

# CONTAINERISATION

## Theft, Fraud & Vulnerability

David Cuckney  
ICC International Maritime Bureau

Wednesday 7th October 2015



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### Containers - How safe are they?

- Theory of Container Security
- International Developments
- How to Steal from Containers
- Container Seals
- Smart Boxes & Technological Advances



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**Container shipping singled out as terrorist threat** *TIMES 8/9/03*

By Stewart Tendler  
Crime Correspondent

TERRORISTS could use the 20 million containers carried around the world on shipping each year to smuggle weapons or bombs, according to American security experts. A report from the European branch of Rand, part of the California-based Rand Corporation, suggests that "the potential threat of terrorists using containers poses a large risk to our economies and to our societies". Air security has been tightened since September 11, but the report says that "the marine sector, and specifically the container-transport sector, remains wide open to the terrorist threat".

Maarten van der Voort, one of the authors of the report, said "The issue of container security is an accident waiting to happen. There is a long way to go to raise awareness." According to the report, there are few checks on the movement of containers, which could easily be used to hide a nuclear device. Many of the world's container ports are near cities. The containers change hands repeatedly during transportation, but the freighters often rely only on documents, which can easily be falsified. The real origin of the container can be hidden by fake papers and the help of corrupt officials.

The report also concluded that "what governments may have in the controlling container ports, some of which are privately owned. The companies operate on tight margins, which means that they may lack X-ray equipment or be unhappy about searches that would slow operations. X-ray equipment is used in Britain and in some American ports, originally to prevent arms and drug-smuggling; British Customs officers are also introducing devices that will detect the presence of radioactive material.

SMART BOXES

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**Container Security**

1. Door flap

2. Locking bars

Seals

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- **Cannot be taken apart and rebuilt.**
- **Free of joints or marks that may disguise tampering.**
- **Resistant to manipulation, cutting or adhesion.**
- **Unique identifying marks and numbers.**



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Therefore you cannot open a container without:-

Leaving visible traces of tampering

or

Breaking the container seal



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“the container is the potential ‘Trojan Horse’ of the 21<sup>st</sup> Century”

Commissioner Robert P Bonner  
CBP Trade Symposium  
Washington DC January 2005

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February 4 · 🌐

لراغبين بالسفر الى اوروبا يوجد لدينا باخرة نافلة حبوب بطول 60متر ستطلق من تركيا الى ايطاليا مدة الرحلة من 4 الى 6 ايام الاكل والشرب مؤمن لتواصل عائلاتهم: ابو عدى

لراغبين بالسفر الى اوروبا يوجد لدينا باخرة نافلة حبوب بطول 60متر ستطلق من تركيا الى ايطاليا مدة الرحلة من 4 الى 6 ايام الاكل والشرب مؤمن لتواصل عائلاتهم: ابو عدى



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"For those wishing to travel to Europe, we have a ship carrying grain, 60m long, departing from Turkey to Italy. The journey takes between four and six days. Food and drinks are available."



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## Cargo Handlers

- Shipper
- Loader/CFS
- Truck
- Port
- Ship
- Port
- Truck
- Consignee



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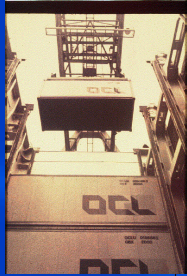
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## ISPS Code

- Shipper
- Loader/CFS
- Truck
- Port
- Ship
- Port
- Truck
- Consignee



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## International Developments

ISPS Code (International Ship & Port Facility Security Code) 2004

Minimum security arrangements for ships, ports and government agencies. It prescribes responsibilities to governments, shipping companies, shipboard personnel, and port/facility personnel to "detect security threats and take preventative measures against security incidents affecting ships or port facilities used in international trade."



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## ISPS Code/CSI

- Shipper
- Loader/CFS
- Truck
- Port/Customs
- Ship
- Port
- Truck
- Consignee



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## International Developments

CSI (Container Security Initiative) Focus on the government sector. (2002)

CSI is a multinational initiative that protects the main method of global trade — containerized shipping.

