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> Proposal for Standards Development in support of Trade Facilitation and Security A collaborative approach

Paper commissioned by the secretariat for presentation at the 2003 International Forum on Trade Facilitation, 14 – 15 May<sup>\*</sup>

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#### 1. INTRODUCTION

1. This paper considers possible collaborative approaches to developing required standards for international trade security that facilitate the participation of companies worldwide in international trade and avoid the introduction of undue costs and procedures.

2. Security has always been a factor in international trade and many mechanisms and procedures already exist to address this issue. However, both the nature of the security threat and, importantly, the perception of the nature of that threat have changed dramatically since the recent terrorist events in the United States. Effectively, the focus has shifted from the relatively minor threat to trade (from theft, hijackings, terrorist interventions, etc.) to the much more alarming threat from trade, where terrorists could use the mechanisms and processes of trade as a weapon against the developed, and indeed the developing, world.

3. Although the nature and extent of this threat is, fortunately, mostly speculative at present, it is essential to understand the seriousness with which many countries approach the issue. Essentially, the major fear is that weapons of mass destruction, or the materials to construct such weapons, could be smuggled into a country through the trade system and could then be detonated by terrorists or other enemies of the state once they have entered the country.

4. Several approaches to addressing this issue have been launched by leading trade-related organizations over the past year and much work is currently under way in developing standards and systems to increase the security of the international trade transaction process. The task is enormous; and there is the obvious danger that the immediate responses to this threat (whether real or perceived) may not be consistent with the longer-term development of an efficient trading system.

5. This paper reviews some current initiatives in the trade security area and considers how the resources and instruments of the many organizations involved in international trade facilitation can best be harnessed to ensure both a more secure and a more efficient trading system that will accommodate the longer-term stability and profitability of global trade. The paper pays particular attention to the work of the World Customs Organisation and the International Maritime Organisation and considers how other major players in the field, such as the United Nations Economic Commission for Europe and the United Nations Conference on Trade and Development, can complement and add value to these efforts.

6. The author recognizes that this security shock to the trade system presents an opportunity to reexamine current trade procedures and processes and to speed up implementation of advanced technologies and approaches, such as risk assessment based on advance information. The challenge is to facilitate the majority of legitimate international cargo movements, and as efficiently as possible, while at the same time dealing effectively with the small percentage that could pose a threat to security. To achieve this, all parties in the trade transaction chain need to work closely together.

# 2. TRADE, TRADE FACILITATION, ECONOMIC DEVELOPMENT AND THE ROLE OF THE UN

7. Trade is an important engine of economic growth and the globalization of trade is a dominant feature of today's economy in many countries. The creation of an open and equitable trade environment is a key United Nations goal, particularly in relation to economic development and poverty reduction. Millennium Development Goal 8 focuses on achieving a global partnership for development. Specifically, the goal is to "develop further an open trading and financial system that is rule-based, predictable and non-discriminatory and includes a commitment to good governance, development and poverty reduction both nationally and internationally".<sup>1</sup> The Monterrey Consensus further states that "globalisation should be fully inclusive and equitable"<sup>2</sup>, and the recent report by the UN Secretary-General (Strengthening the United Nations, September 2002) states that developing and implementing a proper framework of rules, norms and standards for international trade is necessary to help the international community respond effectively to the challenges posed by globalization<sup>3</sup>.

8. Security issues clearly pose a real threat to the stability, further development and equalisation of global trade. However, these security issues must be addressed in such a way as to minimise the potentially negative side effects; otherwise a real, and perhaps intended, reward may be handed to the very groups these measures are intended to defeat. For example, new measures to support security must not add undue procedures and costs to international trade transactions. Further, we must ensure that no specific country or group is excluded from the international trading system through these measures, as exclusion would undermine the basic foundation of security, which is a fair and just society, free from poverty and degradation.

# 3. CURRENT INITIATIVES

9. Not surprisingly, the United States Government was one of the first countries in the world to assess the potential security threat from international trade. Based on an initial review of trade security following the attacks of 11 September 2001, the Government identified seaborne containers4 as a major security threat and subsequently developed several initiatives to tackle this threat. These initiatives focus mainly on the provision of advance information on cargo entering the United States and on securing the supply chains of major international corporations.

10. In January 2002, United States Customs launched the Container Security Initiative (CSI) to prevent global containerized cargo from being exploited by terrorists. The initiative is designed to enhance security of the sea cargo container – a vital link in global trade. Effective 2 December 2002, carriers and/or automated

<sup>&</sup>lt;sup>1</sup> UN Millennium Development Goals, <u>www.un.org/millenniumgoals</u>, October 2002.

<sup>&</sup>lt;sup>2</sup> Monterrey Consensus: **Draft** Outcome of the International Conference on Financing for Development, 1 March 2002. (A/CONF/198/3).

<sup>&</sup>lt;sup>3</sup> Strengthening of the United Nations: an agenda for further change, Report of the Secretary General (A/57/387), September 2002, page 10.

NVOCCs (Non-Vessel Operating Common Carriers) must submit a cargo declaration 24 hours before cargo is laden aboard the vessel at a foreign port.

11. United States Customs held a series of public meetings in accordance with section 343(a) of the Trade Act of 2002 to assist in the development of proposed regulations to provide for the mandatory collection by Customs of electronic cargo information prior to importation into or exportation from the United States. The focus is on 343(a) Cargo Information, which will require promulgation of regulations providing for advance electronic submission of information pertaining to cargo heading out and arriving in the United States. This requirement extends to all modes of transportation.

