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**ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

Working Party on Customs Questions affecting  
Transport

(One-hundred-and-sixth session, 3-6 February 2004,  
agenda item 7 (c) (iv))

**CUSTOMS CONVENTION ON THE INTERNATIONAL TRANSPORT OF GOODS  
UNDER COVER OF TIR CARNETS (TIR CONVENTION, 1975)**

**Application of the Convention**

**Amendment proposals relating to technical provisions**

**Strengthening technical regulations for container seals**

**Transmitted by the Government of the United States**

*Note:* The secretariat reproduces below a document transmitted by the Government of the United States

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## **A. INTRODUCTION**

1. The rapid growth of international trade since the adoption of the TIR Convention in 1975 and the heightened security concerns of 2004 necessitate a review of the TIR Convention with respect to strengthening provisions regarding container seals. Within the scope of the TIR Convention, Annex 7, Regarding Approval of Containers, includes regulations on technical conditions for containers acceptable for international transport under customs seal. This annex does not include, however, any specific regulations regarding container seals.

2. A number of international instruments which address containers and container security are in the process of giving careful scrutiny to ensuring acceptable standards for container seals. As a prime instrument for the movement of goods across land borders via container, the technical experts of WP .30, Customs questions affecting transport, is well positioned to advance such standards.

3. A number of proposals to strengthen provisions for seal security are being addressed within the context of the World Customs Organization for application to the such instruments as the Container Convention (1972) and the Revised Kyoto Convention on the Harmonization and Simplification of Customs Procedures. While any provisions adopted by the Container Convention (1972) must be acceptable under the TIR Convention, failure to harmonize such standards with the TIR Convention will compromise the security of the international trade supply chain.

4. The International Standards Organization (ISO) recently passed ISO/Publicly Available Specification (PAS) 17712 on mechanical seal standards. This specification establishes guidelines for mechanical seals of all kinds. While a PAS is a temporary standard for six years, full approval is expected before this expiration. Of particular interest is the language governing “high security” seals.

5. ISO/TC-104 is establishing a new Working Group to address specific vulnerabilities to container hardware and to develop recommendations for improvement. One major vulnerability is the placement of seals, either mechanical or electronic, on the handle of a container.

## **B. PROPOSAL**

6. During typical container transit, multiple inspections may occur by different Customs and law enforcement agencies. As sealing containers becomes more prevalent, the issue of cradle to grave inventory of mechanical seals becomes imperative. Attached in Annex 2 is a paper that outlines those Parties with responsibilities in an end-to-end international supply chain.

7. The Working Party is therefore asked to consider the following principles within the framework of the TIR Convention:

- ISO/PAS 17712 regarding mechanical seals should be adopted as the standard for the TIR Convention;
- All Contracting Parties should adopt high security seals as the standard for use by their respective countries;
- Each high security seal must have a unique identifying mark unique to the country of the Contracting Party;
- The Contracting Parties should support the work of ISO/TC-104 in addressing vulnerabilities to container hardware and monitor developments in this area;
- Recognizing that placing seals on a container handle poses an unacceptable risk, Contracting Parties should adopt an Explanatory Note or a comment to the Convention to use alternate locking solutions, such as drilling a 1/2" hole in the locking bar for cable seals, cable locks or other devices developed for the purpose of securing the doors more effectively.

8. Furthermore, in light of feedback to paragraph 7, the Working Party is asked to authorize the Secretariat to work directly with the United States and other interested Contracting Parties to draft specific amendments to the text of the TIR Convention for consideration at the its next session.

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Annex

RESPONSIBILITIES OF PARTIES  
IN AN END-TO-END INTERNATIONAL SUPPLY CHAIN

*Draft v. 2*

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## **PREAMBLE**

### **PURPOSE AND SCOPE**

The purpose of the document is to describe the relationships and responsibilities related to cargo security of parties to the international movement of containerized cargo. The document is a tool for members of the World Customs Organization as they consider measures to enhance security while promoting trade.

