Ports & Harbors September 2002 Vol. 47 No. 7

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Ports Harbors

Published by

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Contents

IAPH ANNOUNCEMENTS AND NEWS

| 23rd IAPH Word Ports Conference in Durban, South Africa - Second Announcement | 3 |
|---|----|
| New in the Durban Conference in 2003 "IAPH Open Forum" for the Committees | 5 |
| IAPH talks at OECD | 6 |
| IAPH Head Office sends letter of appeal on national ratification | 7 |
| Visits | 8 |
| Membership Notes • Contributors to the Special Port Development Technical Assistance | |
| Fund (2001-2003) • New Committee Chair and Vice Chair | 9 |
| OPEN FORUM | |
| Port & Maritime Security - ONE YEAR AFTER THE SEPTEMBER 11TH ATTACKS - | |
| Where Have We Been? Where Are We Going? How Are We Going to Get There? | |
| By Bethann Rooney | 10 |
| Partnerships and Resources - Key to Ports in the Post-9/11 Environment | |
| By Kurt J. Nagle | 13 |
| The Economic Consequences of Terrorism - Part 1 | |
| by Patrick Lenain, Marcos Bonturi, Vincent Koen | 16 |
| INTERNATIONAL MARITIME INFORMATION | |
| WCO: Word Customs Organization celebrates 50th anniversary | 26 |
| IMO: Shipping enters the ISM Code era with second phase of implementation • | 20 |
| IAASP: 33rd Annual Conference | 27 |
| BIMCO: Vice President speaks at Quality Shipping Conference • EU: Reaches | |
| agreement on maritime safety system | 28 |
| Upcoming Conferences: | 20 |
| Ship/Port Interface - Environment and Safety • 2nd China Port and Container | |
| Terminals 2002 • ESPO: Seminar on Sustainable Port Development | 31 |
| New Publications | |
| WORLD PORT NEWS | |
| The Americas | |
| AAPA: Letter to Conferees on Maritime Security Bills | 32 |
| Georgia: Creation of "Client Relations Center" | |
| Houston: First Direct Shipment of Russian Crude Oil • Montreal: Captain Jean-Luc Bédar | |
| Appointed Vice President, Operations, and Harbour-Master | |
| Trinidad and Tobago: First quarter performance results | |
| Africa/Europe | |
| ESPO: US Customs officially denies existence of a "Black List" of ports | 35 |
| EU Commissioners call for global agreement with USA on container security | |
| Dunkirk: Falcon Distribution Center • Kenya: First major IT project goes live • Le Havre: | |
| French and American customs authorities to increase their co-operation in their CSI | 37 |
| Rotterdam: Cooperates with US Customs in CSI • Rouen: Invests for the future | |
| Asia/Oceania | |
| Brisbane: Trials Super B-Doubles | 38 |
| MPA: MOU between Singapore and the Netherlands • Osaka: Maritime Museum | |
| Dome wins Intutitution of Structural Engineers' Structural Special Award • | |
| Sydney: Sydney Port officially hands over a piece of history | 39 |
| Yokohama: Opening of New Yokohama International Passenger Terminal • | |
| Saigon: Tugboat Service Company receives International WOC Award | 40 |
| | |

IAPH ANNOUNCEMENTS AND NEWS

23rd IAPH World Ports Conference Second announcement

May 24 to 30, 2003, Durban, South Africa Hosted by the National Ports Authority of South Africa

Ports - The Catalytic Impact Uniting World Economies through Ports and Harbours

S INCE the Malaysia World Ports Conference where we presented our bid as Portnet, in 1999, Portnet has divisionalised into two distinct companies with a totally different focus and mandate:

- The National Ports Authority of South Africa (NPA) which fulfills a landlord function; and
- The South African Port Operations (SAPO) who are involved with cargo-handling.

The 23rd IAPH World Ports Conference will be hosted by the National Ports Authority of South Africa (NPA).

As the CEO of the National Ports Authority of South Africa (NPA) and Chairman of the Conference, I am proud to present you with this Second Announcement, giving you more information on our wonderful country as well as the Preliminary Programme and registration form.

This is an exceptionally important event - not only for the

National Ports Authority of South Africa and South Africa - but also for Africa as a whole. This is the first time that the continent of Africa has the privilege to play to world leaders from the International Association of Ports and Harbors.

For this reason, we have been working hard at putting together a conference that will offer an exciting, topical and dynamic business programme, along with a pleasant and memorable experience of our wonderful country. The conference will be held at Africa's finest and most user-friendly conference centre - the International Convention Centre in Durban.

We are also planning a wide range of exciting social functions that will introduce delegates and their guests to the wide and varied ethnic diversity within South Africa, along with an interesting and unusual Accompanying Persons' Programme.

When you visit South Africa, we would encourage you not to miss the wonderful tourist attractions of our country. A visit to a private game reserve to view the Big Five: elephant, lion, leopard, rhino and buffalo, is a must, as well as a trip to the beautiful city of Cape Town, with its majestic mountains, spectacular plant life and award-winning winelands.

So, do make a point to pencil the dates of 24 to 30 May 2003 in your diary, and can I suggest you turn to the registration form at the back of this brochure, complete it and return it right away.

The National Ports Authority of South Africa, the city of Durban, the Republic of South Africa, and all the peoples of South Africa look forward to extending Africa's Warmest Welcome to you in 2003.

Yours sincerely

Siyabonga Gama

President and CEO: The National Ports Authority of South Africa Chairman: The 23rd IAPH World Ports Conference





Durban City Hall

Conference Theme

The 23rd World Ports Conference will be held from 24-30 May 2003 and the preparations are well underway to ensure that your visit to Durban will be productive and interesting.

The varied subjects that will be discussed during the conference reflect the primary concerns of the Maritime industry in general and Port Authorities around the world.

- The theme for the 23rd IAPH World Ports Conference will be: Ports - The Catalytic Impact
- With the sub-theme being: Uniting World Economies through Ports and Harbours
- Conference Working Session
 Themes:

Session I: Prospect and Challenges of the Global Economy and Trade

Global Trends and Perspectives of Economy and Trade

- Trends and Perspectives of Global Economy and Trade
- Regional Perspectives of World Economy and Trade

Challenges of Emerging Economies

- African Economy
- Latin American Economy

Session 2: Emerging Trends of World Shipping and Logistics

Global Strategy of Maritime Sector

- Perspectives of World Shipping and Strategy
- Suez Canal Present and Future
- Global Logistics and Ports
- Global Manufacturer or Distributor's Logistics Strategy
- Global Terminal Operator's Strategy

Session 3: Impacts of IT and Technical Innovation on Ports

IT and its Implications for Global Trade and Logistics

- Latest Trends of IT business and e-Commerce for Logistics
- International Readiness for IT-led Trade and Logistics

Challenges and Innovations at Ports

- Innovative Container Terminals in the World
- IT Application for Value Adding Port Services

Session 4: Port Security and Environment Management

Security of Port and Maritime Sector

- How is World Customs tackling Port Security
- How are World Port Police tackling Port Security
- How are Port Authorities tackling Port Security

Port Environment Management

- Sustainable Development and Global Challenges
- Knowledge Management for Port Environment Management

Session 5: Challenges for the Future

New Partnerships within Ports

- Future of Port Authorities
- Human Resource developments Challenges for the Future - Regional Pictures
 - Challenges of African Ports for the Future
 - Shanghai's Challenges for redeveloping its Waterfront
 - Port competitiveness



Why we chose this logo

S INCE the age of the Phoenicians, people of different cultures have engaged in global trade mainly in spices and silk - using primitive, but effective vessels to brave stormy waters, defeating distances to promote their developing economies. With this 2003 IAPH Conference logo, we pay homage to this well-established tradition of co-operation through

seatrade for the batterment of mankind. We believe that seatrade has made the world closer than you think.

This essence of the logo, we believe, is positive, enthusiastic, spontaneous, emotional and celebratory yet simple. Using blue, representative of the colour of the ocean, the artist skillfully rendered a fluid holding shape set atop rolling waves with a gentle breeze as its guide. The ever present sun reflects the warmth of the tropical climate of the host city but at the same time, can be perceived as a moon standing proud in a clear sky. The linework, although almost abstract in its presentation, reflects a sense of spontaneity, a constant bid to move forward yet remaining friendly. Bold yet simple, graceful yet rugged, rustic yet modern.

Registration Times

| Saturday | 24 May 2003 | 08:00-16:00 |
|-----------|-------------|-------------|
| Sunday | 25 May 2003 | 08:00-16:00 |
| Monday | 26 May 2003 | 08:00-16:00 |
| Tuesday | 27 May 2003 | 08:00-16:00 |
| Wednesday | 28 May 2003 | 08:00-16:00 |
| Thursday | 29 May 2003 | 08:00-16:00 |
| | | |

Registration Fees

Your registration fee will include the following:

Delegate participation

- Entrance to spouses' programme for one person
- Conference material
- Breakfasts, coffee breaks, luncheons
- Early Arrivals cocktail
- Opening Ceremony and Dinner
- African Cultural Evening
- Next host country dinner
- Gala Dinner
- Technical tour (Port of Durban and Port of Richards Bay)
- Transport from designated hotels to the conference venue and social events

| Registration Fees | Registrations up to 28 February 2003 | Registrations from 1 March 2003 | |
|---------------------------------|--------------------------------------|------------------------------------|--|
| IAPH members | US\$1,900 | US\$2,200 | |
| Non-members | US\$2,350 | US\$2,600 | |
| One spouse | Included in delegate fees | | |
| Additional accompanying persons | US\$710 | US\$865 | |
| Honorary members | No charge | No charge | |



Exhibtion

There will be a full-scale exhibition organised by Kagiso Exhibitions. If you wish to exhibit your services or products please contact Kagiso Exhibitions on:

+27 (0) 11 670 2000 Tel: +27 (0) 11 69 1179 Fax E-mail: maritime@kagisoexpo.co.za



Sponsorship

There will be many opportunities for corporate sponsorship. If you wish to promote your goods or services in this way, please contact Zoe Christodoulou from The Boom Room on:

Tel: +27 (0) 21 421 9910 +27 (0) 21 421 1914 Fax: E-mail: zoe.christo@booomroom.co.za

Accommodation

- · The Hilton Durban www.hilton.com
- The Royal Hotel www.theroyal.co.za
- The Holiday Inn Durban Elangeni www.holiday-inn.com
- Protea Hotel Edward Durban www.protea-hotels.co.za
- · The Holiday Inn Garden Court Marine Parade

www.holiday-inn.com



Social Events

Wozani. Our Kingdom calls. Over the next few days you will discover a treasure trove of exciting activities in the Kingdom of the Zulu.

Early Arrivals Cocktail Sawubona - A hearty welcome to African skies Saturday, May 24, 2003

For those delegates arriving early, why not join us for an informal cocktail party giving all the opportunity of networking. Sample a taste of what Durban has to offer.

Official Opening Ceremony Sunday, May 25, 2003

After enjoying the sights and sounds of Durban, the 23rd IAPH World Ports Conference will open to the sounds of African beats at its best with the opening of the first IAPH Conference on the African continent. Join us for dinner and traditional entertainment at the ICC auditorium.

African Cultural Evening Tuesday, May 27, 2003

Delegates will be treated to the traditional hospitality of the Zulu culture with traditional cuisine, music and dancing.

24th IAPH World Ports Conference 2005

Wednesday, May 28, 2003 Join the next host country for a

memorable evening.

Hambani Kahle Gala Dinner Thursday, May 29,2003

Join the National Ports Authority of South Africa for an evening of fine dining to bring the 23rd IAPH World Ports Conference to an official close,

Technical Tours Friday, May 30, 2003

The Social Events Committee is proud to present you with two tour options for the South Africa's most important ports: The Port of Durban and The Port of Richards



Durban (no charge).

- 2. Full day tour to the Port of Richards Bay.
- Full day tour to the Port of Richards 3 Bay including two nights in a private game reserve. There is an additional charge for the special heritage flight to Richards Bay as well as the trip to the game reserve.

New in the Durban **Conference in 2003 "IAPH Open** Forum"

for the Committees

S one of the fruits of the Mid-Term Board meeting in Abu Dhabi, "IAPH Open Forum" in the IAPH World Ports Conference was supported and ruled on by the Board. Effective from the 23rd Conference in Durban next May, in support of highlighting the activities of the Three Group of Committees, one afternoon session, "IAPH Open Forum", will be held.

"Open Forum" will comprise a 10-15 minute presentation on committee activities by each chair and discussions on the issues and topics carried by such committees. It will be a part of the conference business program for the first time, and open to all delegates, who are encouraged to raise issues and questions.

A letter to Chairs and Vice Chairs of Technical Committees was sent out from the Head Office on July 11 to request their coordination for the session with Vice Presidents. Details will be discussed and finalized at the EXCO meeting in Kobe, and reported in the January/February issue of the journal.

IAPH ANNOUNCEMENTS & NEWS



Organization for Economic Cooperation and Development (OECD), IAPH sent a three-member delegation led by your Secretary General to a regular meeting of the Maritime Transport Committee (MTC), OECD held on July 16, 2002 in Paris. The OECD is formed by 30 developed countries, headquartered in Paris with some 1,800 staff. It plays a prominent role in helping the governments and decision-makers to identify emerging issues, develop strategic policies and ensure responsive governance. It was the first time for IAPH to be given an opportunity to talk about its activities as well as current major issues faced by the port community before OECD members

The IAPH delegation of Mr. van der Kluit, Managing Director, IAPH Europe Office; Mr. Frans van Zoelen, IAPH Legal Counselor and Director, Rotterdam Port; and myself was warmly received by the Committee and kindly introduced by the Chairman, Mr. Bruce Carlton, Associate Administrator for Policy and International Trade, Maritime Administration, USA. Some 70 delegates attended the meeting from 18 countries and 3 organizations. In his opening remarks, Chairman Carlton stated that the MTC has been admittedly focusing on shipping activities over the decades but not so much on ports and other related industries, only recently realizing the critical importance of involving ports and other maritime sectors in their scope of work. As part of the Committee's consultations with industry, he further mentioned, the MTC liked to exchange views with IAPH on various issues of the port industry.

In our presentation, I stressed the criti-

cal need for and importance of better understanding and cooperation at the interface between ports and shipping by saying, "Ports and shipping are absolutely inseparable from each other. However, these two sectors have long been institutionally, sometimes even conceptually, dealt with separately. We must admit that the one often takes the other for granted. Institutional coordination for this critical interface is yet to fully develop particularly at the international level." As Secretary General, I am convinced that their invitation to IAPH this time is a good sign for the port community at large and the presentation we have just made will lead to further development of close cooperation between IAPH and OECD on matters of mutual interest.

Taking the whole morning session, we made a presentation consisting of the following three parts:

- Part 1: Port as Indispensable Partner of Maritime Transport by Dr. Satoshi Inque
- Part 2: IAPH Participation in Major Maritime Issues by Mr. Peter van der Kluit, and
- Part 3: Port and Legal Issues by Mr. Frans van Zoelen.

For your reference, all the texts of the above presantations are available at the IAPH Website.

Following a brief introduction of IAPH, I talked about various types of port authorities in the world. Then I discussed major

emerging trends and challenges faced by the port community today, focusing on the ever-increasing demands and challenges of port development, port reforms and partnerships with private sectors, sustainable development of ports and port strategies emerging in the new century. Before closing, I also spoke about our activities on cooperation and collaboration among the world's ports, such as formulation of common stance and approach to global issues, exchanges and sharing of experiences and information and assistance to developing member countries' ports.

Mr. van der Kluit presented the IAPH activities and achievements with particular reference to IMO-related issues. He gave such examples in detail as our participation in IMO works on port security, reception facilities for ship waste, ballast water management, fumigation of containerized and solid bulk cargoes, and London Convention. Further, he explained the roles and significance of the Ship/Port Interface Working Group and also the Inter-industry Shipping and Ports Contact Group in which IAPH has been playing a leading role from the inception.

Then, Mr. van Zoelen took his turn to the legal issues of importance to the port community. He talked about basic problems, from the port authority's point of view, concerning the 1999 Diplomatic Conference on Arrest of Ships and highlighted the IAPH's position and efforts on this issue. He further explained about the IAPH's position on "Places of Refuge," IMO guidelines for ships in distress, pointing out potential problems and preferred solutions.

During a question-and-answer session following our presentation, a number of issues were raised. Many of them centered on the security issue, even including a request that IAPH act as the clearinghouse of global information on port security measures. Some others were related to port competition, port labor problems, port reforms and port reception facilities.

Having received enthusiastic attention and kind words from the Committee members, I expressed once again at the end of the session our sincere thanks for their invitation and interest in IAPH activities and ensured our commitment to further cooperation with OECD in the years to come.

I strongly hope that IAPH and OECD will work more closely on various issues of mutual interest for furtherance of the world maritime transport. Last but not least, taking this opportunity, I would like to thank both Messrs van der Kluit and van Zoelen for taking their precious time to join me in the presentation despite it being the peak of the holiday season.

IAPH Head Office sends letter of appeal on national ratification

APH Head Office sent out the letter of appeal on the national ratification of The International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 to IAPH Board of Directors on July 11, 2002.

Requesting Your Attention to the National Ratification of The International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001 by Member Countries

- As unanimously approved by the Board of Directors, at its meeting in Abu Dhabi, UAE, the Legal Protection Committee (LPC) (In chair: Mr. Bruno Vergobbi, Managing Director, Port of Dunkerque, France) empathized that the IAPH Members should be advised of the need for appealing to their national authorities of the ratification of the above-quoted Convention as well as the implementation of the Convention into respective legal regulatory systems concerning the Civil Liability for Bunker Oil Pollution Damage.
- Mr. Frans van Zoelen, Vice Chairman of the LPC and Legal Counselor of IAPH, on behalf of Chairman Vergobbi has written a special letter of request addressed to the IAPH Board Members for lobbying for the implementation of adequate national system compatible to the above quoted international convention. His Letter of Appeal to you reads:

The International Convention on Civil Liability for Bunker Oil Pollution Damage 2001 was adopted to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spills of oil from ship' bunkers.

The Convention enters into force 12 months after the date on which 18 States,

including five States each with ships whose combined gross tonnage is not less than 1 million GT have ratified it.

Attached to the Convention is a Resolution on Protection for Persons taking measures to prevent or minimize the effects of oil pollution (so-called Responders' Immunity Principle). The Resolution urges States, when implementing the Convention, to introduce legal provisions for the protection of persons taking measures to prevent or minimize the effects of bunker oil pollution.

The resolution recommends that such persons be exempt from liability in case their action results in damage unless that damage in question resulted from their personal act or omission, committed with the intent to cause damage, or recklessly and with knowledge that such damage would probably result.

It also recommends that States consider

the relevant provisions of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996, as a model for their national legislation.

It is in the interest of ports and harbors that the member Governments as soon as possible would ratify the Convention.

Therefore, the Legal Protection Committee invites all IAPH-Members to urge their Governments to ratify and implement the Convention including the provisions for Responders Immunity as suggested in the resolution stated above.

 For your further reference, I take the liberty of attaching herewith two additional data concerning the matter as quoted from the IMO homepage as follows:

Ref 1: Titled same as the Convention Ref 2: IMO adopts bunkers convention

4. It is my sincere hope that you will be prepared to give your especially kind attention for the ratification and consequential or ensuing implementation of national compliance with this global tool intended for sustainable future development.

Best regards,

Satoshi Inoue Secretary General IAPH

Attachments (as above)

cc: IAPH President, Vice-Presidents, Immediate Past President, Conference Vice-President IAPH Legal Counselors

Chairs of the three Groups of Technical Committees IAPH Liaison Officers

Note: The attachments referred to above cannot be carried in "Port & Harbors" on account of space limitations.





Secretary General visits Iran

Dr. Satoshi Inoue, Secretary General was invited to "Iran Transit 2002" as a panelist. It was held in Teheran during June 11-12 with 170 delegates from 25 countries, under auspices of Ministry of Road Transport of I.R.Iran, and contributed by IRU (International Road Transport Union), UIC (International Union of Railways), WCO (World Customs Organization) and IAPH.

