interports Commission, which he declared was designed to co-ordinate major capital investments in the ports and ensure that they do not clash.

The basic idea is that the Lower Seine should in the years ahead be the Rapid Turnaround Port of all Europe, and the Minister spoke in very precise terms of Le Havre's "Port 2000" project.

For the big consortia, profitability depends on reliable schedules and frequent calls, concentrated on a limited number of ports. Owners are therefore cutting down on the number of ports served on the North European range.

In the competition between them, "Port 2000" must be one of the winners. The whole point of the Port 2000 project is to bring in the big container ships straight away. This ambitious aim must be achieved, for the stakes are high and it is of great importance to the national economy, as the President of the Republic stressed himself when he was here. I want to confirm unequivocally that the principle has been accepted.

The pros and cons of the different possible ways of putting it into effect need to be studied with the greatest care... It falls to me to weigh up, in the clearest possible way, and if need be with the help of independent evaluations, the conflicting interests that may be expressed on the subject. Indeed, the project implies a wide range of preliminary studies of the technical, economic, financial and environmental aspects. Many

things need to be considered before the final choice: ease of operation, cost, interface with overland transport networks, adaptability to changing traffic patterns, and impact on the environment.

1996 will be devoted to carrying out these studies and to initiating this big public debate, starting in the second half of the year. A decision can then be reached in 1997. On this basis, the first stages of the Port 2000 project could be got under way in 1998, with the first berths coming progressively into service from early in the year 2001.

(Port of Le Havre Flashes)

BLG Orders Container Gantry Cranes for CT III

BLG Bremer Lagerhaus-Gesellschaft recently ordered three "Super-Post-Panamax" gantry cranes from MAN-Takraf in Leipzig, which also assumes system responsibility. An option has been granted for two additional container gantry cranes. Delivery will be made in mid-1997, at the same time as completion of the first new berth at the Bremerhaven Container Terminal.

The CT III expansion encompasses extension of the Strom Quay by 700 meters, corresponding to two berths for large container ships, and roughly 800,000 square meters of transport and storage space. Construction is progressing according to schedule. The second berth is to be ready for operation towards the end of the coming year. The Bremerhaven Container Terminal will then offer 10 berths on the Strom Quay and 2.4 million square meters

of total area.

The new gantry cranes meet the highest technical demands. The outreach on the seaward side will be extended by the width of two containers. Since the lifting height has also been increased, the MAN-Takraf gantry cranes can serve ships with a loading width of up to 18 containers and a height of up to six containers on deck.

Furthermore, the gantry cranes will be equipped with the electronic management system for fault detection and analysis and for preventive maintenance which was developed by BLG and has already been tried and tested in the previous generation of gantry cranes. The automatic antisway system ensures no pendulation of the load. A "comfort control system" is responsible for moving the crane into certain loading positions and for setting down the containers quietly.

The new generation of gantry cranes for maximum loads of 75 tons provides for addition of a second traveling/lifting system to make container transfer within the portal area of the crane possible. Moreover, the speeds of the lifting gear and trolley traveling winches have been significantly increased. Express elevators have been integrated for operating and maintenance personnel.

Main technical data:

Max. lifting capacity: 75 t
Working range on seaward side: 53 m
Working range on shore side: 22 m
Track gauge: 30.48 m
Lifting height: 33 m
Traveling speed: 210 m/min
Crane speed: 55 m/min
Max. lifting speed depending on load: 140 m/min

Hamburg: Hub of Trade Between Europe, China

On the occasion of a visit by the Mayor of Hamburg, Dr. Henning Voscherau, to Shanghai from May 20-24 this year, Port of Hamburg Marketing and Public Relations (HHVW) emphasized the importance of China to the Port of Hamburg. With its numerous foreign-trade firms, consulates, banks and insurance companies, the City-State of Hamburg is the main link in trade between Germany, its numerous neighbours and the Far East.

The port on the Elbe has a long tradition of links with China. The first ship to sail direct from China to Hamburg tied up as long ago as 1792. Ships from the state-owned Chinese shipping line COSCO and Sinotrans, the second-largest shipping line and most important forwarders in China, regularly call in at Hamburg with their liner services. The same is true of Rickmers, a long-established Hamburg line, and the Polish-Chinese joint venture Chipolbrok. What's more, COSCO has had its European head office in Hamburg for 10 years and Sinotrans since 1991. Besides COSCO, Sinotrans and Rickmers, there are numerous other lines serving Chinese ports direct from Hamburg or in transshipment via Hong Kong.

In 1995 a total of 1.4 million tonnes of sea-borne cargo was transported between Hamburg and Chinese ports. Of this, around 10% was accounted for by Central and Eastern European transit traffic, another 10% by Scandinavian transit cargoes. In transit traffic incoming cargoes have twice the volume of outgoing ones. Any calculation of the direct sea-borne traffic between Hamburg and China should include a high proportion of the goods handled in Hong Kong because they are either bound for or come from China. Hong Kong traffic totalled 3.3 million tonnes in Hamburg last year.

Hamburg is China's foreign-trade centre for Western Europe. More than 150 Chinese firms and institutions are based in Hamburg. More than 800 Hamburg firms are involved in trade with China, many of them agents for trade between China and Central and Eastern Europe. The City-State of Hamburg has been twinned with Shanghai for the past 10 years.

Containers

In 1995 Hamburg's total container turnover on the Far East routes was around 1.23 million TEUs. Of this total, imports accounted for some 672,000 TEUs and exports 557,000 TEUs. Incoming traffic



COSCO container ship entering the port

rose by 10.5 %, outgoing by 5.4%. Trade with North-East Asia including China was 7.3% up on 1994 and with South-East Asia the increase was 10.4%.

Hamburg: Leading Player in Ro-ro Sector

Hamburg, Germany's largest universal port, is one of Europe's leading roll-on/roll-off (ro-ro) ports. The city on the Elbe is the point of call for numerous ro-ro liner services from Scandinavia and other Baltic countries and the starting point for numerous ro-ro services to other countries in Europe, Africa, Asia, North and South America. In 1995 Hamburg's ro-ro cargo turnover totalled around 2.55 million tonnes. About two thirds was accounted for by European traffic and a third by Scandinavia. One noticeable feature in the nineties has been the above-average growth in trade with other European ports

(Continental ports excl. Scandinavia and Britain/Ireland). There has also been considerable growth in trade with Britain, partly due to the introduction of additional tonnage.

Ships

The con-ro ships mainly used these days for roll-on/roll-off traffic via Hamburg carry containers on deck and wheeled cargo in the hold – vehicles, other kinds of wheeled cargoes or cargo that is made "wheelable" with the appropriate gear. For several years now bananas have been transported in con-ro ships. On the easterly lap of their journey the ships carry bananas, on the westward one it is wheeled cargo.

The generic term "roll-on/roll-off ships" includes ferries such as the *Hamburg* (DFDS) and car carriers which regularly call in at the Port of Hamburg. Besides the traditional roll-on/roll-off ships, side-loaders (for paper/cardboard and cellulose) are also becoming increasingly important.

he viewed them as a major vote of confidence in the Port of Cork and in the shipping services on offer at the port. He added that these developments would strengthen Cork's industrial base and would, hopefully, act as a catalyst for further inward and indigenous capital investment in the Cork area. (Portlines)

Creation of the Board of Directors of Portel

The presidents of the Port Authorities of Las Palmas, Barcelona, Bilbao, Valencia and Algeciras, taking over in Madrid as Members of the Board of the public company Portel Servicios Telemáticos SA. The company, owned 51% by Ente Público Puertos del Estado, and 49% by Telefónica, has six representatives per each one of the parties. It is chaired by Josep Munné, outgoing president of the port of Barcelona, vice-president, Jose A. Alba, so far general manager of Telefónica Sistemas, and as general manager, Fernandez Melle, so far manager of Strategy and Control of Management of Puertos del Estado, and among the board members there is the general manager of Puertos del Estado, Francisco Rueda, and Guillermo Fernandez, so far commercial general manager of Telefónica.

Portel intends an investment at domestic level of 4,500 million pesetas for the next years. Additionally, it has 4,500 million pesetas contributing to the company as a whole in Spanish ports in assets because of undertaken investment.

