



## Editorial

### 100% Cargo Scanning Mandate – Quantity, Quality and the Optimal Solution

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The U.S. Congress recently passed legislation that mandates 100% cargo scanning for all loaded import containers arriving in the United States. Even though the deadline for this requirement is over three years away, cargo scanning is at the top of the issues list throughout the global trade security community. In an attempt to focus on employing tactics that address cargo security risk as close to the origin point as possible, the U.S. government has decided to impose this scanning requirement on international trading partners. Interestingly, this law does not include a corresponding requirement to scan cargo being exported from the United States to the same international locations. Is this driven by an assumption that threats to cargo security only originate outside of America? If not, then a companion requirement that would mitigate risk for trade locations receiving cargo from the United States is conspicuously absent. Additionally, since the operative requirement in this law has to do with increasing the quantity of scanning being done, logic follows that there must be a direct relationship between quantity of scanning and risk mitigation. Unfortunately, a stronger relationship actually exists between risk mitigation and enhancing the quality of scanning. The global trade industry would be better served by focusing on mandating improvements in the type of cargo scanning rather than insisting that additional effort be focused on the quantity of scanning.

#### Mitigate and Facilitate

Many informed cargo professionals will now agree that prosperity in trade is dependent upon the ability to "mitigate cargo risk while facilitating the free flow of commerce" – precisely the vision that the U.S. Government has established for cargo security. The fundamental legitimacy of this goal is no longer being debated. What hasn't been resolved, however, is the precise approach to cargo scanning that represents the optimal strategy to achieve this goal. Since the United States has now decided to require its international trade partners to increase the quantity of scanning to 100%, it should be safe to assume that current policies and technologies that support these scanning requirements have been optimized. It wouldn't make sense to require additional resources be committed to a sub-optimal approach. But the current cargo scanning regime, particularly in the U.S. maritime segment, is far from optimal. Radiation Portal Monitor (RPM) technology is currently being implemented at all major U.S. ports. RPM technology is capable of detecting when radiation is present, but can not identify the



source of the alarm. This technology also does not detect radioactive isotopes that are shielded (encased in lead to contain emissions). So how is this approach working?

The portal monitors have proven to be an ideal technology for verifying that legitimate radioactive cargo is present in the supply chain – but little more. Trucks continue to trigger alarms by the thousands per day, and secondary inspections are being performed with increased frequency in U.S. ports and other select locations throughout the world. These secondary inspections ultimately serve to verify that commodities such as smoke detectors, fire brick, or cat litter are, in fact, emitting harmless amounts of radiation. But verifying normal is not the objective. And the actual utility of this approach, with regard to security threats, is still unclear.

In fact, if shielded special nuclear material (defined by the Atomic Energy Act of 1954 as Plutonium, Uranium, or enriched Uranium – primary ingredients of nuclear weapons) represents one of the primary cargo security threats that the U.S. is interested in mitigating, and the technology that is currently being employed can not detect or identify this type of threat, why would anyone expect to succeed with the "mitigate" portion of the "mitigate and facilitate" goal. Similarly, if thousands of legitimate cargo loads are being delayed for secondary inspections every day, only to determine that they are legitimate – then success on the "facilitate" component of the goal may be elusive as well.

### **From Zero to One Hundred Percent**

Many who have been in the cargo business for more than eight years or so can remember a time when the quantity of cargo containers that were scanned approached zero. There have always been risks associated with the movement of cargo, but scanning loaded containers is a relatively new risk management strategy. In fact, a law requiring cargo scanning for containers entering the United States did not exist until last year. So what has driven this radical policy shift toward interrogating containers that have already been loaded? Emphasis on cargo security, particularly in the United States since 09-11-01, has become increasingly focused on a risk management strategy aligned with counter-terrorism requirements. Special nuclear material is often needed to perpetrate an attack using weapons of mass destruction/disruption. Most or all of this material that is currently unaccounted for in the world is believed to be outside of the United States. Since approximately ninety percent of non-North American goods enter and exit the United States by water, then scanning loaded cargo containers before they arrive at U.S. ports is a logical approach to mitigating this risk. But only if the security technology being employed is actually capable of detecting and identifying the illicit material in question. Finally, since global trade is, in fact, global – and the threats from disruptive events such as terrorism have the potential to originate anywhere, it follows that a 100% cargo scanning regime would logically include U.S. exports as well as imports.