Global trade is extraordinarily complex. There are many permutations and combinations of specialized roles and relationships in trading processes, and they cannot be captured in a short paper. This document describes the archetype of a 'typical' ocean container movement carrying general cargo from an inland origin to an inland destination. The focus in the document is on the cargo and the container, not the transport conveyances such as trucks, railroads, and ships.

### **APPROACH**

The text concentrates on nodes or interchange points along the chain of custody from origin to destination. The reason is that in most cases security-related relationships between actors take place is at the interchange points.

### **IMPORTANCE OF SPECIFYING SECURITY RELATIONSHIPS**

Greater clarity and consensus about the security-related relationships among the parties in the movement of containerized goods, coupled with consistent application and enforcement of those relationships, will provide multiple benefits to all of those parties. These benefits include:

- Improved security against acts of terrorism that exploit the global trade in goods.
- Reduced risk of economic hardship caused by disruptions to or closures of trade in response to terrorist acts.
- Improved security against theft and diversion of cargo, with consequent reductions in direct losses and indirect costs, such as insurance.
- Improved security against smuggling of illegal materials such as narcotics and weapons, and against the illegal transport of persons.
- Improved security against the illegal movement of "black market" and "gray market" trade goods.
- Reduced risk of evasion of proper customs duties
- Increased confidence in international trading systems by current and potential shippers of goods.

## **ROLES AND ACTORS IN A TYPICAL TRADE CYCLE**

### **PRIVATE SECTOR**

- (a) **Shipper/consignor**
  - The originator of the shipment, which may or may not be the beneficial owner of the cargo throughout the trade transaction.
- (b) **Forwarder/broker**
  - Shipper's agent may consolidate several small shipments into a container load or simply facilitate arrangements for the shipper.
- (c) **Inland transport operator(s)**
  - Drayman, trucker, railroad company, or barge operator that positions empty containers or hauls loaded ones to land/land terminals, inland riverine terminals, ocean terminals, or receiver/consignees.
  - Usually operates under contract of carriage to the shipper, a forwarder/broker, another land transport operator, or an ocean carrier.
- (d) **Inland terminal operator(s)**
  - Responsible for intermodal transfer of containers, usually road-to-rail or -water, or rail- or water-to-road.
- (e) **Ocean terminal operators**
  - Responsible for the intermodal transfer of containers, usually from road or rail to ship, or from feeder ship to line haul ship, or the reverse of those moves.
- (f) **Ocean carrier**
  - Responsible primarily for port-to-port movements. May contract with inland transportation providers to provide and arrange for single (or "through") bill-of-lading end-to-end movement of the container for the shipper.
  - The carrier may be a "vessel operating carrier", which operates ships, or it may be a non-vessel operating common carrier, which issues transportation bills of lading and acts as a carrier with the shipper, but does not operate vessels.
- (g) **Customs broker**
  - Arranges Customs clearance and payment of duties.
  - May generate the shipping order for the movement beyond the port or receive the shipping order from a customer.
- (h) **Receiver/consignee**
  - The receiver is usually the unstuffier of the container.
  - The receiver usually becomes the beneficial owner of the cargo.

## **PUBLIC SECTOR**

**(i) Export control/Customs**

- Often responsible for ensuring compliance with its nation's export control regime. Usually responsible for pre-screening for security issues and contraband.

**(j) Importing Customs**

- The importing nation's customs service is the focal point for public sector review and screening of imports. Responsibilities usually fall into three groups:

- Security against terrorism. This may begin with pre-shipment or pre-arrival screening of shipment information for threat indicators; this may be done independently or in collaboration with Customs officials in the exporting nation. Security assurance also includes screening of documents and perhaps physical inspection upon arrival at the receiving port or the site where the Customs bond is released.
- Detection of contraband and stowaways. Although activities in this area shade into security against terrorism, the focus is the more traditional emphasis on detecting narcotics, banned imports, counterfeit goods, and illegal immigrants. The work includes both prescreening of shipment information and selective inspection of shipments.
- Collection of proper duties. This area reflects the historical roots of most Customs activities.