Mission is to target and pre-screen containers and to develop additional investigative leads related to the terrorist threat to cargo destined to the United States.



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## CSI (Container Security Initiative) Continued.....

- Port must have a minimum security standard.
- 24 hour advance BL rule.
- Commit to share intelligence with US CBP.
- Host nation must permit CBP personnel into their ports.
- Currently 86 % of all containers imported into the US are subjected to prescreening.



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## However.....

- Only 'high risk' cargoes are actively screened i.e. physically inspected
- 2012 – 11.5 million container imports into US. 31,000 every day. Only 100,000 are physically inspected – under 1%
- DHS missed July 2012 deadline for 100% screening. Extended by two years
- Reliance on intelligence gathering and analysis to indentify high risk containers
- Other limitations



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### 58 CONTAINER SECURITY INITIATIVE PORTS

AFRICA	DATE	ASIA	DATE	EUROPE	DATE
Durban	December 1, 2003	Shanghai	April 12, 2005	Antwerp	February 23, 2003
Alexandria	September 28, 2007	Shenzhen	June 24, 2005	Zeebrugge	October 29, 2004
		Hong Kong	May 5, 2003	Le Havre	December 2, 2002
<b>NORTH AMERICA</b>		<b>ASIA</b>		<b>EUROPE</b>	
		Osaka	May 21, 2004	Marseilles	January 7, 2005
Montreal	March 25, 2002	Kobe	August 6, 2004	Bremerhaven	February 2, 2003
Vancouver	February 20, 2002	Yokohama	March 24, 2003	Hamburg	February 9, 2003
Halifax	March 25, 2002	Nagoya	August 6, 2004	Piraeus	July 27, 2004
		Pusan	August 4, 2003	Genoa	June 16, 2003
<b>SOUTH AMERICA</b>		Kaohsiung	July 25, 2005	La Spezia	June 23, 2003
Santos	September 21, 2005	Chi-Lung	September 25, 2006	Livorno	December 16, 2004
Buenos Aires	November 17, 2005			Gota Tauro	October 29, 2004
Cartagena	September 12, 2007	<b>ASIA-PACIFIC</b>		Naples	September 30, 2004
<b>CENTRAL AMERICA</b>		Port Klang	March 8, 2004	Rotterdam	September 2, 2002
		Tanjung Pelepas	August 16, 2004	Algeciras	July 30, 2004
Puerto Cortes	March 25, 2006	Singapore	March 10, 2003	Gothenburg	May 23, 2003
Bahua	August 27, 2007	Laem Chabang	August 13, 2004	Felixstowe	May 24, 2003
Colon	September 28, 2007	Cebu	September 29, 2005	Southampton	October 19, 2004
Manzanillo	September 28, 2007	Qasim	April 30, 2007	Liverpool	October 19, 2004
<b>CARIBBEAN</b>		<b>MIDDLE EAST</b>		Thamesport	October 19, 2004
				Tilbury	October 19, 2004
Canedo	September 26, 2006	Dubai	March 26, 2005	Lisbon	December 14, 2004
Kingston	September 28, 2006	Port Salalah	March 8, 2006	Valencia	September 25, 2006
Freeport	September 29, 2006	Ashdod	September 17, 2007	Barcelona	September 27, 2006
		Hala	September 25, 2007		

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## US GAO Report Sept 2013

- Ports not risk assessed since 2005
- 27 out of 50 riskiest ports are CSI
- Host nation cooperation
- 100% inspection = USD 16 billion infrastructure investment (1/3 DHS annual budget)

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## ISPS Code/CSI/C-TPAT

- Shipper
- Loader/CFS
- Truck
- Port/Customs
- Ship
- Port
- Truck
- Consignee



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## International Developments

C-TPAT (Customs-Trade Partnership against Terrorism) Focus on the private sector.

C-TPAT is a voluntary government-business initiative to build cooperative relationships that strengthen and improve overall international supply chain and US border security.

Impact on all elements of the supply-chain with over 11,000 companies registered with US CBP.