The social object of Portel is the marketing, management and operation of an exchange and compensation system of documents associated to the ports and sea facilities, falling under the competence of the State Administration, as well as the basic telematic services, control of dangerous cargo and the unloading of residues.

It is also an object of the Company to provide services to complete intermodal traffic, as well as the management of port infrastructures, in the area of communications and basic services of control, safety and emergency, leaning on them, as well as all those services to the port community based on the technologies of information and communication.

Among the activities undertaken in the organization area of Portel are the agreements with Customs for COMPAS and the participation in the COMINPORT, among others.



Ro-ro ships in the Port of Hamburg

Cork Set for £50 Million Industrial Expansion

As both multi-national and Irish companies recognise the attractions of the Port of Cork as a prime industrial and service location, a planned £50 million capital injection is designed to provide a massive confidence boost for the immediate port area.

Ringaskiddy has been selected for a £31 million investment by Canadian manufacturing firm, Merfin, while Norwegian

giant, Dyno Industrier A.S., will invest £11 million in a new plant at Marino Point.

On the servicing front, almost £8 million will be spent on storage and distribution centres. Moyglare's large dry bulk store is already taking shape at Ringaskiddy where Premier Molasses will shortly construct a molasses terminal. Meanwhile at the City Quays, a bulk storage facility has been recently completed for Walsh Warehousing.

Commenting on these investments, Port Chief Executive, Mr. Pat Keenan, said that

From the activities undertaken by its technical development, underlining the purchase of data processing system, base software and additional development to give support to the relationships with Customs in EDI, EDI design message, the design of architecture for the connection, both with Port Authorities such as shipping agencies, the definition of the structure to be set up at each Port Authority, the agreements with shipping agents and the operation of Portel as an EDI Service Center for Summary Statements and a Statement National Center of Dangerous Cargo, among other activities.

(Port Newspaper)

Göteborg to Develop Its Role for Scandinavia

The board of the Port of Göteborg AB, Sweden, has decided to adapt the port's container facility, the Skandia Harbour, to the demands of post-panamax vessels. The Port thereby demonstrates its determination to keep and develop its role as the direct deep-sea port for Scandinavian trade and industry.

The adaptation, which will cost ab £15 million or \$23 million, includes the purchase of two new post-panamax cranes, dredging, an erosion protection wall along a 400-metre stretch of quay, and two new straddle carriers in addition to the 21

already in use at the terminal.

Until recently, the lock measurements of the Panama Canal set the standards regarding the size of deep-sea container vessels. This has also set a standard in the ports in areas such as crane outreach, depth of water, etc.

Deep-sea container vessels are now increasingly being built larger than what the Panama Canal locks can handle, so-called post-panamax vessels. About 80 such vessels now either exist or are in the order books of the shipyards. One of the deep-sea shipping lines making direct calls at Göteborg, Maersk Line, already calls at the port with their post-panamax vessels, the world's largest containerships.

The decision to invest in post-panamax capacity has not been a purely economic one for the Port of Göteborg. The port is the only one in Scandinavia, in fact the Nordic region, to offer direct deep-sea containerline calls in competition with the large continental ports of Europe. The decision to adapt to the new, larger vessels is an important message to the market that the Port of Göteborg intends to keep and develop its role as the direct deep-sea bridge-head for Nordic trade and industry. In addition to its obvious virtues, the presence of direct deep-sea calls also sets a price level for the relay traffic via continental ports.

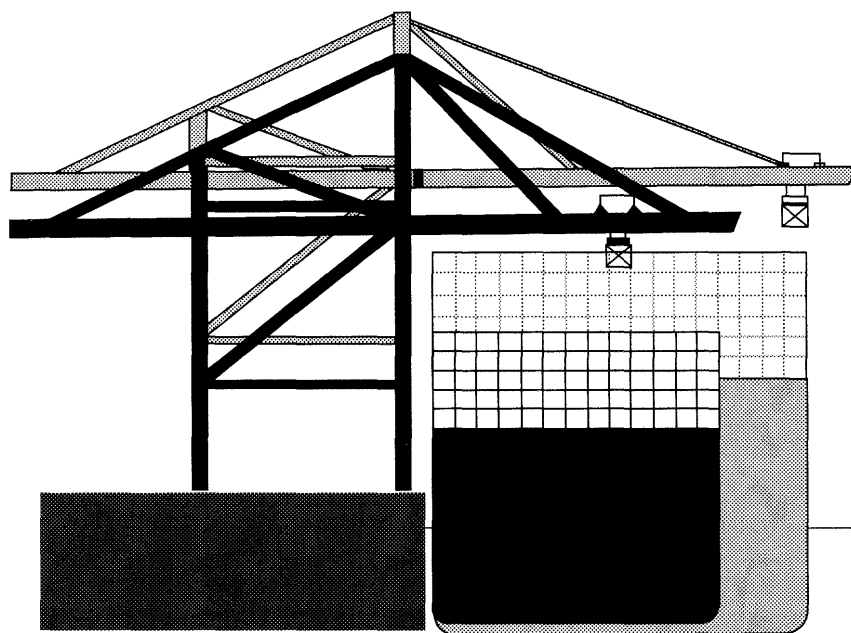
The investments at Skandia Harbour will include two new container cranes with a 48.5-metre outreach, ten metres more than the present cranes. The new cranes

will also have the crane arm set higher to be able to handle a post-panamax vessel with a full deck load. Furthermore, a stretch of quay along the Skandia Harbour will have to have its depth of water increased from 11 to 12 metres. The fairway outside the quay will have to be dredged as well, to increase the safety margins when the vessels are turned around before berthing.

An erosion protection wall will have to be built along a 400-metre-long portion of the quay. This is necessary for the quay construction not to become undermined by the water currents from the strong thrusters of the new vessels (the quay is built like a platform on pillars). Last, two new straddle carriers (in addition to the 21 already in use at the terminal) will be needed to cope with the demands of the new vessels.

Analyses show that trade on all the heavy deep-sea container routes are likely to increase during the next few years. This has encouraged the Port of Göteborg to decide to invest, as has the relative short perspective of the shipping lines' fleet planning: in a not-too-distant future, post-panamax vessels will be entering the second-hand market and this type of vessel will probably spread to more shipping routes.

The Göteborg investment in post-panamax capacity will be financed from the Port's own fund. No national, regional or local government subsidies will be granted. The entire investment package will be operational by 1998.



Comparison between container crane/ container vessel of standard dimensions (black) and crane/vessel

Reprocessed Metal Newport's New Trade

Sims Bird Ltd, the recently formed joint venture between the Bird Group and Simsmetal of Australia, has begun a brand-new export trade in reprocessed secondary ferrous metal at Associated British Ports' (ABP) Port of Newport.

Sims Bird Ltd has entered into a long-term agreement with ABP Newport and is investing capital in developing an 8-acre metal-reprocessing and recycling terminal at the port. Metals in many different forms – bales, swarf and grades one and two – are loaded on to ships which berth at Newport's deep-water quays.

Dic Williams, Port Manager, ABP Newport, said he is delighted that Sims Bird has brought an entirely new trade to the Port of Newport.

"The Sims Bird joint venture is good



More than 27,000 tonnes of secondary ferrous metal bound for export on the m.v. Alexander Dimitrov from Associated British Ports' Port of Newport was recently handled at the port's new Sims Bird terminal

news for both the Port of Newport and the local community. We welcome the new business as it clearly shows Sims Bird's confidence in the facilities and services the port has to offer," he said.

Russell Gulliver, Chief Executive, Sims Bird, said ABP Newport was chosen because of its strategic location and its excellent services and facilities.

"The Port of Newport offers good access to and from the motorways and ample storage space which will provide the capacity for our operation to expand

and grow," he said.

Simsmetal, a public company in Australia with a \$A1 billion turnover, has interests in the USA, New Zealand, China and Thailand and is about to expand its operations into Canada. This week Simsmetal announced the acquisition of McIntyre (encompassing Thomas Hill Group) in the north of England and the Midlands. The company's joint venture with Bird Group is part of its global expansion programme aimed at serving key world markets.

