



Remarks of

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***I. The Current Environment for International Liner Shipping***

The general theme that I was asked to address today is the “The Container Shipping Industry: At the Crossroads”. Outside of Washington, there is a very large highway interchange construction project, called the “Mixing Bowl”. Frankly, I think that may be a better metaphor for this discussion than the “crossroads”.

This year, the industry will carry roughly 6 million containers of import cargo into the United States and roughly 3 and a half million containers of export cargo. The industry is moving an average of almost \$1.5 billion of goods a day through U.S. ports, linking American consumers and businesses with markets at every point around the world. The industry has become the transportation infrastructure that keeps world trade flowing efficiently, predictably and cheaply. It’s a remarkable story that we all know well.

As we approach the end of 2002, the challenges and the questions are many.

First, let me briefly discuss the industry’s financial challenge. 2002 will produce serious financial losses for many carriers, particularly those with significant trans-Pacific services. This is not a situation that can continue. It is not sustainable. Rates must go up, and everyone recognizes that.

What is exacerbating this dismal rate picture are two factors: continuation of lopsided trade imbalances, which produce inadequate revenues for carriers on back-haul service legs, and increasingly, substantial and unpredictable costs arising from the new security environment.

It is clear that everyone – carriers, NVOCCs, shippers, marine terminals, ports and government – are going to be incurring costs from higher security standards. Who will bear what amount is not yet clear, but all will bear some. But, it is imperative that clear, predictable security rules be established and followed in order to minimize supply chain disruptions, to keep costs managed as well as possible, and perhaps most importantly, to continue developing cooperation between industry and government in meeting this challenge.

Meaningful, sustained cooperation between industry and government is needed to develop effective multi-faceted strategies for mitigating those vulnerabilities and to prevent unnecessary disruptions to the flow of commerce.

The first challenge is to design an integrated, coordinated security process and deploy the necessary capabilities to minimize, detect and intercept security risks as early as possible in the supply chain—before containers are loaded aboard a ship for delivery to a destination. The second challenge is to develop and implement the systems and international protocols to ensure the efficient flow of commerce during all potential security conditions.

The liner shipping industry is providing widespread support for the U.S. government's efforts to enhance the security of U.S. ports and marine terminals and the ships and cargo that move through them. It is evident that, in the subject area of port and ship security, the U.S. Coast Guard has a clear agenda and the authority to implement meaningful improvements. Through its Sea Marshall program, port vulnerability assessments, and creation of Maritime Safety and Security Teams, the Coast Guard is taking important steps to prevent vessels and ports from becoming terrorist targets.

Regarding cargo security, the U.S. Customs Service is the lead federal agency and has undertaken several major initiatives, including the Customs-Trade Partnership Against Terrorism (C-TPAT) and the Container Security Initiative (CSI). The principle behind C-TPAT is that if industry members (importers, shippers, carriers, freight forwarders, etc.) voluntarily undertake certain actions to improve their supply chain security, Customs can give their cargos expedited treatment. CSI is a program through which Customs is establishing agreements with other nations' Customs organizations to craft security criteria for identifying high-risk containers, to develop and implement pre-screening processes to target and inspect containers before vessel loading, and to deploy technologies to screen certain containers before loading.

Customs also recently issued a Notice of Proposed Rulemaking that would require carriers to submit import cargo manifests to Customs 24 hours before vessels are loaded

at a foreign port. This proposed change involves major modifications not only to how carriers operate today, but also to the flow of trade. You can be grateful that this morning I am not going to repeat the 23 pages of comments the World Shipping Council filed in response to this proposal.<sup>1</sup>

The liner shipping industry is supporting this initiative. Advance screening of cargo shipments before vessel loading is the correct security strategy, and it cannot be done without advance cargo shipment information. Our comments request that the Customs Service address a number of specific issues that the proposal raises, and requests that adequate time be given so that carriers, shippers, terminal operators, and Customs itself can be properly prepared to implement these new rules. It is a well-intentioned, serious initiative, but it also raises substantial issues that can only be properly resolved through serious industry-government cooperation and commitment.

