



C-TPAT and AEO: new channels for world trade

This edition of the FAL Bulletin analyses the requirements of and the advantages offered by the Customs-Trade Partnership Against Terrorism (C-TPAT) of the United States and the Authorized Economic Operator (AEO) programme implemented by the European Union.

Supply chain security, especially for foodstuffs, has grown considerably in importance in recent years, owing to a combination of different factors which are emerging or becoming more significant, making the requirement of ensuring that a cargo is harmless increasingly essential and valuable during trade negotiations.

In the field of certifying the harmlessness of a cargo, a number of private-sector standards have arisen worldwide, but the benefits offered by the C-TPAT and AEO programmes are well above those of their private-sector counterparts.

As a first step, a comparative analysis of the programmes implemented by the two largest markets in the northern hemisphere is needed in order to provide to Latin American and Caribbean exporters the information they need in order to modify or tailor their installations and production procedures, to achieve greater market entry.

For additional information, please contact the author, Mariano.Alvarez@cepal.org, a staff member of the International Trade and Integration Division. The author is grateful to Mikio Kuwayama, José Durán Lima, Ricardo J. Sánchez, Sebastián Saez and Marcelo LaFleur for their valuable comments and inputs to the preliminary drafts.

Trade and security

As the impact on trade flows of tariffs and non-tariff barriers diminishes, other obstacles to trade become more significant, both by their own weight and because of the reduction of duties. In any case, these new measures need to be reviewed because of new issues which are being included in the drafting and signing of trade agreements and treaties, such as traceability, certification and security. Latin American and Caribbean businesses need to adapt to these criteria in order to maintain or improve their access to end consumers.

Cargo security has become not only a very important issue but also a significant competitive tool. There are two major components among the causes of its growing importance, the first of which relates to ensuring that foodstuffs are harmless.¹ Many food-borne diseases (FBD) are now seen as new because they have recently become more widespread; for example, there have been reports of salmonella outbreaks for decades, but the incidence of the disease has risen over the past 25 years. Many FBD pathogens are seen as new because the micro-organism has been discovered recently (thanks to technological progress) or because it was not known that it could be food-borne.² Thus, their relative importance has increased significantly, leading to a proliferation of private quality certification³ and government rules for frontier checks.

The second cause of concern about cargo security is directly linked to the phenomenon of international terrorism, in which fear is focused on the possibility that the supply chain might be used to smuggle biological, chemical or nuclear weapons or that foodstuffs might be deliberately contaminated for purposes of bioterrorism. Following the attacks of 11 September 2001, terrorism has influenced much of the subsequent political and economic history and trade has been heavily affected.

These and other causes have led States and businesses to multiply precautions and checks, partly owing to clear demand from consumers but also to protect the social and economic security of the whole population. Exporters and importers now have to comply with new requirements and guarantees and adapt to change, or risk losing markets, in response to factors which are unlikely to be short-term in nature. They must also deal with a new "fixed cost" of exportation, an integral and inevitable part of the cost of producing and exporting. This situation confirms fears about risks in the supply chain and infrastructure problems; the greatest concerns relate to geopolitical issues, particularly war and terrorism.

Always prominent among the destinations of Latin American and Caribbean exports are the United States and the European Union (an area comprising 27 countries), whose joint share of those exports has averaged 60% over the past three years.⁴ Thus, any change in security requirements for those markets must always be considered and analysed to determine their significance and their direct impact on the region's export performance. The degree to which agents in the region comply with the standards im-

¹ Products for human consumption (including ingredients), animal feed and beverages.

² World Health Organization (WHO), "Foodborne diseases, emerging", *Fact Sheet*, No. 124, January 2002.

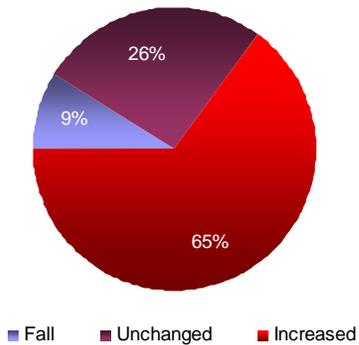
³ Juliana Salles de Almeida, "Normas" privadas: el nuevo desafío de las exportaciones de los países en desarrollo", *Comercio internacional* series, No. 85 (LC/L.2861-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), 2008. United Nations publication, Sales No. S.08.II.G.06.

⁴ Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures from the countries.