Whitby: Endeavour Wharf Development

Associated British Ports (ABP) has let a contract to Clark Construction Limited for the redevelopment of Endeavour Wharf from where its wholly-owned subsidiary, Whitby Port Services Limited, operates a stevedoring and ships' agency business.

The project, which will include the provision of a new fully insulated and ventilated 1,400 m² transit shed, complete with a 25-tonne capacity gantry crane, will cost £550,000. It is being jointly funded by ABP and Scarborough Borough Council who are the harbour authority. The project was the subject of a successful Regional Challenge bid under the Whitby Beacon Regeneration Initiative. A grant of £200,000 has been awarded.

Mike Fell, Chairman, Whitby Port Services, said:

"The provision of a new transit shed is absolutely essential for the future of the Port of Whitby. The new facility will give first-class protection to on-weather-proof cargoes especially steel imported by the port's principal customer, Hoogovens. Product care is of paramount importance to this major Dutch steel producer."

John Trebble, Chief Executive of Scarborough Borough Council, said:

"The Council is thrilled that this project, which should secure the future of the cargo trade at Whitby for many years, is now proceeding. The cargo trade is vital to the success of the port and the Council appreciates the confidence shown in the port, both by ABP investing in the project, and the Government Regional office at Leeds in offering substantial grant aid."

Southampton Welcomes P&O Cruises' Double Act

Two of P&O Cruises' most prestigious luxury liners – the 44,807 GT *Canberra* and 27,670 GT *Victoria* – recently called at Associated British Ports' (ABP) Port of Southampton's Mayflower Cruise Terminal. It was the first time since 'D Day' celebrations in 1994 that the two ships simultaneously visited the port.

The liners were berthed at the port for several hours before departing for their European and Mediterranean cruise itineraries.

Southampton's Mayflower Cruise Terminal is one of two first-class passenger terminals at the port; it was extensively refurbished in 1995. The Port of Southampton is the UK's premier cruise port, handling a record 233,000 passengers in 1995.

Asia/Oceania

Technological Feats at Fremantle Port Authority

Fremantle Port is set to strengthen the competitive advantage it has gained through record trade figures and closer customer liaison by utilising technological advances to further improve port services in the second half of the 1990s.

In the aftermath of a major organisational restructuring and review of services, the Port's governing body, the Fremantle Port Authority (FPA), is keen to ensure the port continues to develop a 'leading edge' through advances in technology – particularly in the port operations area.

Last year, the FPA recorded a \$7 million profit, and improvements in technology could ultimately see a further increase in profits in future years.

Fremantle Port Authority General Manager Kerry Sanderson said the most recent technological improvement has been seen in the trials of agitation dredging which commenced in February 1996.

Agitation dredging is a concept used in Europe and the United States, using the port's fire fighting emergency response vessel. A large volume of water is pumped by hose to a pipe suspended below the vessel where it is then forced through nozzles to displace the soft sediment. The material is dispersed into the water column and part

of it moves out to sea by tidal action before it can re-settle.

"Our Port Operations team at Fremantle developed the concept to suit Port of Fremantle conditions," Mrs Sanderson said.

"We expect big savings in our dredging bill as we can defer our maintenance dredging and therefore do it more cost-effectively. Our emergency response vessel has been rigged to complete the work, and the results of trials exceeded our expectations."

The system is scheduled for introduction in the next few months, and is the latest in many technological improvements on the nautical front.

The Dynamic Under Keel Clearance System – a software package designed by maritime consultants for BP Australia – is operated by the FPA and measures factors affecting the draft of a vessel and how it can safely negotiate channels in the Port's Outer Harbour. The system uses data supplied by Coastal Information and Engineering Services, and reduces the under keel clearance (ie the space between the bottom of the ship and the sea bed) to a minimum tolerance.

"The early results of this technology saw BP being able to load up an extra 5,000 tonnes of crude oil per vessel," Mrs Sanderson said.

"Combined with the dredging in the Success/Parmelia Channels in the Outer Harbour, BP has been able to introduce bigger tankers. The old method of using subjective values to calculate a ship's maximum draft for safe clearance, which came down to personal experience, was more time-consuming and less accurate.

"Rather than having an excessive percentage of a ship's maximum draft as a safety margin, the under keel clearance system can accurately predict the amount of clearance between the keel and the ocean floor in centimetres."

Wave rider buoys are used to provide the system with continuous wave data which can be modelled against each vessel's hydrostatic particulars to predict its motion as it travels through the Outer Harbour channels. The system also shows the actual tides for the day as against those predicted when the ship's cargo was booked in the months before when change in weather patterns could not be determined.

"Other ports have shown interest in the system, as well as Western Australian company Alcoa, which imports caustic soda through Fremantle's Outer Harbour," Mrs Sanderson said.

The safety of deep draught vessels entering the port has also been increased with the synchronisation of the navigational lights in the Success/Parmelia and Stirling/Calista Channels.

The computer-based centralised remote-control system synchronises, monitors and controls the operation of navigation buoy and beacon lights in the channels. The synchronised flashing patterns greatly improve a ship's ability to identify navigational lights from background glare when navigating the channels at night. These patterns may be varied from the computer control centre in the FPA building.

The system also has the ability to monitor the charge in batteries and the number of globes intact without the need to physically check the beacon, providing further efficiencies in the port.

In addition to the synchronisation, a new radar system was installed in the signal station, and is the core element of the vessel traffic system for the port. Vessel movements within the port are displayed in both graphical and digital form, enabling accurate vessel identification.

Being able to detect all movement of vessels, the radar advises of any vessel which moves from its anchored position. It has also been successfully used to guide ships into the port, and has great potential for search and rescue operations as information given is not only relative but also in geographical formats.

Hydrographic survey has also entered a new era at Fremantle with the leasing of a Global Positioning System from Curtin University. Survey work is done from the emergency response vessel, while offshore work is undertaken using a heave compensator.

This provides greater accuracy and allows the port's surveyor to work in what would normally be considered unacceptable sea conditions for survey work.

The FPA's survey programme roughly spans a four month period and is well controlled to ensure safe navigation on approach channels and berths.

In other developments, a state-of-the-art port information system, known as PORT/AMS, is being installed to effectively control the port's various operations and provide the best possible customer service.

The system has allowed the FPA to set up and maintain its own environment for channels and berths as well as maintain the various rates applicable for the services it offers.

The four modules in PORT/AMS include:

- scheduling vessels and visits – including berth allocation and anchorages;
- monitoring vessels carrying dangerous goods – enables specific containers to be highlighted and dangerous goods to be identified, which is essential for emergency contingency purposes;
- generating statistics for raising wharfage invoices – allows statistics staff to produce all necessary reports on the commodities which move through the port as well as the revenue generated;
- co-ordinating pilots, tugs, line-boats, customs and dockmen.

Staff using all the new systems at Fremantle are being trained to ensure the best utilisation of the technology, and in turn, providing the best possible customer service.

1994/95 Facts on Fremantle

- Fremantle Port covers a total area of 876 square kilometres, and consists of an outer harbour, where bulk trades are handled, and an inner harbour, where container and break bulk trades, including motor vehicles, livestock and scrap metal, are handled.
- Total port trade was record 20.3 million mass tonnes.
- Container throughput was up 11 per cent to almost 188,000 TEUs.
- Ship numbers were 1,780.
- Major trading regions are East and South-East Asia which account for 39 per cent of total port trade, or 60 per cent when grouped with the Middle East.
- Major export cargoes are wheat, alumina and refined petroleum.
- Major import cargoes are crude petroleum, caustic soda, cement clinker and phosphate.
- 3.9 million livestock (of this, 3.8 million were sheep) were exported in 1994/95. Since 1991/92, Fremantle has exported almost 15 million livesheep.
- Coflexip Stena Offshore, a major port lessee, installed a new heavy-lift crane in mid-1995 which has a lifting capacity of 300 tonnes.

GPA: New Container Terminal Construction

With the development of the container trade and the establishment of some new

general cargo trades, GPA recently began construction of a new container terminal adjacent to Auckland Point No.3 Wharf.

The new terminal includes a 3ha heavy duty storage area, 2ha for general storage, a packing and storage shed, a rail line into the terminal and facilities for refrigerated containers and container washdown. Valued in excess of \$5 million, it is expected to be completed by mid-March 1996.