Dr. Inoue made a presentation under the title of "Emerging Trends and Challenges of World Ports" which was started with an introduction of IAPH and featured the following subjects;

- Continued Growth of World Trade
- Development of Innovative Terminals
- Increased Involvement of Private Sector
- Expanding New Roles of Public Port Authority
- Sustainable Development of Ports
- Ports in the New Century



His 30-minute presentation finished with an invitation to the IAPH World Ports Conference in Durban, and was followed by lively discussion.

Prior to the symposium, Dr. Inoue had visited Shahid Rajaee Port Special Economic Zone

Secretary General visits Spain

After the presentation at OECD in Paris, Dr. Satoshi Inoue, Secretary General visited Puerto del Estado on July 17 to meet Messrs. Josè Llorca Ortega, President; Carlos Ibarz del Olmo, Head of the Presidential Cabinet; and Josè Luis Estrada Llaquet,



Planning Director. During the meeting Dr. Inoue expressed his appreciation for their contributions to IAPH's activities, especially for Mr. Estrada's services. He has been contributing his effort as the chair of Combined Transport, Distribution & Logistics Committee, and recently took responsibility for the chair of Membership Committee.

On July 19, Mr. Emili Arbós, Head of President's Office and Mr. Santiago Milà, Director of International Cooperation, Autoritat Portuaria de Barcelona, welcomed Dr. Satoshi Inoue, Secretary General. It was a good opportunity to discuss major issues and future work plans of IAPH Trade Facilitation Committee. After the meeting Mr. Arbós himself kindly showed the port facilities to Dr. Inoue.



Visitors: Osaka Port Corporation

Mr. Atsushi Semba, President and Mr. Teruo Yamazaki, Manager of Business Promotion Department,



Business Promotion and Terminal Management Division, paid a visit to IAPH Head Office on July 2 for Mr. Semba's new appointment. They exchanged views on the future of the corporization of port management in Japan and other issue of common interest with Rinnosuke Kondoh and Tadao Katoh.

Visitors: Mr. Bram Oosterwijik

Accompanied by Mr. Asahiko Kochi, Port of Rotterdam Representative in Japan, Mr. Bram Oosterwijk, Chief Editor of MAINPORT NEWS, Rotterdam, called at IAPH Head Office on July 9 during his brief stay in Tokyo. Secretary General Satoshi Inoue and Rinnosuke Kondoh welcomed them and talked about recent topics of IAPH's activities for his report. He visited Port of Tokyo, one of Rotterdam's sister ports, the next day. The report on his Japan visit will be featured in upcoming issue of Port of Rotterdam Magazine.



Visitors: TT Club

On July 18, Mr. Colin E. Lewin, Managing Director, TT Club Hong Kong Branch; Mr. Andreas Mueller, Regional Director of Underwriting, TT Club Hong Kong Branch; and Mr. Masaki Oiwa, Deputy Claims Manager of ISS P&I (Japan) Ltd. visited IAPH Head Office. Mr. Mueller had just arrived at his post as successor to Mr. Lewin. They exchanged views and information on the current state of maritime security with Rinnnosuke Kondoh.



Membership Notes

New Member

Associate Member

| Researcher] (Class D) |
|--|
| 2001-5 Concorde Place, Toronto, Ontario, |
| CANADA M3C 3M8 |
| +1-416-444-5013 |
| +1-416-444-4462 |
| zrizvi@sympatico.ca |
| |

Changes (Major changes are highlighted.)

 Member's Matters

 Port of Long Beach (U.S.A) [Regular]

 President:
 Mr. John W. Hancock

Kolkata Port Trust (India) [Regular] (Formerly Calcutta Port Trust)

Indonesia Port Corporation IV (Indonesia) [Regular] Managing Director: <u>Mr. Djarwo Surjanto</u>

Japan Association of Cargo Handling Machinery Systems (Japan) [Class B] (Formerly Japan Cargo Handling Mechanization Association-JCHMA)

Toa Corporation(Japan) [Class A-2-1]Mailing Addressee:Mr. Hideaki Kimoto, Managing DirectorE-mail:s_yamadaira@toa-const.co.jp

Port of Sines Authority (Portugal) [Regular] E-mail: <u>geral@portodesines.pt</u>

 Osaka Port Corporation (Japan) [Regular]

 President:
 Mr. Atsushi Semba

Nakabohtec Corrosion Protecting Co., Ltd. (Japan) [A-2-1] President and CEO: <u>Mr. Yoshiaki Kinoshita</u>

 Administracion
 Portuaria
 Bonaerense
 (Argentina)
 [Regular]

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 +54-221-460-1150
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 +

Port of Sines Authority (Portugal) [Regular] Executive President: <u>Mr. José Monteiro de Morais</u>

Ports and Harbours Bureau, Ministry of Land, Infrastructure and Transport (Japan) [Regular] Director General: <u>Mr. Hiroshi Kanazawa</u>

Tokyo Metropolitan Government, Port of Tokyo (Japan) [Regular]

Director General, Bureau of Port & Harbor: <u>Mr. Nobuyuki Takahashi</u>

 Shannon Foynes
 Port Company (Ireland) [Regular]

 Chief Executive:
 Mr. Brian Richardson

 E-mail:
 agarry@sfpc.ie

Niigata Prefectural Government (Japan) [Regular] Director General, Bureau of Port and Airport Development: <u>Mr. Katsumi Mutoh</u>

 Sydney Ports Corporation (Australia) [Regular]

 E-mail:
 jhayes@sydneyports.com.au

Contributors to the Special Port Development Technical Assistance Fund (2001- 2003)

- No new donations this month -

(in order of receipt)

| Organization | Country | US\$ |
|-------------------------------------|----------------|--------|
| Port Autonome d'Abidjan | Cote d'Ivoire | 980 |
| Port of Brisbane Corporation | Australia | 1,000 |
| Maldives Ports Authority | Maldives | 250 |
| Rotterdam Municipal Port Management | Netherlands | 1,000 |
| Sydney Ports Corporation | Australia | 1,000 |
| Dr. Susumu Maeda | Japan | 200 |
| Marine Department, Hong Kong | China | 500 |
| Vancouver Port Authority | Canada | 500 |
| Johor Port Authority | Malaysia | 1,000 |
| Montreal Port Authority | Canada | 500 |
| Ghana Ports and Harbours Authority | Ghana | 500 |
| World Cargo News | UK | 150 |
| Amsterdam Port Authority | Netherlands | 1,500 |
| Nagoya Port Authority | Japan | 1,000 |
| Port of Houston Authority | USA | 1,500 |
| Sea Ports Corporation | Sudan | 500 |
| City of Kobe | Japan | 1,000 |
| Port Authority of Trinidad & Tobago | Trinidad&Tobag | o 250 |
| Abu Dhabi Seaport Authority | UAE | 1,000 |
| City of Osaka | Japan | 1,000 |
| | Total | 15,330 |

New Committee Chair and Vice Chair

APH Membership Committee is now chaired by Mr. José L. Estrada Llaquet, Planning Director of Puertos del Estado, Spain, who succeeded Datin Paduka O.C. Phang, Port Klang Authority, Malaysia. His appointment was made at the Mid-term Board meeting, Abu Dhabi, UAE, April 20-24, 2002.



Jose L. Estrada

Mr. Bill Mills, President & CEO, Nanaimo Port Authority, Canada has recently been appointed by President Akio Someya as Vice Chair of IAPH Finance Committee.

He is currently a Director with the Association of Canadian Ports and Harbours (ACPA), is active in the Association of Pacific Ports (APP) and is past Director of the American Association of Ports Authorities (AAPA).



Bill Mills



PORT & MARITIME SECURITY ONE YEAR AFTER THE SEPTEMBER 11TH ATTACKS

WHERE HAVE WE BEEN? WHERE ARE WE GOING? HOW ARE WE GOING TO GET THERE?



By Bethann Rooney

Manager, Port Security The Port Authority of New York and New Jersey

Introduction

HE limited involvement and control by worldwide regulatory agencies has historically fostered the principle doctrines of container transportation; speed, reliability and cost. The events that transpired on September 11th in the United States however have created a new and urgent focus on the worldwide vulnerability of the marine transportation industry. The porous nature of ports makes them extremely vulnerable. Every container that enters or passes through our ports must be treated as a potential weapon of mass destruction, every vessel a delivery device, every crewmember or passenger a potential terrorist and every port a potential target.

On September 11, the world witnessed the use of civilian transportation as a weapon to destroy property and take the lives of thousands of innocent people. The tragic events of that day underscore the critical need to meet America's transportation requirements while ensuring the safety and security of the nation. Much attention has been paid to the aviation industry and this is very important given the role of air transportation in our society and economy and the number of citizens that use our aviation system every day. Just as important, however, is our maritime transportation system, which may not move as many people, but is an essential component of the international goods movement system and, as a result, is tremendously important not only to the American economy and national security, but the economy and security of many of our large international trading partners. Former Commandant of the United States Coast Guard, Admiral James Loy, stated that of all transportation nodes, the maritime industry is the most valuable and the most vulnerable in the nation. It is a low risk, high payoff target which could lead to economic destabilization of our nation and secondary impacts worldwide.

The Port of New York and New Jersey is the third largest in the United States and the largest port on the east coast of North America. Last year the port handled over 3 million containers (as measured in twenty-foot equivalent units) and 560,000 autos. New York/New Jersey handles more refined petroleum products than any other port in the nation, along with a variety of other bulk and breakbulk commodities. New York harbor also supports a wide range of passenger services including cruise ships and a growing, as well as increasingly important, commuter ferry services. Ports like New York/New Jersey are key transportation links in global trade; ninety-five percent of trade in the United States enters by ship. The Port of New York and New Jersey serves a

region of 18 million people locally and a larger population of 80 to 90 million people within the ten state region surrounding the port.

On a national level, there are 361 deep-water seaports that support more than 3,700 individual cargo and passenger terminals. These terminals account for more than 30 million containers (as measured in TEU's), carrying \$480 billion worth of goods (\$2 billion of seaborne trade a day), 134 million ferry passengers and 7 million cruise passengers a year. So you can see that serving consumer demand for international goods and transporting passengers is an essential component of the US economy. Ports provide the critical intermodal link for the transfer of those goods and people from ships to our national landside transportation network.

September 11th

Immediately after the attacks on the World Trade Center, the Pentagon and the airplane crash in Pennsylvania, President Bush ordered the grounding of all airplanes, closed all ports and closed the land border crossings with Mexico and Canada. At the time, there was no reliable way to know whether or not another attack was planned, so our borders were closed as a precaution against another potential terrorist threat. This response by Federal, state and local enforcement agencies, along with the support and cooperation of private business, was well coordinated and orderly. The result however was a blockade on our own economy and the freedoms that Americans love.

Where have we been?

The Port Authority developed a comprehensive port security program that takes a risk management approach to security focusing our efforts on awareness, prevention, response and consequence management. While all of these components are equally important, out primary discussion in this article is on prevention.

The Port of New York and New Jersey was reopened on the morning of Thursday, September 13 under heightened security measures established by the Coast Guard, Customs, local law enforcement, the Port Authority, and terminal operators. The measures

included at sea boardings by integrated teams consisting of Coast Guard, Customs and Immigration personnel to inspect the vessel, its cargo and crewmembers, a requirement for tug boat escorts, prohibiting shore leave for crewmembers and limits as to who could visit a vessel while in port. All vessels arriving in the United States were also required to file a Notice of Arrival (NOA) with our National Vessel Movement Center (NVMC) and the local Coast Guard office 96 hours before arrival. In addition to vessel and schedule particulars, the NOA must include a copy of the cargo manifest as well as the crew and passenger lists. This allows the Federal law enforcement agencies to pre screen vessels, cargo or crew members that may represent a threat to our nation. When necessary, Sea Marshals would board ships at sea or Coast Guard vessels would escort ships during their transit to the dock.

On the shore side, security surveys and vulnerability assessments were immediately conducted and corrective action taken. Given the very nature of ports, their size, complexity and openness, physical security is a challenging task. Ports like ours have been forced to take a second look at security components such as perimeter fencing and gates, access control, credentialing, alarms, intrusion detection, CCTV surveillance systems, extra policing and security guards and because of the current threat, detection equipment for chemical, biological, radioactive and explosive devices. Effective port security requires a layered approach with the right equipment, the right people and the right processes. US ports expect to spend over \$2 Billion for security enhancements.

Where are we going? Cargo Security

While physical port security is absolutely critical, it is just one piece of a much larger puzzle. Perhaps the most daunting challenge to ensuring security in the port and marine transportation system is the issue of container security. Container security however is not new. It has been a concern of governments, importers, exporters, port and others stakeholders for many years, but the focus has been on cargo crime issues such as theft, pilferage, drug and alien smuggling and export of stolen goods and money. While we cannot lose sight of those very real crimes, our primary focus in the post September 11th environment is container security as it relates to terrorism and the transportation of Weapons of Mass Destruction (WMD). Our collective mission must be to prevent our ports from being the conduit through which a container laden with a WMD, components of a WMD or a terrorist passes. Legitimate cargo must not be exploited as a means to transport potential terrorist devices.

Cargo security must be addressed internationally. It is not a problem that neither the United States nor any other country can solve on their own. Our industry is multi dimensional and international in scope. Port, maritime and cargo security must therefore be addressed as such.

The procedures that world customs organizations currently use typically focus on interdiction of suspect cargo rather then on prevention. Given that many major international ports, like New York/New Jersey, are interconnected with transportation systems and located near major population centers, interdicting a container laden with a WMD through the inspection of the container at the port of import is too late. Our collective goal should be to prevent the weapons or terrorists themselves from ever making it to our respective ports. The only way to do that is to make maritime security an international issue whereby foreign countries cooperate with each other to hold the shipper responsible for verifying the contents of every container before they are ever loaded onto a ship.

Pushing the Borders Back

Historically, the mantras of maritime transportation have been speed, cost and reliability - get my cargo to where I want it to go in the fastest and cheapest way and make sure it gets there when vou tell me it will be there. In an industry where the profit margins are so slim, the emphasis has been on cost rather than on security. This is especially true in the liner or container business. In today's environment we know that security must be our highest priority. Creating a transportation system that balances economic concerns with national security concerns is our challenge. Our goal should be to increase our confidence that we know exactly what is in each container before it is discharged in any port. It is not possible to physically examine the content of each of the 6 thousand containers that arrive in the Port of New York and New Jersey each day. The productivity and efficiency advances in recent years that have made the container industry so

efficient and the proliferation of just in time inventory are the same things that have made the industry more vulnerable. The key is finding a way of separating high-risk cargoes from the vast majority of legitimate containers and dealing with the exceptions. This approach requires a systematic understanding of the logistics chain that now moves that container from any place in the world to the distribution system in our country.

To transport a container, a typical cargo transaction will have as many as 25 different parties involved - buyers, sellers, banks, insurance companies, inland carriers (road and rail) on both sides of the water, at least two seaports, often more, ocean carriers, governments, consolidators, and others. They will generate anywhere from 30-40 different documents, many still required in hard copy. This is a complex process. The physical movement of a container is only one dimension of the system. There are three other components that must be understood and addressed when combating cargo security. There is the flow of money, the flow of information and data on the shipment, and, finally, the transfer of accountability that all must occur in order for the cargo to be delivered.

Today, there are no security standards when loading a container at the manufacturer or consolidators warehouse, often well inland of a seaport. There are no security standards for the seals that are put on containers. Cargo is transferred from one mode of conveyance to another and there are no standards for how that is done or accountability for the integrity of the container as it changes hands. International seaports are generally not held to certain security standards. An authorized shipper is not held accountable to know exactly what is in a container, where it is in the supply chain and to report on its contents. For US imports, shipping papers do not have to be complete and accurate until after the cargo arrives in the US.

We believe that efforts must be taken to verify the contents of containers before they are even loaded on a ship. The process must include certification that the container was packed in a secure environment, sealed so that its contents cannot be tampered with and transported under the control of a responsible party. A chain of custody must be established that ensures the cargo's integrity and requires that complete and accurate data be provided to Customs well in advance of a ships

arrival. All parties in the logistics chain must accept some burden of responsibility for the additional security.

How are we going to get there? Operation Safe Commerce

As a way to test the validity of this theory in the United States, various federal and state agencies along with private sector partners are participating in a new initiative referred to as Operation Safe Commerce (OSC). OSC is an innovative public - private partnership dedicated to enhancing security throughout domestic and international supply chains, while facilitating the efficient movement of cross border commerce and decreasing the risk of additional congestion in our ports. This can be achieved by developing dependable arrangements for verifying, securing, monitoring and sharing information about cargo from the point of origin, throughout the supply chain, to its final destination. Private companies have volunteered to join with representatives from key federal, state and local agencies to construct prototypes of a secure international supply chain. It is our collective hope that we can provide constructive and tested recommendations to international lawmakers on how best to secure the supply chain without burdening the industry with unnecessary costs or delays that reduce the flow of cargo through the US and impact the national economy.

Customs Programs

There are other worthy efforts underway in the US to increase the security of the supply chain including two new programs sponsored by US Customs; the **Customs-Trade Partnership Against** Terrorism (C-TPAT) program and the Container Security Initiative. C-TPAT enlists the cooperation of importers and their trading partners to secure their facilities and conveyances. The program requires a signed agreement with Customs in which the trading partners perform a security self-assessment, agree to follow certain security guidelines and to develop and implement a security program throughout their supply chain. Customs will then make recommendations on how to improve security. While participation in C-TPAT is voluntary and was initially limited to the shipping community, it will be opened up to the carriers, forwarders, brokers, terminals and port authorities in the near future. In addition to increasing security, there are commercial benefits to participating in C-TPAT including a reduced number of inspections, an assigned account manager and "lowrisk" treatment resulting in "fast lane" cargo clearance. It is anticipated that C-TPAT certification may be treated similarly to ISO certification when special consideration or preferential treatment may be given to C-TPAT members when negotiating contracts for services with trading partners.

The CSI program partners with the top 10 international ports that represent the origin of more than fifty percent of the containers that enter the United States. After negotiating bilateral agreements with foreign governments, US Customs agents are stationed at overseas ports to target suspicious cargo, pre-screen and inspect US-bound containers. Cargo from CSI ports would be "fast tracked" upon arrival in the US and not subject to a second inspection. US Customs agents are currently working in Singapore, LeHarve, Antwerp and Rotterdam. It is believed that the participating countries will soon be looking for reciprocity, requiring the United States to welcome foreign Customs inspectors into our ports as a means to ensure the integrity of all export cargo.

However, as outlined in the Operation Safe Commerce and C-TPAT programs, you need to go well beyond the port to ensure cargo security. Those ten ports are essentially, trans-shipment points, where cargo is transferred from one mode of conveyance to another. Rotterdam for instance is a major transshipment port - containers that are loaded on a ship in Rotterdam that are destined for the United States, could have originated all over Europe or the Mediterranean. The port of Rotterdam will know no better than we do what is in that container.

Although we support Customs initiatives they are not the panacea, but rather part of the layered approach to security discussed earlier, we look forward to leveraging OSC, C-TPAT and CSI to build upon each other as we work with the industry in the coming months to build secure supply chains and systems.

On the international front, the World Customs Organization (WCO), which represents 161 countries and accounts for 97 percent of the world trade, has adopted a supply-chain security strategy that they expect to be implemented by June 2003. We are encouraged by this action as many of their goals reflect recommendations that the US has made to enhance container security, including standardizing cargo information to identify high-risk shipments, leveraging public-private partnerships and developing guidelines for the electronic transmission of cargo data to Customs organizations.

Technology

In addition to changes in business practices, we must leverage technology to help secure the maritime industry. Today, technology and security are no longer distinct issues. We must conduct research and development followed by proof-of-concept projects for both physical and data systems to identify and introduce various port security related technologies. The solution should include a number of discrete technologies capable of being interoperable with other stand alone systems and the ability to analyze the data. Technology needs include: 1) container tracking and warning systems so that Customs can be provided with accurate and detailed information on containers prior to the ocean voyage. The information should include an accurate description of the cargo, where it is coming from, where it has been, where it is going, and who has handled it; those that stuffed it, transported it and have a financial interest in it. 2) intelligence and warning systems so that the right information is in the right format, to the right place, at the right time; 3) "smart boxes" with electronic seals and sensors that can indicate if a container was tampered with after it was packed or last inspected and; 4) non-intrusive detection equipment for chemical, biological, nuclear, radiological and explosive devices.