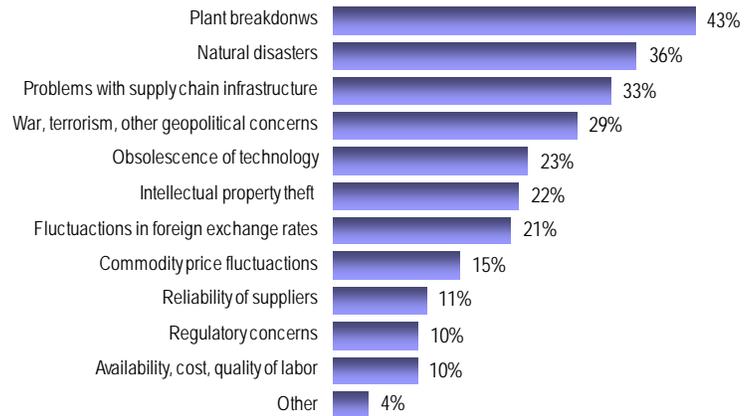
posed, as well as the corresponding behaviour of competitors from outside the region, will determine whether market share rises or falls.

Figure 1: Supply chain risks

A. Perception of change over the past 5 years



B. Greatest concerns



Source: Deep Parekh, "The talent paradox", *American Shipper*, vol. 49, No. 12, December 2007.

a/ Survey of executives, 2,990 responses. b/ Multiple responses.

Programmes

Aside from compulsory requirements for imports, there are also initiatives whose application is entirely voluntary, although significantly beneficial. While many of the security measures in trade are not innovations, there are two particularly important programmes for new development of international trade: the Customs-Trade Partnership Against Terrorism (C-TPAT) of the United States and the Authorized Economic Operator (AEO) programme of the World Customs Organization (WCO), implemented by Australia, China, the European Union, Hong Kong SAR of China, Japan, Malaysia, New Zealand, the Republic of Korea and Singapore.

The purpose of these programmes is to certify that businesses have brought themselves into line with predetermined standards which seek to guarantee cargo security, thereby reducing the quantity of goods to be inspected in ports. This makes it easier to detect in a timely manner any danger in the process of clearing the goods through customs.

The programmes also offer their members facilitated market entry, expediting passage through customs inspections and thereby saving time and money; membership in the programmes serves as an important letter of introduction to importers and trade partners.⁵

The C-TPAT began functioning in mid-2002 as an association of governments and importing businesses. It offered expedited entry for goods into the United States in return for protection of containers against terrorist acts. In 2006, it was given a solid legal basis by the Security and Accountability For Every Port Act (or SAFE Port Act) of 2006. Under this mechanism, goods are protected from when they leave the factory to their arrival at their final destination.

Initially, the programme had only seven members,⁶ but it expanded gradually and, as of mid-2005, represented almost 40%⁷ of the imports of the United States. It was estimated that by mid-2007 over 60%⁸ of goods entering the United States market would do so through the programme, and it is hoped that terrorists will be discouraged from using the supply chain as a means of transport.

The programme has four clearly defined targets, which should lead to constructing safer and more efficient frontiers: (a) To ensure that members improve their supply-chain security; (b) To provide incentives and benefits to speed up the flow of goods within the system; (c) To introduce the programme's principles into the international community on the basis of cooperation and coordination; and (d) To support other initiatives and programmes of United States Customs and Border Protection (CBP).

Membership of the C-TPAT programme requires: (a) Ensuring that appropriate procedures are in place to protect against unmanifested material being introduced into the supply chain. A series of controls are recommended, including supervised introduction and removal of material and the proper marking, weighing, counting and documenting of cargo, the detecting and reporting of shortages and overages, and verification of seals on containers; (b) All buildings and rail yards should be constructed of materials which resist unlawful entry; (c) Companies should conduct employment screening and interviewing of prospective employees to include periodic background checks and application verifications; (d) Procedures should be in place to deny any type of access to

⁵ Chris R. McColm, "Iniciativa para la seguridad de la carga", *Security Management Online*, December 2003; "El certificado aduanero crea oportunidad de negocio" [online]

http://www.expansion.com/edicion/exp/economia_y_politica/fiscal/es/desarrollo/995612.html, 18 May 2007.

⁶ United States Customs and Border Protection, "Securing the global supply chain" [online] <http://www.cbp.gov>.

⁷ Hong Kong Trade Development Council, "Issue 02" [online] <http://www.tdctrade.com>, February 2005.

⁸ BancoMext, "Estiman que 60% de la mercancía importada por EU es vía C-TPAT" [online] <http://www.buyinmexico.com.mx>, July 2007.