In 1995, approximately 1,300 containers were handled through the Auckland Point wharves.

The majority of these containers were exports. Major cargoes including aluminium from the Smelter, sodium cyanide from ICI, icecream sticks from Stickmakers and meat-meal, hides and flour products from Rockhampton.

Two shipping lines are now calling at Gladstone on regular schedules.

Austral Asia Line (AAL): has operated a SE Asian liner service since June 1995. AAL operates three vessels – Cape York, Cape Nelson and Cape Moreton which call at Gladstone, Townsville, Darwin, Surabaya, Jakarta, Port Kelang and Singapore on a fortnightly service.

AAL has secured contracts with Boyne Smelter for the export of aluminium and the import of materials for the smelter expansion.

Australia Pacific Container Line (APCL): operates a monthly liner service from Gladstone to the Pacific Islands. The service mainly loads pallets of bagged cement from QCL, however container volumes are increasing. APCL's vessel, *Rybnovsk*, calls at Gladstone, Vanuatu, Fiji, Wallis Island, Samoa and Tonga every 28 days.

GPA is proceeding with the design of Auckland Point No.4 Wharf. With significant growth in container and general cargo trades expected in the next two years, it is possible that Auckland Point No.4 could be constructed by the end of 1997.

(Port-Talk)

Melbourne: Wharfage Charges Cut Further

The Port of Melbourne's competitive position will be dramatically enhanced by a further 20 percent reduction in wharfage charges by the Melbourne Port Corporation, announced by the Treasurer, Mr. Stockdale, and the Minister for Roads and Ports, Mr. Craigie.

Mr. Stockdale and Mr. Craigie said the price reduction, effective from July 1,

would save port users \$10 million annually based on current charges.

The reduction comes on top of cuts to Port of Melbourne charges in December 1994 which resulted in savings of \$17 million a year to port users.

The 1994 package of cost reductions included the abolition of State Tonnage Duty, an across-the-board reduction in wharfage charges of 15 percent, and an additional reduction of another 10 percent for Bass Strait cargo.

And the reductions are additional to the reduction in channel usage charges from 59 cents to 40 cents per gross tonne made by the Victorian Channels Authority on March 1.

Mr. Stockdale said the total \$27 million price cuts were the direct result of the State Government's port reform agendas to deliver cost effective and efficient services to port users.

Wharfage Charges

	Current Rate	Rate Effective 1 July 1996
Non Containerised/General Cargo		
		Per Tonne of M³
Direct Cargo	\$1.62	\$1.29
Transshipment Cargo	\$0.81	\$0.64
Entry Cargo Unit	\$0.52	\$0.41
Containerised Cargo		
		Per 20' Container
Direct Cargo	\$46.75	\$37.40
Transshipment Cargo	\$23.37	\$18.69
Empty Container	\$13.80	\$10.88
Bulk Cargo		
		Per Tonne or M³
Inwards Cargo	\$1.62	\$1.29
Outward Overseas Cargo	\$1.15	\$0.92
Outward Coastal Cargo	\$0.97	\$0.77

VicRoads Chief to Head Melbourne Port Corp

The State Government announced, on Friday, May 3, 1996, the appointment of Mr. Colin Jordan as Chief Executive Officer of the Melbourne Port Corporation (MPC) for a period of three months.

The Treasurer, Alan Stockdale, and Minister for Roads and Transport, Geoff Craigie, said Mr. Jordan, the current Chief Executive of VicRoads, would replace Mr. Kevin Shea, whose term as interim CEO at the corporation expired on May 3, 1996.

Mr. Jordan will maintain his current



"Victoria is leading the nation in lowering port charges and providing a competitive port sector to keep downward pressure on port costs," he said.

"These substantial cost reductions will make it easier for overseas traders to do business with Victoria and will help exporters boost their business opportunities," Mr. Stockdale said.

Mr. Craigie said the announcement that freight rail access to Webb Dock would be maintained would further consolidate transport links to the Port of Melbourne.

The Government has provided for a new rail corridor adjacent to the proposed Yarra Bridge on the City Link route.

"The strengthening of transport links and these very significant price reductions are two more import steps to make Victoria the best place to do business in Australia," Mr. Craigie said.

position at VicRoads, assisted by Mr. David Berry in the management of day-to-day operations.

At MPC, Mr. Jordan will establish future directions for the port, manage major planning and leasing issues and recruit a permanent CEO for the corporation.

The Melbourne Port Corporation is the landlord of the Port of Melbourne. It coordinates the development of port land and infrastructure and is responsible for lease management and the encouragement of competition in the port.

Mr. Jordan will work with MPC chairman, Tony Hodgson, who has already commenced an extensive round of consultations with Melbourne port interests.

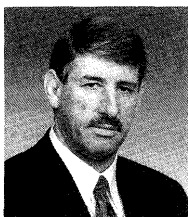
Mr. Stockdale and Mr. Craigie said Mr.

Jordan would bring considerable experience and transport industry expertise to the Melbourne Port Corporation.

Mr. Jordan was General Manager of the Port of Melbourne Authority, before joining the then Road Traffic Authority (later VicRoads) in 1987. He is Chairman of the VicRoads Advisory Board and the Victorian Road Freight Advisory Council.

Vazey Chief Executive of Ports of Auckland Ltd

Sir Richard Carter, Chairman of Ports of Auckland Limited, announced on 19 April that Mr G.E. Vazey will be the next Chief Executive of the company.



Mr Vazey, presently Deputy Chief Executive, has been appointed Chief Executive Designate and will take over on 1 July 1996 when the present Chief Executive, Mr Robert Cooper, retires.

Before joining Ports of Auckland in 1988, Mr Vazey held senior positions in the engineering industry. During his years with the port company Mr Vazey has held general manager appointments of three divisions before being appointed Deputy Chief Executive in January 1995.

New Container Terminal In Port of Sakai-Semboku

On June 1, a container terminal was inaugurated in the Port of Sakai-Semboku in Japan. The terminal is the first to be opened in the Port.

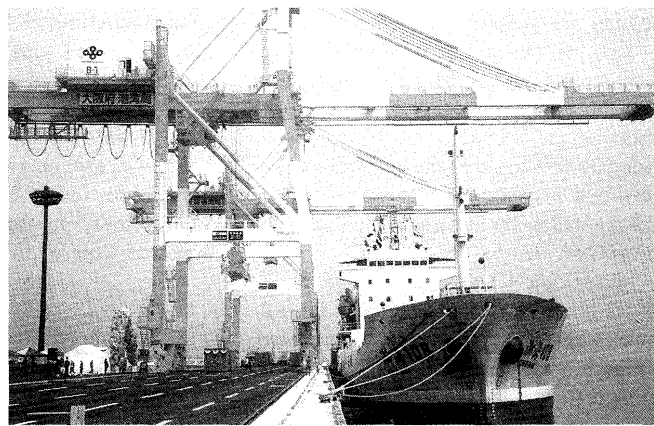
The Port of Sakai-Semboku has developed as a port supporting the industrial district in its hinterland. In the light of the recent progress of containerization and the resulting changes in international distribution, the Port and Harbor Bureau of the Osaka Prefectural Government has decided that the Port must enhance its features as a commercial port. The Bureau, responsible for Port management, therefore promoted the construction of the container terminal.

Located at the Sukematsu Wharf, the terminal has a quaywall water depth of 12m and a total quaywall length of 240 m. Equipped with two gantry cranes, the terminal can handle 30,000 ton-class container vessels. The 63,000m² terminal area

includes 861 TEU dry containers and 50 TEU reefer containers.

The Port and Harbor Bureau has endeavored to establish services linking the Port with foreign ports. As a result, service linking the Port with Pusan (one service per week), operated by Korea's Chun Kyung Shipping, and another service linking the Port with Ningbo (three services per month), operated by China's Sinotrans, started simultaneously with the opening of the container terminal. The former service is linked further with feeder services between Pusan and Ports in China (the Ports of Dalian, Quindao, Shanghai and Xingang).