Conclusion

As we approach the one year anniversary of the September 11th attacks on the United States, we are racing against a return to complacency in our quest to push the borders out and secure the international supply chains. However, if another attack, anywhere in the world occurs in the maritime sector, we will have a very hard time getting the system up and operating again. As a nation that relies heavily on international trade, our national and economic security are not mutually exclusive and we cannot allow that to happen. While we are not going to eliminate the threat, we need to take some steps to reduce or limit the risk. We must find ways to expedite the movement of low risk cargo and people and focus our resources on the higher risk traffic. This requires international cooperation and coordination. Everyone in the supply chain must share responsibility for security, but most importantly, trade security cannot be voluntary.

Partnerships and Resources Key to Ports in the Post-9/11 Environment



By Kurt J. Nagle President American Association of Port Authorities

MERICA'S ports and waterways serve vital national interests by facilitating the flow of trade and supporting the mobilization and deployment of military forces. For these reasons, protecting port cargo, passengers and facilities from criminal activity including pilferage, theft, vandalism, sabotage, and terrorism is critical for ports, their customers, public and private other stakeholders, and to the nation as a whole.

Until September 11, 2001, attention focused mostly on security issues such as narcotics trafficking, cargo theft, container hijacking, documentation, fraud, stolen automobiles, and stowaways. These concerns were highlighted in a report to the U.S. Congress released in September 2000, of the Federal Interagency Commission on Crime and Security in U.S. Seaports.

New Security Measures Post 9/11

Security concerns changed abruptly as a result of the terrorist assaults of September 11 on the Pentagon in Washington, D.C., and the World Trade Center in New York City. The resulting destruction and loss of life were on a scale that had never before been experienced by the American homeland, even in wartime.

For America's port public port industry, the horror of the moment and its implications were underscored by the fact that the offices of the Port Authority of New York and New Jersey were housed in the World Trade Center North Tower. Years earlier, in February 1993, it had been the target of what had been the worst terrorist bombing attack in the history of the United States.

The conflagration that consumed the World Trade Center on September 11 tragically resulted in the deaths of 67 Port Authority employees. They included its Executive Director, Police Superintendent, and 37 Port Authority police officers and commanders, the greatest loss experienced in a single event by any American police agency.

The attacks also posed the immediate challenge of securing the nation's harbors against the real possibility of follow-on assaults. The public, national media, and the U.S. Congress also had to be reassured about the safety of these vital waterway assets.

Almost immediately following the attacks, the U.S. Coast Guard established a cordon of its own sea-going assets off lower Manhattan, closed the port of New York and New Jersey to all shipping activity and took action to protect the nation's other ports. This included the close monitoring of all vessel activity and the deployment of cutters and armed boarding crews in the form of Sea Marshals drawn initially from the Coast Guard Reserve to escort ships as they entered port. Although the Port of New York and New Jersey was reopened to commercial shipping by September 13, these countermeasures remained in place for many months afterwards, both in New York and at ports elsewhere.

The events of September 11 thrust an immediate and significant responsibility on the nation's public seaports themselves, which responded, with guidance from Federal officials, by implementing heightened security measures of their own.

During the past year U.S. seaports have invested millions of dollars on enhanced security. Ports have spent the most money on personnel-related costs, which are a recurring annual cost, including the hiring of new officers and overtime. Fencing, identification systems, lighting, and gate/entry controls account for most of the remaining expenses incurred nationally.

Most ports report that they have relied on internal financial resources to pay these additional costs; some received funding assistance from state or local government. For an industry already challenged by funding, the additional costs of security measures prompted by the 9-11 emergency are a significant burden for ports.

The public port industry plans to invest at least an additional \$312 million for security enhancements. Almost half will be invested in personnel, gate/entry controls, and surveillance systems. Other top categories of investment are lighting, X-ray equipment, fencing and radiation detection equipment.

U.S. Congress Helps Fund Security Enhancements

At the same time that ports addressed immediate security needs, the U.S. Congress considered seaport security measures and ways to fund them. In December 2001, Congress authorized \$93.3 million in port security grants for enhancements.

In June 2002, grants totaling \$78 million were provided to fund enhanced facility and operational security, and grants for \$5 million for security assessments to help ports evaluate vulnerabilities. Another \$9.3 million will help to fund exploration of new technology to improve maritime security.

Applications for the \$93.3 million in port security grants actually totaled almost \$700 million, highlighting the need for additional port security funding.

The U.S. Congress also passed a Fiscal Year 2002 (FY '02) supplemental funding bill in July 2002, which included additional funds for port security grants. Congress provided \$125 million for port security programs, including \$105 million for grants, and \$20 million for incident training at ports. It is anticipated that the FY '03 bill will include additional funding for port security.

The port industry also expects the maritime security legislation that is being considered in conference to provide funding. H.R. 3983 authorizes \$249 million over three years for Federal grants to help ports enhance seaport security, and allows local flexibility to address terrorism at America's ports. The Senate bill, S.1214, calls for \$390 million in grants over a five-year period. Conferees coming to agreement on both bills looked at ways to fund a sustained grant program before adjourning for the August recess.

AAPA Advocates Flexibility in Seaport Security Legislation

AAPA strongly supports the enactment of Federal legislation and adoption of regulations to enhance maritime security and protect America's seaports from acts of terrorism and other Federal crimes. Homeland security is a national priority, and protecting America's ports is critical to our nation's economic growth and vitality.

To address security, AAPA believes that legislation or new policies must be sensi-

tive to the unique nature and complexity of the port industry. Further, in crafting solutions, it is important to recognize the nature of the industry itself, the economic interest it represents and how it is governed and operated. U.S. ports are diverse, with a variety of security needs and concerns. Any new programs for enhancing security must allow for the efficient movement of trade into and out of the United States.

There are a number of key issues that U.S. ports believe should be addressed in new security legislation.

Partnership Approach: Protecting our

international seaport borders should be a shared responsibility between the Federal, state, and local governments, seaports and private industry. Ports are located on international borders and the Federal government is responsible for approving and inspecting cargo and passengers moving into and out of public ports.

Resources for Federal Agencies: Increased funding for the Federal agencies charged with protecting seaports is essential. The U.S. Coast Guard (USCG), U.S. Customs Service (Customs), and Immigration and Naturalization Service (INS), must have the necessary resources to protect America's ports. Appropriate security measures must be sustained without hindering the movement of cargo.

Grant Funding for Ports: The Interagency Commission on Crime and Security at U.S. Seaports estimated costs for security improvements would range from \$12 to \$50 million per port. AAPA projects that based on the estimates in the report, the cost to AAPA U.S. members could be \$2.2 billion. Without help, any new Federal requirements are likely to become unfunded Federal mandates.

Security Committees and Local Flexibility: Because of their diversity in size and types of cargo, security for individual public ports should be coordinated at the local level. America's port industry is vast, versatile and highly com-petitive, consisting of deepdraft commercial seaports dispersed along the Atlantic, Pacific, Gulf and Great Lakes coasts. These ports range from huge load centers handling millions of tons of containerized, breakbulk and dry and liquid bulk cargoes to relatively smaller regional and "niche" ports serving the unique needs of particular regions, localities, or industries. Security programs should be adapted to the unique needs of each port instead of a "one size fits all" approach.

AAPA recommends that the U.S. Coast Guard work in conjunction with the port industry in developing local seaport security committees that would establish port security plans specific to each local port area. The U.S. Coast Guard and the port authority should coordinate the local security committee at each port to include stakeholders from local industry, law enforcement, government agencies with jurisdiction over seaport security issues, terminal operators, and labor.

The following are other important issues to be addressed in new security programs.

Performance Standards and Planning:

AAPA supports the development of performance standards, which reflect the variable nature of a facility's risk. Performance standards serve as an excellent tool to determine whether methods used to secure a port or facility are achieved. They should be used as part of the planning process as a means of setting outcomes for enhancing security and measuring performance against those desired outcomes.

Credentialing of Transportation

Workers: AAPA strongly encourages the Department of Transportation to move quickly on implementing a national credentialing system for U.S. transportation workers. One uniform system would provide facility operators with an effective tool for controlling access. In the wake of September 11, many ports are looking to implement new access control systems. Quick action is needed so these new systems will not be duplicative and will be compatible with a new Federal program.

Preclearance of Cargo: AAPA supports U.S. government initiatives to pre-certify and clear cargo in foreign countries to reduce the vulnerabilities of the international transportation system to terrorist threats. The U.S. should focus efforts on preventing terrorist and criminal activity from entering ports, instead of responding to a terrorist event in a port. However, it is important that this process not create a competitive disadvantage to any ports.

Container Security: For the U.S. Customs Service to more closely monitor cargo flowing in and out of the country, and conduct more inspections without slowing the movement of commerce, it must have addi-tional resources, both in terms of personnel and equipment. Modernizing Customs resources, such as upgrading the Automated Commercial System, would greatly improve the agency's ability to more closely monitor what is entering and exiting the country while ensuring the continuous flow of commerce.

AAPA supports the U.S. Customs Service's goal of "pushing the border outward" by expanding perimeter security away from our national boundaries and toward points of origin.

Container Inspections: AAPA also supports Federal government acquisition of nonintrusive container inspection tech-nologies, and continued research on, and development of, inspection technologies that could identify chemical, biological, radioactive or nuclear cargo risk. Funding should be provided to Customs so this technology can be installed as soon as possible so that high-risk containers can be inspected quickly and efficiently without slowing down the movement of commerce.

Further, AAPA supports government programs to encourage the shipper to seal a container originating in or destined for the United States upon loading. These seals should be tamper-proof and allow the container to be tracked during transit. If a seal is broken during transit, U.S. Customs must have appropriate measures in place to handle this cargo. Information Technology: AAPA supports making existing government cargo information systems fully operational as soon as possible. Carriers and shippers should provide whatever information the government requires through existing channels (subject to system updating), rather than new or additional channels. Government agencies should cooperate and effectively share existing data-bases. Illegal Aliens: The Immigration and Naturalization Service (INS) must be given the necessary resources to track those persons entering and exiting the United States in an efficient and timely manner. AAPA encourages the INS to gather crew and passenger manifest information in a uniform format prior to a vessel entering the United States. This will allow the INS to target those highrisk persons who must undergo a more rigorous inspection without holding up low risk persons and U.S. citizens.

Threat Assessments/Terrorism: With regard to terrorism, the Federal government has programs in place to assess a port's vulnerability to terrorism and threats. Ports want to work closely with the Federal government to adequately address this serious issue; however, because of their expertise in this area, Federal agencies must take the lead. It is important to entrust one agency with this responsibility of measuring a port's vulnerability to terrorism.

Information Sharing: Enhancing communication between ports and agencies that have jurisdiction over seaport security is very important. It would allow local seaport security committees to better focus their efforts within the port area and strengthen security. Though a port has little control over things like internal conspiracies or drug interdiction, the local port committee can work closely with the Federal agencies that have jurisdiction over this criminal activity to address these problems.

Seaport Security Officer Training: AAPA encourages the development of appropriate programs for the purpose of training seaport security officers. Such programs would provide the kind of training specific to handling security on the waterfront. Upon completion,

the security officer would receive certification that he/she has been officially trained as a seaport security officer. Existing training programs could serve as models.

Cargo Controls, Imports and Exports, International Cooperation: AAPA

believes that enhanced international exchange of crime and security information provides an opportunity to reduce the flow of drugs and other illegal shipments. The State Department should play a greater role and take the lead in sharing information internationally. Also, the United States Maritime Administration and other appropriate agencies should coordinate an international crime and security exchange program.

Technology, Research and

Development: There should be a grant program for establishing new technologies and installing security enhancements at ports. However, new technologies should be implemented on a case-by-case basis where needed and useful.

The Federal government must continue to support the Coast Guard's Automatic Identification System (AIS) approach to traffic management by requiring the installation of AIS on ships entering the United States. AAPA supports efforts by the International Maritime Organization to promote this system internationally. AIS provides a ship's identity, position, course, and speed and would allow the Coast Guard to track a vessel before it enters the United States, thus enhancing U.S. domain awareness. The National Oceanic and Atmospheric Administration (NOAA) provides the nation with valuable nautical charting, hydrographic services, navigation-related tools such as realtime water level information, highly accurate positioning data, and expertise in reducing risks from hazardous chemical spills. NOAA must be given the resources to support these essential programs that will help primary responders and contingency planners combat maritime threats, keep marine trans-portation moving, and protect the people and interests of the United States. This program provides information that is vital in a crisis response situation.

Seaport Security Requires Partnership

As previously stated, security at seaports involves multiple state, local and federal government jurisdictions as well as the private sector. In addition to Customs, the Coast Guard, and INS, Federal agencies with law enforcement responsibilities at seaports include the Department of Agriculture, and the Federal Bureau of Investigation (FBI).

At the non-Federal level, seaport security varies, depending on the resources, statutory authority, and corporate policies of the individual seaport agencies. Some ports have full-fledged departments of trained, certified and officially sworn police offers. Examples are the ports of Los Angeles, San Diego, Virginia, Georgia, and South Carolina. The Port Authority of New York and New Jersey's 1,200-member police department is reportedly the 27th largest municipal police organization in the United States.

At landlord ports, including those with sworn police forces, security at leased terminals is typically the responsibility of the tenant companies. Port authority police patrol perimeter roads and other common use areas, monitor traffic, respond to emergencies, and frequently, advise tenants on how to improve physical security at their facilities. More typical are ports that rely on proprietary, in-house security personnel or contract security services for physical protection. They rely on municipal, county, or state police agencies for law enforcement, sometime in the form of a contractual arrangement.

For a variety of reasons other than the September 11 attacks, the security threat to commerce and ports has changed radically in recent years. Petty pilferage by thieves frequenting waterfront areas has diminished significantly since the advent of containerization.

Cargo theft today results more often from the falsification of shipping documents and the hijackings of entire containers after trucks have left the confines of a marine terminal. Stolen autos seized at ports are typically the product of thefts committed miles away, in other states and even countries.

Indeed, many of the security challenges confronting ports and the maritime industry generally, such as cargo theft, illegal immigrants, narcotics trafficking, laundered money and stowaways, involve wellfunded regional, national and international conspiracies. Criminals are equally adept as legitimate traders in their use of the intermodal system, commercial shipping and documentation, and computer technology. This is especially evident with respect to the September 11 attacks.

Confronting these challenges requires commitment of political will and resources by all levels of government, the commercial sector, and the public sector. More specifically, it means that Federal and non-federal jurisdictions must share resources, information, and work together to the deter criminal activity that burdens legitimate commerce, endangers the public, and threatens a nation's security and economic wellbeing.

Port Security Precautions Important

AAPA's Security Committee has identi-

fied a number of security precautions that ports themselves can take to avoid being a soft target — one that criminals or terrorists can attack and exploit with minimal effort and maximum effect. Port police and security personnel are obviously the first line of defense, but all port employees should become security conscious and remain alert to potential problems, such as suspicious vehicles or packages, malfunctioning security alarms or locks, damaged perimeter fences, and the presence of strangers on port property.

Ports should take care to prevent access to port facilities and offices by unauthorized vehicles and persons and secure unused or unneeded gateways and building entrances with tamper-proof locks or sealed off permanently.

Special precautions are obviously in order for passenger vessel terminals and for facilities used for the handling or storage of fuels, chemicals and other hazardous materials. Security surveys of port facilities by competent specialists from a law enforcement agency or a private company with the requisite expertise may be useful, followed by a more thorough assessment of the port's vulnerabilities and security requirements and the preparation and implementation of a port security plan.

Special attention should be given to the training, professional composition, and management of police and security employed by the ports. Where contract security is used, technical competence, character, reputation, and reliability of the company providing security services are important. Supervisory responsibility for security should be vested in a senior staff officer. Continuous consultation and regular liaison with federal and non-federal law enforcement entities are also important, as is security awareness training for port employees.

Initiatives by individual ports can be further enhanced by active professional participation in international organizations such as AAPA, IAPH, and the International Association of Airport and Seaport Police.

At the same time that ports facilitate commerce, they also want to share the cost of providing the security at the nation's harbors, protect its borders, and safeguard its vital commercial and strategic interests, particularly in the face of international terrorism. Port security requires a coordinated effort and sharing of burdens and responsibility between Federal, state and local government, working in cooperation with the private sector and law enforcement bodies worldwide.

OECD **((** The Economic Consequences of Terrorism¹

Patrick Lenain, Marcos Bonturi, Vincent Koen

Organization for Economic Cooperation and Development

Introduction and summary

N the morning of Tuesday 11 September 2001, the United States was hit by a set of unprecedented terrorist attacks, calculated to inflict massive civilian casualties and damage. Four hijacked commercial jets crashed, two into the World Trade Center towers in Manhattan, which collapsed shortly thereafter, one on the Pentagon in Washington DC, and the last one in Pennsylvania. Over 3,000 people were killed, including hundreds of rescue personnel. The US President declared the aggression to be an act of war and in early October military action commenced in Afghanistan, which harboured the al-Qaeda terrorist network responsible for the attacks. This was presented as the first phase of a broader and likely drawn-out war against global terrorism, in which the United States was joined by NATO and many other countries. Even though this was not the first attack in the United States, the horrific scale of destruction and the boldness of the terrorists ushered in a period of greater uncertainty.² A few months later, however, the direct economic effects seemed to have largely vanished. The Taliban regime in Afghanistan tumbled in a matter of weeks. Confidence and equity prices bounced back rapidly. Consumption and activity showed more resilience than initially feared, not least thanks to a vigorous response by policymakers and the private sector. Even though the short-term macroeconomic impact has largely dissipated, the attacks and the response they have elicited may still have long-lasting impli-

cations. In addition, further terrorist attacks remain a prominent danger, as several subsequent thwarted attempts testify.³

This paper analyses the economic consequences of terrorism, both in terms of immediate policy response in the aftermath of the attacks and of medium-term policy implications for regulatory, trade and fiscal policy. The first section covers the short-term impact of the attacks and the crisis management decisions taken by the authorities to limit or offset their direct negative economic impact. The second section looks at the reaction of the insurance industry to the increased threat of terrorism and discusses whether governments should intervene when the private insurance sector fails to cover terrorism. The third section examines the impediments to international trade that could result from tighter security screenings of border crossings. The fourth section discusses the rise in national defence and domestic security spending, which may divert resources away from directly productive uses and contribute to a deterioration of the fiscal outlook.

A first main message of this paper is that the vigorous policy response after the attacks has played a very important role in averting a short-term negative economic impact. A second message is that medium-term policies aimed at enhancing protection against the threat of terrorism need to be properly designed. This has several policy implications: Crisis management played a key role after 11 September to restore confidence, safeguard the financial system and avoid a self-fulfilling depression. Decisions taken by the Federal Reserve, other central banks and governments were essential in this respect. One lesson of this crisis is that when policymakers have to take rapid decisions in an environment of deep uncertainty and imperfect information, priority ought to be given to liquidity management. Financial support to any sector or industry should focus on short-term loans or guarantees, rather than on grants or other direct budget outlays. After the immediate crisis response, more attention can be devoted to longer-term measures, if necessary.

- In reaction to the attacks, the insurance industry raised its premiums, reduced coverage and called on governments to step in and cover risks deemed too large for the private sector. Indeed, risks related to terrorism are difficult to price, not least because of the possibility that several catastrophic events occur at once (correlated risk). However, private sector initiatives specifically tailored to provide insurance for this type of risk are emerging. Market-based instruments, such as catastrophe bonds, are also available, although they are at present not actively traded. Private sector coverage of terrorism risk may therefore be restored in the future. Government intervention to fill the gap in the meantime should be considered with caution and limited in time and scope. Mega-terrorism, however, poses special challenges which cannot be fully addressed by the private sector and may require international options.
- The disruptions in the transportation system following the attacks have illustrated the importance of efficient and open borders for the daily operations of firms. The just-in-time supply chain management system, increasingly common in industry, depends to a large degree on the efficiency of border crossings. The severe tightening of border controls following the September attacks resulted in long waiting times that disrupted the operations of manufacturing companies, especially at the US-Canada border. Border controls

^{1.} This paper was originally written at the request of the OECD Economic Policy Committee, which discussed an earlier version at its April 2002 meeting. The three authors work for the Economics Department of the OECD. Patrick Lenain and Marcos Bonturi are in the office of the Head of Department, and Vincent Koen is a senior economist in the General Economic Assessment Division. The paper benefited from helpful discussions with officials of various government agencies as well as experts of the private sector, national research organisations, various academic institutions and international financial organisations. The authors are grateful for helpful comments and suggestions made by Ignazio Visco and other OECD colleagues. Special thanks also go to Peter Downes for having undertaken the Interlink simulation, Sandra Wilson for having organised contacts in the United States, Debra Bloch for her skilled research assistance and Susan Gascard for technical preparation of the document.