Herein lies the true test for both industry and government—how to ensure a more secure transportation system, and the efficient, reliable flow of commerce, while avoiding needless costs and government interference. Shippers and carriers must support reasonable government initiatives and not resist every new security measure. But government must listen, cooperate and communicate clearly. Both sides have legitimate points and complaints. Industry should be expected to abide by clear government rules, and government must avoid imposing needless expenses and unexplained restrictions.

Two weeks ago, a vessel coming into New York, with properly documented cargo, was detained by the Coast Guard, and quarantined for several days at sea outside the Port because it was carrying clay tiles that naturally emit very low-level radiation. There was no security problem, but the carrier had to incur unrecoverable costs of many hundreds of thousands of dollars. Last week, the Coast Guard had a suspicion that a container on a ship in New York might have explosives. Again, it was not the case, but delays and another hundred thousand dollars of unrecoverable costs were incurred.

Let me be clear that the point here is not to criticize the government for undertaking security precautions. The industry understands that mission and fully supports it. But the security process will become discredited if it produces huge costs and delays that in hindsight do not appear to have been based on adequate grounds or sound procedures.

There should be an industry-government dialogue to assess what lessons both industry and government should take from such cases, and how we can best support each other going forward. As a preliminary judgment, it would seem that several lessons warrant attention. First, there must be clear and open communication between the industry and the government. For example, the carrier may well have considerable information about the container, the shipper, the route, etc, that should be sought and used by the government. Second, the government itself must be well-coordinated. Customs and Coast Guard must agree on their roles and responsibilities regarding cargo

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<sup>1</sup> The Council's comments on this Customs Service proposed rulemaking are available on the Council's website at [www.worldshipping.org](http://www.worldshipping.org).

security. This is clearly an area where further progress is needed. Third, CSI is a very important initiative. Not only will it improve security, but it is needed to provide carriers and shippers with the confidence that once cargo is prescreened and loaded aboard a vessel, cargo security concerns should – except in exceptional circumstances – have been adequately addressed, and the international supply chain and carrier operations should be able to proceed with predictability. Fourth, at-sea inspection of containerized cargo ranges from generally impractical to impossible and must be avoided as a security strategy. Fifth, additional training and decision-making protocols are needed to assist personnel assigned to these security tasks. Finally, the cost consequences of operational disruptions can be very substantial. Carriers, already awash in red ink, are struggling to determine how to recover them. The government should impose them only when there are good reasons to do so.

The liner shipping industry is incurring substantial costs in the interest of security in a very wide range of areas – from C-TPAT programs with Customs, to new information and operating systems and procedures for advance cargo manifesting, to armed guards on ship gangways, to significant disruptions to operations.

Some costs, like drayage to an inspection station, can be recovered, but others are much more difficult. For example, Customs is frequently requiring carriers to offload containers for inspection in the first U.S. port of call, rather than the scheduled port of discharge – requiring significant unloading and restowing expense. How can a carrier recover \$30,000 of additional operating expense from the shippers of seven containers pulled for such inspection? Is this simply an unavoidable cost of business that all carriers will need to recover through general rate increases? How can carriers effectively do this when so many rates are set in year-long contracts, and carriers are unsure of how to accurately predict their added future costs? Would it be possible to establish acceptable security charges?

However cost-recovery ultimately is addressed, carriers, shippers and the government all should have a commitment to limit higher costs to those that are clearly necessary for prudent security. And, hopefully, the government, if it does not provide any sort of financial assistance in dealing with such costs, will assist by providing, whenever possible, clear and predictable rules that carriers and shippers can adapt to, rather than unpredictable, ad hoc measures that cannot be managed and the costs of which are not easily recovered.

Government agencies should also do all they can to avoid duplicative and inconsistent approaches to security issues. The Customs Service should not seek to invoke port security standards that differ from the Coast Guard's. The Coast Guard should not undertake cargo security measures that are duplicative, inconsistent or already being undertaken by the Customs Service. The Customs Service, the Immigration and Naturalization Service and the Coast Guard should have a single, common approach to gathering information on crew members.

So, whether we are in the “Mixing Bowl” or “at the crossroads”, what direction are we going?

## II. Some Security Trends

Based on developments up to this point, I expect that we may see the following trends and issues in the year ahead.