To commemorate the completion of the container terminal, an elaborate ceremony was held on May 30, 1996, with the participation of individuals engaged in port-related activities. During the ceremony, the Port received *Zhejiang 108*, a fully containerized vessel operated by Sinotrans, as the first vessel to enter the Port. Also held during the ceremony, marking the beginning of the new age of the Port, were a ceremony commemorating the first shipment at the terminal; a tape-cutting ceremony; and a kusudama (decorated ball)-opening ceremony.

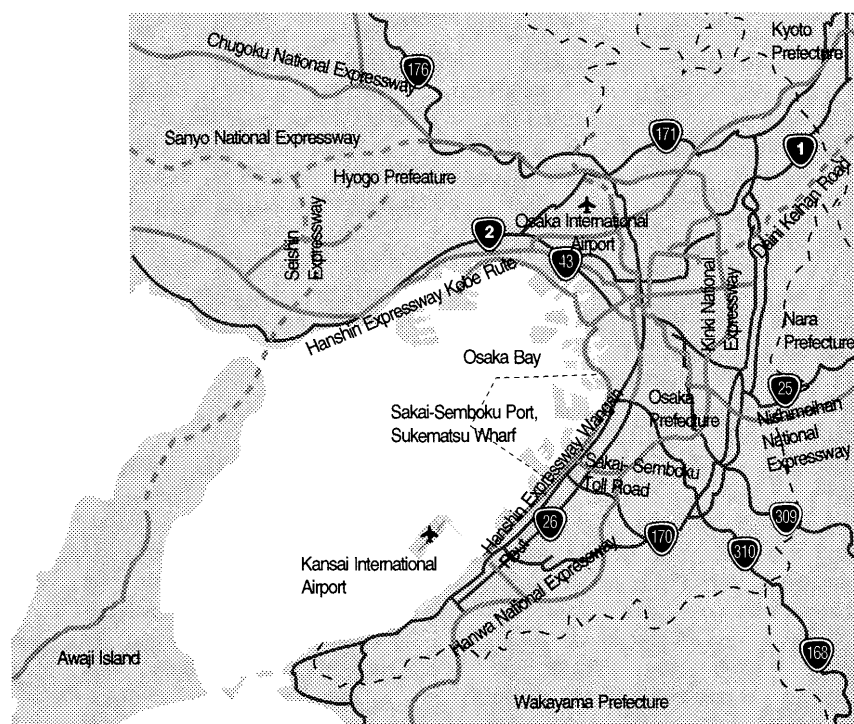


Another berth adjacent to the newly opened berth, also with a quaywall water depth of 12m, will be inaugurated next January. The berth will be equipped with a gantry crane for the full-scale handling of container cargoes; it was already used for handling container cargoes on an emergency basis during the period immediately after the Great Hanshin-Awaji Earthquake (Kobe Earthquake).

Consequently, the container terminal of the Port will be operated for the time being as a facility equipped with two berths with 12m-deep quaywalls, as well as with three gantry cranes. Each crane is load-rated for 30.5 tons, with a hoist load of 45.0 tons.

According to the development plan, another berth with a 14m-deep quaywall will be opened by the year 2000, and two additional berths with 15m-deep quaywalls after 2000.

Users of the container terminal in the Port of Sakai-Semboku will enjoy the fol-



lowing advantages:

First, with its favorable location between downtown Osaka and Kansai International Airport, the terminal provides smooth access to major cities in nearby regions via a highly developed highway network. The terminal notably permits smooth cargo transportation by bypassing the congested downtown area.

Second, the terminal has a large market in its hinterland, where substantial volumes of cargo are produced or consumed. Cargoes mainly handled here are expected to be textiles such as blankets and carpets, and products of the coastal industrial district.

Third, the terminal offers the use of cargo handling facilities at low cost – about 10% lower than nearby ports. Accordingly, considerable cost reduction can be achieved by using the terminal.

The Port and Harbor Bureau is committed to providing container terminal users with the best possible services and to developing the terminal into an important center for international distribution in Osaka Bay.

Yokohama Promoting Sale of Imported Goods

The concept of the Japanese Foreign Access Zone (FAZ) was created through the cooperative efforts of a number of Japanese agencies in an attempt to increase the importation of foreign products, and bring more balance to Japan's trade relations with other industrialized nations. In accordance with this designation, the city of Yokohama is working to build a unique environment that will be highly conducive to the promotion of foreign direct investment and the sale of imported goods.

The national policy to increase imports includes numerous measures and increased government budget spending. FAZ's require the funding to establish a first-rate infrastructure that is able to support increased importation, domestic distribution, and efficient delivery of goods to the Japanese marketplace. This must all be done without placing unreasonable financial burdens on companies or consumers. The policy also requires the establishment of business support centers, assistance to export promotion in foreign lands, and exhibition fairs to increase consumer exposure to foreign goods.

However, Yokohama's efforts in this area do not stop at cargo handling and distribution improvements. The city is also preparing to build what will be called the

"Yokohama Import Mart". Located near the city's new MM21 seaside development, the Import Mart will offer wholesale and retail shops with leasing priority given to small sized local and foreign businesses. There will also be an exhibition space for the introduction of foreign goods as well as commercial storage space which importers require. *(Port News)*

Campaign Against Drug Trafficking

According to the information supplied by the public relations office of the Japan Maritime Safety Agency (MSA) (Japanese coast guard), one month period from 11 May to 10 June has been designated as the Month for Promoting the Awareness on the Danger of Drugs and Firearms, under the auspices of a national council for the prevention of illegal trafficking of drugs and firearms.

Recognizing the ports (commercial or fishery) and the coastal areas have been exploited for the illegal trafficking of such unlawful commodities, the tripartite law enforcing agencies of the MSA, the customs administrations, and the police force conducted a series of campaign at such major ports as Otaru, Shiogama, Yokohama, Nagoya, Kobe, Hiroshima, Moji, Hamada, Niigata, Kagoshima and Naha.

The tripartite campaign which is open to the citizens included the music band parades, displays, visits to and cruises on patrol boats, handing over of campaign leaflets and others. Many programs were devoted for school children.

Also taking part in the national campaign were the Japanese Shipowners' Association, Japan Passengership Association, Japan Harbour Transportation Business Association and Japan Federation of Coastal Shipping Associations.

The general public and those working at sea or land were requested to report to the authority when they witness some irregularities. Cited in the campaign brochures as irregularities were:

On the sea:

1. When seeing a ship (national or not) coming closer to another ship or sitting side-by-side as if suspecting some kind of exchange of goods being conducted,
2. When seeing dubious floating objects (attached with buoy or marked),
3. When seeing a ship whose course and navigational behaviour seem to be unsettled and unfixed,

4. Ships whose name and registry are not clearly visible,
5. Ships who seemed to be leaving abruptly the site at seeing another ship,
6. Ships who display strange lights at night,
7. Ships whose behaviours seem to be out of norm.

At port:

1. When suspecting someone seem to be secretly bringing out something from a ship,
2. When suspecting dubious cars are coming close to the ship, or seeing dubious looking people (gangsters, yakuza) seem to be visiting the ship,
3. When seeing some objects being dropped from the ship and retrieved by someone who sped away by car,
4. When seeing boat or craft normally considered to be as service boat or craft (bunkering, supplying and others) is coming closer to the ship suspecting receiving or delivering something between the two,
5. Any other irregularities perceived.

Wharf Development at Napier Takes Shape

The first bay of concrete decking on the Port of Napier's new \$17 million wharf development has been poured into place during an eight-hour operation.

Almost 140 cubic metres, or 30 truck-loads, of concrete with 20 tonnes of steel reinforcing is now in place in the first of 41 bays of decking.

Engineer Peter Frizzell said the job remains on target for an early-1997 completion, with just over half the 250 piles required now in place. All the piles required have been made on site alongside the wharf. Each is up to 26 metres long and pretensioned with reinforcing steel for extra strength.

Reclamation work underneath the new wharf was also well advanced with armour covering the sloping sections being laid as piles are set.

Mr Frizzell said dredging the berth to a depth of 12.5 metres was almost completed.

Truckies, Clients Come First at Port of Napier

Truckies will have a smoother job and clients will be able to track the exact movement of cargo in a major new gate-

way development at the Port of Napier.