^{2.} Uncertainty is to be understood here as risk to which probabilities are hard to assign, along the lines of the classic distinction made by Knight (1921).

^{3.} Examples include the discovery, in an Italian port, of an al-Quaeda suspect inside a container bound for Canada, complete with food and telecommunications equipment. Another near-miss was the attempt by a passenger on a transatlantic flight to set off explosive material fitted in his shoes.

have now been relaxed and waiting times reduced, but some observers feel that the porosity of borders creates a security threat. Attempts to reinstate comprehensive controls at the borders would have long-lasting detrimental consequences for economic growth. Industrial sources estimate that proposed security measures may increase the ad valorem cost of trading internationally by 1 to 3 percentage points. Given that the elasticity of trade flows with respect to transaction costs may be in the -2 to -3 per cent range, this could lead to a significant drop in international trade, negatively affecting openness, productivity and medium-term output growth. Thus, the right balance between efficiency and security at the border needs to be found, preferably in agreement with trading partners and on a non-discriminatory basis.

 To combat terrorism, public spending on homeland security and military operations has been raised significantly in the United States and to a lesser extent in other OECD countries.

Private sector spending is likely to be on the rise as well to improve the security of premises, employees and information. This may crowd out the accumulation of directly productive capacity, increase the cost of capital, raise wages and divert R&D activities toward military projects. Therefore, the benefits associated with the peace dividend may be reduced. Rough calibrations suggest that an increase in public military-security spending by 1 per cent of GDP and private security spending by 0.5 per cent of GDP would reduce output by about 0.7 per cent after five years. Hence, the step-increase in anti-terrorism spending ought to be accompanied by a hard look at the costs and benefits of other military programmes, along the lines of what is intended more generally in the budget for non-defence spending. In addition, tighter security may reduce the level of productivity as, for instance, waiting times lengthen at airports and borders. Public financial support to strategic industries (such as aviation) and protectionist measures could also distort competition and reduce productivity growth. Although these effects should remain small based on measures currently announced, caution needs to be exercised.

Short-run impact and crisis management

The 11 September attacks inflicted casualties and material damages on a far

greater scale than any terrorist aggression in recent history. The destruction of physical assets was estimated in the national accounts to amount to \$14 billion for private businesses, \$1.5 billion for State and local government enterprises and \$0.7 billion for Federal government.⁴ Rescue, cleanup and related costs

4. These property losses are reflected in the US national accounts as an increase in the consumption of fixed capital and therefore a reduction in net domestic product, but not in GDP, which measures the production of goods and services.

Box 1. The risk of mega-terrorism

VER the past few decades, dozens of aggressive movements have emerged espousing varieties of nationalism, religious fundamentalism, fascism and apocalyptic millenarianism.¹ Terrorist threats and actions have come in many guises, including aircraft hijackings in the 1970s, the 1983 suicide attack on US and French contingents of the multinational peacekeeping force in Beirut, the 1993 attack on the World Trade Center, the 1993 bombing in the City of London, the 1995 sarin gas attack in the Tokyo metro and the 1996 bombing of a US military compound in Saudi Arabia, which put terrorism at the forefront of the subsequent G7 summit. Recent terrorist attacks (Oklahoma City, Khobar Towers, US Embassies in Kenya and Tanzania) have been increasingly more destructive and claimed a growing number of victims (see Lake, 2000).

The 11 September attacks exceeded in scale and audacity those of previous events. Yet, attacks on an even broader scale may occur.² The US government, intelligence and military leadership have repeatedly warned that new attacks may happen in the near future. Attacks using weapons of mass destruction, although considered to have a remote probability, are not ruled out by security experts. The US government is taking the risk seriously and has reportedly activated, immediately after the 11 September attacks, a contingency plan (*Continuity of Operations Plan*) that involves housing senior officials in nuclear shelters.³ The US Vice-President is also subject to special security procedures.

According to security specialists, terrorists could at some stage attempt to explode a nuclear device or release contagious viruses in a populous metropolitan area (see Stern, 1999). During the Cold War, the Soviet Union developed "suitcase" nuclear bombs that could be carried by a single person. Although the Russian authorities have taken steps to protect nuclear material from theft, it is not clear that all devices can be accounted for (see Allison, 2001). Even a crude nuclear device could create an explosive force of 20,000 tons of TNT, demolishing an area of about three square miles. If detonated in lower Manhattan, the whole Wall Street and financial district would be destroyed and hundreds of thousands of lives would be lost.

Assessing the economic impact of such a terrorist attack is nearly impossible. Nonetheless, orders of magnitude may be helpful to evaluate what governments would have to deal with. An attack against, for instance, New York City using a nuclear weapon could leave most of the metropolitan area uninhabitable for years. The direct impact would reduce the country's production potential by about 3 per cent,⁴ that is, the equivalent of a small OECD country's GDP. The brunt of the direct impact would be borne by the financial industry, which represents the bulk of the city's economy. Wall Street would be closed for a protracted period of time and the recovery of financial transactions would depend on the availability of back-up facilities and data duplication. Hence, supervisory measures to ensure the continuity of businesses after a destructive attack may be desirable (see Ferguson, 2002). Another local impact with broad implications would be closed for a long time, and other transportation facilities would be subject to severe security measures, meaning a much slower and less predictable delivery system.

Nationwide, both household and business confidence would be badly shaken, as well as the trust in the Government's capacity to protect the country. The displacement of the surviving population to non-contaminated areas would create the need for new housing. As standard insurance policies exclude nuclear attacks, the cost of reconstruction would fall on the budget, and the fiscal outlook would deteriorate markedly. The recent shrinkage of coverage for terror-ism-related risks (see below) would also leave most businesses dangerously exposed. Over the long term, such an attack would sharply reduce the readiness of persons and businesses to agglomerate in metropolitan areas. The trend would therefore be to disseminate in less populated areas, which may have a negative impact on innovation and productivity growth. Overall, a second terrorist attack could have longer-lasting effects, especially one using weapons of mass destruction. In view of this, preparedness should be seen as essential, even if the possibility of such an attack is considered as remote.

- 1. For overviews, see for instance Laqueur (1996) and Reich (1998).
- This risk is taken seriously by the insurance sector as well. For example, in a letter to shareholders, the Chairman of a major US insurance group contemplated the possibility of a disaster wrecking \$1 trillion in damage (Buffett, 2002).
- 3. Washington Post, 3 March 2002.
- 4. The gross state product of the State of New York was \$755 billion in 1999, about 8 per cent of the country's GDP. Using labour force statistics, the city of New York appears to account for about 40 per cent of the state. Hence, a rough estimate is that New York City represents about 3 per cent of the country's total output.
- 5. Glaeser and Shapiro (2001).

have been estimated to amount to at least \$11 billion. Lower Manhattan lost approximately 30 per cent of its office space and scores of businesses disappeared. Close to 200,000 jobs were destroyed or relocated out of New York City, at least temporarily.⁵ Within weeks of the attacks, bio-terrorism came to the fore. Lethal anthrax spores were found to have contaminated mail, causing several deaths. At the same time. awareness of a number of other sources of threats increased. Concerns were raised about the vulnerability of critical infrastructure, including computer systems (see Annex 1), power plants, nuclear facilities, chemical factories, dams, bridges, pipelines and water supply. The threat of mega-terrorism ceased to be considered as pure fiction (Box 1).

The adverse conjunctural impact was sharp but temporary...

By early September 2001, household and business confidence in the United States as well as in most other OECD countries had already weakened considerably compared with their 2000 peaks (Figure 1).⁶ The attacks further dented confidence. In the United States, consumer and business surveys showed falls in the overall confidence measures akin to those observed in the wake of the Iraqi invasion of Kuwait in 1990, and much larger than those following terrorist attacks in the 1990s. In Europe and Japan, confidence was also weakened, albeit less sharply. Forecasters responded with one of the

ces: Consensus Economics, OECD

largest one-time collective downward revisions in recent history. Thus, the consensus forecast for US real GDP growth was instantly downgraded by 0.5 percentage point for 2001 and 1.2





percentage points for 2002 (Figure 2). The implied projected cumulative loss in national income through the end of 2003 amounted to 5 percentage points of annual GDP, or half a trillion dollars.

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Near-term prospects not only became gloomier overall, but uncertainty greatly increased. Whereas private sector forecasts for US growth in 2002 symmetrically and narrowly clustered around $2^{1/2}$ per cent on the eve of the attacks, they very unevenly shifted down during the following weeks (Figure 3).⁷ In fact, the distribution of forecasts became multimodal, altering the very meaning of any single summary measure of what would be a consensus forecast.

- 6. In the United States, the National Bureau of Economic Research subsequently declared that the cycle had peaked in March 2001. The euro area was within measurement error distance of a technical recession starting in the second quarter of 2001. Real GDP declined in Japan in the second and third quarter of 2001.
- The 25 September Consensus Economics survey results were not broken down across forecasters. Therefore, the October data are used in Figure 2.

^{5.} See DRI-WEFA (2002)



Uncertainty likewise increased in financial markets, with risk premia shooting up and a "flight to quality". Equity prices tumbled (Figure 4). Spreads between corporate and government bond yields, as well as spreads between emerging market and US bond index yields widened (Figure 5).

Implied volatility as derived from traded options on equity indices, government bond prices, short-term interest rates, exchange rates and commodities spiked upwards. These indicators pointed both to lessened risk appetite and to higher perceived risk.⁸ But by the end of 2001, and not unlike during earlier wartime episodes (Table 1), equity prices had bounced back vigorously, in many cases to well above their 10 September levels. As well, spreads had generally narrowed and implied volatility had declined significantly. Furthermore, a survey of major transnational corporations conducted in November 2001 showed that only a few of them intended to delay or cancel investment projects for the next three to five years as a result of the terrorist attacks.9 On the whole, the shock to financial markets thus seems to have been largely transitory.

With production severely disrupted and consumers temporarily limiting shop visits, real GDP shrank in the third quarter. But in the fourth quarter, demand held up better than initially feared, and GDP increased. Labour shedding accelerated, with the attacks serving as a proximate or genuine motivation, and unemployment rose sharply, from 5.0 per cent of the labour force on the eve of the attacks to 5.8 per cent by December (seasonally adjusted). Private sector fixed investment registered a steep decline, and inventories were slashed. Offsetting these forces, however, were household consumption, helped by falling energy prices and aggressive discounting in the automobile sector, and government spending. Defence spending, in particular, grew by about 91/2 per cent in real terms in the fourth quarter, at a seasonally adjusted annual rate.

While overall demand proved fairly resilient, a number of sectors were hit hard. Airlines, many of which were already in mediocre financial shape prior to the attacks, suffered a substantial loss in capital and in demand, both in the United States and in many other OECD countries. Aircraft manufacturers almost immediately saw orders curtailed. The insurance sector faced a catastrophe of unprecedented severity. Hotels, restaurants, travel agencies and other tourism-related businesses confronted a sharp drop in demand, in the United States but also in many other

^{8.} Separating the two is difficult. Kumar and Persaud (2001) have attempted to do so.

^{9 .} See UNCTAD (2001).

| | Reaction period | Reaction | One year later ^a |
|----------------------------|---------------------------------|----------|-----------------------------|
| Pearl Harbor | 7 to 29 Dec. 1941 | -10.2 | 15.3 |
| Korean War | 23 June to 17 July 1950 | -12.9 | 31.4 |
| Cuban missile crisis | 23 Aug. to 26 Oct. 1961 | -8.8 | 36.6 |
| Tet offensive, Vietnam War | 31 Jan. to 5 Mar. 1968 | -5.6 | 13.7 |
| Iraqi invasion of Kuwait | 2 Aug. 1990 to 16 Jan. 1991 | -11.1 | 32.3 |
| 11 September, 2001 | 11 to 19 Sep. 2001 ^b | -7.0 | 15.0 |

countries, in particular in the Caribbean and in the Middle East. In the retail sector, customers initially tended to desert upscale department stores in favour of large discount outlets. The US Postal Service recorded an abrupt decline in mail traffic (Figure 6). Some sectors or firms, however, witnessed an increase in demand, notably

in the area of security and information technology (*e.g.* producers of biometric and other screening devices).



in check float on 12 September, close to two hundred times the average over the preceding six weeks. It also kept the Fedwire open late into the night to facilitate payment execution. Against this background, the effective Fed funds rate plunged to levels last seen in the early 1960s, troughing at 1.2 per cent on 19 September. On the international front, the Fed established or expanded 30-day swap lines with the European Central Bank, the Bank of England and the Bank of Canada, totalling a record \$90 billion, so as to enable them to provide dollars to their financial institutions. These and other major central banks also provided their market participants with extra liquidity.11

At the same time, along with the Comptroller of the Currency, the Fed urged banks to roll over loans for borrowers facing temporary liquidity problems, indicating it was ready to assist with additional funds. In addition, the Fed temporarily waived the usual fees and penalties on daylight and overnight overdrafts so as to ease banks' problems in managing their reserve positions. Likewise, the rules on securities lending were suspended for a while to make additional collateral available to

Large temporary liquidity injections by the Federal Reserve safeguarded the financial system

The attacks destroyed or disabled whole portions of New York's financial infrastructure, with potentially devastating domestic and international reverberations. Financial markets were shut down, and remained closed until Monday 17 September. The Federal Reserve instantly indicated that it stood ready to inject virtually unlimited amounts of liquidity to avoid payment failures and cascading defaults. The Fed's New York trading desk, operating from its primary emergency backup site, engaged in massive repo operations: it's holdings of securities under repurchase agreements more than doubled from an average of \$24 billion in the preceding six weeks to \$61 billion on 12 September (Figure 7).¹⁰ The Fed also lent money directly to banks through the discount window, lifting the stigma normally associated with this facility, and outstanding loans surged from an average of \$21 million in the preceding six weeks to \$46 billion on 12 September. Furthermore, the Fed gave credit for deposited checks being cleared through its books before the amounts were deducted from other banks' accounts, extending \$23 billion

10. Data are normally available only for Wednesdays and week averages. Figure 7 shows weekly averages.

11. For further details, see Cumming (2002).





the markets. Banks were also notified that regulatory capital requirements would be administered flexibly. Meanwhile, the Securities and Exchange Commission exercised one of the emergency powers it was granted in the wake of the 1987 stock market crash by temporarily lifting the limits on the repurchase by firms of their own stock. In many other countries, the supervisory authorities took similar regulatory forbearance measures.

In the days following the attacks, all interested parties worked inexhaustibly to rebuild communication and power connections and to ensure the smooth and timely reopening of markets. As the financial markets and payment infrastructure returned to normal, loans were repaid, and the temporarily bloated balance sheet of the Fed shrank rapidly. By 19 September, repo holdings were down to \$40 billion and discount loans outstanding to \$2.6 billion. Over the next two days, the effective Fed funds rate moved back up to around 3 per cent. As in previous episodes of financial stress -- such as the 1987 stock market crash, the 1998 Russian default and LTCM debacle, and the Y2K scare -- the Fed managed to preserve the integrity of the financial system. That said, the fact that banks and securities firms generally entered this crisis with strong capital bases and sound liquidity positions also helped to avoid a systemic breakdown.

The macroeconomic policy response was vigorous and swift

On Monday 17 September, and before the reopening of the stock markets, the Fed cut its target rate by 50 basis points at an unscheduled meeting. During subsequent weeks, the target rate was brought down in steps by another 125 basis points. While the counterfactual is bound to remain hypothetical, it can be noted that the consensus forecast on the eve of the attacks was for a cumulative cut by end-year of only 30 basis points. Two weeks later, the consensus forecast was for a 60 basis point cut on top of the 17 September one. On this evidence, the shock and its immediate repercussions led the Fed to move much further than would otherwise have been the case. The same holds for many other central banks in OECD countries as well as elsewhere. Thus, in the weeks following the attacks, both the Eurosystem and the Bank of England trimmed their policy rate by 100 basis points, while the Bank of Canada reduced its target rate by 175 basis points.

The fiscal stance had started to be relaxed well before the attacks. In the United States, Congress had passed a major package of tax cuts in June 2001, which was estimated to reduce revenues by 0.7 percentage points of GDP in FY 2001. Tax refund checks had started to be sent out in late July. In Europe, many countries had embarked around the late 1990s on medium-term tax reduction programmes. *Ex post*, the implied loosening of the fiscal stance turned out to be well timed, at least in the countries where fiscal consolidation had progressed sufficiently.

On 14 September, the US Congress cleared a \$40 billion supplemental appropriation emergency spending package. At least half of the money was to be used for relief related to the destruction in Manhattan, at the Pentagon and in Pennsylvania. Ten billion dollars were available immediately for emergency rescue and rebuilding efforts, tightening security at airports and other transportation centres and at public buildings, investigating and prosecuting those involved in planning and executing the attacks, and enhancements to national security. A few days later, Congress authorised \$5 billion in direct grants plus \$10 billion in federal loan guarantees for the US airlines. The actual outlays, however, were to fall mostly in the fiscal year starting on 1 October and beyond. They contributed to the aforementioned acceleration of public spending in the fourth quarter of 2001. Limited discretionary fiscal stimulus action was taken in other OECD countries, not least because many of them had less room for manoeuvre. State aid was granted to airlines in the European Union (EU) as compensation for the losses resulting directly from the four-day closure of US airspace, but on a smaller scale.12

Following the approval of the emergency package, a variety of proposals were tabled for a set of fiscal stimulus measures, including an extension of unemployment insurance benefits, personal and corporate income tax cuts, and other tax relief provisions -- involving an injection of up to 1 per cent of GDP. Agreement on the shape of an additional package was not found before March 2002, however, when a

^{12.} For example, France granted C55 million ,GERMANY C71 million and the United Kingdom E40 million. Rescue financing was arranged for Sabena and Swissair, which went bankrupt.

compromise was reached on a package worth 0.5 per cent of GDP and consisting mainly of unemployment benefit extension and business tax relief measures. With the benefit of hindsight, the gridlock may actually have been a blessing in disguise, avoiding too large a fiscal push, which might have turned out to be pro-cyclical.

The US authorities also promptly took a number of regulatory measures. Border controls were tightened. An executive order was issued freezing the US assets of terrorists, terrorist organisations and their sponsors and associates, and banning financial dealings with them. At the international level, the mandate of the Financial Action Task Force (FATF) was broadened (Box 2). Security-related restrictions were imposed or reinforced in most OECD countries. Governments also stepped in to provide temporary backstop insurance for terrorism risk, although in the United States more ambitious initiatives to that effect were not immediately approved by Congress.13

Overall, the short-term adverse economic impact of the attacks was far less than feared initially, thanks in large part to good economic crisis management. The Federal Reserve, the US Administration and Congress acted quickly to restore confidence, inject liquidity and provide resources to deal with the consequences of the attacks. Lowering the price of credit and temporarily providing vast amounts of liquidity helped safeguard the integrity of the financial system and save firms from bankruptcy, and was perhaps more important than bailing out firms with budgetary resources. International co-operation, not least at the level of the monetary authorities, also helped.

Medium-term economic consequences

Even though the strong policy response mitigated the short-term direct impact, medium-term implications from the attacks should not be under-estimated. In general, little research is available regarding the long-lasting impact of terrorism. A case study on the terrorism-prone Spanish Basque region¹⁴ suggests a permanent drop in output, but this is largely related to the displacement of economic activities to more secure regions and does not apply to a large national economy. Half a year after the events, nonetheless, it appears clearly that three important consequences will be long-lasting: insurance coverage for ter-

Box 2. The Financial Action Task Force

N 31 October 2001, the FATF agreed to eight Special Recommendations against terrorist financing which commit members to: take immediate steps to ratify and implement the relevant United Nations instruments; criminalise the financing of terrorism, terrorist acts and terrorist organisations; freeze and confiscate terrorist assets; report suspicious transactions linked to terrorism; provide the widest possible range of assistance to other countries' law enforcement and regulatory authorities for terrorist financing investigations; impose anti-money laundering requirements on alternative remittance systems; strengthen customer identification measures in international and domestic wire transfers; and ensure that entities, in particular non-profit organisations, cannot be misused to finance terrorism.