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## Authorised Economic Operator

- Introduced June 2005 by World Customs Organisation.
- Part of WCO Framework of Standards to Secure and Facilitate Global Trade (SAFE).
- Similar to C-TPAT but “on request of the Customs administration of the receiving nation, the customs administration of the sending nation will perform an outbound inspection of high-risk containers and cargo.”



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## Container Control Programme

CCP developed by UNODC & WCO in 2003

“to enhance port surveillance in developing countries to minimize the risk of maritime containers being exploited and used for illicit drug trafficking, transnational organized crime and other forms of fraudulent activity.”



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### What is CCP?

- 2014 – 500 million movements p.a.
- UNODC – only 2% inspected in any manner
- Joint Operations – Enforcement Authorities at ports of Origin, Transit & Destination
- Inter-Agency Port Control Units (PCUs)
  - Different law enforcement agencies – Customs, police, etc
  - Trained to target high risk containers
  - Seeks to promote interaction & teamwork necessary for effective interdiction




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### CCP operates in following countries

**Latin America and the Caribbean:**  
Costa-Rica, Ecuador, Guatemala, Jamaica, Panama & Paraguay

**East Africa:**  
Kenya and Tanzania

**North Africa:**  
Algeria and Morocco

**West Africa:**  
Benin, Cape Verde, Ghana, Mali, Nigeria, Senegal, Togo

**Central Asia/ECO Countries:**  
Afghanistan, Azerbaijan, Georgia, I.R. Iran, Kazakhstan, Pakistan, Turkmenistan




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### CCP Global Results - 2012

Mar 2006 – Jun 2011 (27 PCUs)	Seizure Type	2012 (41 PCUs)
40 tons	Cocaine	11 tons
31 tons	Cannabis	17 tons
770 tons	Precursor Chemicals	434 tons




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15 metric tons cannabis resin seized in Karachi



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### Ship & Port Operations

- Operations run 24/7
- Multi-dimensional & always in flux
- Difficult to control (Law Enforcement)
- Operated by private organisations
- Ports are not storage facilities
- Ships must keep moving (Load-and-Go)
- Must make money
- Attractive to criminal organisations



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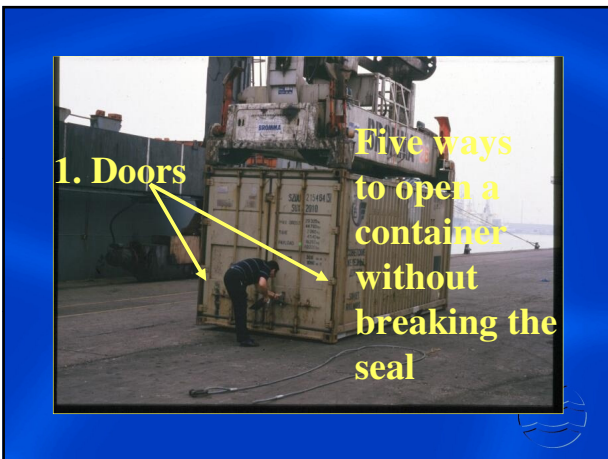
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1. Doors