The northern gateway at the port is closed as major reconstruction work is in progress to create a five lane roading system, smoother traffic flow of heavy trucks turning into the port and sophisticated computer-tracking systems for cargo.

The revamp also includes a new cargo reception building which is being constructed elsewhere within the port and will be shifted onto its new entrance-way site when the gateway service installation, roading and other work is completed.

Construction engineer, Mike Elmes, said the job could be completed faster by having the building and roading work continuing simultaneously rather than delaying a start on building until all other site work was completed.

Work is expected to be completed in about a month and when all systems are fully operational, cargo coming into the port will be logged into a computer system and followed by computer through all stages until ship departure.

Truck drivers will be issued with a "swipe" card and their container cargo entered into the computer tracking system. The "swipe" card will activate security barriers into the port and match up with the container cargo which has been entered into the computer system. As the cargo is offloaded it will be entered into the Radio Data Transfer (RDT) system operated by all forklift drivers who are now equipped with computer terminals.

The information is sent by radio transmitter back to the database to provide clients with the 'real time' whereabouts of cargo. Previously the information was manually entered into the data system and there could be delays tracking the exact whereabouts of a container.

As the truck drivers leave the port they return their "swipe" card so the computer system can show exactly who, and what

cargo, is in the port premises and movement through the loading process.

Mr Elmes said the combination of the new entrance, reception and computerisation provides clients with more exact information about cargo, prides improved security and smoother traffic flow both inside the port gates and as trucks turn off into the entrance-way.

President Ramos OKs PPA Master Plan

President Fidel V. Ramos approved last July 10 the 25-year master development plan of the Philippine Ports Authority up to the year 2000 in ceremonies held in Malacañang to mark the PPA's anniversary.

Ramos has also ordered the Cabinet clusters D, A and B to submit feedbacks from inter-agency groups with proposed presidential orders and/or legislative measures needed to implement the plan.

Some P492 billion is required to finance PPA's ambitious port development program for the next 25 years, at an average yearly investment of some P19.68 billion. Most of the future projects are being offered to the private sector through joint venture agreements or build-operate-transfer scheme and its variants.

In the plan, the PPA, while continuing with its role of central port planning, is seen as working towards the development of selected major ports to serve as service centers offering comprehensive transport package. Smaller ports, on the other hand, will be developed as multipurpose terminals capable of handling both breakbulk and containerized cargo. They will serve as satellite ports or spokes and be the link between the service centers and the hinterlands.

With the coming of age of intermodalism and multimodalism, ports shall be the essential interface between land and sea transport. Thus, future investments will be poured into ports whose location complement and integrate smoothly with other transport modes such as rail and land.

Specialized terminals will also be developed to serve deep-sea container vessels and equipped with modern landside equipment.

Ports privatization, while already operational will be pursued more aggressively as the only road to sustainable affluence.

Because of the distinctive contribution of Philippine ports in national development, focus will be in providing appropriate and adequate infrastructure and landside equipment. The provision of quality, value-added service to port customers will be improved.

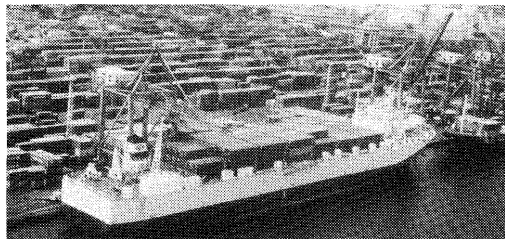
In the Manila area, port projects are designed to strengthen Manila's capability as the country's main distribution center, in keeping with its role as the premier gateway of international trade and commerce.

Infrastructures will be put up to further facilitate the movement of cargo to other transfer points, with Manila serving as the major staging area.

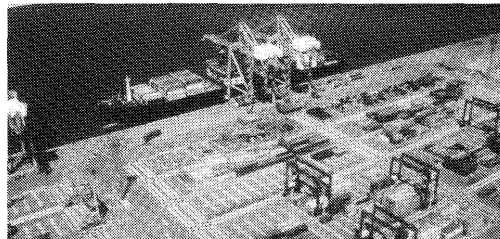
The existing major ports in Luzon will be further improved and new ones set up to complement other projects such as power, housing, industrial complexes, and roads and railways programmed by the national government. Ports along the coastal towns and cities will be capable of absorbing the excess traffic from Manila's North Harbor which is presently reaching congestion level.

In the Visayas, certain ports are identified for large-scale development. Cebu and Iloilo are presently the two most important ports while the others are secondary and tertiary ports in terms of economic activi-

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ties. The ports in The Visayas enjoy the relative advantage of easy access from both the northern and southern parts of the country. The provinces play host to major industries, hence the need for strong infrastructure support, including ports.

In Mindanao, major port development projects are also in the pipeline. The southern Mindanao ports of Davao, Zamboanga, General Santos and Polloc are within the East Asean Growth Area or EAGA, where the projected increase in trade are expected to spill over to the outlying areas. The PPA will thus continue promoting the use of existing port facilities while introducing new infrastructures needed in the area.

Philippine ports stand to gain from the immense transshipment container traffic from Singapore and Hongkong. The potential is highest in 1997 when Hongkong is turned over to Mainland China. Preferential tariff rates will make Philippine ports competitive. The increased participation of foreign terminal operators in port operations and development will be encouraged.

Major ports like the Manila International Container Terminal, South Harbor, North Harbor, Batangas, Cebu and Davao should achieve world-class status within the plan period. Opening them to international port competition will accelerate their development, as well as full privatization or through the establishment of an alternative port administration system granting full autonomy to port managers.

Shipping and Passenger Traffic Forecast

Year	Shipcall	Passenger Traffic
1995	221,948	42,699,176
2000	279,696	56,590,421
2005	337,445	70,481,665
2010	395,194	84,372,910
2015	452,942	98,264,155
2020	510,691	112,155,400

Cargo and Container Traffic Forecast

Year	Total Cargo (1,000t)	Boxed Cargo (1,000t)	Total TEU (1,000)
1995	142,498	31,290	2,722
2000	286,614	62,935	5,475
2005	576,483	126,585	11,011
2010	928,431	203,866	17,734
2015	1,495,248	328,329	28,560
2020	2,408,112	528,777	45,997

(Port Trends)

Commercial Port of Vladivostok: Main Gateway on Russian Pacific Coast

Vladivostok was founded as a fortress. In April 1880 the State Senate Commission granted it the city status, thus emphasizing its significance as the main coastal gateway at the Russian Pacific coast. That year, on April 12, the steamship *Moskva* anchored at the Vladivostok roadstead launching a regular Dobrovolny Fleet line between European and Asian parts of Russia.

In the 1890s the economic life of the Russian Far East underwent dramatic changes: domestic shipping and railroad construction were being expanded. The beginning of the Trans-Siberian Railroad and feasibility studies for Chinese-Eastern Railroad required to build a commercial port in the Far East in order to provide the railroad access to the Pacific. In March 1885 at the State Council's Siberian Railroad Committee hearing Emperor Nicolas II approved the budget of the Vladivostok Port's construction and in October 1897 the Commercial Port was founded.

Early in the 20th century, with the economic development of the areas adjacent to the Port of Vladivostok (Primorskaya Province and Eastern Manchuria) the cargo flow, both export and import, continued to grow. Before World War I, the Vladivostok Port's cargo turnover reached 1.1-1.4 million tons, and it had 14 berths with 1,845 m of total length. Vladivostok was quickly becoming one of the largest seaports in Russia.

These days the Commercial Port of Vladivostok plays one of the leading roles in the international and coastal cargo handling at the Russian Pacific Coast. The port is located at 43°07' N and 131°53' E, occupying the Muravyov-Amursky Peninsula's southern extremity on the coast of Golden Horn Bay. The time zone is GMT+9 hours.

The Golden Horn Bay is ice-free and well-protected from winds, with monsoon climate and warm summers. The Average annual temperature is +4°C, the warmest month is August (+22°C), the coldest one is January (-15°C). The annual precipitation is 690 mm, mainly comprised of summer rains. The port's favourable geographical location and good climate conditions provide for the year-round navigation. The highest water level is observed in July

through September (0.7-0.8 m), with the densest fogs usually in early summer. Berths Nos. 14-17 are specially scheduled as south-eastern winds above 15 m/sec. might be dangerous, and the other berths are protected from winds and high waves. The tides vary in height from 0.3 through 1.4 m.

