

24th International Port Conference, 17-19 February 2008, Alexandria

Challenges of the World's Ports

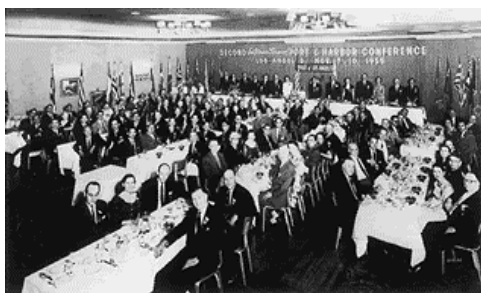
Dr. Satoshi Inoue, Secretary General

The International Association of Ports & Harbors (IAPH)

I thank the Arab Academy for Science, Technology and maritime Transport for inviting me as a keynote speaker to the 24th International Port Conference here in Alexandria. On behalf of the International Association of Ports & Harbors, IAPH in short, it gives me a great pleasure and honor to discuss and share with you this morning about emerging challenges facing the ports in the world today.

Introducing IAPH...

As I suppose not many of the audience here are familiar to IAPH, I like to start with a brief introduction of our organization to you. The IAPH that is often called the World



Ports Association is rather unique, being the only international organization of the world port authorities jointed by many others interested in the port industry. Established in 1955, IAPH celebrated its 50th anniversary three years ago.

IAPH, headquartered in Tokyo, Japan, has been and will be constantly devoting itself to the sustained development of the world port community. We believe in our foresighted founders' spirit that ports in the world should and could work together hand in hand for the furtherance of the world economy and realization of the world peace, holding high a torch of its motto: ***World Peace through World Trade, World Trade through World Ports.***

IAPH activity

At present, our membership is some 230 ports from 90 countries and economies and about 130 associate members such as shipping lines, logistics providers, maritime industry organizations, national and regional ports associations, education and research institutes, etc. Member ports all together handle nearly 90% of the world container cargos and 60% of the whole maritime cargos.

The first pillar of our activity is to network all port executives and experts across the globe to share best practices among themselves. Every two-year, we meet at the IAPH world ports conference rotating around the world. Last year we held a successful conference with some 800 participants in Houston, US and next year we will meet again in Genoa, Italy. In addition, each of Africa/Europe, North/South Americas and Asia/Oceania has respective regional meeting annually to discuss common key issues in regional perspectives.



The second pillar is to represent the world port community at international arenas. To effectively address global issues such as maritime security and environment, IAPH works hard and proactively at United Nations, being granted Consultative NGO Status by and from IMO, ILO, UNEP, UNCTAD, WCO, etc. Also we closely collaborate with other international NGOs to work out common approach to underlying industrial issues.

The third is to tackle port management issues and topics of common interest to members. Currently, eight technical committees are formed up to cover a range of subject areas such as port safety and security, environment, legal affairs, port planning and development, port operations and logistics, IT applications, and others. Their technical reports and guidelines are considered highly valuable not only by our member ports but also UN agencies and global maritime organizations.

The fourth one is to assist member port in developing countries to enhance their human resources. It has long been a main thrust for IAPH to provide developing member ports with financial support to their staff sent to overseas training institutes, and also with chances for young professionals to study port management by applying for IAPH essay contest running every two years.

Ports in the globalization era

Now, I will move on to the today's subject. No day is passing without hearing someone talking about globalization. Yes, indeed, just look around your home, work place and streets. Cars, audio-sets, shirts, fruits, wines, even mineral waters. So many things are now coming from overseas for your daily life. Likewise, manufacturing industries are now importing hundreds and thousands of parts from around the globe to assemble into

their final products, and then export a huge volume of products to every corner of the world.

Living in such a so-called globalization era, people tend to take it for granted to have any thing they need without hassle. In reality, however, none of goods can come to them without help of excellent transportation infrastructure especially network of ports across the globe.

Then, what has the globalization brought to the world's ports today? Basically, in my view, we have two critical challenges. One is obviously how to cope with continued trade growth, meaning tremendous increases in demands for port capacity. As known to everybody, expansion of port capacity implies two elements, not just simple increases of terminal numbers but also provision of port facilities to accommodate vessels of ever increasing sizes.

In 2006, 440 million TEUs of containers were handled at ports in the world, an increase of 13.4% over the previous year, and are forecast to reach 600 million by 2015. To carry ever increasing demands, container vessels deployed have never stopped increasing in size in pursuit of the economy of scale, even accelerating further its enlargement with an introduction of 12,000 TEUs carrying vessels.