The FATF subsequently developed a self-assessment questionnaire to help evaluate the level of implementation of the Special Recommendations. In January 2002, FATF member jurisdictions completed the first phase of a self-assessment exercise against the Special Recommendations. All other countries have also been invited to participate on the same terms as FATF members. In April 2002, the FATF issued a document describing the methods of terrorist financing and the types of financial activities constituting potential indicators of such activity. The aim of this guidance is to assist financial institutions and other vulnerable entities in detecting and reporting terrorist financing through the existing anti-money laundering channels.¹ In addition, the FATF has begun developing a process to identify weaknesses in the world-wide efforts to combat terrorist financing. This process will include the development of guidance on implementing the Special Recommendations and the identification of jurisdictions with inadequate measures to combat the financing of terrorists.

1. The 2002 FATF typologies report includes an in-depth analysis of the methods used in the financing of terrorism. This report and the guidance will be updated regularly as the FATF and its members increase their knowledge of the financing of terrorism. The report is available through the FATF website at: http://www.fatf-gafi.org.

rorism-related activities is more difficult to obtain and premiums have increased considerably; pressure is mounting to tighten security at the borders and better screen the vast flows of merchandise entering OECD countries; public spending on security and military operations is on the rise. These three channels are discussed below.

The shrinkage of affordable insurance coverage: should governments intervene?

The losses from the terrorist attacks for the insurance industry (including reinsurance) are estimated at between \$30 billion and \$58 billion, with the main uncertainty deriving from payments on liability insurance (Table 2).¹⁵ The attacks represented the largest insurance event in history, dwarfing the \$21 billion of losses incurred when Hurricane Andrew

hit Florida in 1992.¹⁶ Even if the final cost is close to the lower estimate, insured losses in 2001 are likely to have been the highest ever (Figure 8).

In spite of the magnitude of these payments, no major bankruptcies have occurred in the industry, in part because the risk was spread over a number of companies and countries. It is estimated that reinsurers, most of them European, will incur over half of the losses. The capital base of many insurance and reinsurance companies has been severely hit, the shock having come on top of a series of other recent disasters (including a number of major storms) and portfolio losses associated with stock market declines. As a result, it is

- 13. The House of Representatives approved a terrorisminsurance bill in November 2001. A different version of the bill was approved by the Senate in June 2002. At the time of writing, the two versions still needed to be reconciled before they could be signed into law by the President.
- 14. See Abadie and Gardeazabal (2001).
- As of the end of January 2002, claims for \$27.4 billion had been filed, mostly for commercial insurance.
- 16. Claims from the 1993 bombing of the World Trade Center amounted to \$0.5 billion. The 1992 Los Angeles riots were the most expensive man-made disaster to date, with claims of \$0.8 billion. These costs were almost entirely concentrated in property insurance claims. In contrast, the 11 September attacks have led to claims on a variety of types of policies: life, property, auto, airplane, workers compensation and business interruption insurance.

Table 2. Insurance market losses Range (\$ billion) Line of busines Property 10.0 - 12.0 Business interruption 3.5 - 7.0 Workersí compensation 3.0 - 5.0 3.0 - 6.0 Aviation Liability 5.0 - 20.0 Other lines (non-life) 1.0 - 2.0 Life and health 4.5 - 6.0 30.0 - 58.0 Total a) Preliminary (as of 31 January 2002). Source: Tillinghast-Towers Perrin.



likely that several companies would not be in a position to withstand another shock of a similar magnitude. 17

Following the attacks, primary insurers and reinsurers have hiked their premiums and curtailed or dropped altogether coverage for terrorism-related risk.18 The hikes in insurance premiums have hit several industries. The strongest impact has been on aviation (Box 3), but other sectors, including transportation, construction, tourism and energy generation have also been affected. Overall, it is estimated that commercial property and liability insurance rates have been raised by 30 per cent on average, with "target" structures such as chemical and power plants and "iconic" office buildings seeing steeper increases. This should be seen in the context of a sharp decline of premium rates in the 1990s, which in the case of reinsurance, had only started to be reversed in 2000 (Figure 9). Even with the projected hikes, reinsurance rates should remain well below the peaks reached in 1993, especially given enhanced competition in the industry, which limits the scope for further rate increases.

Another channel through which developments in the insurance sector may have economy-wide implications is the reduction in coverage. Uncertainty negatively affects the capital accumulation process and the existence of instruments to share and limit risk - which help reduce uncertainty - are often associated with increased investment.19 These instruments have included over time the creation of limited liability corporate structures, the development of hedging instruments in financial markets and the growth of the insurance industry, the size of which is positively correlated with GDP. To the extent that it increases uncertainty related to investment decisions, reduced insurance coverage may thus have a negative impact on growth.

The reduction in the coverage of risks is in large part the result of the difficulties insurance firms have in pricing large terrorist attacks. Until 11 September, the risk

Box 3. The impact on the airline industry

T HE airline industry suffered major losses as a result of the terrorist attacks in the United States. Air traffic was completely shut down for four days in the United States and demand for air transportation services around the globe fell sharply in the following months. In the United States, revenue passenger miles (RPMs) fell by 32 per cent in September 2001, compared with a year earlier (Figure 10). In the same period, revenues from airfreight (including express) and airmail were down by 20 and 63 per cent respectively, as the latter was also affected by the anthrax scare (see above). The industry responded with a substantial curtailing of capacity, with available seat miles falling by about 15 per cent in the fourth quarter, compared with the same period of 2000. Reduced capacity and a gradual recovery in demand – RPMs in December and January were down by a less sharp 13 per cent from a year earlier – led to a strong recovery in passenger load factor (PLF). By January 2002, PLF was already above one-year earlier figures. The measures taken by the airline industry helped contain the fall in airfares, which declined by less than 4 per cent in the two months following the attacks. By comparison, airfares had declined by more than 6 per cent following Operation Desert Storm in 1991 (Figure 11).

US airlines were also hit by an increase in insurance costs, up 233 per cent in the fourth quarter (year on year). Insurance costs represented only 1 per cent of total operating expenses though, so higher rates were more than offset by a decline in fuel and interest payments. More seriously, reinsurers and insurers radically modified their policies for aviation cover, reducing coverage and sharply increasing premium rates. In the United States, insurers introduced exceptional premia of \$1.25 per transported passenger and raised premiums by 0.05 per cent per total insured fleet value. Insurers have also decided to limit the cover for third party damages caused by terrorist actions to \$50 million (instead of \$1.5 billion).

Given these challenges, the US government provided airline companies with direct financial help and reinforced airline security (see Annex 2). The Air Transportation Safety and System Stabilization Act of September 2001 provided \$5 billion in emergency assistance to compensate the nation's air carriers for losses resulting from the temporary shutdown of the nation's air-space and the severe drop in passenger traffic since the attacks. Passenger carriers were allocated \$4.5 billion, and cargo carriers \$0.5 billion. Besides these direct cash grants, airlines were provided with loan guarantees worth \$10 billion, but as of early 2002, only one airline had taken up the offer.¹ Finally, limits (of \$100 million per incident) were imposed on third-party liability damages.

In order to avoid disruption of the air traffic, many regulators (Australia, Denmark, Finland, France, Ireland, Germany, the Netherlands, the United Kingdom, Spain, Portugal, Sweden, Switzerland) also introduced measures to support third-party insurance for airlines companies. The EU Finance Ministers have approved a code of conduct, followed by most EU members, that sets the conditions under which EU governments may sustain aviation insurance. The code of conduct enabled those Member States so wishing, either to pay insurance premiums linked to the "risk of war and terrorism" for their airline companies, or to grant them a State guarantee against such risk.

1. To obtain government loan guarantees, airlines are required to provide equity options as collateral.

^{17.} See Cummins et al., (2002). 18. General Accounting Office (2002).

^{19.} See Bassanini and Scarpetta (2001), Dixit and Pyndick (1994), Hartman (1972) and Leahy et al. (2001).



 Includes the following carriers: Alaska, America West, American, Continental, Delta, Federal Express, Northwest, Southwest, Trans World, United, UPS, US Airways, Aloha, Continental Micronesia, Emery Worldwide, Hawaiian & Midwest Express.
 Source: Air Transport Association.



of a large magnitude event was considered low and was seldom formally incorporated into premium rates. Primary insurers and reinsurers are now facing the complex task of pricing the risks related to terrorism, which is difficult not least because it involves "correlated risk", i.e. the possibility that several catastrophic events occur simultaneously. With time, however, insurance companies will become better equipped to model "patterns" and risks of terrorist attacks, much as they already do for natural catastrophes. Indeed, a group of European insurance and reinsurance companies has recently announced their intention to set up a pool to cover against some types of terrorism risk. In the United States, airlines are in the process of creating a mutual company, Equitime, with similar purposes, although the proposed scheme has the Government act as a reinsurer of last resort.20 Finally, the use of mechanisms to transfer insurance risks to the financial markets could also play an important role in increasing coverage against terrorism. The market for insurance bonds - sometimes known as "catastrophe bonds" - launched in 1996, has remained thin, as the fear of information asymmetries reduced demand and the availability of cheaper sources of finance discouraged issuance by insurance companies.²¹ It is conceivable, however, that the increase in the industry's capital needs and ongoing efforts to repackage insurance bonds in forms more familiar to financial markets may increase liquidity and lead to a larger role for capital markets in providing alternative risk transfer mechanisms in the future.²²

The efficient modelling of "patterns", the building of adequate private insurance capacity and the development of risk transfer mechanisms for terrorism insurance are likely to take a few years. In the meantime, incomplete markets for sharing risk may be construed as a market failure, which could in theory justify government intervention. Indeed, several OECD governments have long had schemes in place to cover terrorism risk (Box 4). Many of those schemes were introduced to deal with a particular set of political events, which had led to a re-evaluation of risks and the reduction of coverage. Often, they were thought of as a temporary state response to market failure, in the expectation that with time, the insurance industry's capacity would develop and efficient risk-sharing arrangements would be reestablished. The fact that many of these schemes have endured beyond their original mandate is an indication that either the market failure was not temporary or that government intervention crowded out private sector responses. Finally, the design of support schemes is necessarily dependent on the particularities of domestic judicial processes. For instance, the UK's Pool Re scheme, which does not provide reinsurance for liability coverage, would be less applicable in the United States, where the judicial system allows a much wider scope for litigation on thirdparty liability cases. These differences also complicate international pooling efforts.

Overall, even though it has been hit by the largest amount of reimbursements ever recorded, the insurance industry has escaped bankruptcy, and some large reinsurers are still able to distribute dividends to their shareholders. In reaction to the terrorist attacks, commercial insurance premium rates have been raised significantly, but this partly offsets the decline recorded in the last decade. This pricing power encourages the entry of new capital in the industry, which will spur competition and help contain further rate increases. More worrying is the shrinkage of coverage for commercial properties deemed too risky and for terrorism risk altogether. The private insurance sector may eventually decide to re-enter the market for some types of terrorism-related risks, but such a prospect is at present elusive not in the least because the industry may not be in a position to face losses of a similar magnitude of that of 11 September. Hence, close monitoring is warranted. If government involvement proves justified, it should be limited in scope, be conceived in partnership with the private sector and be accompanied by the introduction of some type of user fee. In that regard, multi-pillar risk sharing mechanisms, involving insurers, reinsur-

22. See A.M. Best's Review, February 2002. Since 1996, approximately \$13 billion of insurance bonds have been issued -- a relatively small amount

Several insurance or reinsurance companies, specialised either in terrorism risk insurance or in the aviation industry, have also been created in the Bermudas since the attacks.
 Niehaus (2002). Insurance ("catastrophe") bonds are debt instruments carrying a premium reflecting the agreement by investors to forgive some of the principal and/or interest payment in case a specified catastrophe occurs.

Box 4. State mechanisms to provide insurance or reinsurance against terrorism risk

SEVERAL OECD countries that have experienced lasting pressures from terrorists have established government-sponsored insurance coverage schemes.

In the UK, a pool reinsurance company, *Pool Re*, was established in 1993 to ensure the continued availability of insurance cover for damage and loss caused by terrorist actions, which had become largely unavailable after a spate of IRA attacks. *Pool Re* functions as a reinsurance company for its (voluntary) members, while the Government provides reinsurance to *Pool Re*. The first £100,000 lies with primary companies, with *Pool Re* intervening only above that amount. Losses from underwriting activities are covered by accumulated premia or, if needed, by an additional call on members (limited to 10 per cent of the annual premium). Beyond that, claims are met by the Government. This scheme enables insurers to cover terrorism without the need to restrict the sums insured, but does not encompass third-party liability insurance.

In Spain, the state insurance compensation fund (*CCS, Consorcio de Compensación de Seguros*) was created in 1928 and now covers a variety of "extraordinary" risks, including terrorism. Premia are collected through a surcharge on all policies in specific risk categories. Traditionally, CCS has provided subsidiary cover and served as a guarantor if a primary insurer is declared insolvent, so it did not technically provide reinsurance. After the 11 September attacks, however, the fund has started providing reinsurance for air transportation against war and terrorism risks (third party liability only).

In France, since December 2001, the state-owned Caisse Centrale de Réassurance under government guarantee, covers physical and property damages caused by terrorism attacks above an annual C1.5 billion ceiling.

Under this amount, the insurance and reinsurance markets cover the risks. Outside the OECD area, countries that have special mechanisms to deal with terrorism risks include South Africa (where SASRIA, the South African Special Risk Insurance Association, created in 1979, insures against political risks) and Israel (where the Property Tax and Compensation Fund, financed by a nation-wide property tax, covers property and casualty insurance claims from terrorism-related losses). Several OECD countries, including Switzerland and Japan, have some type of government scheme to insure against "catastrophes", but these do not specifically include terrorism.

In the United States, following the 11 September attacks, the administration proposed a transitional three year "Share Loss Compensation Programme" to address the risk of a shrinkage of affordable insurance. Under the programme, which has not been approved by Congress, the share of insurers in loss compensation would have been capped (as a percentage of total losses), with government stepping in beyond that limit. The cap was to be increased gradually until 2004, when government involvement would have been phased out.

ers, pooling structures, capital markets, and possibly governments as an insurer of last resort, may offer a valid alternative. Government involvement is likely to be especially justified in the case of potential losses arising from mega-terrorism (such as a nuclear attack), which is typically excluded from standard insurance policies. In that regard, international options may also be considered.

Increased shipping costs: is there a trade-off between efficiency and security? example by jamming emergency telephone numbers or shutting down electricity or telecommunications after blowing up a building or releasing toxic gases. In addition, the scope for such terrorism is likely to increase as the real and virtual worlds become more closely coupled, with automobiles, appliances, and other devices increasingly attached to the Internet. While steps have been taken by governments and enterprises to protect their systems, information security weaknesses remain widespread.⁷ Efforts to protect critical infrastructures from devastating computer-based attacks by terrorists (or hostile nation states) are similar to and need to be integrated with other computer security activities.

The second part of this article will appear in the October 2002 issue of the journal.

1. This has been documented by the General Accounting Office (2000) for federal agencies in the United States.

ANNEX 1. CYBER-TERRORISM

G OVERNMENTS and private agents across the world increasingly rely on interconnected computer systems. At the same time, the number of individuals with computer skills is rising and intrusion ("hacking") techniques have become readily accessible. There is also evidence that some terrorists groups have been acquiring rudimentary cyber-attack tools. The number of cyber-incide notified to the Carnegie-Mellon University's Computer Emergency Response Team rose from 252 in 1990 to over 52 000 in 2001, and they are estimated to represent only about one fifth of actual occurrences. Cyber-attacks can entail considerable economic costs, as has been the case for some "viruses" (Table A1.1).

So far, cyber-aggressions have generally involved fraud, theft, sabotage, vandalism or extortion rather than terrorism. Nonetheless, there is a clear risk that they be used to amplify the impact of a physical attack, for Table A1.1. Estimated worldwide economic impact of malicious code attacks In billions of US dollars

| Annual estimates | | Annual estimates Selected incider | | nts | |
|------------------|------|-----------------------------------|----------|------|--|
| 1995 | 0.5 | 1999 | Explorer | 1.02 | |
| 1996 | 1.8 | | Melissa | 1.10 | |
| 1997 | 3.3 | | | | |
| 1998 | 6.1 | 2000 | Love | 8.75 | |
| 1999 | 12.1 | | | | |
| 2000 | 17.1 | 2001 | SirCam | 1.15 | |
| 2001 | 13.2 | | Code Red | 2.62 | |
| | | | Nimda | 0.64 | |

Source: Computer Economics





WCO: World Customs Organization celebrates 50th anniversary

N June 27 WCO celebrated its 50th anniversary. His Majesty, King Albert of Belgium visited its Brussels headquarters on the occasion and met with Directors General of Customs accompanied by their Ambassadors from the Organization's 161 members, who have assembled to take part in the 99th/100th Sessions of the Customs Co-operation Council.

The Belgian Minister of Finance, the Hon.D. Reynders, the Chairperson of the WCO Council, Mr Pravin Gordhan (South Africa) and the Secretary General of the WCO Mr Michel Danet, in their addresses celebrated the achievement of the WCO in the 50 years since it was established and urged the WCO to accept the challenges of the future because efficient and effective trade processes were important to economic growth and security.

Following the opening ceremony, the King took time to meet all delegates from the WCO region who outlined to him the various challenges that were faced by their respective Customs administrations. The Director Generals of Customs were extremely impressed by his keen interest in the work of Customs services around the world.

Here is the speech given by Mr Michel Danet, Secretary General of the WCO:

Your Majesty, Minister of Finance, Your Excellencies, Chairman of the Council, Heads of Customs administrations,



Dear Colleagues,

It is with great pride and genuine emotion that almost 130 Members of the Customs Cooperation Council welcome you here today to the Organization's Headquarters in Brussels.

Your Majesty, on this 50th Anniversary, I would like to thank you not only on my own behalf, but also on behalf of all the former Secretaries General who have kindly joined us today and all the delegates present, for the unfailing efforts, facilities, assistance and support provided to the World Customs Organization by the Kingdom of Belgium and its governments.

25 years ago, King Baudouin graced our commemorative events for that anniversary with his presence. Today, in Your Majesty's presence, I wish to express our joy at being here in Belgium, in your magnificent capital city of Brussels, sharing in the lives of the Belgian people.

In this year marking the World Customs Organization's 50th Anniversary, let us take some time to recall the global events of the past half-century.

The greatest philosophical, political, economic, technological, scientific and medical changes have occurred during this brief period of mankind's history. After two world wars, new frontiers were drawn, empires fell and multilateral institutions were established. It was also during this period that man walked on the moon, life expectancy increased and air transport and containerization were introduced. Mankind also hoped that globalization would solve its main problems. However, over the same period, large-scale cross-border crime and terrorism flourished, leaving a trail of problems. More recently, the development of new information technologies has revolutionized the way we communicate.

There has been unprecedented growth in world trade throughout this period of upheavals. Globalization and liberalization of trade, the increased volume of trade, the sophisticated nature of products, developments in means of transport and the growth of electronic commerce have thrown down new challenges to Customs administrations. These changes have rendered methods used in the past obsolete, and have forced political and economic decisionmakers to seek new solutions enabling Customs administrations, which are State administrations, to attain the objectives set by their governments while carrying out their mission of collecting duties and taxes, their economic mission of fostering foreign trade and their mission of protecting the national territory by combating the scourges undermining our societies (such as drugs, firearms, industrial piracy, etc.).

The establishment of the Customs Co-operation Council (now known as the "World Customs Organization") was supported by 17 founding countries which decided, with wisdom and foresight, to set up an international institution responsible for harmonizing and simplifying Customs procedures, so as to prevent the latter from becoming barriers to international trade. It has shifted from an initially European to a worldwide orientation.

We are proud that the WCO now has 161

members, representing all the continents and all levels of socio-economic development. These figures bear witness to the fact that the WCO has gained a reputation as a positive force, enabling the world's governments to attain their policy objectives through strengthening of cooperation between Customs administrations, the implementation of WCO instruments and international best practices.

The WCO has always provided the necessary technical assistance to ensure implementation of its instruments.

We can therefore quite rightly claim, without exaggeration, that over the past 50 years, the WCO's activities have been instrumental in increasing the prosperity and security of its Members.