### **Reciprocity**

An essential component to a successful strategy for cargo scanning must include at least an acknowledgement that other nations importing from the United States are likely to demand reciprocity for 100% cargo scanning. Since the 9/11 Commission Recommendations Act of 2007, only calls for scanning outside of the United States, it is unclear how the U.S. will respond to a demand for reciprocity. Will the law be amended to include that requirement? If the U.S. agrees to reciprocate, and scan all loaded containers leaving the U.S., who will assume financial responsibility for this mandate? Will international trading partners refuse to accept cargo that has not been scanned by the



U.S.? What effect would a requirement for additional scanning in the United States have on domestic terminal productivity?

These questions and more remain unresolved as the global trade community attempts to agree upon a reasonable and equitable approach to cargo scanning. At the end of the day, it is certainly hard to argue that American trading partners would not be justified in implementing the same requirements that the United States has determined to be important for cargo risk management. A recent issue of *Journal of Commerce* highlighted comments on this subject made by Robert Verne, the director general of the European Commission's Taxation & Customs Unit. He had this to say in a recent letter to the Commissioner of U.S. Customs & Border Protection: "it has a high risk of disrupting trade without appreciably improving security." If not properly managed, the unintended consequences of the 100% cargo scanning requirement could actually produce the opposite of 'mitigate and facilitate'.

### **Scanning and the SAFE Framework**

There is also concern among European trading partners that the 100% scanning mandate could be detrimental to the established Standards to Secure and Facilitate Global Trade Framework – commonly referred to as the SAFE Framework.

The SAFE Framework was issued in 2005 by the World Customs Organization, and advocates adopting a risk-management approach to supply chain security. One of the key components of this approach includes the concept of "mutual recognition" – a case where two or more countries recognize and rely upon each other's security policies and procedures to ensure that cargo containers are free of threats. The assumption is that all nations would ultimately establish and manage their own scanning regimes – significantly different from the mandatory legal requirement anticipated by the U.S. law. As of November, 2007, the U.S. had only signed one "mutual recognition" agreement – with New Zealand – not exactly an origin point producing a high percentage of total U.S. imports. European officials are concerned that the mandated approach could undermine the effectiveness of, and necessity for, "mutual recognition" agreements. A spokeswoman for the European Commission recently stated that: "we strongly believe that the way forward is to pursue the work on a multi-layered, risk-based approach and enhanced cooperation toward mutual recognition of security standards and trade partnership programs."

### **Focus on Quality vs. Quantity**

Finally, it's important to note that this panel discussion title appeared at a recent cargo security event in the U.S.: "Balancing Safety, Security, and Commerce: How Much Container Screening Is Practical?" This title clearly indicated an emphasis on quantity of scanning versus quality. With all due respect to the show organizers, a more appropriate title for this discussion may have been:

"...Commerce: What Kind of Screening is Practical?"

The 100% cargo scanning mandate takes the same approach, and will focus on quantity of scanning – increasing the amount of scanning required from a few percent, or none in some cases, to one hundred percent. Since many believe that the current approach is actually "sub-optimal," increasing the level of scanning activity may have little or no actual relationship to enhancing cargo security. Perhaps the emphasis should actually be on the quality, or kind of scanning. The fact that currently employed cargo scanning technologies can not detect shielded special nuclear material alone seems to



justify the pursuit of alternative solutions that could improve scanning performance. Since the goal for cargo security is still to "mitigate risk while facilitating the free flow of commerce," its time to invest precious resources in cargo scanning solutions that offer the promise of timely, effective, first-pass scanning that detects threats without limiting operational effectiveness.

Cargo scanning technologies, and associated policies and procedures, should be evaluated with a focus on Return on Investment (ROI). All future cargo scanning initiatives should be designed and implemented with the goal of building security 'into' vs. 'onto' cargo operations. Decision makers and those with purchasing authority should be investigating ways to invest in alternative cargo scanning solutions that can produce a measurable security benefit while supporting or enhancing associated transportation operations.

### **Ultimate Goal: Improve the Process**

In the last quarter century, the global business world has become acutely aware of the fact that quality matters; and security should be no exception to this rule. If a process is producing results with defects, performing the same process at a greater rate can only be expected to result in one thing: more defects. The stakes in global trade security are too high to simply pursue a strategy that promises to produce more defects where cargo scanning is concerned. It is time to take a cue from Total Quality Management, and use valuable cargo security resources to do two things: (1) trace cargo scanning process defects back to the root cause, and (2) change the cargo scanning process in order to produce a more desirable result.

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