Five ways to open a container without breaking the seal



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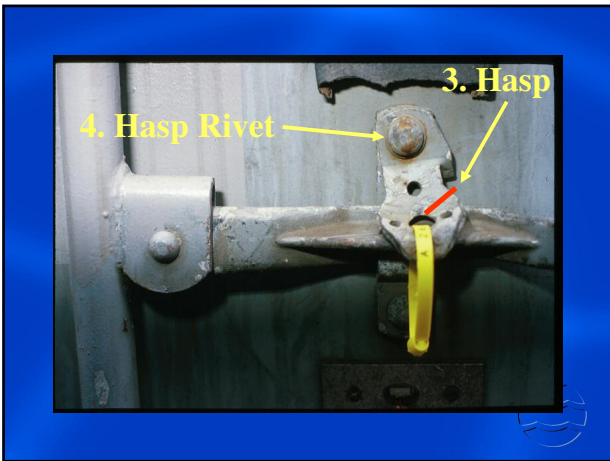
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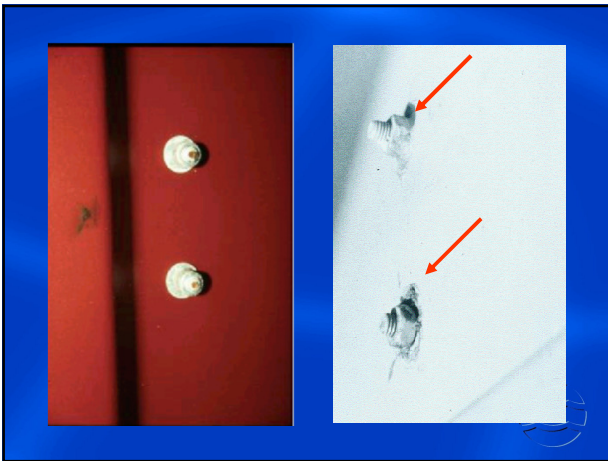
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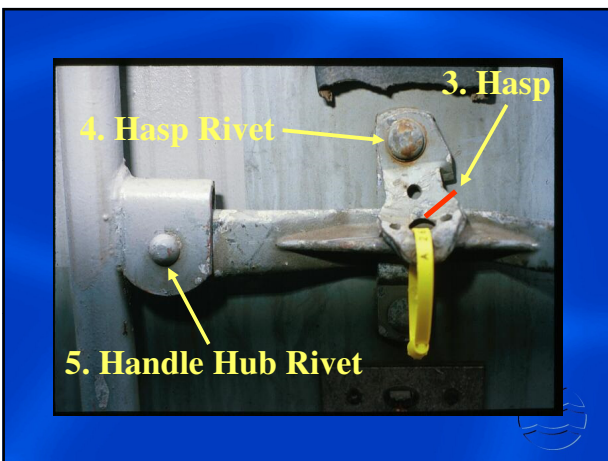
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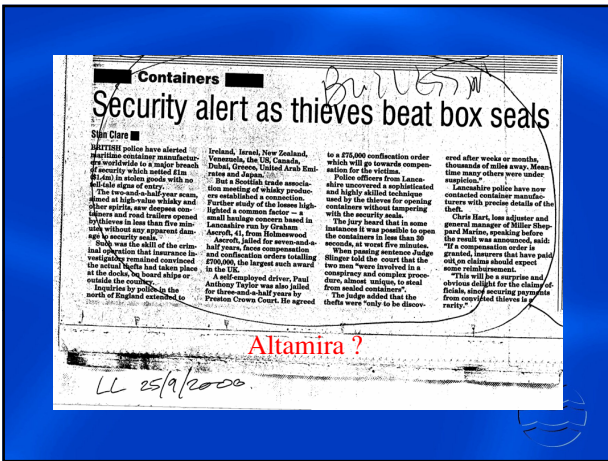
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### Case Studies



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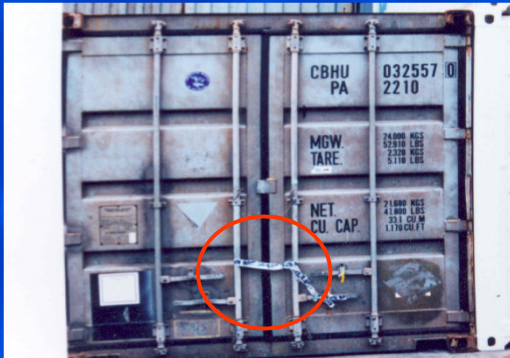
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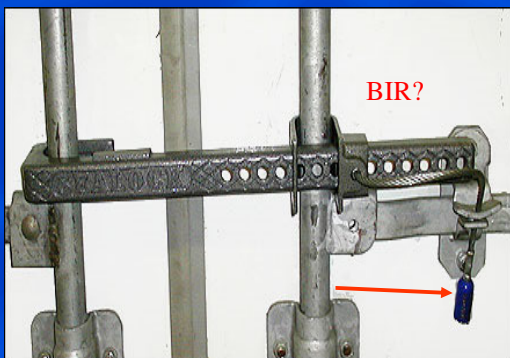
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## Vulnerability of Container Seals

- Pre-tampering
- Manipulation
- Physical force
- Falsification
- Superglue
- Heat



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“All bolt seals, including our own,  
can be circumvented.