**(k) Other public sector entities**

- A government agency other than Customs typically is responsible for ensuring compliance with safety regulations for dangerous goods, and for security of vessels, crews, and ports.
- Law enforcement agencies in exporting and importing nations are usually responsible for simple criminal threats, such as cargo theft.
- Immigration agencies in importing nations are usually responsible for dealing with stowaways, although detection of stowaways generally falls to the Customs agency.
- Agencies responsible for issues such as public health, agricultural purity, and copyright or trademark infringement may complement or assist Customs officials in screening imports.

## **RESPONSIBILITIES ALONG THE CHAIN OF CUSTODY**

### **CROSS-CUTTING RESPONSIBILITIES**

There are responsibilities and principles that apply throughout the life cycle of a containerized shipment of goods.

The emphasis of this document is on the relationships among parties upon changes in the custody or possession of the container. That emphasis does not reduce and should not obscure the fundamental responsibility of the shipper for the safe and secure loading (or “stuffing”) and sealing of the container.

Each party in possession of the container has security responsibilities while cargo is entrusted to them, whether at rest at a node or while moving between nodes. Each party with data that needs to be filed with the government for customs and security screening purposes has responsibilities. Those responsibilities, which are not discussed further in the paper, include:

- Protecting the physical goods from tampering, theft, and damage
- Providing appropriate information to government authorities in a timely and accurate manner for security screening purposes
- Protecting the information related to the goods from tampering and unauthorized access. This responsibility applies equally to times before, during, and after having custody of the goods.

Security seals are an integral part of the chain of custody. The proper grade and application of the security seal is addressed below.

Security seals are to be inspected at each change of custody for a cargo-laden container. Inspecting a seal requires visual check for signs of tampering, comparison of the seal’s identification number with the cargo documentation, and noting the inspection on the cargo documentation, including the identification of the checker.

If the seal is missing, or shows signs of tampering, or shows a different identification number than the cargo documentation, then a number of actions are necessary:

- The receiving agent shall bring the discrepancy to the attention of the party tendering the container and the shipper
- The receiving agent shall note the discrepancy on the cargo documentation



- The receiving agent may be required to notify customs or law enforcement agents, depending on local laws and regulations
- The receiving agent must decide whether to refuse custody of the container pending resolution of any discrepancy, or to accept custody and continue with planned movements of the container. In the latter case, the receiving agent shall affix an additional security seal to the container and note the particulars on the cargo documentation.

Security seals may change on a container for legitimate reasons. Examples include inspections by an exporting Customs administration to verify compliance with export regulations; by a carrier to ensure safe blocking and bracing of the lading; by an importing Customs administration to confirm cargo declarations; and by law enforcement officials concerned with other regulatory or criminal issues.

If public or private officials should remove a security seal to inspect the lading, they will install a replacement that meets the quality specified below, installing it in a manner that meets the requirements specified below, and note the particulars of the action on the cargo documentation.

## **STUFFING SITE**

The shipper/consignor is responsible for securely stuffing the container and for the accurate and complete description of the cargo. The shipper is also responsible for affixing the cargo security seal immediately upon the conclusion of the stuffing process, and for preparing documentation for the shipment, including the seal number.

The cargo security seal should be compliant with the definition of high security mechanical seals in ISO Publicly Available Specification 17712. The seal should be applied to the container in a manner that avoids the vulnerability of the traditional container door handle seal location to surreptitious tampering. Among the acceptable ways to do this are alternative seal locations that prevent swiveling of an outer door locking cam or the use of equivalent tamper evident measures, such as cable seals across the door locking bars.

The shipper/consignor, which may be a forwarder/broker acting as an agent for the shipper, transmits required cargo documentation electronically or in hard copy to:

- Export control/Customs
- Where applicable, Importing Customs
- Other public sector entities as required
- Transport carrier (or carriers)
- Receiver/consignee

The land transport operator picks up the load. The transport operator receives the documentation, inspects the seal and notes the condition on the documentation, and departs with the load.

### **INTERMEDIATE TERMINAL**

If the container movement is via an intermediate terminal, then the land transport operator transfers custody of the container to the terminal operator. The terminal operator receives the documentation, inspects the seal and notes the condition on the documentation. Normally, the terminal operator sends an electronic notification of receipt (status report) to other private parties to the shipment. The terminal operator prepares or stages the container for its next movement, which could be by road, rail, or barge.

