



Reducing Trade-Financing Risks Through the Use of the *Powers Secured*® Chain of Custody

Banks are normally sought out by importers who need financing. Traditionally the financing has usually been through documentary or letters of credit (L/C), factoring, forfeiting, and drafts. Each has risks for the importer especially in the case of L/Cs, and the bank that replaces the credit worthiness of the buyer with the credit worthiness of the bank. The risks are tied to issues of correctness of product purchased, its possession, control, title transfer, fraudulent or altered documents, complying documents, complying presentations of documents, deadlines, Standby L/C insurance issues, and government intervention as in Customs clearance issues and inspections by a third party. Adding to the bank's natural concern in reducing risks, they now have to follow Basel III rules which require the banks to have increased capital liquidity, and increased capital quality all bearing on a banks capacity to continue trade financing. Yet, trade financing will become more and more important for the United States given the increase of trade as part of our gross national product. Reducing risk has become paramount especially when considering all the international stakeholders involved in an international sales transaction. These stakeholders include:

- Shippers/Exporters;
- Importers/Consignees;
- Carriers always at least two in any vessel, rail, or air transaction;
- Government entities like Customs Administrations;
- Banks; and

- Government trade-financing entities and programs such as Eximbank and the Foreign Credit Insurance Association (FCIA).

Add to this list all the potential banking programs and offerings that have unique risks associated with them like:

- Documentary Credits or Letters of Credit (L/Cs);
- Sight and Time Drafts;
- Forfeiting;
- Factoring;
- Acceptances; and Confirmed L/C.

Then there are also risks involving criminal activities such as:

- Fraud;
- Money Laundering as part of a trade transaction;
- Transshipment risks; and
- Counterfeit and other illegal products shipped as part of an international sale.

In addition, there are now updated international rules and regulations which impact trade financing:

- The United Nations *Convention on Contracts for the International Sale of Goods* (now U.S. Federal Law);
- New *Incoterm® 2010 International Chamber of Commerce Rules* that went into effect in 2011;
- New *Documentary Credits 2007 Revision* rules;
- *Supplement for Electronic Presentation, Version 1.1 (eUCP)*; and
- Changes to the *Federal Rules of Civil Procedure*, which make electronic-stored information (ESI) discoverable and equal to hard documents.

Because of these areas of concern and new rules, banks more than ever before need the ability to electronically audit all portions of an international sale and the cargo's global movement which necessitates the requirement for more than ever, requiring the need for more visibility, verification, and audit mechanisms that are consistent with ever increasing electronic communications and government requirements.

Therefore, the international supply chain can be treated as if it were a criminal event by employing the equivalent chain-of-custody used in a crime scene. With the emergence of new, global electronic processes banks can now utilize this chain-of-

custody process to seek out international business firms in a proactive way while at the same time reduce trade financing risks by requiring their international trade customers to implement an automatic and verifiable system provided by the utilization of a global chain-of-custody process.

Specifically, banks can actively recruit U.S. importers and exporters to arrange financial assistance on a conditional basis: the importer must utilize the chain-of-custody process in the international sales contract in order to get bank financing. Its use would limit the risks of banks involved in the international transaction and improve the accuracy of documentation and visibility of the shipment. The chain-of-custody process would also limit the chance of money laundering schemes involving letters of credit and other trade financing fraud or Customs violation activities. Essentially, the bank conditions the issuance of a letter of credit on the importer's use of the chain-of-custody process which would be available from firms offering container security devices (CSDs) that provide the patented *Powers Secured*® chain-of-custody process. Second, the bank could, as a licensee or owner of the process, generate additional revenue from its use separate from letters of credit or factoring program earnings. Additional factoring receivables could be realized from both ends of the supply chain, the Exporter as well as the Importer. And third, it could increase its factoring margins because of reduced risk exposure and auditable global visibility

So what is this *Powers Secured*® chain-of-custody process? Essentially, the process allows the inclusion and carriage within the container's container security device logistics data describing the cargo. In addition, it identifies electronically the authorized agent who personally verified the contents of the shipment and represents the legal commitment of the shipper as to authenticity of the cargo in compliance with contractual agreement between the buyer and seller. When the container is loaded, the trusted agent arms the CSD which immediately transmits the cargo information and the identity of trusted agent who verified it to an international control center where monitoring the movement of the shipment along with monitoring any intrusion into the container all the way to destination where another trusted agent opens and reaffirms the cargo and its

quantity regardless of any paper documentation used for Customs or other purposes. The process can also determine and communicate whether the shipping container moves off its intended course. It can also provide electronically the container's identification number carrying the cargo, the cargo's manifest, the name of the vessel, the nationality of the vessel, the port of loading, estimated time of departure, and even voyage number, confirming the varied requirements of L/C conditions. Analogous data can be compiled for other types of transport containers, such as trailers, railcars, and transport containers traveling via air.

