



A uniform approach to global supply chain risk management

Peter Boyce of Lloyd's Register Quality Assurance (LRQA) examines the key initiatives to improve supply chain security and argues how a new international security management standard, ISO 28000, can provide equivalency and thereby hasten the process and help to improve the reliability of supply chains

All goods bought and sold move through supply chains of some description, making the security of goods in transit an issue that affects everyone.

While terrorism is a potential threat, theft is a clear and present menace; it erodes profitability and disrupts supply chains on an ongoing basis.

The cost of theft is a major driver for improved security — in Holland alone, which produces less than 1% of world GDP, annual cargo theft losses have been valued at €300m.

For the food sector, tampering or poisoning of consumable goods represents

a major risk. The US Department of Homeland Security and other government agencies have identified food establishments as a potential 'target' for terrorist attacks because this would damage food supply and the economy. Furthermore, it has the potential to cause physical and psychological harm to citizens.

For several industries, in particular pharmaceuticals, security issues include fake branded products and the substitution of goods with counterfeit or inferior quality replacements.

In addition to the fulfilment of key roles in countering terrorism and reducing theft,



recent supply chain security initiatives are also designed to address security problems relating to the sale of counterfeit goods. Examples of where counterfeit problems can surface include:

- Re-conditioned aircraft parts could re-enter the supply chain without appropriate stress and x-ray tests, posing immediate danger to the general public
- In August of 2008, Hong Kong customs discovered 2.5m cigarettes in a container that was marked to contain other goods. If these items had not been identified as fake, they could have been sold as original brand goods, resulting in a substantial shortfall in excise income for the Hong Kong Government

A number of international initiatives have been undertaken to improve supply chain security. These initiatives seek to prevent illegal access to goods in transit and the movement of illegal goods.

Security initiatives

Immediately after the 9/11 terrorist attacks in the US, the International Maritime Organisation (IMO) established the International Ship and Port Facility Security (ISPS) Code. This requires ports and all vessels weighing over 500 gross tonnes and sailing international waters to hold a security certificate.

This initiative necessitates a formal security management system, which is risk-based, dynamic, and requires re-certification every three years.

The Customs Trade Partnership Against Terrorism (C-TPAT) scheme was first introduced in the United States two months after 9/11. C-TPAT member importers are to meet supply chain security requirements prior to the importation of goods to the United States.

In order to achieve C-TPAT status, it is necessary for importers to provide evidence of an effective security management system, which must include an assessment of risks and offer appropriate remedial practices.

Generally, companies holding C-TPAT certification require their business partners to implement the C-TPAT security criteria. To-date more than 10,000 companies have

applied for C-TPAT certification.

In contrast to other initiatives, the TAPA (Transported Asset Protection Association) initiative was created to limit theft. Initiated by a group of manufacturers of high-value goods, the Association sought guarantees from its logistics providers on the security of its members' goods. To-date, TAPA has produced two standards relating to the security of in-transit storage and warehousing and security during transportation by truck. Further work on security standards during parking and airfreight is in progress.

In order for suppliers to attain TAPA certification, they need to implement a number of organisational and physical security measures and go through a third party audit.

“In addition to the fulfilment of key roles in countering terrorism and reducing theft, recent supply chain security initiatives are also designed to address security problems relating to the sale of counterfeit goods. Counterfeit goods can range from being a nuisance to a very costly problem for companies and governments, to a severe threat to public health and safety.”

On top of these initiatives, in response to the potential proliferation of the varied national requirements, which would multiply compliance costs and impose significant delays, the WCO has developed the 'baseline guidelines' for the implementation of AEO (Authorised Economic Operator) programmes. These guidelines support the WCO Framework of Standards to Secure and Facilitate Global Trade (the SAFE Framework), adopted in 2005, which incorporates the AEO concept. AEO is a certification regime that demonstrates compliance with the supply chain security requirements of the WCO. To-date 157 countries have signed up to the scheme. The AEO regulation encourages companies to increase security and thereby benefit from improved efficiency and reduced costs.

AEO status is of direct benefit to companies, both financially and to their brand reputation. Some WCO proposed

benefits of AEO status include:

- Fewer physical border controls
- Easier reporting
- Reduced risk
- Priority treatment for goods selected for examination
- Lower insurance costs (potentially, or higher insurance costs without AEO certification)

The driver behind the AEO initiative is the Official Journal of the European Union Commission Regulation (EC) 648/2005 and AEO status became effective January 1 2008. Application for AEO status entails a security and risk assessment following guidelines that are outlined in the SAFE Framework. Applicants are required to demonstrate

a complete understanding of their supply chain. Every risk should be assessed and appropriate action taken to address risks that are deemed to be significant.

AEO application forms make reference to Management Systems Standards such as ISO 9001 (quality), ISO 27001 (information security) and ISO 28000 (supply chain security). Compliance with such standards (particularly ISO 28000) will therefore simplify the application process.

ISO 28000 supply chain security management standard

ISO 28000:2007 is a management system standard that has been developed specifically for companies and organisations that manage supply chain operations. Published as a Publicly Available Specification by the International Standards Organisation in 2005, this was replaced in 2007 by the full standard, ISO 28000:2007.

ISO 28000 was developed to facilitate the identification and mitigation of security risks in the supply chain by implementing security processes to reduce the risks of theft, smuggling and tampering, and to provide a response to the threat from attacks by criminals, terrorists or others.