1. **Government-Industry Cooperation**: Notwithstanding some of the frustrations all sides have with the exceptionally difficult security challenge, ocean carriers will continue to work in as constructive manner as possible with the government: to better secure international trade; to devise logical, effective means to improve security; and, to protect the American economy, and the economies of all trading nations, from terrorist risks. This is a challenge to which the industry is committed.
2. **International Standards and Cooperation**: Prior to September 11, there frankly was no effective international governance structure to address securing trade or shipping from these risks.

The U.S. Coast Guard and the International Maritime Organization have acted quickly and diligently to fill that gap as to ship and port security, and their hard work should produce new internationally agreed-upon security standards this December.

The Customs Service, through the Container Security Initiative and through the efforts now underway at the World Customs Organization, is helping to develop and implement international agreements and mechanisms to address these issues. While each nation reserves the right to establish its own rules to protect itself from the threat of attack as it deems most appropriate, the implementation of effective international measures will not only improve the security of international trade, but should provide a more predictable and uniform set of operating rules.

The need for common international standards can be illustrated by the effects that might result from the Customs Service proposed advance manifest rule. If cargo destined from Asia to Chicago has one set of security rules and costs if it is unloaded in Seattle, but a significantly different set of security rules and costs if it is unloaded in Vancouver, distortions in trade will occur without any enhancement of security.

3. **Calls for Regulatory Clarity and Predictability Will Increase**: If international trade is to continue to flow reliably and efficiently, carriers and shippers must have as much clarity and predictability in the operating rules as possible.

For example, security rules may affect whether foreign-to-foreign commerce will be served by vessels calling at U.S. ports. If Asian cargo destined for Panama, for example, is likely to be inspected by U.S. Customs in LA/Long Beach if the ship calls there first, shippers and carriers will want to avoid such costs and delays, and there will be an incentive to serve such destinations by vessels that do not call in the U.S. first. Consider a different example involving U.S. destination cargo. If a container originating in a particular country must be inspected at the first U.S. port of call, shippers need to know that for service selection, and carriers need to know that for stowage planning. Furthermore, as larger ships are deployed, the costs of unpredictability and delays rise, as more cargo is thrown off schedule, and more relays and rail connections are missed. Both shippers and carriers should be able to understand the implications of the new security regime and plan their operations and cargo routing accordingly.

Security measures must not be so predictable that they can be evaded. Yet, carriers and shippers should, whenever possible, be told what the rules will be so they can avoid unnecessary costs and plan with confidence.

4. **Information**: A key element of the enhanced security strategies is better, more complete information – information about ships, about ownership, about crews, and about cargo.

The currently proposed import cargo manifest filing is perhaps the most substantial example of this, but it will certainly not be the last step in this exercise. New information systems that can gather more complete information will be considered. Enhanced export documentation regulations under the recently enacted Trade Act will be proposed by Customs sometime early next year.

Better, earlier information can obviously be useful in producing enhanced security capability. One of the challenges for the government is to ensure that it is capable of processing and analyzing all this new data it is seeking efficiently and effectively. Additional earlier information should produce more predictable, more secure and more efficient commerce, not a clogged system.

5. **Human Intelligence**: While new security regulations affecting carriers' and shippers' operations are inevitable and appropriate, the most important and effective means to detect and prevent terrorist threats is human intelligence. Governments around the world have an enormous stake in protecting their economies and their international trade, and hopefully will be enhancing their capabilities and their cooperation in this regard.
6. **Technology**: The government will continue to consider how technology can be deployed to enhance security, ranging from the Department of Transportation's consideration of a Transportation Worker Identification Card, with "smart card"

technology to effectively identify persons with a consistent, compatible national data system, to the International Labor Organization considering a similar initiative for seafarers, to Automated Identification Systems on ships, to whether new kinds of electronic container seals must be affixed by shippers to containers upon stuffing the box.

While it is not clear how these technology considerations will evolve, one can start by observing how it should NOT evolve. It should not be driven by vendors pushing their products, and there's a lot of that going on.

It should be driven by identifying affordable technology that meets agreed, defined requirements more effectively and efficiently than can be done without the technology.

What are those requirements?

At this point, the question is easier to ask than answer.

One legitimate, logical analytical approach is to consider how to devise more secure supply chains – meaning from the loading of the cargo into a container at the point of origin, to its truck and rail movements, to a loading port, through the marine terminal or holding areas, to the ship, to the port of discharge.