What is the second challenge? It is how to cope with extremely sophisticated logistics demands of port users, especially global shippers in pursuit for integrated supply chain management. As we will discuss in more detail in a minute, this is more fundamental or you could say "qualitative" challenge rather than "quantitative" challenge like traffic growth we have just discussed as the first challenge.

Transforming into logistics hub ports

Since unmemorable ancient times, ports have been playing an essential role of transferring point between sea and land transports. In this traditional model, port must only cut down cost and time of port services as much as possible. Ideally, no cost and no time spent at port would be the best to users. In other words, no matter how critical and inevitable, ports are considered as no more than "cost-adder" from users' point of view.

As globalization advances, however, from raw material procurement and parts

production through assembling into final products to delivery to consumers all over the world, the entire process is controlled in an integrated way with so-called supply chain management system. In other words, logistics of any goods today is not managed in a fragmented way as in the past. For instance, shippers are no longer looking at just efficiency of port terminals alone apart from other segments of a total supply chain. Instead, they pursue more for efficiency and effectiveness of their total logistics process.

Therefore, in the globalization era, if port is to continue playing its critical role, port must provide much more integrated logistics services rather than mere interface between two modes of transportation. Under the new model of port, ports are considered to be “logistics value-adder”, which means fundamental transformation of ports into “logistics hub ports”. This is only possible through a new approach to port management, which gives new critical mission to port authority.

While terminals operations may rely on the private sector, port authorities need to take responsibilities for long-term planning, infrastructure provision, safety and security regulations, environmental measures, trade promotion, port community IT system development and integrated links to hinterlands. More importantly, it is a mission that cannot be fully accomplished by port authorities alone. The key to success is to develop innovative partnerships with all other members of the port community, be they government agencies or private concerns. Port authority will need to be like an orchestra conductor, blending all the players’ skills to produce a harmonious whole.

Accordingly, the key question to be answered is how much logistics value a port community as a whole can provide to users. We need to look at a port not as a series of terminals but as a port community.

Key strategies

Now, let us see what strategies the world’s ports are now undertaking to transform themselves into “logistics hub ports”. We will focus on five areas of key strategies in turn: port expansion, innovative terminals, integration of logistics services, hinterland access and quality port.

– Port expansion –

First, to cope with future traffic growth, a number of ports are carrying out large-scale developments of new terminals and deepening of waterways. For instance, construction

works are now in full swing at New Busan Port, 20 km west of the existing Busan Port, to develop planned 30 container berths, which partly started operations in 2006. Another example is Maasvlakte-II development at Rotterdam Port, which involves 1000ha land reclamation for huge complex of container



terminals and other industrial activities. You can also find many other large-scale port projects such as Hamburg, Antwerp, Le Havre, Shanghai's Yangshan Deep-sea Port, Quanyang New Port, etc.



Despite those tremendous efforts, however, demands for port facilities are expanding even more rapidly. We have already experienced serious port congestion at major ports, especially

along the west coast of the US and northern Europe. Many major ports are facing now space constraints for future development with more attention recently turning to re-development of existing terminals and facilities. In addition to space problem, ports have to meet environmental standards and requirements, which are increasingly becoming stricter and broader.

– Innovative terminals –

As ports have to go through such constraints in coping with increasing demands, we should develop port capacity not by blindly repeating traditional concepts and modules of terminals, but by introducing innovative approaches and systems by all means. With support of advanced IT technology, innovative automation of terminal has already been introduced to many ports. Also, new generation of container terminals are equipped with systems of high-speed and high-capacity.

For instance, the brand-new terminal Pasir-Panjang of Port of Singapore is designed to stack 9-10 high of containers by remote-controlled over-head yard cranes. This is one of earliest models for space-efficient terminal.



Another innovative approach is found at Peres Paragon, Port of Amsterdam. Here, a container

vessel is to come into the world's first indented berth, and then to be loaded and unloaded from both sides of ship. So that ship-turn-around time is cut down to a half of that required by a normal container terminal.



– Integration of logistics services –

Today, major ports allocate more and more space for logistics activity when developing container terminals. This is a most significant change observed in port development over the recent years, which is a clear reflection of port management policy to transform and re-establish their ports to integrated logistics hubs. As port users tend to freely shift from one port to another to develop their effective logistics systems, ports need to establish itself more solidly as a logistics-value adding center within a regional logistics network.

Although given different names such as logistics parks, logi-tech-zones, logistics center, etc, essentially, they are concentration of a wide range of logistics service industries, including warehousing, delivery, checking, processing, assembling, repairing, etc. Also strongly needed is reliable IT infrastructure to support global logistics networks, which is prerequisite to making logistics services systems visible to users. Concentration of such logistics industries brings customers located in port's logistics parks a range of benefits from an economy of scale.