Overall Benefits and Solutions

- Transport Container Becomes Equivalent to a Registered-Certified letter with real-time monitoring
- Solves Transshipment Vulnerabilities and Risks
- Solves Outbound Vulnerabilities and Risks
- Solves In-Bond (In-Transit) Vulnerabilities and Risks
- Solves Supply Chain Counterfeit Vulnerabilities and Risks
- Intelligence Mapping
- Asset Recovery

World Wide Compliant with Regional Customs Programs such as

- C-TPAT (Customs Trade Partnership Against Terrorism) - United States
- AEO (Authorized Economic Operator) - European Union
- AEO (Authorized Economic Operator) - Japan
- AEO (Authorized Economic Operator) - Korea
- PIP (Partners in Protection) - Canada
- GLP (Golden List Program) - Jordan
- SES (Secure Exports Scheme) - New Zealand

Compliant with International Standards

- World Customs Organization (WCO), (2005)
- Single Window approved in U.S. (2006)
- ISO 28000, Security Management System for the Supply Chain (2007)
- Transported Asset Protection Association (TAPA) issues Freight Security Requirements, (2001)
- Kyoto Convention ICT Guidelines , (2004)

- International Maritime Organization (IMO) Creation of International Ship and Port Facility Security Code (ISPS) (2004)
- UN's Single Window through which "...trade-related information and/or documents need only be submitted once at a single entry point to fulfill all import, export, and transit-related regulatory requirements." (2004)
- International Trade Data System (ITDS) establishes a single portal system: ACE and the E-Manifest
- ACE (Automated Commercial Environment) Eventually Combining:
 - a) Automated Manifest System (AMS)
 - b) Automated Broker Interface (ABI)
 - c) Automated Export System (AES)
 - d) Automated Commercial System (ACS)

The process provides the electronic equivalent of a receipt showing evidence of contents and evidence of shipping. Any deviation from any form of monitored control will be reported by the container's security device to a control center where it will be stored and available as Electronically Stored Information (ESI), now discoverable as evidence for both civil and criminal law enforcement action. Thus, the process provides:

- Evidentiary Value;
- Legal Defense Value; and
- Prosecution Value.

Financial Benefits for International Banking and Its Customers

For the Banks, the Confirmation of Cargo and Shipping Data

- Electronic communication of the trusted agent certifying cargo quantity and quantity at loading at origin;
- Identification of container number;
- Manifest and bill of lading data;
- Time container was loaded, armed and sealed;
- Time container begins movement;
- Movement and location monitoring of container;
- Any access or opening of the container;
- Container's arrival at Origin Port and its identification;
- Container's arrival at Destination Port and its identification;
- Final destination arrival time;

- Opening of the container by identified, authorized agent of importer

L/C Compliance

- Electronic transmission of required compliant document data;
- Timely Electronic presentation of appropriate data required by the issuing, confirming, nominated or negotiating bank in compliance with the L/C;
- Where credit indicates it is subject to *eUCP* requirements, electronic document presentation and electronic signatures as needed;
- Automatic storage and examination of electronic data subject to required documents;
- Electronic record to satisfy presentation requirements;
- Reduced shipping, handling, and carriage liability; and
- Reduced criminal risks such as fraud, the introduction of counterfeit or other illegal cargo, and the use of L/Cs in money laundering schemes.

General Benefits for the Bank-related Stakeholders

Perhaps one of the most significant attributes of the chain-of-custody process is its value in increasing the private sector's bottom line benefits. It is not an expense. It is an investment. The benefits of expedited shipments, alone, vary from \$600 to \$700 per container per move (*Bearing Point Study*, 2003); and \$1150 per move (*AT Kearney Report*, 2006). Therefore, if a smart container costs you an additional \$100 from origin to destination, and you save \$1000 on the expedited treatment, what was the cost? Costs are associated with the loss or delay of cargo; diversions; increased insurance premiums; supply chain disruptions; increased labor to reship or replace the cargo; business downtime; loss of seasonal promotions; or the costs of the sale. Benefits include minimizing financial risks, reduced inventory carrying costs, protection against counterfeiting; reduced or eliminate diversion costs, reduced out of stock, and reduced insurance costs. A *Stanford University* recent study revealed that quantifiable benefits of security controls and technology included:

- Improved Product safety – 38% reduction in theft/loss/pilferage, 37% reduction in tampering;

- Improved Inventory management – 14% reduction in excess inventory, 12% increase in reported on-time delivery;
- Improved Supply chain visibility – 50% increase in access to supply chain data, 30% increase in timeliness of shipping information;
- Improved Product handling – 43% increase in automated handling of goods;
- Process improvements – 30% percent reduction in process deviations;
- More efficient Customs Clearance – 49% reduction in cargo delays;
- Speed Improvements – 29 % reduction in transit times;
- More Resilience - 30% improved response time; and
- Higher Customer Satisfaction – 26% reduction in customer attrition and 20% increase in new customers.

Other sources offer different, but compelling, benefits to using smart container technology to include the *U.S. Congressional Budget Office*, in March 2006. In the 2006 *A.T. Kearney Report*, respondents stated that “...they need real-time data for accurate visibility into their supply chains.” Since accurate data may not exist within the current logistics industry, smart containers which utilize the chain-of-custody process can provide accurate and sometimes missing data deemed important to shippers. The report further revealed that the U.S. Department of Defense “...reduced overall losses (military supplies) to less than 8 percent.” There is a favorable bottom line to using smart boxes based on speed alone. The *A.T. Kearney, Bearing Point, Stanford*, and *Congressional Budget Office* all, in one way or another acknowledged that control and speed through the supply chain, and especially through ports, pay off.

Benefits to the Shipper

- Confirmation and electronic certification of proper cargo and quantity leaving facility
- Control of access and entry into the container
- World-wide tracking and location of container for security and asset management
- Identifying and placing into the supply chain the identity of the company employee who certifies contents of container at sealing at origin and opening at destination (end-to-end visibility)
- Lower insurance costs
- Knowledge of departure from foreign port to destination port
- Knowledge of carrier's sail or over-the-road or rail transport time
- Expedited entry of cargo by CBP and faster through-port time

- Data-base intelligence identifying weak points/delays/security- risk areas in supply chain
- Verification of compliance with *Incoterms® 2010*, and *UN Convention of Contracts for the International Sale of Goods (CISG)*, specifically Articles mandating accurate cargo and quantities to be shipped under contract

Benefits to Consignee and Its Financing Bank

1. Cargo identification and quantity verification and electronic certification at stuffing
2. Knowledge of departure time
3. Location of container throughout the supply chain
4. Knowledge of opening or surreptitious access into container
5. Third-party verification of all supply chain data elements and reports
6. Knowledge of arrival
7. Lower insurance costs
8. Verifications of Compliance with CISG importer provisions
9. Increased or enhanced knowledge needed for *10+2 Program* Importer Security Filings
10. Enhanced knowledge of shipper and carrier performance

Benefits to the Carrier

- Access control into container and knowledge of container location
- Protection against claims by shippers that unauthorized contents were the results of carrier action
- Certification and Verification of identity of shipper and contents
- Marketing and sales tool to increase market share in providing secure containers to shippers
- Automatic transmission to CBP of container data, exemplified in CF-1302 or like manifest or other required electronic filings
- Data-base intelligence identifying weak points/delays/security- risk areas in supply chain

Benefits to Customs and Border Protection (CBP)

- Supporting means for Electronic filing of In-Bond applications.
- Use of trusted third-party agents of shipper or carrier
- Minimum 6-digit HTSUS identification, and safety, security identification at origin
- Knowledge of container or trailer arrival and location on 24/7 basis
- Knowledge of container/trailer diversion from approved path
- Knowledge of container opening or access into container

- Knowledge of which containers need no inspection
- Identification of suspect container
- Faster transmission of data into CBP and ACE system
- Elimination of third-party reporting of trade data (i.e. Border Customs brokers)
- Enhancement of 10+2 Importer Security Filings
- Enhanced knowledge of actual container contents from a identified supervisory employee who certifies shipment contents and quantity at stuffing.

Conclusion

Given the projections that international business will continue to increase to more than 50% of the U.S. economy by 2020, it makes sense that the banking sector will have the opportunity to capitalize on this growth, and do so with significantly increase solid fee revenue and at the same time reduced risk by requiring its importers and exporters to employ the new chain-of-custody process as a condition of financing. By doing so, it broadens the base of the auditable asset financing to include additional higher financing receivables from the global import and export client, and develops protection by providing an electronic audit mechanism. By integrating the *Powers Secured*® Process into the Banking Sector, it creates a unique financial product offering.