



# The Impact of Incoterms® 2010 on Supply Chain Security: Both Global and Domestic



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*by Dr. Jim Giermanski*

I have recently written that it seems the real movement to secure the global supply chain is being accomplished by the private sector. What follows is more verification of the private sector's leadership and movement to continue that process through the rules for international business practices embodied in Incoterms® 2010.

## **The New Mortar of Global Business and Its Security Elements**

There are three major contracts in the international sale of goods, the Contract of Sale (normally governed by the UN Convention on Contracts for the International Sale of Goods [CISG]); the Contract for Carriage (normally governed by the transport document or bill of lading); and the Contract for Payment (negotiated between buyer and seller). While these contracts are all distinct, each relates to the other. Because of the interconnectivity of these legal agreements, there is something called Incoterms, rules that link and support the smooth execution of these disparate contracts. In effect, Incoterms serve as the mortar or glue to hold them together to function smoothly. Incoterms have always dealt with the international contract of sale, carriage, and payment, and provided the guidelines that distinguish duties and responsibilities of the buyer and seller. Incoterm rules are defined and described in Incoterms® 2010, a publication of the International Chamber of Commerce (ICC). Although first published in 1936, they are updated about every 10 years. The newest version is Incoterms® 2010 which went into effect on January 1, 2011.

As the playbook of international rules for global trade, the players involved in the contract for sale (exporter and importer); the contract for carriage (carrier, freight forwarder, and customs broker); and the contract for payment (banks, insurance companies, and other financial intermediaries); all need to understand the use of these terms. Because of the rules' importance the United States has now recognized them as also essential for domestic business practices within the United States. Incoterms have been approved as the replacement of all domestic trade terms currently used in the United States. In September, 2004 the United States Council for International Business (USCIB) announced the removal of the current U.S. domestic terms:

“ With little fanfare, the shipping and delivery terms (former sections 2-319 through 2-324 are being written out of the Uniform Commercial Code (UCC) because they are inconsistent with modern usage. The final draft revision, minus these sections was completed by the American Law Institute (ALI) and the National Conference of Commissioners on Uniform State Laws (NCCUSL on February 19, 2004, and awaits approval by each state legislature.” (1)

Then in July 2005, the United States Council for International Business (USCIB) announced: “Nearly all businesses in the United States will be affected by upcoming changes to the shipment and delivery terms commonly used in domestic B2B (business-to-business) transactions.” (2) The announcement further stated that the revision of Article Two of the Uniform Commercial Code (UCC) is incorporated into the laws of the United States except Louisiana, and that state legislatures can be expected to adopt the revisions which are the “... industry-defined standard trade definitions, used in international contracts, that also provide a clearly defined alternative to the deleted UCC shipment and delivery terms.” (3)

However, in addition to their international prominence in trade negotiations and seller/buyer obligations, the new Incoterms® 2010 has an additional focus on global supply chain security, not present in previous editions. Within the 9 main features of the Incoterms 2010 rules, feature No. 7 is dedicated to security.

*There is heightened concern nowadays about security in the movement of goods, requiring verification that the goods do not pose a threat to life or property for reasons other than their inherent nature. Therefore, the Incoterms® 2010 rules have allocated obligations between the buyer and seller to obtain or to render assistance in obtaining security-related clearances, such as chain-of-custody information (emphasis added), in articles A2/B2 and A10/B10 of various Incoterms rules. (4)*

Global supply chain security has now become a mandated area of business concern, responsibility, and liability when complying with Incoterms® 2010..

### **The Liability Issue for Buyer and Seller**

In the new Incoterms 2010, as in past Incoterms, "A" Articles refer to seller obligations, and "B" Articles refer to buyer obligations. However, Articles A/2 and A/10 and B/2 and B/10 are new and indicative of the concern worldwide for supply chain security, clearly absent from previous editions of Incoterms. While each of the 11 Incoterms is unique, in essence, the buyer and seller are obligated to ensure that Customs and security formalities are met so that shipping containers

can be considered safe and be transported through any country prior to delivery. Specifically, depending on the Incoterm used, the seller and buyer have obligations to provide "chain-of-custody," "...security-related information..." needed for the cargo's transport to destination. So what is "chain-of-custody" information?