A typical logistics park, as shown in a slide, is being developed at Port of Lu Havre. More than 500 ha in total are developed as logistics parks at several sites within the port areas. Many similar developments can be found at Ports of Rotterdam, Antwerp, Hamburg, Barcelona, etc.



– Enhanced inland access –

In addition, major ports are now working hard to strengthen access to their hinterlands or service areas. To be efficient logistics hub ports, it is essential to provide a wide selection of efficient transportation from ports to hinterlands. It is not just hardware like highways or railways but also, perhaps even more importantly, software like service

frequency and convenient timetable.

Excellent examples are found at major European ports, offering customer-friendly railways services and inland waterway services. Another recently completed case is the Alameda Corridor Project in US. This is a 20-mile-long dedicated freight rail corridor, jointly developed by Ports of Los Angeles and Long Beach in a consortium with railway companies and other private sectors.



Key is how to best satisfy users who like to deliver their cargos to final destinations most efficiently. As part of this effort, some ports are developing inland logistics centers called inland ports or dry ports, which functions for inland users or shippers as a convenient extension of seaports.

– Quality port –

Challenges facing ports today goes beyond just efficiency and functionality to reliability and sustainability of ports. In other words, if ports are to be successful in a current global logistics market, ports must guarantee users a high quality of safety, security and environment. This is what we call Quality Port. It is the only way that port can provide users with reliable and sustained services, and at the same time can contribute to the development of national, regional and local economies as well as community.

Port safety should well cover three key components: ships coming in and out of ports, port workers and cargos handled. IAPH is proactively working at UN agencies and other maritime organizations to develop international frameworks such as conventions and guidelines and ensure effective implementation across the globe.

Port security has become another essential area for port management to tackle today. Representing the world's port community, IAPH has played a central role in developing the SOLAS amendments and ISPS Code. While assisting member ports in smooth implementation of port security measures, IAPH now considers it imperative to work out effective frameworks for international logistics chain security. We are now collaborating with WCO, ISO and various organizations to this end.

Port environment has also been high on the agenda of the world's port community. To keep marine environment clean and reserve eco-system, tremendous efforts have been made worldwide spending much time and money. In view of serious trends of global warming, IAPH has committed to tackling air pollutions caused by port-related activity. Last May, IAPH made a special resolution at the IAPH Conference in Houston, urging the world's ports, members and non-members alike, to develop integrated and effective programs to reduce air emissions from port operations. We will soon launch a web-based guideline for clean air port programs.

Strategic partnership

Since the early 1980s, many of the world's ports have engaged private terminal operators to provide efficient services to costumers and achieve higher productivity. Impressive records of cargo throughputs at their terminals in recent years are testimony to that system's success. But the past decade's unprecedented trade growth and forecasts of more of the same over the coming years bring new missions to port authority. Ports need not only take short-term measures to enhance productivity and to avoid congestion, but also to take an aggressive view of their future.

In particular, transforming into logistics hub ports is at heart of missions of port authority. To this end, port authorities are expanding functions and responsibilities by developing new relations with various private sectors. Strategic partnership provides port authorities with effective means to be more successful in their key projects through risk sharing, joint financing, operational improvement, ensuring demands, etc.

Higher productivity at terminals, for example, is being achieved by new partnerships between port authorities and terminal operators. Better access to hinterlands is provided through new partnerships between port authorities and other transport providers such as rail, trucking and barging companies. Or advanced logistics centers are further developed by new partnerships between port authorities and logistics companies and shippers. In parallel with these, there will be an increasing number of inter-port cooperation activities, covering joint marketing, integrated terminal operations, combined access services to common hinterlands and many others.

Final remarks

Port is not just a terminal for cargo handling, but the gateway of a country to the world economy and trade. Port is fundamental and indispensable global infrastructure to every

modern nation, without which no country is able to build up its brightest future.

IAPH is the unique and only organization of the world's ports. I believe that IAPH is the best international forum to discuss issues and share best practices for the betterment of port management.

Taking this opportunity, I wish great success in your endeavors of port development in Egypt and Arabic countries. I also hope that we at IAPH will be able to work together more closely with many ports of Egypt and also Arabic countries.

Thank you for your kind attention.

Contact:

The International Association of Ports and Harbors (IAPH)

7th Fl. South Tower, New Pier Takeshiba, 1-16-1 Kaigan,

Minato-Ku, Tokyo, 105-0022, JAPAN

Tel: 81-3-5403-2770 Fax: 81-3-5403-7651

URL: <http://www.iaphworldports.org>

E-mail: s_inoue@iaphworldports.org