However, you will doubtless agree that while the purpose of today's event is to commemorate and celebrate past successes, the WCO and its members should also take this opportunity to look to the future.

How can we meet the expectations of the world's citizens? What role can the WCO play in the fight against poverty? How can Customs administrations make our frontiers, territories, economies and societies secure whilst facilitating trade? How should Customs administrations reform and modernize? How can we work together to increase the efficiency of Customs services throughout the world? How can the WCO ensure that capacity building in developing countries becomes a reality? How can the WCO help its members to attain the highest standards of integrity? How can we achieve more general acceptance of WCO instruments?

The world has changed since the tragic events of 11 September 2001. It has become more uncertain and less predictable. The WTO Doha Ministerial Declaration is an attempt to give new impetus to international trade and investment, so as to find new solutions to the problems of globalization and marginalization by stressing the importance of capacity building in developing countries. We must rise to these new challenges. Whatever happens, we must ensure :

- · Economic growth;
- Border security;
- Economic, commercial and social protection;
- Environmental protection.

As in the past, Customs administrations will be faced with these new challenges. As in the past, the World Customs Organization is fully committed to spending the next half-century working on behalf of the international community and all its members.

Thank you for your attention.



IMO: Shipping enters the ISM Code era with second phase of implementation

HE International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code) becomes mandatory for most ships trading internationally on July 1, 2002. Compliance with the Code has been mandatory for tankers, passenger ships and bulk carriers since July 1998, under the first phase of ISM implementation, and now all other vessels covered by the SOLAS Convention, which includes all but the smallest internationally-trading vessels, must comply.

"This is a significant day for the shipping industry and for all those involved with shipping," said Mr. William A. O'Neil, Secretary General of the International Maritime Organization (IMO). "This is a positive step which contributes to IMO's goals of safe, secure and efficient shipping on clean oceans," he added.

Mr. O'Neil said that development of the ISM Code and making it mandatory for SOLAS ships can be considered one of the most important developments in maritime safety in recent years. "Previously, IMO's attempts to improve shipping safety and to prevent pollution from ships had been largely directed at improving the hardware of shipping - for example, the construction of ships and their equipment. The ISM Code, by comparison, concentrates on the way shipping companies are run," he said.

"This is important, because we know that human factors account for most accidents at sea - and that many of them can ultimately be traced to management. The Code is helping to raise management standards and practices and thereby reduce accidents and save lives, "Mr. O'Neil said.

The mandatory ISM Code provides an international standard for the safe management and operation of ships and for pollution prevention. It places direct responsibility on shoreside management to ensure that its ships operate to the prescribed level of safety. Evidence so far suggests that the impact of ISM implementation has had a positive effect and the Code is beginning to achieve its aim of creating a culture of safety within shipping companies throughout the world.

Commercially, there are indications that ISM certification proves its worth.

Studies have shown that the implementation of the ISM Code has already had a positive effect on safety. In fact, companies which have safety management systems in place have reported a reduction in casualties and spills, as well as a downward trend in detention rates while companies which have fully embraced the ISM Code have a better approach to safety management.

A claims analysis by The Swedish Club, which provides both hull and Protection and Indemnity cover, showed that, in 2000, vessels required to comply with the ISM Code by July 1,1998 were having around 30 percent fewer claims than vessels covered by the second deadline of 2002.

ISM Code background

On July 1,1998, the ISM Code became mandatory under the International Convention for the Safety of Life at Sea (SOLAS) and from that date it applied to passenger ships, including high-speed passenger craft; and oil tankers, chemical tankers, gas carriers, bulk carriers and high-speed cargo craft of 500 gross tonnage and above. From July 1, 2002, other cargo ships – including general cargo ships and container ships - and mobile offshore drilling units of 500 gross tonnage and above must comply.

It has been estimated that some 12,000 ships had to comply by the first deadline with the second phase of implementation bringing in another 13,000 ships. All commercial ships (above 500 gross tonnage) on international voyages now have to comply with the Code.

The ISM Code addresses the responsibilities of the people who manage and operate ships and provides an international standard for the safe management and operation of ships and for pollution prevention.

The application of the ISM Code should support and encourage the development of a safety culture in shipping.

The Code establishes safety-management objectives and requires a safety management system (SMS) to be established by "the Company," which is defined as the shipowner or any person, such as the manager or bareboat charterer, who has assumed responsibility for operating the ship. The Company is then required to establish and implement a policy for achieving these objectives. This includes providing the necessary resources and shore-based support.

The procedures required by the Code should be documented and compiled in a Safety Management Manual, a copy of which should be kept on board. Regular checks and audits should be held by the company to ensure that the SMS is being complied with and the system itself should be reviewed periodically to evaluate its efficiency.

Ship operators and owners can seek more information and guidance on implementing the ISM Code through their flag state administration - who in turn follow recommendations contained in IMO Assembly Resolution A.913 (22) -Revised Guidelines on the implementation of the ISM Code by Administrations.

The full and successful implementation of the ISM Code will ensure that a company has safety and environmental pollution risks under control. Among other things, a proper safety management system as required by the ISM Code should:

- ensure that all applicable international standards are complied with
- help prevent accidents occurring
- ensure procedures are in place for dealing with any shipboard emergency
- ensure there are adequate communications between ship and shoreside personnel
- ensure that all individuals know their role and responsibility and are adequately trained and

have the appropriate resources to do their job

- ensure that all activities and operations are planned, controlled and verified.

The July 1, 2002 date for the second phase of ISM Code implementation coincides with the entry into force of amendments to the International Convention for the Safety of Life at Sea, 1974 (SOLAS).



IAASP: 33rd Annual Conference

OSTED by the Port Authority of New York and New Jersey, the 2002 IAASP Annual Conference was held in New York City at the Marriott Financial Center Hotel. Admiral Richard E. Bennis of the Transportation Security Administration (TSA) and IAASP President Chief Superintendent Henk van Unnik formally opened the Conference. Following the opening remarks, the delegates, many in uniform, participated in a memorial march to 'Ground Zero' to honour the fallen victims of the world's worst terrorist attack. As part of the memorial service, IAASP President Henk van Unnik announced the estab-

lishment of the "Morrone Education Fund".

The Conference theme 'Global Security - Post 911' drew a record number of members and attendees from twenty countries. Of particular significance to the delegates were the graphic and frank reports of the Port Authority of New York & New Jersey and their Police Department, who provided a highly detailed account of how they dealt with the horrifying aftermath of the terrorist attack on the twin towers of the World Trade Center. The Port Authority Police Department lost more officers in this single criminal act than any other police department in any previous event.

These compelling sessions were of great value to the delegates who accepted that there was now a need to plan to respond to events that were previously unthinkable. Updated threat assessments are required which take into account the new risks and exposures posed by international terrorism. Having lived through the experience of this tragic event, the Port Authority has offered to provide their expertise and advice to assist any other ports in the event they are faced with a similar tragedy.

Officials of the Port Authority had agreed to sponsor the IAASP conference prior to Sept 11. Soon after that time and despite enormous difficulties, they insisted on honoring their previous commitment to the IAASP. The courage and determination demonstrated by the Port Authority staff in resuming normal port operations is a fine example to us all.



BIMCO: Vice President speaks at Quality Shipping Conference

T the recent Quality Shipping Conference, BIMCO predicted that a shortfall from the present 16,000 officers may grow to 46,000, or 12% of the total work



force, within 10 years time unless a marked stimulation of both recruitment and training takes place, assuming that the recruitment levels of today are maintained. In particular, BIMCO believes that the trainee rate needs to be stepped up to a recommended level of 1 in 7 officers, or about 1.5 trainees per ship.

Referring to the groundbreaking study BIMCO and the International Shipping Federation (ISF) conducted in 1990, which was the first of its kind, and recently updated, BIMCO's Vice President, Mr. Bjarne Tvilde, who spoke on behalf of BIMCO at the Conference, said that "it is clear that while the past may have seen some fairly dramatic reductions in crew sizes per ship, we are reaching the end of this process."

He went on to say, "so, while the replacement of old, labour intensive units will lead to some manpower economies, it is believed that the new ship of five or ten years hence will probably have a crew much the same size as that of a new ship today."

In addition, the industry is continuing to see startling changes in nationalities and hence in areas of recruitment. "Individual companies and even countries where there has been a large-scale switch of personnel from OECD countries to, say, Philippine or Indian crew sources, illustrate this change most dramatically but viewed over the whole industry, the change has been, we believe, much more evolutionary," Mr. Tvilde said.

The themes of the Conference, which was organised by the Danish Maritime Authority and held in Copenhagen, Denmark, July 10-11, 2002, dealt predominately with the issues of how to create and sustain a safety culture, the effectiveness of the International Safety Management (ISM) Code and Standards for Training Certification and Watchkeeping (STCW) Convention, new technologies, and the question of competent seafarers in the future.

Mr. Tvilde recommended that, when establishing a safety culture, necessary standards be set and the policies and directions required be issued. Mr. Tvilde went on to describe a safety culture as one that "cares for human life and health; protects the environment, and preserves an asset."

Mr. Tvilde suggested that there are three very good reasons to establish a safety culture. The first, to create a safe and attractive working environment in order to attract and maintain a staff of well-trained, qualified, and motivated seafarers and shore staff. The second, to improve operational efficiency through a safer and more efficient operation and the third, by optimising earming potentials. A safe and efficient operation, said Mr. Tvilde, "reduces injuries, accidents and damages while improving the company's reputation and decreasing the cost of off-hire and insurance."

To develop a safety culture, Bjarne Tvilde recommended, establishing a human resource management programme which goes beyond statutory requirements, ensures proper communication and information and, most importantly, actively involves the crew; establishing pro-active learning systems in order to actively monitor and learn from, for instance, near-miss accidents; and breaking the cultural barrier by understanding how to benefit from cultural differences and by working together ashore and onboard.

Mr. Tvilde said that, in his opinion, these factors present the biggest challenges ahead of us within the human element.



EU: Reaches agreement on maritime safety system

INCE the Erika ran aground, the European Union has made considerable progress towards improving maritime safety. Adoption of the measures of the Erika I package and most of those of the Erika II package is a major step towards putting effective rules into place to increase maritime safety and to counter the risks of oil spills. Thanks to these measures substandard ships and floating rust buckets should disappear from Europe's waters within two years. "The EU now has one of the best sets of maritime safety rules in the world, and these measures must be put into place with the utmost resolution and speed. The Commission, for its part, will continue its efforts and propose follow-up measures to complete these rules and banish the spectre of a new Erika disaster," said Mrs Loyola de Palacio, Commission Vice-President responsible for energy and transport. It is now up to the Member States to apply the new rules adopted by the EU with full force.

On December 12, 1999, the Erika, a 25year-old single-hull oil tanker flying the Maltese flag and chartered by TOTAL-

FINA, broke in two some 40 nautical miles off the southern tip of Brittany, polluting almost 400 km of French coastline. The damage caused to the environment and the exceptionally high cost of the damage to fisheries and tourism make the Erika oil spill one of the major environmental disasters of recent years.

The wreckage of the Erika aroused much public concern about the safety of maritime transport. It also highlighted the risk presented by old, poorly maintained ships and the need to reinforce and harmonise European rules on maritime safety and the control of ships in ports in particular, going further, where necessary, than International Maritime Organisation guidelines and standards.

After the accident was reported the European Commission prepared measures in record time designed to increase maritime safety off our coastlines substantially. Three months later, on March 21, 2000, the Commission adopted a first series of proposals, known as the Erika I package, which was quickly followed, in December 2000, by a second set of measures known as the Erika II package.

The Erika I package provides an immediate response to certain shortcomings highlighted by the Erika accident. It steps up controls in ports, monitors the activities of classification societies and speeds up the timetable for eliminating single-hull tankers.

Adoption of the Erika I package, however, is only one step in the Community action programme. The Erika II package contains measures that are just as essential: establishment of a Community fund to compensate the victims of oil spills up to 1 billion euros, closer monitoring of traffic in European waters, and creation of a European maritime safety agency. Examination of these measures is well under way in the European Parliament and the Council. Policy agreement on the proposals concerning the Community traffic monitoring system and creation of a European maritime safety agency could be obtained before the end of the year and enter into force in 2003.

While the European Union has a full battery of laws to protect its coastlines, the effectiveness of Community laws will depend on due and proper application by the Member States.

Erika I package: the three measures adopted

Stepping up controls in ports

The current Directive on Port State Control has been substantially amended in order to step up controls in ports, which so far have proved to be inadequate. Thus, ships that have been laid up on more than one occasion due to poor condition and fly flags of convenience will henceforth be banned and refused entry into EU ports by virtue of a blacklist published by the Commission.

In addition, all vessels posing a risk will be subjected to more stringent obligatory annual inspections. Unlike ordinary inspections, which may just be a relatively superficial examination of the condition of the vessel, the expanded inspections provided for by the new Directive will include a systematic, detailed check of a number of vital elements of a vessel. Any corrosion or structural problems, for example, that might be the cause of accidents such as the one involving the Erika, will thus be detected more easily. These inspections will be determined by the age and category of the vessel (e.g. tankers more than 15 years old such as the Erika), and also by the vessel's "target coefficient," which measures the potential risk presented by a vessel, and criteria such as the fact that the vessel is flying a flag of convenience or members of the crew have complained about conditions on board or the poor state of the vessel as seen from the number of deficiencies highlighted and the number of times it has previously been laid up.

At present EU Port State Control inspectors board around 10 to 12000 ships a year, but of this number only around 700 ships are subjected to real, thorough inspections. The new Directive guarantees expanded annual inspections on more than 4000 vessels thought to pose a risk.

These new rules and regulations should also make for a considerable increase in the number of vessel inspectors in ports and help the Member States to meet the obligatory inspection thresholds set by the Directive (25% of vessels entering port). In practice this minimum threshold is not achieved by all Member States and the Commission has had to initiate infringement procedures against some of them.

The European Parliament has helped in no small measure to improve the effectiveness of the Commission's proposals. It has called for the introduction, for example, of obligatory black boxes on all ships calling at EU ports, based on a timetable from 2002 to 2007. The absence of a black box on board a vessel should lead to its being laid up in port.

Greater control of the activities of classification societies

The rules contained in the current

Directive concerning classification societies have been beefed up to make for greater control of the activities of these private organisations which play a crucial role in maritime safety.

The job of the classification societies is to check the structural quality of vessels. Nearly every country in the world delegates a good part of its inspection powers. The new rules will provide a better guarantee of the quality of classification societies at European level. They introduce in particular:

- a new sanction: suspension of Community approval for a year, which can lead to complete withdrawal of approval if the deficiencies resulting in suspension persist;
- the requirement of good safety and pollution control performance before Community approval is granted;
- stricter quality criteria, in particular compliance with certain procedures in the event of a switch of class and greater transparency in the communication of information on vessels in that class.

Without waiting for the new measures to enter into force, the Commission is already taking a close look at the activities of approved classification societies. It has already carried out a number of audits designed to establish whether organisations approved by the Member States meet the requirements of the Directive. These audits have helped to limit the scope of the approvals granted to certain organisations, given their real capacity.

Elimination of single-hull tankers

On average single-hull tankers present a greater risk of pollution in the event of an accident and are often old ships. The main objective of the measure is to protect the coastline of the European Union against the increased risk of pollution presented by the imminent arrival of single-hull tankers banned from American waters under OPA 90 (Oil Pollution Act) but authorised to operate under current IMO legislation.

The recently adopted regulation provides for a general ban on single-hull tankers by 2015 at the latest, in accordance with a timetable for their gradual phasing-out.

Timetable for implementation of the Erika I package

The measures adopted as part of the Erika I package will enter into force in around 12 months' time. The sole

exception concerns the port of Rotterdam which has obtained a sixmonth extension on the requirement of implementing greater controls in ports. The Nice European Council in December 2000 nonetheless called on the Member States to implement the measures earlier. The Commission therefore expects the Member States to begin work immediately on legislative and administrative transposition measures and to start recruiting the vessel inspectors needed to carry out the new measures. The Commission, for its part, plans to publish a blacklist of substandard ships in the Official Journal at the beginning of next year, ahead of the entry into force of the Directive on port control. The Commission will also step up its monitoring of classification societies and, where necessary, propose that their recognition be suspended.

Erika II package: further measures

 Establishment of a European maritime safety agency. Within the space of a few years several safety standards have been established and Member States have been obliged both to comply with them and to approximate their inspection and control procedures. The European maritime safety agency will support the action of the Commission, the Member States and candidate countries. It will assess the effectiveness of maritime safety measures put in place. The main task of the Agency will be to collect information, operate databases on maritime safety, monitor classification societies and organise inspections in the Member States in order to check the conditions of Port State Control. It could also assist national inspectors in their work and help make for an exchange of experience that would benefit all concerned. The Regulation setting up the agency has just been definitively adopted.

- Greater safety in maritime traffic and more effective prevention of pollution by ships: a proposal for a Directive provides for the establishment of a system of notification which also covers vessels which do not call at Community ports. It increases the powers of intervention of Member States, in their capacity as coastal states, where there is a risk of accident or a threat of pollution off their coastlines, even beyond their territorial waters. It imposes the carriage on board ships in Community waters of automatic identification systems (or transponders) as well as black boxes similar to those used in aviation in order to help enquiries in the event of accidents. The Directive sets out to improve procedures concerning the transmission and use of data relating to dangerous cargoes and to increase the development of common databases. Given that most shipwrecks occur in extreme weather conditions, the Directive also provides for the possibility of preventing ships from leaving port in such conditions. Finally, it makes it compulsory for each Member State to have ports of refuge for vessels in distress. This Directive has just been formally approved.
- Improvements in the existing schemes

concerning liability and compensation for pollution damage: today the people hit hardest by the oil spill, hoteliers and those working in the maritime sector, have still not been fully compensated for their losses. This is due to the limits of the current international scheme (in particular FIPOL) when the cost of pollution exceeds the present ceilings. The Commission takes the view that it is unacceptable for Europeans not to be properly compensated several years after a serious accident. To prevent situations of this kind arising in the future, the Commission has proposed that a fund for the compensation of oil pollution damage be set up, with a global ceiling of 1 billion euros, to compensate victims where the current ceilings of 200 million euros are exceeded. The Commission's proposal also provides for Member States to impose fines for negligence on the part of anyone involved in the transport of oil by sea.

An accident such as the one involving the Erika can happen at any time. Given this risk, the Commission's proposal offers a solution which can rapidly be put in place and will guarantee that victims are fully and promptly compensated. In this context, the Commission hopes that the Member States' decision to pursue discussions within the IMO rather than at European level will result in an international agreement that comes close to the objectives set by the Commission. The Commission, for its part, intends to work towards a solution that is most in the interests of Europeans and the victims of oil spills.



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For further information: Elke Lonicer **Conference Manager** Klein Ostiemer Weg 64a D-26419 Schortens, Germany +49-4461-98 65 55 Tel: Fax +49-4461-89 15 29 E-mail: 1onicer@t-online.de

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The Americas

AAPA: Letter to Conferees on Maritime Security Bills

APA sent a letter to House and Senate Conferees who would be trying to resolve differences between S. 1214, the Maritime Transportation Antiterrorism Act of 2002, and H.R. 3983, the Maritime Transportation Counter Terrorism Act of 2002. The letter included a three-paged attachment outlining the Association's recommendations on the two bills.

June 24, 2002

The Honorable Ernest F. Hollings Chairman, Senate Committee on Commerce, Science and Transportation SR-254 Russell Senate Office Building Washington, DC 20510-6125

Dear Chairman Hollings:

On behalf of the American Association of Port Authorities' U.S. delegation, we congratulate your efforts in moving security legislation to conference. AAPA strongly supports the enactment of Federal legislation aimed at protecting America's seaports from acts of terrorism and other Federal crimes. As a member of the Conference Committee on seaport security legislation, we wanted to share AAPA's recommendations on the two bills in order to enact legislation that will make America's ports safe, and will not have a negative impact on efficient movement of cargo.

AAPA is a trade association representing the public ports in the U.S., Latin America, Canada and the Caribbean. AAPA's U.S. member ports serve vital national interests by facilitating the flow of trade and supporting the mobilization and deployment of U.S. Armed Forces. In the next twenty years, overseas international trade, 95% of which enters or exits through the nation's ports, is expected to double. As the link between the land and the water, ports continue to update and modernize their facilities not only to accommodate this growth, but also to be secure.