ISO 28000 was the product of the ISO technical committee ISO/TC 8 in collaboration with other technical committee chairs. Fourteen countries participated in its development, together with several



international organisations and regional bodies: these include the International Maritime Organisation; the International Association of Ports and Harbours; the International Chamber of Shipping; the World Customs Organisation; the Baltic and International Maritime Council; the International Association of Classification Societies; the International Innovative Trade Network; the World Shipping Council; the Strategic Council on Security Technology -- which has a Memorandum of Understanding with ISO/TC 8 -- and the US-Israel Science and Technology Foundation.

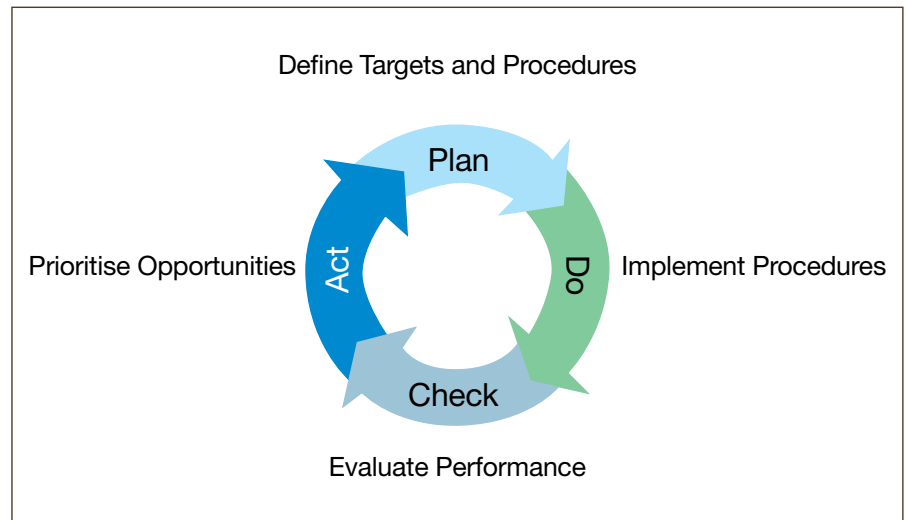
This standard specifies the requirements for a security management system, including those aspects critical to security assurance of the supply chain. It is applicable to all sizes of organisations from small to multinational, in manufacturing, service, storage or transportation at any stage of the production or supply chain.

ISO 28000 applies to the security of an entire organisation, not just the logistics or security departments. It is risk-based, and designed to be flexible so that organisations manage those security risks that apply to them, following the well-established management systems principles of 'Plan, Do, Check, Act' (PDCA), an approach that helps organisations recognise, prepare for, manage and review processes that mitigate security threats.

As security management systems are common to all of the initiatives outlined above, it is clear that an opportunity exists to utilise a common architecture that can be adopted and recognised by all parties. This

“Benefits to government include a more risk-focused and targeted control practice that is unrestricted by national borders. Recognition of ISO 28000 certificates in meeting the requirements of governmental schemes is also likely to reduce the regulatory burden suffered by businesses and reduces transaction efforts and costs between business and government.”

The 'Plan-Do-Check-Act' principles



would reduce duplication, save time and money, lower risks and improve the security of supply chains.

Companies that are certified to ISO 28000 are able to demonstrate to their stakeholders a higher level of assurance in relation to security, providing confidence that their systems conform to a common international platform.

Furthermore, certification by a respected third party strengthens brand reputation, simplifies processes, and delivers cost savings.

Many countries have expressed an interest in specifying ISO 28000 certification as part of the requirement for AEO status because this would contribute to mutual recognition and thereby avoid needless duplication. However, to achieve this goal it is absolutely vital that certification is rigorous and reliable, and that it is delivered by international organisations with the reputation and credibility that is essential for an issue of such political and economic importance.

Looking forward

Wider official recognition of ISO 28000 will confer a number of benefits to government executive agencies. The most significant benefit will be a better split of responsibilities. Whereas government agencies are responsible for law enforcement and administering legal compliance, the assurance industry can provide independent verification, certification and subsequent surveillances for certification maintenance. This is common practice with a number of European Directives, where conformity is assessed through so-called Notified Bodies (accredited assurance providers that

have been appointed by government for conformity assessment).

A second benefit will be the considerable resource savings, derived from the fact that, as a government body, it is less resource-intensive to use a trusted independent assurance provider than to conduct and enforce security standards directly.

Further benefits to governments include a more risk-focused and targeted control practice that is unrestricted by national borders. Recognition of ISO 28000 certificates in meeting the requirements of governmental schemes is also likely to reduce the regulatory burden suffered by businesses and reduces transaction efforts and costs between business and government.

As ISO 28000 becomes more widely adopted and recognised by authorities, it will serve as a vehicle to reduce regulatory complexity and reduce overall security risks. In addition, and equally important, ISO 28000 will act as the widely accepted supporting system in the high-value goods sector to fight crime in the supply chain.

Increased recognition of ISO 28000 will also contribute to Customs Mutual Recognition initiatives by establishing a common framework from which to manage security requirements.

As part of a global initiative to improve security and reduce illegal activities within supply chains, companies should be increasingly looking to suppliers for ISO 28000 certification as a means of assurance for reducing risks and the complexity of varying regulatory security, thereby enabling faster, safer and reliable movement of goods. ■