All bolt seals fail to secure the  
container door from easy access by  
even the most novice cargo  
thieves!”

CGM Security Solutions Inc.



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**Indicative strip seals**



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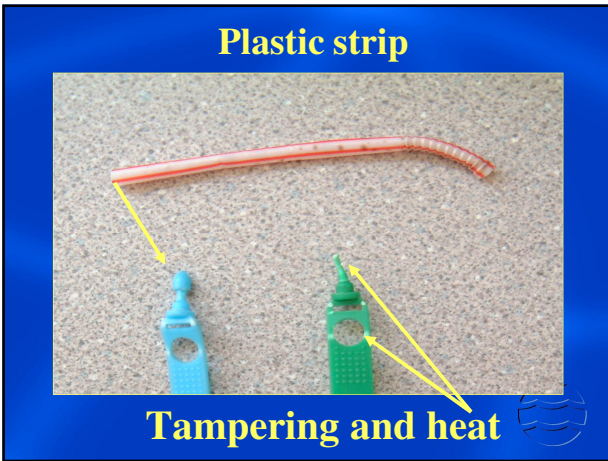
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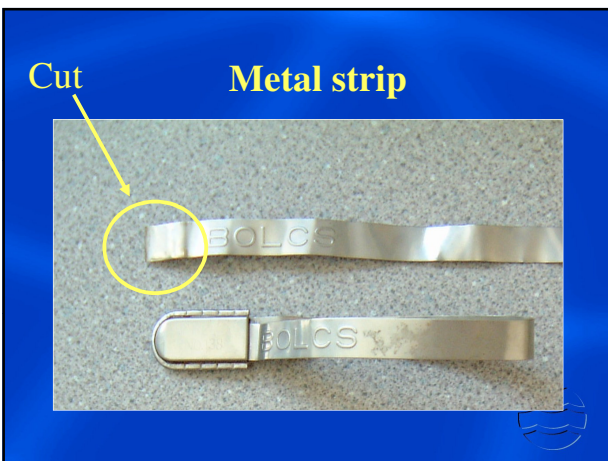
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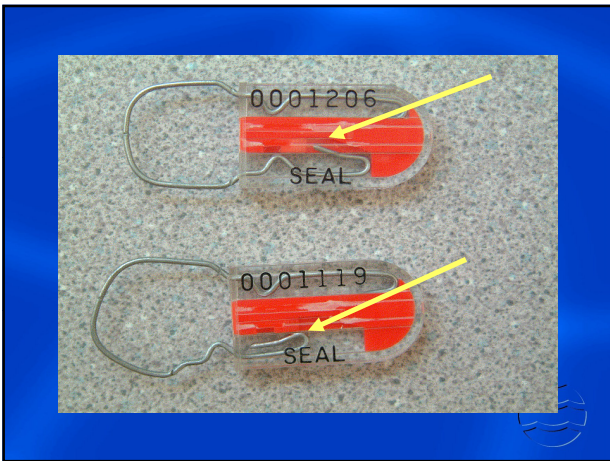
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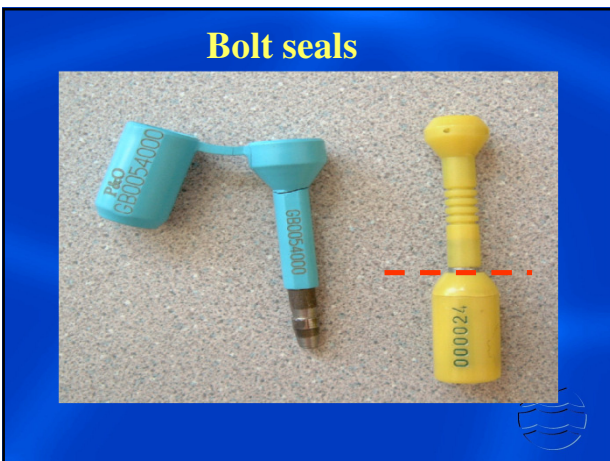
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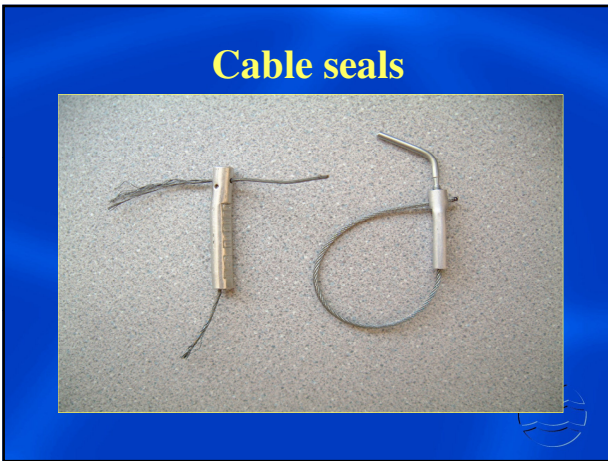
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**Manufacturer of  
security seals  
www.onceseal.com**