Protecting our international seaport borders should be a shared responsibility between the Federal, state and local governments, seaport and private industry. We are pleased that both bills (H.R. 3983 and S. 1214) have incorporated this concept. Also, AAPA has been very supportive of the flexibility proposed in both bills for developing security programs on the local level instead of establishing a new "one-size-fits-all" security program. Because of the diversity in size and types of cargo, security for individual public ports is better coordinated locally. Further, we support the Coast Guard taking the lead in establishing local seaport security committees and working with these committees in conducting risk assessments and developing security plans (as outlined in the Senate bill).

We also applaud both bills for recognizing that ports need Federal help in the form of grants for making security enhancements. America's ports understand that port security is an integral part of homeland defense, and since September 11 ports have spent millions of dollars instituting heightened security measures. AAPA strongly supports the authorization of a port security grant program to help ports make improvements quickly. The funding levels provided in both the House and Senate bills, however, are not sufficient to meet the new requirements in the bill. Additional funding is needed.

There are many other provisions in the bills that AAPA supports, such as increased resources for Federal agencies like the Coast Guard and the establishment of a program for training maritime security officers. A more detailed list of the provisions we would like to see included in the conference agreement is attached.

Thank you for your consideration. We look forward to continuing to work with both the Senate and the House as these issues are debated in conference.

Sincerely,

Kurt Nagle

AAPA Priorities for Maritime Security Legislation

Grants

AAPA strongly supports the authorization of a grant program for port security enhancements. The funding request outlined in the Senate bill of \$390 million over five years is a positive first step, but more is needed. Ports have already requested nearly \$700 million from the \$93 million available from the DOT Transportation Security Administration's port security grants program. Further, the Interagency Commission on Crime and Security at U.S. Seaports estimated costs for security improvements would range from \$12 to \$50 million per port. AAPA projects that, based on the estimates in the report, the cost for AAPA U.S. members could be as much as \$2.2 billion

In addition, AAPA supports the provision in the House bill that allows for up to \$7.5 million of the grant money to be used for reimbursement to ports that made security improvements between September 11, 2001, and September 30, 2003. A survey of 52 public port agencies conducted earlier this year revealed that these ports had already spent at least \$49 million for security-related enhancements since September 11.

Local Security Committees

AAPA is supportive of the Senate proposal to establish local security committees. The U.S. Coast Guard should be charged to work in conjunction with the port industry in developing local seaport security committees that would establish port security plans specific to each local port area.

Resources for Federal Agencies

AAPA supports the authorization of funding for agencies that have jurisdiction over seaport security. Both the House and Senate bills provide funding for the U.S. Coast Guard, and the Senate provides funding for U.S. Customs. It is essential that both agencies are given the necessary resources to protect America's ports.

Seaport Security Plans

AAPA prefers the House proposal with regard to security plans. The House sets up a family of plans consisting of a national plan, area plan and facility and vessel plans. These plans are developed to "deter and minimize damage from catastrophic emergencies." This riskbased approach that allows flexibility in planning requirements is preferable to the Senate bill that outlines specific requirements that must be included in every security plan. Because each port area is unique and has a different level of risk, security programs must be adaptable to individual needs.

No New Taxes

Like America's national defense, homeland

security is a basic government service. Therefore, new taxes to fund security enhancements are not a proper way to finance grants. These enhancements protect all Americans, not just those who use the ports. A diverse constituency, including cargo vessels, the nation's defense agencies, fishermen, recreational boaters, cruise vessels, and ferries use America's ports and must also be protected. Additionally, the maritime community already generates \$22 billion in Federal revenues annually in the form of 124 different user fees and taxes. AAPA believes that those funds should be used to protect our international borders.

Maritime Security Officer Training

We are pleased to see that both bills include funding and guidance for developing maritime security officer training programs. It is important to have programs in place that will provide the training necessary for handling security on the waterfront.

Data Collection

AAPA has not taken a position on which agency is more appropriate to collect cargo, crew and passenger manifest information. However, the Federal government should have a single, coordinated mechanism and strategy for requesting all required information so that there are not multiple requests for such data from different government sources.

Technology

There should be a grant program in the final bill for establishing new technologies and installing security enhancements at ports. However, new technologies should be implemented on a case-by-case basis where needed and useful.

Credentialing

If language is included in the final bill addressing credentialing, AAPA strongly encourages the Department of Transportation to move quickly on implementing a national credentialing system for U.S. transportation workers. Many ports are already looking at implementing new access control systems on their own, therefore quick action is needed so these new systems will not be duplicative and will be compatible with a new Federal program. It is also important to ensure that any credentialing system is flexible so it can be adapted to the local security requirements developed by the local Captain of the Port.

With regard to criminal background checks, AAPA supports background checks for certain jobs; however, this issue must be treated with sensitivity with careful consideration of the impacts on employees and the maritime industry.

Container Security and Inspection

AAPA supports the concept of "pushing back the border" by expanding perimeter secu-

rity away from our national boundaries and toward foreign points of origin. Both the House and the Senate bills include provisions aimed at this goal, as do several other bills pending in Congress. When adopting final provisions in conference, AAPA encourages a final bill to provide a Federal program to:

- Establish international security criteria for identifying high-interest cargo containers that pose a potential risk of containing a terrorist or terrorist weapons;
- Prescreen high-risk containers prior to loading the vessel;
- Avoid a system that disadvantages smaller ports or ports near our borders where pre-inspection is not viable;
- Maximize the use of detection technology to pre-screen high-risk containers; and
- · Develop and broadly deploy "smart" boxes

- smart and secure containers with electronic seals and sensors that will indicate whether any tampering has occurred.

AAPA also supports Federal government acquisition of non-intrusive container inspection technologies, and continued research on and development of inspection technologies that could identify chemical, biological, radioactive or nuclear cargo risk. AAPA believes that funding must be provided to Customs so this technology can be installed as soon as possible, and is very supportive of the money that is provided in the Senate bill for this purpose.

Modernizing Customs resources, such as upgrading the Automated Commercial System, would greatly improve the agency's ability to more closely monitor what is entering and exiting the country while ensuring the continuous flow of commerce.



Georgia: Creation of "Client Relations Center"

N July 10, The Georgia Ports Authority announced the creation of a Client Relations Center (CRC). The Authority's newest division, to be based in Savannah, will work closely with the transportation sector, as well as port communities and business interests statewide, to assist with issues related to terminal logistics and services.

"We've always strived to provide our customers with a portfolio of value-added services that extend beyond the traditional package of services offered by most ports. The CRC will act as a front-line communications tool providing customers and other port users with a direct, responsive link to service assistance, cargo coordination and issue resolution," stated GPA Executive Director, Doug J. Marchand.

Added Marchand, "Among U.S. ports, the Client Relations Center will be unique to our operations. We are currently in the process of hand picking the team with a start-up of the CRC scheduled for no later than the end of this year."

The Client Relations Center will be tasked with handling customer relations pertaining to a cross-section of cargoes (container, breakbulk, ro/ro, agri-bulk, dry bulk, liquid bulk, heavy-lift and project cargo) transiting Georgia's deepwater ports in Savannah and Brunswick, as well as inland barge operations in Bainbridge and Columbus. "We've seen record growth in almost every aspect of our business, particularly that of container, ro/ro and agri-bulk. With this growth have come even greater demands on our operations. The Client Relations Center will result in even greater operational productivity by freeing up personnel currently tasked with customer service responsibilities,"stated GPA Director of Operations, John D. Trent.

Though functioning in concerted effort with numerous departments, the CRC will operate as a division of the GPA Trade Development Department. Direction of the newly created CRC has been tasked to GPA Director of Trade Development, Byron X. Hock. In addition to the CRC, GPA Trade Development responsibilities include: sales, marketing, tariff information and economic and industrial development initiatives.

"The Client Relations Center is a natural extension of the functions tasked to Trade Development," stated Byron X. Hock, Director of Trade Development. "Amazingly, the concept of the GPA's Client Relations Center is unique to the port industry. However, many transportation firms outside of the port industry currently operate similar 'customer service' divisions. With the introduction of our CRC, I believe ports will recognize GPA's success and implement similar customerdriven initiatives of their own utilizing our Client Relations Center as a benchmark."

Added Hock, "The CRC is a big part of the GPA's long-term growth strategy to continue to operate Georgia's ports as 'seamless links' within the logistics chain. It also marries well with the 'one-stop' shopping approach we have undertaken

in the design and operation of the Garden City Terminal. Here we've implemented a 'single-terminal' strategy where all ocean carrier services, personnel, service providers, container handling equipment and technologies are located in one massive 1,200 acre facility. The key to our success has always been flexibility in everything we do and that ultimately translates into good, old-fashion customer service."

In addition to an impressive inventory of internal and external support vehicles at its disposal, the Client Relations Center will make use of a number of recent technological investments by the Authority. One such tool, WebAccess, is an easy-touse on-line web browser interface recently introduced by the GPA that provides port users with secure, real-time access to a wealth of container terminal transaction data (see webaccess.gaports.com for additional details).

"Port customers, now more than ever, are looking to ports to operate as more effective 'partners' in the logistics pipeline. Over the past seven years we've made significant investments which have resulted in a number of 'customer-driven' technologies such as radio frequency technologies such as radio frequency technologies should have an immediate impact on the CRC's long-term success," stated Thomas H. Armstrong, GPA Director of Information Technology.

Georgia's public and private port sector activities directly or indirectly support 80,100 jobs, are responsible for \$1.8 billion in personal incomes, produce billions of dollars in sales revenue to benefit the state's economy and generate \$585 million in state and local tax receipts each year.



Houston: First Direct Shipment of Russion Crude Oil

HE Port of Houston announced the first-ever direct shipment of crude oil from Russia to the United States arrived early Wednesday morning in the Gulf of Mexico off the Texas coast near Galveston Island. The shipment is being supplied by YUKOS Oil Company, the largest fully privatized Russian integrated oil company.

"It's fitting that the first direct shipment of Russian crude oil to the United States comes via the Port of Houston," James T. Edmonds, Port of Houston Authority chairman, said in a welcoming address. "This is the eighth largest port in the world, and it is home to a \$15 billion petrochemical complex that is the largest in the nation and second-largest in the world. As a gateway to the Gulf of Mexico, the Port of Houston is a natural point of entry for Russian crude oil with easy access to U.S. markets."

The shipment is further proof of the ever-improving relationship between Russia and the United States - which includes the signing of an energy cooperation statement by Presidents Bush and Putin during their recent summit in Moscow. "The President's National Energy Policy recommended more dialogue between energy producing and consuming countries. The events taking place today are prime examples of how two nations can work within the everchanging global marketplace in order to strengthen the economies of both countries," Assistant Secretary of the Office of Fossil Energy, Mike Smith said.

"This shipment symbolizes the first step toward what we hope will become a fruitful partnership between YUKOS and refiners in the United States," said Bruce Misamore, YUKOS' chief financial officer and deputy chairman of its management committee. "As we expand our production, the United States can become a new market for YUKOS and Russia. While many logistical challenges remain, we believe that these pilot shipments will put us on the path to creating an efficient system of providing a stable source of non-OPEC crude oil for the U.S." Misamore joined YUKOS in Moscow in 2001 after a successful career in the oil and gas industry in Houston, where he still maintains a residence.

Following the September 11 attacks, there has been renewed focus on the need to reduce U.S. dependence on oil imports from the Middle East. Russia, which has vast oil and gas reserves, has become a potential supplier of oil to partially displace oil from unstable countries in the Middle East.

The historic occasion was recognized today at a press conference at the Port of Houston. Participants included Congressman Nick Lampson, Congressman Ken Bentsen, Armando Walle, representing Congressman Gene Green, Assistant Secretary of Energy for Fossil Fuels Michael Smith, County Judge Robert Eckels, Port of Houston Chairman James T. Edmonds, and Captain Odysseas Lekatsas of Kristen Navigation.

Additionally, a number of officials from YUKOS Oil participated, including Misamore, Mikhail Brudno, first vice president of YUKOS Refining and Marketing (RM), Hugo Erikssen, International Information Department director, Vladimir Kuznetsov, deputy director for Oil Exports, YUKOS RM, and Peter Levonowich, Oil Exports, Geneva.

The oil will be discharged to facilities in Baytown and Beaumont in four lighterings from the supertanker Astro Lupus. The lighterings will commence today with deliveries scheduled through mid July.

YUKOS has begun its shipments on an experimental basis to determine their profitability. Challenges remain in making regular direct shipments of oil from Russia to the United States, including pricing and transportation.

YUKOS Oil

Headquartered in Moscow, Yukos is the largest fully privatized Russian integrated oil company.



Port of Montreal Port de Montréal

Montral: Captain Jean-Luc Bédard Appointed Vice President, Operations, and Harbour-Master

N June 13, 2002, Captain J e a n - L u c Bédard was promoted to the newly-created position of Vice President, Operations, and Harbour Master, at the Montreal Port Authority.



Captain Bédard now oversees the Harbour Master's Department (Marine and Shore Divisions, Railway Operations, Security and Fire Prevention), Technical Services (Engineering/ Technical Survey, Maintenance and Environment) and the Grain Terminal. He reports to President and Chief Executive Officer Mr. Dominic J. Taddeo. "Captain Bédard has always been passionate about the Port of Montreal, and he has made continued excellent customer service his priority," said Mr. Taddeo.

Captain Bédard brings 25 years of shipping industry experience to his position. Before joining the Port of Montreal as Harbour Master in 1990, he navigated the Great Lakes, the Arctic, coastal waters and the high seas. He is a graduate of the Institut Maritime de Rimouski, and holds a master mariner's certificate.



Trinidad and Tobago: First quarter performance results



(a) Transshipment & General Cargo on the increase

First quarter performance reports on the Port of Spain indicate an increase of 14% in the volume of transshipment and breakbulk cargo handled in 2000 over the same period in 1999. From January 01 to April 30, 2000 almost 93,000 twenty foot equivalent units (TEUs) have been handled which represents over 10,000 TEUs more than the same period in 1999.

Port performance in the handling of breakbulk cargo (newsprint, lumber, steel pipes, potatoes) for the first quater of 2000, is even more encouraging, with over 48,433 tonnes managed this year, compared to just over 30,000 handled over the same period in 1999.

Renewed confidence in Trinidad and Tobago's economy, conistent growth in the manufacturing sector and increasing local expenditure has led to greater exports and imports. Some of the credit for the growth in business at Port of Spain is due to the Port Authority's aggressive pursuit of the breakbulk business.

(b) Portainer #3 is on the rise:

It's been almost two years in the making, but Portainer #3, the Port Authority's most expensive equipment purchased to date, has been delivered, Already visible on the skyline of the Port of Spain Container Terminal, the post-Panamax Portainer is being erected on site, and when fully assembled will have an outreach of 130 feet, that is, the capacity to manage vessels 15 containers wide. This new Portainer is equipped with fully computerised dignostics, as well as capacity for remote computerised control. The Port Authority considers this investment critical to its strategic objectives, which is to make the Port of Spain the regional transshipment hub and looks forward to introducing this impressive piece of equipment, as well as other innovations and enhancements to its facilities in the service of its customers.

(c) Dredging of the Port of Spain Harbour

The Port Authority has embarked on an histroic undertaking, that is to deepen the Port of Spain harbour from its current draft of 9.75 meretrs to 12 meters. This project is one of the critical elements of the Port Authority's strategic plan to facilitate growth in the business of managing both transshipment and general cargoes, through the enhancement of Trinidad's main containerized cargo handling facility.

With the completion of phase one of the dredging, the length of the Grier Channel has been increased by over 5 kilometers. The latter was achieved with the use of the Trailing Suction Hopper Dredger 'Barent Zanen which has removed approximately 600,000 cubic meters of material from the seabed.

Phase two of the project which involves the reclamation of 28 hectares of land is already underway.

Phase three of the project will begin at the inner channel and basin. This involves the pumping of the dredged material to the site of the land reclamation area via 800mm pipes. In an effort to ensure minimal disruption of the port operations during this phase of the dredging, these large cast iron pipes will be sunk to the seabed from the dredger to the reclamation area over a distance of approximately 2.5 kilometers. The cutter suction dredger 'Edax' will be used.

(d) Berth 6a Upgrade

The dredging of the Port of Spain harbour will impact on the port's operations in many ways, one of which is the stability of the existing structure at Berth 6A at the container terminal.

According to the Port Engineer Narine Singh, the structure at Berth 6A is of an Open Pile design where the rails for the port's two (soon to be three) ships to shore Portainer Cranes are located. He added, "The open pile structure is supported by a rock-lined dyke which also retains the backfill and paving for the container storage yard. The dyke as well as the stability of the rock slope, which were designed at a certain elevation, in conjunction with the current depth of the harbour of 9.75 meters could be adversely affected when the harbour is deepened to 12 meters. Therefore measures must be undertaken to the dyke and rock slope to prevent any possibility of failure.

(e) Other upgrade works

Other development works in progress include the upgrade of the the Port Authority's high voltage electrical system, which has suffered some deterioration over the years. This project includes:

Construction of a new 33 KV/6.6 KV substation.

- Installation of 33KV outdoor switch gear and a 6.0 MVA transformer,
- Installation of ductwork and power supply for the new ship-to-shore crane,
- Installation of new Ring Main Units at each of the 17 mini substations.



frica/Europe

ESPO: US Customs officially denies existence of a "Black List" of ports

UR initial focus is on the top-20 mega-ports in the world, which handle 66 % of containers destined for the United States," said Edward Logan, Customs Attaché of the American Embassy in London, "but there is not such a thing as a white list or a black list, there is only good and less good security." Mr. Logan spoke at the TOC Maritime Cargo Sec-

urity conference in Antwerp on June 10, where he presented the US Customs' Container Security Initiative (CSI). This project aims at targeting and screening containers at the top-20 mega-ports in the world, before these containers reach their port of final destination in the US. The initiative could eventually be extended to other ports as well.

Initial discussions between US

Customs officials and representatives of the authorities of these top-20 ports have recently started. Singapore was last week chosen as the first port outside North America to engage in a pilot project. US Customs officials are expected to be posted in a number of European ports soon.

"The advantages of the CSI project for the participating ports are enhanced safety and security, a competitive advantage and reciprocity," Mr. Logan explained. Representatives of the European Commission and ESPO warned however for the dangers of unilateral initiatives in terms of distortion of trade and competition. "Remedying port security can be compared with the task of a plumber," Jean Trestour, Head of the Shipping Policy Unit of the European Commission said, "it is no good if he just fixes one hole in a tube if several others are leaking. In the case of ports, risks may come from the east, but also from the west, the north and the south." He added that the Commission was examining if legislation could help to avoid security becoming an issue of competition. Terminal operators present at the conference also pointed at the cost of investing in port security measures. "Mega-ports have sufficient resources to invest in scanners and other means, but smaller ports and terminals do not always have such funds available," one operator said. This led to a discussion as to whether port users should bear the costs, as it is currently the case in UK ports where port security legislation is already in force, or whether state funding (national or European) should be made available as in the United States.

It is recalled that ESPO is currently assessing security levels in European ports, through a series of "fact-finding" missions. Aim is to find out what is being done already in terms of security, to identify particular problems and to pinpoint both good practices as well as weak spots. The next step is then to learn from each other and to exchange best practices. Co-operation with other parties, such as FEPORT, MedCruise, Cruise Europe and also the European Commission is crucial in this respect.

ESPO Chairman David Whitehead will be writing to Commissioner Loyola De Palacio to formally confirm ESPO's willingness to co-operate on port security matters.

EU Commissioners call for global agreement with USA on container security

N the context of their Container Security Initiative (CSI), launched following the 11 September's attacks, the USA have been negotiating bilateral agreements with some foreign governments (including EU Member States), with the aim to collect information to target suspicious cargo, pre-screen and inspect containers, and therefore ensure the security of cargo before it reaches US soil.

The agreements notably entail the positioning of US Customs officials in those ports, whose traffic volume to the US is high, so that they can supervise the procedures in place in the port. Traffic from "CSI ports" would not be checked a second time upon arrival in the States, which would allow a "fast-track" treatment by US Customs of import shipments originating from those ports.

In Europe, France, Belgium and the Netherlands have signed declarations of principle to enter into this programme, covering the ports of Le Havre, Antwerp and Rotterdam. It has just been announced that Marseilles would be added to this list of "CSI ports" (even though it is not one of the 20 mega-ports identified by the US as first targets of their initiative).