Average depth in the roads is 20-30 m. The Commercial Port zone ship traffic is monitored by the Vladivostok Sea Traffic Management System's Radiolocation Center. It can be contacted on USW Channel 67, the call-sign is "Vladivostok-Port Control".

The Port has 17 berths available with total length of 4,200 m. Two of them, Nos. 1 and 2, are capable of taking cruise and passenger vessels. There is the container terminal on berths Nos. 16 and 17, the other berths offer services for handling the different kinds of cargoes.

Draught, length, o.a. of vessels taken at the berths are as follows:

Berth	LOA, m	Draught, m
1	200	9.0
3	160	9.0
5	160	9.2
6	150	9.4
7	150	8.9
8	185	10.5
9	160	11.5
10	160	10.0
12	150	9.1
13	260	11.5
14	180	10.5
15	150	9.8
16	220	11.5
17	300	11.0

The currently operational up-to-date container terminal is equipped to facilitate quick cargo delivery to North-Eastern Russia and South-Eastern Asia. Its berthing length is 303 m and annual handling capacity is 70,000 TEUs a year.

The shiprepairing plant located in the harbor offers a full scope of repair services for hull, engine, electric and electronic equipment.

The Commercial Port of Vladivostok specializes in handling general and bulk cargoes, mainly cars, heavy equipment, ferrous and non-ferrous metal, as well as

cargo in bags, boxes, lighters, containers, etc. The annual cargo turnover is approximately 5 million tons. On average, for one working day about 13,700 tons of cargoes are handled depending on the type of the latter. In the absence of a grain elevator the grains is loaded directly from board into rail cars.

In the vicinity of berth No. 6 there is the production line of bagging dry bulk cargo with the capacity of 60 tons an hour.

An extensive park of transloading equipment in the amount of 300 units comprises gantry cranes of 5-32 ton capacity, forklift trucks and electric loaders of 1.5-25 ton lifting capacity, auto cranes of 50 ton capacity and the floating crane of up to 100 ton capacity.

The covered warehouse facilities occupy the area of 54,100 sq. m. The open air storage area is 71,700 sq. m.

The cargoes mostly arrive in or leave the Commercial Port of Vladivostok by rail. The adjacent railroad terminal has 950 cars available and is capable of handling 300 rail cars daily. The total length of the port railtracks is 28 km. Thanks to convenient geographical location the Port has the possibility of reducing transportation costs by railroad. On average, the rail rates are \$1.00-1.50/ton cheaper than those of the nearby ports.

The Commercial Port's trading partners are 16 countries. The most volume of export cargo is directed to China, South Korea and Japan, whereas import cargo is mainly delivered from Australia, the USA and Japan.

The Port owns two sea terminals in the downtown. One of them accommodates ocean going vessels, the other one is capable of taking the ships operating on domestic lines. The port fleet comprises 120 units. Up to 8 million people are carried by ships on the local passenger lines.

The Port owns the modern and very comfortable Gavan Hotel located in the downtown with a swimming pool, restaurant, gym and sauna, which renders a wide range of services for businessmen and tourists.

Prospects of Commercial Port Development

In order to expand the Port capacity the following measures are planned:

1. Expansion of the container terminal area and cargo berths by constructing a wider quay.
2. Reconstruction of two berths in order to increase water depth and expand the warehousing areas in their vicinity.

3. Construction of an extra railtrack at the new port premises.

4. Reconstruction of the existing oil terminal with increasing its capacity up to 1.5 million tons, thus allowing not only to bunker vessels but to serve tankers.

The Commercial Port of Vladivostok has initiated two major projects. There have been established two enterprises with Port's participating as a founder: the Vladivostok Industrial Port and the Southern Primorsky Terminal.

The Southern Industrial Port is going to be built next to the existing Port facilities around the Golden Horn Bay and the Amursky Gulf.

The Southern Primorsky Terminal will be the freight station located 40 km away from Vladivostok at the intersection of highways (2 km from the Vladivostok-Khabarovsk road), air routes (8 km from the airport) and railroads. In this place the railway goes in three different directions: to Vladivostok, Nakhodka and Khasan. The terminal construction and monitoring system of the cargo traffic will facilitate the continuous cargo handling through the Port of Vladivostok.

The Commercial Port of Vladivostok is the acting member of the International Association of Ports and Harbors.

The Commercial Port of Vladivostok maintains and develops sister-ports relations with Tacoma (USA), Niigata, Fushiki-Toyama (Japan) and Dalian (China).

PPA: Joint Venture Undertakings Welcome

Moving forward with its program to increase private sector involvement in port infrastructure projects and to maximize the use of port areas, the Philippine Ports Authority now accepts proposals for joint venture projects.

Administrative Order No. 08-95 issued last March enumerates the projects where joint venture undertakings are welcome and the guidelines governing such proposals.

As the name implies, a joint venture is an undertaking between the PPA and a private sector or other government agency proponent. Infrastructure and service projects in the port which are not yet available but are critically needed are the primary targets for joint venture.

Among such projects are the construction and operation of public piers and wharves, specialized cargo terminals and

passenger terminals, warehouses, container yards and container freight stations and handling equipment, port dredging, terminal operation, arrastre and stevedoring services operation, installation and/or operation of ship traffic management systems, and other PPA authorized port-related projects and services.

Foreign corporations submitting a joint venture proposal must be registered with the Board of Investments or any government agency or department regulating foreign investments. The proponent-firm and his key personnel must have adequate experience and a proven track record in the project or service being proposed and must have the financial capability to undertake the project.

Among the incentives given to proponents are PPA equity participation of up to a maximum of 49 percent of total project cost, easement rights and areas for site development within the PPA's territorial jurisdiction, and non-intervention in the day-to-day operations of the joint venture company except in policy formulation.

Joint venture proposals require a pre-feasibility study to be submitted to the district office where the proposed project will be located. After initial evaluation at that level, the proposal goes to the joint venture committee in the PPA head office which shall recommend meritorious projects to the board of directors. Final approval of the project rests with the President of the Philippines. (Port Trends)

PSA's Annual Report: Landmark Achievement

To remain one of the world's best ports, PSA plans to invest S\$1,120 million in infrastructural facilities, technologies, systems and its employees this year. This is nearly a three-fold increase from 1995, revealed by Mr Khoo Teng Chye, PSA's Chief Executive Officer, at a press conference to announce the release of PSA's 1995 annual report. The lion's share of this investment will go to the development of the new container terminal at Pasir Panjang.

PSA is committed to greater improvements to the quality of its service so that customers can further enjoy better services like quicker berthing, faster ship-turn-around rate and loading time for cargo.

Last year, the Port hit the landmark achievement of 11.85 million TEUs in container traffic, a growth of about 14 per cent.

Mr Khoo said, "I'm pleased with our growth last year. We succeeded with a record of 11.85 million TEUs because we provide fast, reliable and flexible services to our customers. This year, we aim not only to improve our operational services but to deliver even more customised services to suit the unique needs of each shipping line."

In addition to the strong operational performance, the Port of Singapore Authority (PSA), its subsidiaries and associate companies chalked up a record-breaking S\$1,936 million in Group Operating Income. This is an increase of 15 per cent from last year. The bulk of this sum came from container handling operations. Operating Surplus increased by 22 per cent to S\$820 million.

One of the highlights for 1995 was PSA's internationalisation thrust. PSA's flagship international port investment is Dalian Container Terminal, in Dalian, China. To give greater focus to developing PSA's international business and to transform it into an international port company, PSA has set up an International Business Division in May 1996.

By venturing overseas, PSA will be able to compete more effectively and build up stronger port linkages. The network of regional ports will be advantages for Singapore as a hub. When a port in the network builds up its facilities, it will strengthen the network. PSA will venture into the region through commercially viable business partnerships.

Progress for PSA's corporatisation was also made in 1995. The corporatisation is slated for the first half of 1997 with privatisation to follow in the next few years. PSA is privatising so that it can respond faster to business opportunities. PSA has engaged the services of a financial/tax consultant to evaluate the optimal corporate group structure and advise on financial/tax matters. A risk management consultant has also been hired to look into PSA's potential liabilities when corporatised.