**“If there are not seals you  
are looking for on our web  
site, please send us your  
samples, we would like to  
make the mould for you.”**

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25 May 2005

US CBP C-TPAT

Container and physical security requirements – ISO 17712 Standard



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### Tamper Evident Secure Container (TESC)

- General Electric / China International Marine Containers
- New generation container with built in TESC device
- Pilot Project Oct – Dec 2004 monitored by Unisys
- 18 Containers China to USA
- All 15 security breaches successfully identified



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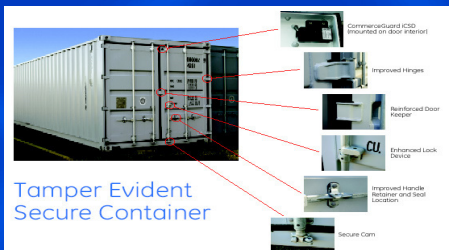
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### Tamper Evident Secure Container (TESC)



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## Tamper Proof Container Systems (TPCS)

- Recognised by C-TPAT and AEO and other national customs authorities.
- Containers lined with a fabric which acts as a detection sensor. If breached, a signal is relayed to a Data Management Centre in minutes.
- Allows for continuous monitoring.



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## Tamper Proof Container Systems Continued.....



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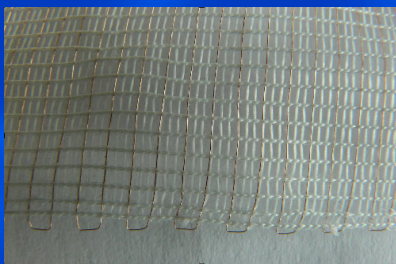
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## Tamper Proof Container Systems Continued.....



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## 100% Scanning?

- 100% inspection of all US inbound cargo containers
- Huge investment required - \$16bn
- Secure Freight Initiative (SFI) Pilot
- US currently at 1%
- HMRC 1.7%



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## CONTAINERISATION Theft, Fraud & Vulnerability

THANK YOU ...

Mailto: [dcuckney@icc-ccs.org](mailto:dcuckney@icc-ccs.org)  
Website: [www.icc-ccs.org](http://www.icc-ccs.org)  
Tel: + 44 20 7423 6960



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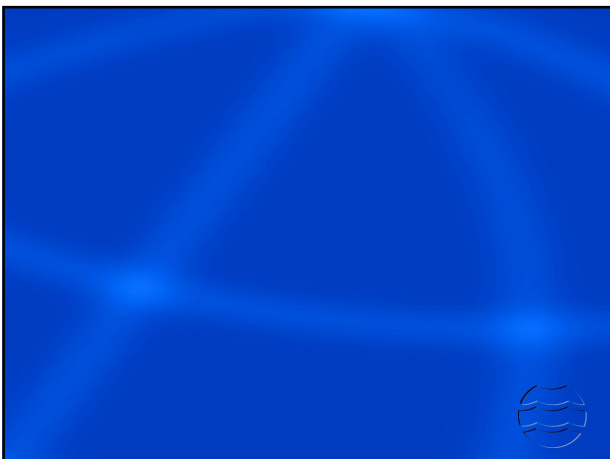
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