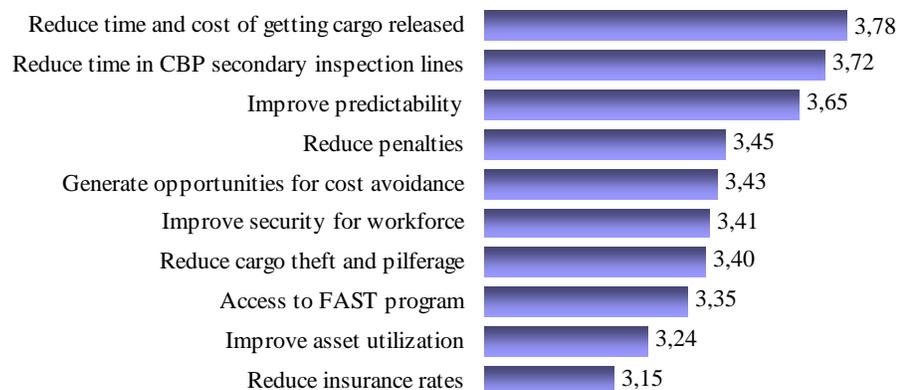
facilities by former employees and to withdraw their security passes; (e) There should be written security procedures to assess business partners; (f) A security awareness programme should be provided to employees, including recognizing internal conspiracies, maintaining product integrity, and detecting and dealing with unauthorized access; (g) Manifests submitted to Customs should be complete, legible, accurate, and should be submitted by a secure and, where appropriate, automatic means before the arrival of the shipment; (h) Information systems should be protected by individually assigned passwords, which should be changed periodically, and there should be a system to detect inappropriate access to or tampering with data; and (i) The physical integrity of the means of transport must be ensured.⁹

As for benefits, the programme divides them according to the level of security and the category thereby achieved by each member:

- Tier 1 (attestation only): Entails between five and eight times fewer inspections than for non-members.
- Tier 2 (validation): There are even fewer inspections and, when one is required, the container is moved to the front of the line.
- Tier 3: No regular security inspections, and infrequent random checks.

In a survey conducted in 2007 by United States Customs and Border Protection (CBP) among C-TPAT members, the latter were asked to give points to 10 factors according to their importance in their motivation to join the programme. A reduction in the time and cost of cargo release by CBP was considered as the greatest benefit of the programme.

Figure 2: POTENTIAL BENEFITS (Points out of four)



Source: United States Customs and Border Protection, "Cost/benefit survey" [online] <http://www.cbp.gov>, August 2007.

⁹ This list is not exhaustive, but summarizes the general requirements of C-TPAT.

The CBP website includes guides which can be downloaded free of charge, explaining the eligibility and minimum security criteria for each specific area and how to apply.¹⁰ There are also manuals by private groups which explain the opportunities at length and the detail of how to comply with C-TPAT, but they are priced at around US\$ 600.¹¹

The Authorized Economic Operator (AEO) programme, adopted in 2005 under the SAFE Framework of Standards, has been promoted globally by the World Customs Organization (WCO). It consists of a series of guidelines to be applied by customs, and compliance is required from operators to improve supply chain security and thereby reduce risks both of malicious interference and of accidents which could endanger cargoes, regardless of their contents. The goal is to facilitate secure trade exchanges through mutual recognition by national AEO programmes.

An AEO is defined as "a party involved in the international movement of goods in whatever function that has been approved by or on behalf of a national Customs administration as complying with WCO or equivalent supply chain security standards."¹²

In order to analyse the characteristics implemented and not limit itself only to suggested parameters, and taking into account the aforementioned weight of the market, this paper will first review the characteristics of the AEO programme according to European Commission guidelines.

The parties involved in the supply chain fall into seven categories: manufacturers, exporters, forwarding agents, bailees, customs brokers, shippers and importers. They are all very important, but have varying responsibilities. The programme therefore sets out three types of certificate, each having different requirements depending on the type of applicant, and establishes the benefits:

- Customs simplification certificate: easier admittance to customs simplifications; fewer physical and document-based controls; preferential customs clearance; and, on request, customs inspections can be carried out at a different place than the customs office concerned.
- Security and safety certificate: advance notification of inspections; summary declarations with reduced data elements; fewer physical and document-based controls; preferential customs clearance; and, on request, customs inspections can be carried out at a different place than the customs office concerned.

¹⁰ United States Customs and Border Protection [online] <http://www.cbp.gov>.

¹¹ United States Customs and Border Protection [online] <http://www.c-tpat.com>.

¹² World Customs Organization, "Authorized economic operator" [online] <http://www.wcoomd.org>, 2006.

- Customs simplification/security and safety certificate: combines the benefits of the other two certificates.