Among the Port's achievements last year was its ability to remain the world's busiest port in terms of shipping tonnage, a position PSA has held since 1982. Shipping tonnage rose by 5 per cent to 710.6 million gross tons in 1995 when 104,014 vessels called at the Port. Singapore was also the world's top bunkering port, supplying 17.5 million tonnes of bunkers lifted by vessels in Singapore.

Last year, the World Trade Centre's exhibition halls hosted 105 exhibitions and 81 events for 4.92 million visitors, making

it again the premier exhibition centre in Singapore. Its Convention Centre and Auditorium held 211 conferences/meetings and 49 performances.

Singapore '96: Greater Value to Trade

News and views on the maritime industry were shared during SingaPort '96, held at the World Trade Centre Singapore from 26-29 March 96. Opening the four-day maritime exhibition and conference was Mr Mah Bow Tan, Minister for Communications. Vijaya Rani reports.

The Port of Singapore will remain a competitive hub port attractive to shipping lines and transshipment cargo after PSA's corporatisation, the Minister gave this assurance in his opening address on 26 March 96. "We will configure our port industry and cost structure to allow the Port to remain a vital part of our industry and a key link in the global logistics chain," he said.

Besides corporatisation, Mr Mah also announced that the Port of Singapore's next phase of development would be to transform itself into an international port company. Having built up a quality of service which stands with the best in the world, he said, PSA could add greater value to trade and shipping by embarking on ventures that would provide end users with the kind of services that are synonymous with the Port of Singapore, everywhere around the world. It would then support the growth of its customers over a larger geographical area.

"As it does so, it will work with suitable partners who share the common vision of developing potential sites into world-class ports and port-related facilities. PSA will contribute its expertise and experience in IT-based port operations and port terminal logistics management. It will work with local partners and local government agencies and other local participants. The result we aim for is a win-win arrangement which will bring benefits to all parties concerned," Mr Mah told over 400 delegates at the exhibition's opening ceremony.

Outlining the trend of increasing use of IT in the shipping and port industries, the Minister called for a global information web where industry players all over the world could monitor and make decisions on the cargo movements, deployment of ships and calls at the ports.

Mr John Sullivan, Vice President (Southeast Asia/Australia), Sealand, delivering a "State-of-the-industry" address on

behalf of the company's chief executive, John Clancey, said the increased use of information technology in the shipping industry would get rid of the inefficiencies in shipping and put pressure on shipping lines to improve services to provide "just in time" delivery of shipment. (Port View)

PSA Signs Contract For First Port Venture

Bernadette Lee from Corporate Communications Department reports:

The equity joint venture contract was signed on 28 March 96 with the Port of Dalian Authority (PDA) through PSA's majority-owned subsidiary, Singapore-Dalian Port Investment Pte Ltd (SDPI)*. The new joint venture company is Dalian Container Terminal Co. Ltd.

Under the contract, Dalian Container Terminal Co. Ltd will own, develop, manage and operate three container berths in Dalian's Dayaowan Container Terminal. Two more berths are currently being developed; one will be ready in 1997, and the other in 1999.

The total investment in Dayaowan Container Terminal will be RMB\$4 billion with SDPI holding a 49-percent stake in the company and Dalian Container Comprehensive Development (DCCD) holding a 51-percent stake. The initial investment is RMB\$1.35 billion.

Mr David Lim, PSA CEO at the time of the signing, said, "In our aim to transform PSA into a multinational port terminal company, we are proud to make Dalian the first of our port ventures. PDA and PSA are confident that our joint venture can meet the demands of Northeast China's booming economy for first-class container terminal facilities."

To expedite the development of the Dayaowan Container Terminal, PSA will second a management team to the joint venture company.

PSA has considerable experience in port consultancy and development work in China through its subsidiaries and associated companies. SPECS Consultants, one of PSA's subsidiaries, was the consultant for the first phase of the Dayaowan Port development. MAP Services, another wholly owned subsidiary, has also been providing port consultancy to China.

(Port View)

**SDPI is a Singapore consortium formed by PSA, Jurong Town Corporation International, AIG Asian Infrastructure Fund L.P., and Sembawang Maritime Ltd to invest in the project.*

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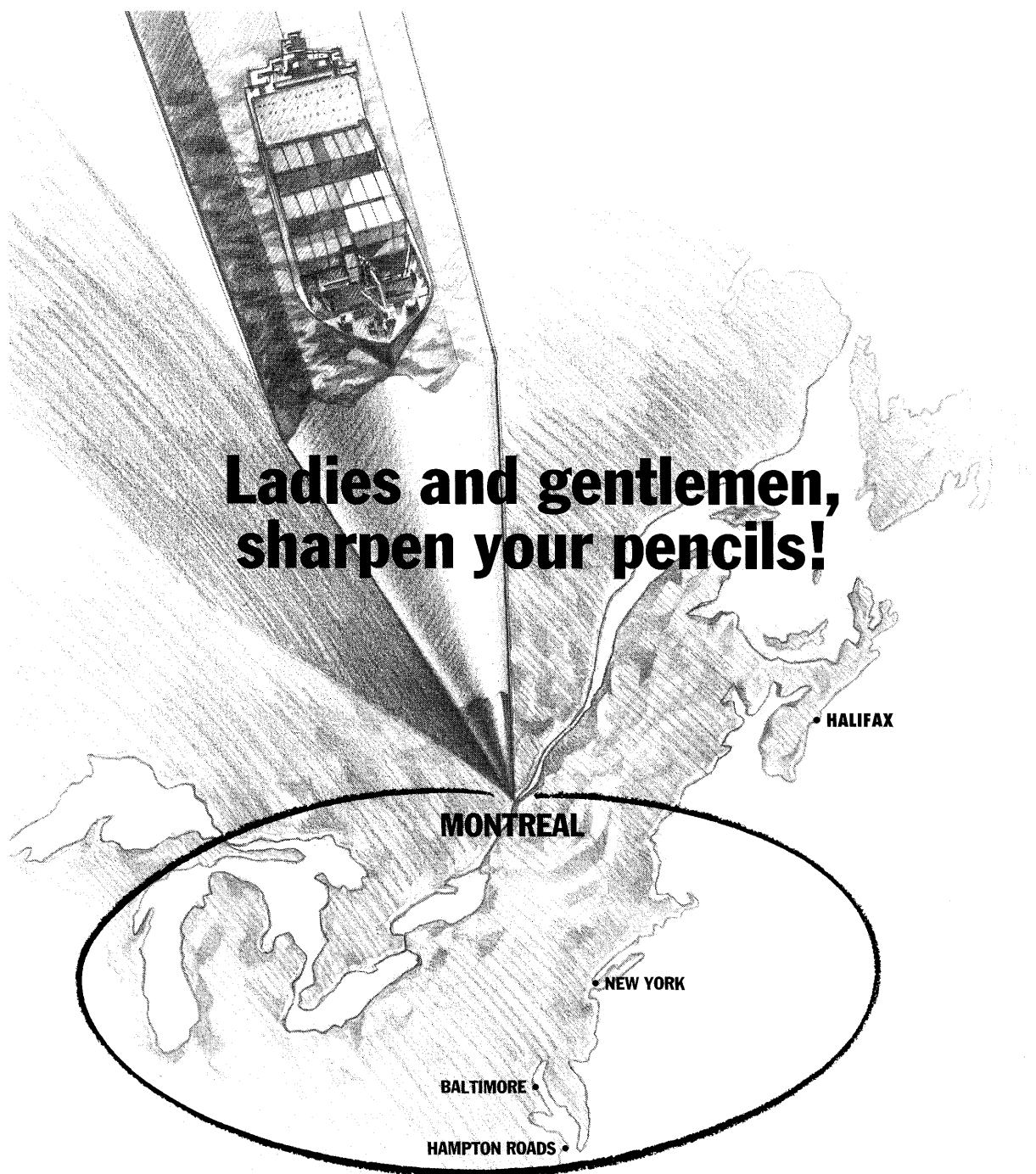
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