### **Chain-of-Custody in the Supply Chain**

In jurisprudence and law enforcement, "chain of custody" refers to the integrity of evidence and requires a documented process showing the "seizure, custody, control, transfer, analysis, and disposition of physical and electronic evidence. Documentation should include the conditions under which the evidence is gathered, the identity of all evidence handlers, duration of evidence custody, security conditions while handling or storing the evidence, and the manner in which evidence is transferred to subsequent custodians each time such a transfer occurs." The question is whether this chain of custody concept can be applied and used in the world of global container security, trailer security and railcar security. Interestingly, in addition to the Incoterms® 2010 change, there are also some new changes to the Federal Rules of Civil Procedure which support the electronic communication procedures and protocols referenced in the new Incoterm rules.

In 2006, the U.S. Supreme Court approved amendments to several rules. In short, the changes allow electronically stored information (ESI) to be requested during discovery for admission in trials in U.S. courts, assuming, of course, that it meets the legal thresholds for the admission of evidence. Furthermore, ESI evidence that includes virtually all electronic records and communications, including e-mails, may be obtained through subpoena in criminal cases and by pretrial discovery in civil cases. Thus, information contained in electronic systems used in the global supply chain now have the potential for use as evidence in civil litigation. ESI may also be used in supply chain disputes regarding compliance with mandated requirements in government programs such as Customs and Border Protection (CBP) programs like the Customs Trade Partnership Against Terrorism (C-TPAT) and the 10-Plus-2 Program.

The most common and fundamental problem in transport today comes from the very conveyance of goods in the global supply chain. If one sends goods in an open conveyance, like coal in a rail car, it would be difficult to prove that all the pieces of coal that started the journey at origin ended the journey at destination. However, with common shipping containers, there is no problem in assuring the sender and receiver that the all the goods "stuffed" into the container at origin are, in fact, the same goods in the same quantity that arrived at destination and that nothing has been added into the container nor taken out of the container.

Modern logistics chain-of-custody processes and capabilities are already available to sellers, buyers, and carriers through the use of container security devices (CSDs). Distinct and apart from Incoterms® 2010, one version of the chain-of-custody supply chain process is officially recognized in 33 countries, with pending recognition in other countries. These chain-of-custody capabilities can offer the following benefits and are consistent with and supportive of the new Incoterm rules.

1. CSDs can provide the electronic verification of contents and its quantity. Their use can also identify the accountable person verifying the cargo's accuracy, and any logistical data agreed

upon can automatically be transmitted from the container by satellite or cellular communications to appropriate entities with the need to know.

2. Depending on the robust nature of the CSD, it not only can track movement, but also it can allow seller, buyer, or others so permitted to "query" the container while it is in transit. Some CSDs also allow the container itself to report independently any movement off its intended journey. Satellite and/or cellular-monitored and tracked smart containers automatically offer through the use of worldwide call centers a third-party record of any break in the chain-of-custody.

3. Finally, a CSD utilizing a chain-of-custody process can provide an electronic receipt of delivery and the identification of the individual authorized to open the container through a specialized electronic communication or biometric reading needed to access the container at destination.

The only real difference with the chain-of-custody described in other legal circles is that the CSDs can do all of this electronically. CSDs cannot only meet the challenges of providing a good control similar to a registered and certified letter in the postal system, but also provide the electronic management not available in documentary chains.

### **Compliance with Government Programs**

There are also important benefits from the use of a chain-of-custody system: support for national security programs such as the Container Security Initiative (CSI); and the Customs Trade Partnership Against Terrorism (C-TPAT). With respect to C-TPAT, a chain-of-custody process can certify that C-TPAT firms that claim to comply with certain components of C-TPAT like control of stuffing at origin, actually do comply. With respect to CSI, container contents will be verified by an indentified person at stuffing, not required by the government programs. Also the chain-of-custody data stored in third-party control center servers and in the servers of shippers and consignees can be used legally to defend against negative CBP audits, legal claims regarding damage or loss by others within the supply chain, or non-compliance with cargo verifications connected to some legal requirements of the UN Convention on Contracts for the International Sale of Goods (CISG). In effect, chain-of-custody systems exceed the requirements of current CBP programs.

Finally, in September 2009, the United States became a signatory to the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (Rotterdam Rules). (5) Instead of the current carrier liability beginning from the period of time the goods laden into, and discharged from the vessel, these Rotterdam Rules will now make vessel carriers responsible for the cargo they carry from origin to destination. In effect, shippers, consignees, and vessel carriers will all have to be concerned with a door-to-door chain of custody with respect to carriage of goods by sea.