As mentioned, the requirements for obtaining certification in the European Union vary not only according to the type of certificate requested but also according to the applicant's activity. Nonetheless, the requirements as set out in the SAFE Framework of Standards are observed, and the applicant is required: (a) To have a good financial standing which is sufficient to fulfil its commitments with due regard to the characteristics of the type of business activity; (b) Not to have committed, over a period determined by the national AEO programme, any offence; (c) To maintain records systems which permit Customs to conduct any required audit of cargo movements relating both to import and export; (d) To have internal records access and control systems which are satisfactory to the national programme; (e) To have local officials to whom Customs can have rapid access and who will appropriately notify Customs of any unusual or suspect cargo; (f) To ensure the confidentiality of commercial and security-sensitive information; (g) To have premises constructed so as to resist unauthorized entry; (h) To take all reasonable precautions when hiring staff, but also to conduct periodic background checks, and have procedures for staff identification and for detecting, identifying and dealing with unauthorized or unidentified persons; (i) To train staff to be aware of the risks associated with movement of goods in the international supply chain, establishing procedures for crisis management and for operating in unusual situations, including periodic training; (j) To develop and maintain a policy manual or other appropriate security guide relating to the WCO guidelines on cargo security procedures; and (k) To ensure that business partners use seals which meet or exceed the existing ISO requirements, ensure that only authorized staff distribute the seals and ensure their appropriate and lawful use, using procedures for transport structure inspection.¹³

Differences and costs

There is a series of requirements which are imposed by AEO on its members and appear to fall outside the scope of C-TPAT. Three important observations need to be made in this regard. The first is that C-TPAT is immersed in a more complex national legal system which includes, as obligatory provisions, a number of the requirements contained in AEO, and which it was therefore not necessary to incorporate into C-TPAT. One such provision is that which relates to local officials, which is required in the United States under the Bioterrorism Act.

Second, there are provisions which, while included in the AEO programme, do not appear in C-TPAT or in United States law. This resulted in a problem in the drafting of the mutual recognition agreement between the two programmes: AEO requires that its

¹³ This list is not exhaustive, but summarizes the general requirements of WTO.

members can demonstrate that they are financially capable of complying with their commitments, but this requirement is not included in United States law.¹⁴

Lastly, a matter not discussed in the preceding paragraphs, AEO incorporates requirements relating to customs. The AEO programme implemented by the European Union is the implementation of the WCO framework, one of whose goals is harmonization of procedures and facilitation of secure international trade, and this means that customs services must agree to comply with certain criteria. Inasmuch as it does not affect the exporter, this differentiates AEO from C-TPAT, which does not impose on the customs service of the United States any requirements not provided for in that country's national legislation.

Analysis of the implementation costs of the C-TPAT and AEO programmes is extremely complicated because they are subject to the previously-existing infrastructure and terminology conditions (relating to both security and documentation) for businesses wishing to become members. CBP conducted a survey of the members of the C-TPAT programme, however, in which they provided estimates of their annual implementation and maintenance costs. The results showed that over half the businesses (in seven out of ten areas) did not have to incur implementation costs except in the programme's most sensitive areas (physical security and internal knowledge of the programme). Table 1 shows the percentage of the businesses taking part in the survey which incurred expenditure (since not all of them had to modify their structures or procedures) and how many current United States dollars they had to spend on each item.

ECLAC consultant Martin Sgut conducted a complementary study, which estimates that if businesses comply with the International Ship and Port Facility Security Code (ISPS) of the International Maritime Organization (IMO) and the Container Security Initiative (CSI) of the United States, the additional cost of implementing C-TPAT is reduced to approximately US\$ 10,000.¹⁵

¹⁴ "U.S., EU set to unveil C-TPAT, AEO mutual recognition road map", *Inside U.S. Trade*, vol. 25, No. 44, November 2007.

¹⁵ Ricardo Sánchez and others (coords.), "Protección marítima y portuaria en América del Sur. Implementación de las medidas y estimación de gastos", *Recursos naturales e infraestructura* series, No. 81 (LC/L.2226-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), December 2004. United Nations publication, Sales No. S.04.II.G.145.