Similar verification and documentation processes take place upon pickup or departure of the container from the intermediate terminal.

It is rare that public sector agencies are involved in or informed about intermodal transfers at intermediate terminals.

### **LOADING OCEAN TERMINAL**

Upon arrival at the loading ocean terminal, the land transport operator transfers custody of the container to the terminal operator. The terminal operator receives the documentation, inspects the seal and notes the condition on the documentation. Normally, the terminal operator sends an electronic notification of receipt (status report) to other private parties to the shipment. The terminal operator prepares or stages the container for loading upon the ocean vessel.

Public agencies in the exporting nation review export documentation and provide necessary export control and safety certifications.

Importing Customs agencies that require advance information receive that information, review it, and either approve the container for loading or issue “do-not-load” messages for containers that cannot be loaded pending further screening, including possibly inspection.

For those countries that have export declaration and screening requirements, the carrier should require from the shipper documentation that the shipper has complied with the relevant requirements before loading the cargo for export. (The shipper/consignor is, however, responsible for compliance with all prevailing documentation and other pertinent export requirements.) Where applicable, the ocean carrier must file its manifest information to those importing Customs agencies that require such information. Shipments for which “do-not-load” messages have been issued should not be loaded onboard the vessel pending further screening.

The carrier or the ocean terminal as agent for the carrier inspects the condition of the seal, and notes it accordingly; this may be done at the ocean terminal gate or after entry to the terminal but before the container is loaded on the ship.

### **TRANSSHIPMENT TERMINAL**

If the container is routed via an ocean transshipment terminal, then the carrier provides information to the terminal operator to assist in staging and preparing the container for re-loading onto another vessel. The carrier also provides electronic and perhaps paper documentation appropriate to an in-bond transfer to the Customs authorities at the transshipment port.

The transshipment terminal operator shall inspect the security seal between the off-loading and re-loading of the container. This requirement may be waived for transshipment terminals which have security plans that conform to the ISPS Code.

### **OFF-LOADING OCEAN TERMINAL**

The receiver/consignee usually arranges for a Customs broker to facilitate clearance of the shipment in the off-loading port. Generally, this requires that the cargo owner provide documentation to the broker in advance of arrival.

The ocean carrier provides advanced electronic cargo manifest information to the terminal operator and to the importing Customs authority as required.

Customs officials may select containers for different levels of inspection immediately upon offloading or later. Customs officials may inspect the condition of the seal and related documentation in addition to the cargo itself.

If the container is to travel in Customs bond to another location for clearance, then Customs officials at the offloading terminal shall affix a Customs seal to the container and so note the documentation.

The receiver/consignor or Customs broker pays the duties due to Customs and arranges the Customs release of the shipment.

Upon pickup for departure from the ocean terminal, the land transport operator inspects and notes the condition of the seal, and receives documentation from the terminal operator.

## **INTERMEDIATE TERMINAL**

The processes in intermediate terminals in the importing country are analogous to those in intermediate terminals in exporting countries.

## **UNLOADING SITE**

Upon receipt of the container, the consignor or deconsolidator inspects the seal and notes any discrepancy on the documentation.

The consignor unloads the container and verifies the count and condition of the lading against the documentation. If there is a shortage, damage, or an overage discrepancy, it is noted for claims or insurance purposes, and the shipment and its documentation is subject to audit and review.

If there is an anomaly related to narcotics, contraband, stowaways, or suspicious materials, the consignor notifies law enforcement or Customs officials.

Unless there is an apparent criminal anomaly, it is rare that public sector agencies are involved in or informed about transfers at unloading sites.

## **TECHNOLOGY EVOLUTION**

The above description of roles and responsibilities relies heavily on a process of checking mechanical seals that are affixed by the shipper to a container. This reflects the current state of commercially deployed technology. Some governments and private parties are exploring the suitability of new technologies that may provide enhanced container security capabilities. If such technologies are approved and deployed, then procedures and requirements based on checking traditional mechanical seals should also evolve to reflect those technologies.

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