The EU Commissioners for Trade, Customs and Transport, Pascal Lamy, Frits Bolkestein and Loyola De Palacio (also Vice-President of the Commission) expressed their concerns about the effect of this American initiative. Even though the European Commission shares the aim of the CSI (i.e., increase security and fight terrorism), it fears that discrimination would be created between those European ports participating in the project that would benefit from preferential treatment for exports towards the States, and other ports which are not covered by a CSI agreement.

Moreover, the Commissioners noted that this approach would induce transfer of customs controls from the import country to the export country and would be contrary to the current efforts to simplify customs operations in the European Union.

Lamy, Bolkestein and De Palacio presented these concerns during the weekly meeting of the College of Commissioners on July 17 where they proposed the following lines of action :

 to pursue talks with the US in order to reach an agreement allowing an equal treatment of all containers coming from the EU. The Commissioners believe that port security needs tailor-made solutions taking into account the diversity of each port, based on an objective and non-discriminatory evaluation and not decided by US Customs on an improvised and arbitrary basis;

- to integrate all bilateral negotiations into a multilateral agreement, under discussion in the World Customs Organisation (this global agreement between the USA and the EU should notably include a reciprocity clause);
- to dissuade Member States to continue bilateral contacts with the US which threaten common trade, customs and transport policies;
- to check the compatibility of the existing bilateral agreements with Community law;
- to present, by the end of the year, a Commission Communication on maritime security

Lamy and Bolkestein had already written to the US Treasury Secretary, Paul O'Neill and to the US Trade representative, Robert Zoellick last week, calling for better coordination between the EU and the USA, notably in view of international discussions on a common model approach for CSI. The letter also highlighted EU concerns about the ongoing selection of European ports which would lead to a difference of treatment between them.

In response, the USA stated that all ports may potentially participate in the CSI. But in practice, the first phase of implementation of the programme is already underway with the selected ports.

Global terminal operators co-operate on container security

The world's three largest container terminal operators, Hutchison Port Holdings, PSA Holdings and P&O Ports announced last week that they will join efforts in improving physical tracking of containers destined to the US. Together, these three companies account for 70 % of the world's container terminal operations.

Working with shippers, carriers and service providers, the three operators will track and authenticate containers from the point of manufacture, load and transhipment port to discharge in the US.

The three operators will fund the deployment of hardware including electronic seals, sensor devices and scanners. The equipment will enable web-based tracking of ocean-going shipments in real time.

Preparations on this joint initiative have started and are expected to be operational by the end of this year. An automated IT infrastructure linking Singapore, Rotterdam and Hong Kong with the principal US ports will be the result.

The initiative has received the support of the US Transportation Security Agency.





HE British logistical concern Falcon Distribution Group is moving to 19,000 m² (200,000 sq. ft.) warehouses built by the Port of Dunkirk Authority in the Dunkerque Logistique International sector located in the fast turn-round Western Port.

Falcon, a concern created in 1991, was until now established at Outreau (Pasde-Calais) and was using ferries out of Boulogne-sur-Mer to ship its goods to Great Britain. However those ferry lines ceased operating and that obliged Falcon to send its trailers to Dunkirk and Calais, an additional expense. Following the opening, in September 2001, of the Dunkirk-Dartford line by Dartline, Falcon decided to relocate its activities at Dunkirk, in the Western Port, right next to the Ro-Ro Terminal. As for all other warehouses in that park, Falcon will be employing its own workforce.

Specialised in storage and distribution in the UK, Falcon is aiming at expansion and diversification. Currently it imports domestic electrical appliances, mostly from Italy but also from Austria, Slovenia and Germany, and 70% of those goods are received by rail. For distribution in the UK they are loaded on unaccompanied trailers for forwarding via the Ro-Ro Terminal. In 2001 that traffic reached 7.500 trailers.

The Port Authority has made available logistical warehouses provided with their own rail spurs. A first instalment of 12,400 m² (133,000 sq. ft.) was delivered early May. Delivery of the last instalment is scheduled for late July 2002.

With that new establishment, Dunkirk reinforces its position as a distribution hub. Already, in 2000, Maersk Logistics chose the port as the place where to develop 20,000 m² (215,000 sq. ft.) of warehousing for the distribution of toys.

Dunkirk's ease of access by rail and motorways, and the existence of two regular lines to Great Britain, were the determining factors for its being chosen by Falcon Distribution Group.



Kenya: First major IT project goes live

HE KPA's first major fully integrated IT project modules of Enterprise Resource Planning Systems (ERPS) went live on July 1, 2002 at 9.30AM.

The implementation of phase 1 of the IT strategy which commenced in November 2000 is in tandem with the Authority's vision to become an E-port and be rated among the top twenty ports in the world by the year 2005.

Out of the many ERPS's available in the market KPA has zeroed in on the Systems Application Product (SAP) as the preferred ERPS. SAP will integrate all functions in the organization and provide information that will be on-line and realtime. This will enable the management to be making timely and appropriate decisions.

With SAP having gone live, the key organization's functions namely: human resource management; financial planning; material management; plant maintenance; sales and distribution and project systems management are all now computerized and on-line.

Intense preparations to guarantee success of the programme are in the final stages. According to Mrs. Catherine Wairi, the KPA IT project manager' massive training of systems users has been going on from clerical to managerial levels. Networking is complete and crucial offices both at the headquarters and ICDs are online, first targeting Human Resource, Procurement, Finance and Revenue departments.

Mrs. Wairi confirmed that out of the eight hundred personal computers that have already been received three hundred have been rolled out to priority areas for use. The exercise is still going on. The high level of computerization will ease service delivery and enhance efficiency by eliminating unnecessary bureaucratic procedures and paperwork.

Mrs. Wairi said paper work is expected to reduce by about 80 per cent. There will be cost savings and high rate of returns owing to the efficiency of the systems. This step is so far a major a landmark in KPA's spirited efforts to improve general port efficiency and service delivery to customers.

After SAP, the next phase in the IT strategy will be to implement the waterfront and cargo management system in the year 2003. The system, which will be interfaced with the ERP, will streamline gate pass control, traffic management, ship and yard planning and billing.

The third and final stage of the IT strategy will be the implementation of the community-based System (CBS). This is a computerized flexible information resource that will link the entire port community in the region and allow exchange of shipping information on a common platform.

CBS will ensure faster clearance of goods from the port, ease access to global logistics markets information, reduction of potential for fraud and corruption, improvement of revenue collection and enhancement of security of cargo in the port.

KPA is also at the moment redesigning its website to make it interactive to boost communication with business partners and improve customer service.

KPA will by the year 2005 be a full E-Port with many advantages. The systems will be web-enabled with full Internet connectivity. Transactions will have less human intervention as information will be paperless, accurate, on-line and realtime and accessible round the clock. Furthermore, all service providers will be able to offer improved services that will benefit users in their supply chain management that guarantees quality, performance, and just-in-time schedules.



Le Havre: French and American customs authorities to increase their co-operation in their CSI

S part of the Container Security Initiative (CSI) launched by the United States of America after the terrorist attacks of September 11, 2001, Mr. Alain Cadiou, Director General of the French Customs Authorities and his American counterpart, Mr. Robert Bonner, have signed a declaration of principle at the head office of the World Customs Organisation in Brussels. The agreement is designed to reinforce the operational cooperation between the two administrations, states a press release from the French Customs Authorities.

In practise, alongside their French colleagues in the port of Le Havre, American customs officers are to take part in targeting high-risk goods on shipping connections with the United States.

The French customs authorities are providing active support for the initiative in the port of Le Havre, in particular with an automated system capable of obtaining

information on goods upstream of their arrival at customs clearance and targeting containers requiring a high level of caution.

Containers are checked by physically inspecting the goods or by using an X-ray type of scanner (Sycoscan).

The port of Le Havre also has a computerised system enabling the follow-up in real time of the containers in the port.

In parallel, the US Customs Service in

Washington has also issued a press release, recalling in particular the major role played by the port of Le Havre in exchanges with the USA. It indicates that Le Havre is the 3rd port in Europe to take in the CSI after Rotterdam and Antwerp, further to the agreements also signed a few days ago between the American, Belgian and Dutch Customs Authorities.



Rotterdam: Cooperates with US Customs in CSI

UESDAY morning, June 25, 2002, Dutch Minister Mr. Gerrit Zalm and Mr. Robert Bonner, Commissioner Customs Service USA, signed the so-called Declaration of Principles for the port of Rotterdam. The goal of this cooperation is to mutually exchange information aimed at identifying containers that carry a high risk.

The Rotterdam Municipal Port Management (RMPM) is pleased with the proposed cooperation between the customs services of the Netherlands and the United States. The declaration will not only contribute to improving the level of cooperation in US ports, but also in other ports. The RMPM considers the agreement a token of appreciation for its safety policy against organized crime.

If a lot of ports actually join the Container Security Initiative (CSI) proposed by the Americans, the safety/ security of logistic chains around the world will be improved. The RMPM will therefore gladly share its knowledge and experience with other ports.



Rouen: Invests for the future

HE Port of Rouen has every confidence in its competitive advantages and its relevance to the economy: a 180 million euros investment programme scheduled for the years 2001-2006 has been approved by local government bodies, central government and the ERDF. This programme relates to sea access and port facilities such as the terminals and the logistics platform, as well as land access to the port.

Improvements to sea access

Following the completion in 2000 of the programme to enhance channel depths to allow ship draughts of up to 10.30m downstream (10.70m upstream), the Port Authority has now undertaken a programme to rehabilitate the estuary's channel stabilisation embankments. This part of the programme, which will cost EUR33.54m, is fundamental to safe port access and will be implemented over the period to 2003-2004.

More efficient port terminals

Following its total overhaul, the Rouen-Qevilly forest product terminal now has two new warehouses:

- one offering 10,000 sq m, built by the Port Authority and leased to CIMEP,
- the other with an area of 13,500 sq m,



financed by Westerlund.

A new wharf, due to enter into service in 2003, will be built at Honfleur to cope with the growth in traffic - which has trebled in the space of 10 years in this sector far downstream from the Port of Ruen (cost: 6.4 million euros).

The Grand-Couronne container and general cargo terminal, with an average annual rate of growth in its container traffic of 13.5% over the last eight years, is now covered by a new comprehensive site plan which will enable it to cope with this positive traffic trend. The new site plan also includes the Rouen Vallee de Seine Logistics Platform. The objective is to integrate it into transport networks, to modify the terminal entrance, to separate general and internal traffic routes, and to put in place a high-quality rail connection. In addition, in 2003 two new gantry cranes will be replacing the two oldest cranes. And lastly, in 2003, construction will begin on one of the two extra ship berths with which this terminal is to be provided (total cost: 37.65 million euros).



B-Doubles

PORT of Brisbane Corporation and Queensland Transport began trials of Super B-Double trucks at the Port of Brisbane. The trucks are used to transport containers between the shipping terminals, the



Corporation's rail terminal (the Brisbane Multimodal Terminal) and container parks.

While existing vehicle combinations can only carry between one and three 20-foot containers (depending on weight) or one 40-foot container, the 30metre-long Super B-Doubles can carry up to four 20-foot containers or two 40foot containers.

The Corporation's Acting Chief Executive Officer, Jeff Coleman, said, "We have embarked on this trial because of the obvious efficiencies to be gained. The Super B-Double's extra

capacity will mean more containers moved with fewer trucks. This will save both time and costs, and, from an environmental perspective, fewer trucks will mean reduced emissions."

For the initial period of the trial, the Super B-Doubles are restricted to just four roads on Fisherman Islands. Nevertheless, Mr Coleman still advised caution by other drivers.

"A Super B-Double is around four metres longer than a B-Double, and so we are asking road users on Fisherman Islands to take special care, especially at roundabouts and when overtaking." he said. "It will be more important than ever that people observe the 60km/h speed limit."

Four Super B-Doubles are taking part in the trial. The Brisbane Multimodal Terminal's contract truckers, K&S Freighters, operates three, and independent contractor, Transmutation Pty Ltd, owns the other.



MPA: MOU between Singapore and the Netherlands

HE Maritime and Port Authority of Singapore (MPA) has signed a Memorandum of Understanding (MOU) with the Directorate-General for Freight Transport (DGFT) of the Dutch Ministry of Transport, Public Works and Water Management. The MOU was signed by Mr Chen Tze Penn, Director-General, MPA and his Dutch counterpart, Mrs Jacqueline Tammenoms Bakker, Director-General, DGFT. The signing ceremony took place on July 2 at the headquarters of the DGFT at the Hague, Netherlands.

This MOU follows on the Letter of Intent on maritime co-operation signed between Transport Minister Mr Yeo Cheow Tong and the Dutch Minister of Transport, Mrs Tineke Netelenbos in 2000. The MOU provides a framework for the MPA and the DGFT to co-operate in areas such as maritime policy, maritime safety and security, marine environment protection, maritime technology research and development, maritime training, and innovation in shipping, ports and logistics.

Under the MOU, co-operation could take the form of regular dialogues on maritime and port issues of mutual interest, implementation of joint projects, exchange programmes involving scientists, researchers, trainers and other experts in the maritime field, and joint organisation of maritime training courses, seminars and conferences.

Singapore had previously concluded a MOU on Maritime R&D, Education and Training with Norway, another leader in maritime technology, in March 2000. The signing of this latest MOU on maritime cooperation with the Netherlands represents another milestone in the MPA's efforts to strengthen links between Singapore and the leading countries in maritime technology research and development to boost Singapore's development as a maritime R&D centre.



Osaka: Maritime Museum Dome wins Institution of Structural Engineers Structural Special Award



ITH its unique design featuring a large glass dome that gives an impression of floating on the sea, the Osaka Maritime Museum makes itself as a landmark of the port of Osaka, the sea gateway to Osaka. For its structural excellence, the museum recently received the Structural Special Award, the highest of prizes awarded by the Institution of Structural Engineers, a UKbased internationally-recognized engineering institution.

The Osaka Maritime Museum was highly commended by judges as "a superbly executed fully-glazed glass and steel lattice dome, sited in an active seismic area, and designed to resist the unusual combination of wave action and typhoon loading." Judges also regarded this project as a successful case that effectively reflected an equal-footing collaboration between an architect and a structural designer, and made full use of the latest engineering technology. This award is particularly meaningful and honorable for the Museum in that this same award was also given to The Eden Project (Cornwall, UK) and The Queen Elizabeth II Great Court, The British Museum (London, UK), both of which are also the dome projects located in UK

The application process for this award

was arranged by ARUP, a firm responsible for designing and engineering the Museum Dome. On June 6, 2002, Mr. Mike Shears, Vice President of ARUP, presented a plaque at the Institution's award ceremony to the Maritime Museum.

Institution of Structural Engineers

With an aim to contribute to the technological development in the field of engineering structures and enhance the quality of produced structures through the activities of its members, the Institution publishes journals and organizes lectures and seminars.

Structural Special Award

It is an award given by the Institution of Structural Engineers to a project that shows prominent creativity, high quality and outstanding structural engineering technology.



Sydney: Sydney Port officially hands over a piece of history



fisherman always knows the best time to fish, a surfer always knows when they can catch the best waves and a captain always knows when to bring his or her ship into port.

Sydney Ports Corporation's provision of tidal information makes the job of knowing what's best, much easier for these people. Sydney Ports and their predecessors have been responsible for recording tide levels for over 100 years.

On July 30, Murray Fox, General Manager Navigation and Environment of Sydney Ports Corporation officially handed over Sydney Ports' manual tide gauge first used in 1908, to the National Parks and Wildlife Service.

The old tide gauge, located at Fort Denison is a historical symbol of the working harbour and its maritime history and is being transferred to the NPWS for preservation. It is Sydney Ports' responsibility to provide tide records from the tide gauge at Fort Denison and Botany Bay to

the National Tide Facility (NTF) in South Australia. The information collated by the NTF from tide gauges all over Australia, is used to prepare tidal predictions for port and harbour authorities, navies, and other users such as fishermen, sailors and even surfers.

Phenomena such as tsunamis can be predicted by the analysis of tide levels and used to warn coastal communities at risk, data relating to changes in sea levels are also gathered in the study of global warming. Tide analysis also assists in the research of currents which can help locate faster and more economic shipping routes.

Tidal information is most important to Port Authorities especially in a crisis, for example when a ship spills a pollutant into the sea, sea levels and tide predictions are important when attempting to prevent the spread of the pollutant and cleaning up the spill. Tide levels have been recorded at Fort Denison from as early as 1870. Original charts are available from January 1905 and are held in the State Archives. From 1908 the Sydney Harbour Trust was the responsible authority for the tide gauge, although tides have been recorded at Fort Denison since 1870. The Sydney Harbour Trust employed a caretaker who lived on Fort Denison, and it was the responsibility of the caretaker to replace the recorded charts with fresh paper, this continued when the Maritime Services Board took over in 1936

In May 1960, the gauge at Fort Denison recorded shockwaves from the devastating Chile earthquake, an amazing graph of the event is now on display in the tide gauge room. In 1974, the tide reached its highest value recorded at 2.37 metres. This was considered a freak of nature, as the average high tide known as the "mean high water springs", is around 1.6 metres.

A caretaker by the name of Cliff Morris, employed by the MSB between 1961 and 1985, was very protective of the Fort and was constantly informing the Harbour Master if three or more ships were between the Fort and the Harbour Bridge at one time, even though this broke no maritime laws.

In 1992 National Parks and Wildlife Service took over from the MSB as the responsible authority for Fort Denison. However, the MSB remained responsible for the tide gauge, and an MSB staff member visited Fort Denison daily to change the paper and perform general maintenance on the gauge. The introduction by Sydney Ports of an automatic tide gauge in 1995 enabled digital information from the gauge to be sent to the NTF via email/internet, however, the old tide gauge was still used up until 1999, as a back up.

Sydney Ports are responsible for the new tide gauge, including the maintenance of the gauge and the provision of tide levels. The NPWS have the old tide gauge operational once again for historical and interpretive purposes.



Yokohama: Opening of New Yokohama International Passenger Terminal



N June 1, 2002, the new Yokohama International Passenger Terminal was opened on the Osambashi pier, the oldest pier within the port of Yokohama. The pier underwent reconstruction work from 1988 to combat the aging of its structure.

The new terminal is 15 m tall and 430 m long. The parking lot is located on the first floor, and the new terminal and the Osambashi hall that will be completed in December are on the second floor. The public square and observation decks are located on the roof level and are open to the public 24 hours a day. The new terminal is noteworthy for its interior construction that uses no pillars or beams. The roof section is made up of wave-like curved surfaces. At the new terminal it is possible for two LOA 300-meter class vessels or four LOA 200- meter class vessels to moor simultaneously.

On June 2, the Crystal Harmony, the first vessel to moor at the terminal since its opening, entered the port of Yokohama and a welcome ceremony which saw the mayor of Yokohama, the designer of the terminal, the captain of the Crystal Harmony and many citizens was held.

The new terminal does not just bring a positive economic effect to Yokohama through the increased number of passenger ships that will be attracted by its increased convenience, it is expected to become a new attraction of this city.

The Yokohama International Tallships Festival



From June 26 to June 30, the Yokohama International Tallships Festival was held at the port of Yokohama, with sailing vessels from various countries participating.

This event was held to coincide with both the opening of the new Yokohama International Passenger Terminal and the final match of World Cup soccer events. A total of eight vessels from Japan, Korea, Russia, Holland, and New Zealand gathered at the port of Yokohama.

In addition to the events held for crew members, many other events, such as the opening to the public of ships and sail drills were held. These events increased the liveliness of Yokohama already filled with the excitement of the final match of the World Cup. In particular, on June 29 when the sail drills were conducted, over 100,000 people gathered at the port of Yokohama to see the tallships at full sail.

Saigon: Tugboat Service Company receives International WQC Award

HE presentation of the WQC (World Quality Commitment) International Star Award trophy took place on May 20, 2002 in the Convention Hall of the Concorde La Fayette Hotel. The event was presented

Business Initiative Directions. Among the outstanding companies at this year's ceremony was TUGSERCO the leading professional towage company in Vietnam.

by Jose'E. Prieto - President and CEO of

It is the first time the Vietnamese maritime services company was presented this International Award.



Mr. Nguyen Thu (right), Director of Tugserco receiving the BID Award.