Table 1: Average annual implementation and maintenance costs of the C-TPAT programme

Specific area of C-TPAT	Implementation		Maintenance	
	Businesses with expenditure	Average expenditure	Businesses with expenditure	Average expenditure
Physical security	57.2%	USD 38,471	47.5%	USD 13,141
Internal knowledge and training	52.3%	USD 9,192	45.0%	USD 4,945
Payroll	45.2%	USD 32,986	36.3%	USD 28,454
Cargo security	43.7%	USD 18,443	41.4%	USD 7,110
Staff security procedures	43.2%	USD 11,643	33.1%	USD 5,437
Identification system	41.7%	USD 9,681	35.8%	USD 6,241
Staff monitoring procedures	35.8%	USD 7,079	33.1%	USD 3,733
Electronic communication and database systems	33.7%	USD 24,303	34.4%	USD 8,752
Staff security	19.7%	USD 35,682	22.4%	USD 40,441
Total expenditure, annual average		USD 187,480		USD 118,244

Source: Prepared by the author on the basis of United States Customs and Border Protection, "Cost/benefit survey" [online] <http://www.cbp.gov>, August 2007.

When the CBP survey also asked members of C-TPAT whether they had considered leaving the programme, only 6.5% said that they had done so, 2.0% did not respond and the remaining 91.5% said that they had not considered it.

In the case of AEO, since it has been implemented only recently in the European Union (as of 1 January 2008), there have not as yet been any similar studies to determine the costs incurred by businesses in order to join or remain in the programme.

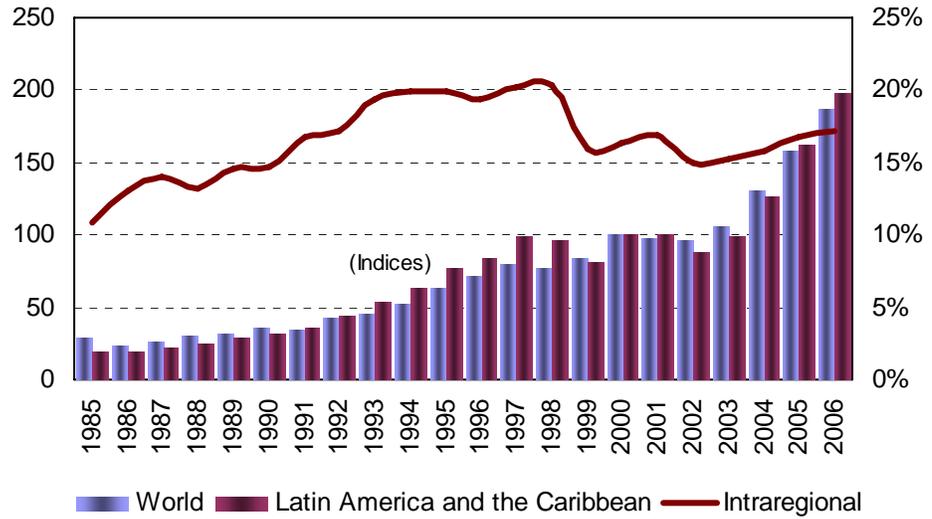
Latin America and the Caribbean

In 2006, intraregional exports in Latin America and the Caribbean totalled less than 20% of exports to the world. Nonetheless, the figures for export flows indexed from 2000 show that trade within the region is growing faster than trade with the rest of the world.

The region must therefore tackle the double challenge of supply chain security, not only as a means of access to United States, European or other markets, but also as a tool which will strengthen commercial links with neighbouring countries.

The SAFE Framework of Standards of WCO offers a unique opportunity: the chance for each State, within established parameters, to set up its own AEO programme, and then to interconnect its system with those in other countries of the region. This would not only promote growing confidence in the region's products but also strengthen security measures and improve product quality, while giving a further boost to the already-growing trade exchanges.

Figure 3: Latin America and Caribbean exports (Indices 2000 = 100)



Source: Prepared by the author on the basis of United Nations Commodity Trade Database (COMTRADE).

Conclusion

The issue of security in international trade will not go away. It is not merely a fashionable subject but a new cost component for exporting businesses. Initiatives such as C-TPAT or AEO, membership of which is now voluntary, may become formal requirements for entry to various markets. Becoming a member as soon as possible would result not only in benefits for businesses as described above, but also in international recognition as secure operators.

Constructing an interconnected Latin American system has always been an extremely difficult task, since the areas in which the States needed to reach agreement were often very taxing. Using the SAFE Framework of Standards as a basis, each country establishes its programme according to its own criteria and requirements, thanks to the flexibility offered by AEO; at the same time, however, the national programmes automatically become a strong negotiating base for mutual recognition which promises many benefits to the region, concerning both the harmlessness of foodstuffs consumed by its population and windows of opportunity in extraregional trade.

The costs associated with supply chain security are not short-lived. They have come to stay, and businesses must deal with them as soon as possible in order to ensure early global integration in the context of these new developments. In such a sensitive area, governments and the private sector must work together to achieve the best positioning for local industries in external markets.