The technology discussion in that context has tended to focus on container seals, sensors that could detect entry, and tracking devices.

In this arena, the analysis can frankly become very complicated and confusing for a number of reasons:

- Clear analysis of what we want (what the specific requirement is), why we want it, what we will do with it, and how will it actually deter terrorist threats is difficult and at times elusive. (e.g., electronic tags that could be read to provide cargo manifest information may be useful to the U.S. military for its unique purposes, but what application would it have in the commercial supply chain to reduce the risk of terrorism?)
- Does the technology provide a clearly and significantly better level of security? For example, what protection against terrorism does an electronic seal provide (assuming one can agree on what an electronic seal should be, i.e., active or passive, RF or infrared, operating in what bandwidth) that a case hardened bolt seal does not provide?
- The technology must be able to operate reliably in the marine environment. At a recent workshop hosted by the Lawrence Livermore Lab on these issues, experts clearly identified this as a significant issue.
- Many of these technologies may provide indicators of potential anomalies in a shipment, but is it focusing effectively on the risk of terrorism? For example, a seal, entry sensor and tracking device might indicate that something unplanned

has happened to a container while in transit, but is that really how a terrorist would use a container? Would a terrorist's mode of operation be to hijack a container, put the terrorist threat in the container, and then put it back into the stream of commerce, hoping they don't get detected? Or is it more likely that they'd figure out how to load the threat in a container in the first instance and then put a seal on the box and enter it into the transportation network for delivery?

- These secure "supply chain" technologies have value only if they are used in conjunction with strictly adhered to business practices at many points around the world (e.g., they don't matter if the workplace or workforce at the loading facility can be infiltrated).
- The technology has to be internationally accepted. For example with electronic seals, if RF-type seals were determined to be a security requirement, there must be international agreement on what bandwidth will be used, on the standards for readers/scanners, etc. Containers moving across international borders cannot confront one technology standard in the U.S., but a different one in Rotterdam or Hong Kong.
- Finally, these kinds of technologies can only tell you about anomalies in the shipment. They can't tell you what's in the box; so, in any event, they must be used in conjunction with inspection technologies.

In short, while the secure supply chain approach is very complex and there are a lot of variables beyond the technology itself that must be addressed, the good news is that, under Operation Safe Commerce, now jointly overseen by Customs and DOT, and with support of the industry, these efforts and technologies can be explored and tested more objectively.

Coming back to "what are the requirements" for new technologies, as I said, one is "door-to-door" supply chain security just discussed.

Another approach is the "What's in the box?" approach. This can be stated as: "How do you know that the contents of a sealed container are what the shipper tendering the container says the are?" Or, in the alternative: "How can you be sure the something bad is NOT in the box?"

Here the role of technology has a different and frankly simpler objective, although challenges remain.

In this category, we have:

- non-intrusive inspection technology (such as Customs' VACIS gamma ray technology, or higher resolution inspection devices that could be deployed in the future, or new technologies that could provide actual container content analysis, not just visual images (e.g., neutron bombardment technology), and
- non-intrusive detectors (e.g., radiation).

Customs is deploying VACIS machines more broadly. Clearly, not only is expanded deployment necessary (including at foreign ports), but inquiry into more advanced and better technology in this area is worthwhile.

Why? First, inspection technology is what should provide the information that you most want to know – what is in the box? Not what does someone say is in the box – but what is in the box?

Second, even with seals, tracking device and sensors, these kinds of technologies can only indicate whether the box should be inspected. A broken or nonconforming seal, or a delayed delivery to the marine terminal doesn't mean terrorism. That happens. It means you need to consider whether the box warrants inspecting because something out of the ordinary appears to have happened. So inspection technology is necessary under any scenario.