## **Conclusion**

Without a doubt, Incoterms® 2010 recognizes the value of global supply chain security utilizing a demonstrable and verifiable chain of custody, that can provide the following benefits:

1. make money for their users through expedited Customs treatment;
2. serve to prove C-TPAT compliance with stuffing at origin;
3. verify the loading of proper cargo and quantity at origin;
4. affirm the appropriate container environment and location during carriage;
5. verify the proper cargo and quantity at destination;
6. protect against the unauthorized placement of contraband or counterfeit products while in route to destination, and
7. provide to parties of contracts for the international sale of goods, a level of confidence in the expectation of accuracy in sending and receiving that which was purchased.

With respect to securing the global supply chain, the international private sector has done what national governments so far have been unwilling to do. Incoterms® 2010 embodies that accomplishment.

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### ***About the Author***

*A former Regents Professor at Texas A&M International University, Dr. Jim Giermanski is now Professor of International Business and Director of Centre for Global Commerce at Belmont Abbey College. He has been chosen as the International Educator of the Year by the National Association of Small Business International Trade Educators and has been appointed to the graduate faculty at the University of North Carolina at Charlotte. In conjunction with the Professional Examination Service (PES) and Bradley University, he is a member of the International Practice Analysis Committee of the NASBITE Task Force to develop a national International Trade Specialist Certificate. He is also a reviewer for the Transportation Research Board, U.S. National Research Council. He served as Director of Transportation and Logistics Studies, Center for the Study of Western Hemispheric Trade at Texas A&M International University.*

*Dr. Giermanski consults often on international transportation and transportation security, border logistics, and trade matters involving Mexico. He has frequently given invited testimony on NAFTA, transportation, and other international business issues before the U.S. Senate and House, the Texas Senate and House, EPA, and the U.S. International Trade Commission. He served as the co-chairman of the Texas Transportation Committee of the Task Force to prepare for NAFTA, sat for 5 years on the Texas Office of the Attorney General's Trans-border Trucking International Working Group, and for three years as a member of the Research Advisory Committee on Management and Policy, Technical Advisory Panel, Texas Department of Transportation. He has been requested to serve as a border expert to assist the Arizona Department of Transportation in developing concepts and practices to improve the border crossing activities on the Arizona Mexico border, and at the request of the White House, Council*

*of Economic Advisors, he provided information on trade issues and barriers on the southern border.*

*He has authored over 100 articles, books, and monographs and has given over 100 presentations. He has been published extensively on transportation and trade issues and for five years wrote the International Insight column in Logistics Management. In addition to his scholarly writing, he has been published in the Journal of Commerce, El Financiero, Traffic World, Strategic Finance, Transport Topics and most recently, Tax Notes International. He has been interviewed by and quoted in over 50 national and international publications such as the Wall Street Journal, the New York Times, Forbes, the Financial Times, Christian Science Monitor, and has appeared nationally as a special guest on the FOX News Channel's Special Report with Brit Hume, CNN, NBC, CBS, NPR, BBC, Voice of America and the Canadian Broadcasting Corporation in addition to many local and regional affiliates.*

*Finally, with his background as a former FBI special agent, OSI special agent and a Colonel in the Office of Special Investigations where he handled counterintelligence matters, Dr. Giermanski is Chairman of the Board of Powers International, Inc. which provides supply-chain security solutions, consulting, and training. He currently provides transportation security lectures on C-TPAT, and other Customs and Border Protection (CBP) programs. Dr. Giermanski has a Masters degree from the University of North Carolina in Charlotte, a Masters from Florida International University, and a Doctorate from the University of Miami. He is a graduate of Air Command and Staff College, and The Air War College while also serving as a visiting scholar at the Center of Aerospace Doctrine, Research, and Education, an Air Force think tank.*

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1) "Latest UCC Revision Drives Universal Use of Incoterms 2000," USCIB in the News, <http://www.uscib.org/index.asp?documentID=2954>, p. 1.

2) <http://www.uscib.org/index.asp?documentID=3345>, A Handy Replacement for Obsolete UCC Trade Terms, p. 1.

3) <http://www.uscib.org/index.asp?documentID=3345>, A Handy Replacement for Obsolete UCC Trade Terms, p.

4) Incoterms® 2010, International Chamber of Commerce, Paris, France, 2010, p. 9.

5) G.A. Res. 63/122, Annex, U.N. Doc. A/RES/63/122 (Dec. 11, 2008)