Finally, new technology possibilities should be considered with the following in mind:

- 1) Keep it simple if possible. Complexity is tough to implement and breaks down.
  - 2) Recognize that the importance and value of human intelligence cannot be replaced by these technologies.
  - 3) New technology devices might be useful, but we should not overlook the computer and analytical resources and skills required of the government in this effort. There is a lot of information to process and analyze, and incremental additions of data should not be considered unless it is useful, necessary, and manageable (e.g., there are more than 12 million containers in use – if the technology sets off false positives at any significant rate, it would cause chaos to commerce and delegitimize both the product and the security process).
  - 4) Training, experience and judgment in use of technology are necessary. Radiation detectors can provide readings off clay tile and bananas. Knowing what is and is not worthy of security concern is important.
  - 5) Determine how easy is it to defeat the technology. If it is, critically examine its value. If terrorists were to attack shipping, their efforts are likely to be highly sophisticated. Technology that does not provide significant deterrent or detection value should be seriously questioned.
  - 6) Remember that the cost of new technologies is highly relevant.
  - 7) Remember it's international commerce, and solutions not only need to allow trade to continue to flow efficiently, predictably and reliably, but need to be deployed and accepted internationally.
7. **Marine Terminals**: Marine terminals and ports are essential nodes in international commerce, and the efficient flow of commerce through them is very important. The Container Security Initiative led by Customs, and the IMO negotiations and U.S. port vulnerability assessments overseen by the Coast Guard recognize this. The new security regimes being created should impinge on the

efficiency of these nodes with care and deliberation, because if these “choke points” are choked, trade can be significantly affected.

For example, the advance Customs manifest rule would certainly cause some portion of trade (especially cargo that is first tendered to an ocean carrier at the loading port) to face delays. Carriers, terminal operators and governments will need to determine how to plan for and accommodate such delays and congestion. Similarly, determining how best to establish expanded container inspection facilities in congested ports will be a challenge.

The Container Security Initiative is a positive start on ensuring that these concerns can be properly considered at loading ports, as we also consider the consequences in U.S. ports of the new security strategies.

### **III. Some Other, Non-Security Related Trends**

While the financial challenges the industry is facing in trying to regain profitability, especially in light of the current costs that result from West Coast labor problems, and the security challenges dominate the current liner shipping agenda, there are some other developments that can be expected next year.

1. **Inland Infrastructure’s Connection to Ports:** There is a growing recognition that the inland transportation infrastructure has not accommodated the needs of moving freight as well as moving people. The Highway Bill will be reauthorized in the next Congress, and the business community across the country is pushing to properly recognize the importance of freight mobility. As part of that recognition, the Department of Transportation and the Congress will consider how to more effectively connect port and intermodal facilities with the nation’s highway system. A Freight Stakeholders Committee has united trucking, rail, ports and the maritime industry in making this case, and hopefully, the next highway bill will effectively address this concern.
2. **Environmental Issues:**

The challenge of protecting the environment from invasive species has received increased attention, and one prominent vector for such transmissions in the marine environment is via the discharge of ballast water. In 2003, vessel operators will operate under new, mandatory rules, including mandatory mid-ocean ballast water exchange, which will help address this issue. In addition, the IMO is tentatively scheduled to convene a diplomatic conference next year to, inter alia, establish international standards for the treatment of ballast water – hopefully enabling the technology marketplace to

develop commercially available technologies as an alternative way to address this problem.

Regarding vessel air emissions, 2003 will hopefully mark the ratification by the United States and other nations of a treaty (Annex VI to the Marine Pollution Convention) that will create a much-needed regulatory structure for the establishment of international emission standard for ships.

### 3. **Cargo Liability**

International negotiations have begun at UNCITRAL to develop a uniform, international cargo liability regime. The World Shipping Council and the NitLeague joined in a common effort to support this initiative, and our agreement on these complex legal issues will hopefully assist the United States and its trading partners develop a new agreement that can produce a mutually acceptable and internationally uniform convention. While this process is in its early stages, we remain optimistic that these efforts will bear acceptable results.

## IV. **Conclusion**

After touching on all these issues, I am only more convinced that the industry is in the “Mixing Bowl”, and not “at a crossroads”. But in any event, the more important observation is that there are hopeful signs that we are headed in the right direction.

Hopefully, the economics of the industry will improve in 2003.

The efforts of industry-government cooperation to better secure international trade from terrorist risks are moving forward in a reasonably cooperative spirit and with a growing commitment to the development and implementation of international standards and mechanisms.

Environmental protection improvements are underway.

All in all, despite the enormity of the challenges, we seem to be moving forward in meeting them.