12. The Aviation & Transportation Security Act was passed by the 107<sup>th</sup> Congress on 19 November 2001
Public Law 107-071. This Act established a series of challenging but critically important milestones towards achieving a secure air travel system.

13. A number of international organizations have also undertaken recent work in trade security and facilitation, often using the United States initiatives as a base for developing new recommendations and instruments. For instance, the World Customs Organisation (WCO) Task Force on Security and Facilitation is basing its security initiative on the idea of closer international cooperation, and calls for the mobilization of all the links in the supply chain and the encouragement of partnerships already existing in the field of international trade. This cooperation depends on an extensive exchange of information between all the players, public and private, involved in the international supply chain. The Task Force will develop sectoral guidelines to formalize and define the terms of this collaboration. These will make it possible to assist WCO Members in concluding cooperative agreements with business partners to increase supply-chain security and facilitate the flow of international trade. A basic concept in this approach is the establishment of an effective risk management system at international level, requiring Customs controls from the very beginning of the supply chain.

14. The International Maritime Organisation (IMO) has developed a new comprehensive security regime for international shipping, which is set to enter into force in July 2004. This follows the adoption by the IMO Diplomatic Conference on Maritime Security, held from 9 to 13 December 2002 in London, of a series of measures to strengthen maritime security and prevent and suppress acts of terrorism against shipping. IMO Secretary-General, William O'Neil, has strongly urged all parties concerned "to start putting in place all the necessary legislative, administrative and operational provisions needed to give effect to the decisions of the Conference as soon as possible".

15. The United Nations Economic Commission for Europe (UNECE) is currently reviewing its relevant instruments in the trade and transport areas. For example, the Inland Transport Committee at its meeting in February 2003 took note of a number of initiatives in the transport and security area, requesting its subsidiary bodies to identify, within their respective fields of competence, the difference between "security" and "safety" concepts and the relevant concrete questions that could be addressed in this respect. In addition, UNECE held a meeting of leading government and trade organizations in early 2003, *Achieving Trade Security Within a* 

<sup>4</sup> Some 200 million sea-cargo containers move annually among the world's top seaports, and nearly 50 per cent of the value of all United States imports arrive via sea containers.

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*Standardized, Efficient and Transparent International Framework*, to consider the evolution of a longer-term approach to trade security and facilitation. It was suggested at this meeting that a useful basis for future work could be the UN/CEFACT Supply Chain Model, and possibly also the International Trade Transaction Model. UNECE is currently updating both of these models. This work is being further reviewed and developed by UNECE, in the light of the above suggestions and complements the framework set out in the Netherlands and WCO papers on advance cargo information5.

# 4. ANALYSING THE NEEDS – THE INTERNATIONAL SUPPLY CHAIN MODEL

16. International trade and security can best be assessed in the context of the international supply chain. This has been the approach of UNECE to trade facilitation and e-business analysis for many years and is also the approach adopted by the WCO Task Force on Security and Facilitation.

17. The international supply chain involves a potentially large number of activities performed by a considerable number of different parties. An activity may be carried out by different parties depending on the terms of business, type of product, country and market etc. as well as on the methods of operation of the buyer and seller. For a supply chain to operate effectively and efficiently, the relationships and activities have to be clearly identified and managed.

18. The UN/CEFACT International Supply Chain Model (UN/ISCM) sets out to identify and model the key processes and relationships of the parties involved in international trade. This Model helps in the understanding of how a supply chain operates, and it can be used to highlight opportunities for "best practice" improvements in international trade for all countries, businesses, governments or economies. The Model can also be used to identify procedures that do not add significant value or enhance security or safety, and it can indicate opportunities for facilitation actions.

19. Within the international supply chain some 40 or more actors are potentially involved. These may be categorized according to 4 "actor types", namely:

- **Customer:** A party who acquires, by way of trade, goods or services
  - Supplier: A party who provides, by way of trade, goods or services
- Authority: A statutory body existing within a jurisdiction and within a specific area of responsibility that administers legislation to regulate trade and/or monitors compliance with existing legislation.
- **Intermediary:** A commercial party who provides services to customers, suppliers or authorities within the international supply chain.
- 20. Each type includes several possible actors or roles, some of which are listed below:

<sup>5</sup> WCO Proposed Customs guidelines on advance cargo information, TF0005E1; Supply chain security, discussion paper prepared for the WCO Trade Security Task Force by the Netherlands

Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company	Actor Types	Possible Actors & Roles
Payor         Importer         Supplier       Consignor         Payee         Seller         Manufacturer         Exporter         Authority         Chamber of Commerce         Consular         Customs         Health         Agriculture         Environment         Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company	Customer	Buyer
ImporterSupplierConsignorPayeeSellerManufacturerExporterAuthorityChamber of CommerceConsularCustomsHealthAgricultureEnvironmentNuclear/Atomic EnergyIntervention Board (EU)LicensingReceiving Authority (Port AuthorityStandards InstituteIntermediaryBank / Financial InstitutionBrokerCarrierCredit Checking Company		Consignee
Supplier       Consignor         Payee       Seller         Manufacturer       Exporter         Authority       Chamber of Commerce         Consular       Customs         Health       Agriculture         Environment       Nuclear/Atomic Energy         Intervention Board (EU)       Licensing         Receiving Authority (Port Authority         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Payor
Payee         Seller         Manufacturer         Exporter         Authority         Chamber of Commerce         Consular         Customs         Health         Agriculture         Environment         Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Importer
Seller         Manufacturer         Exporter         Authority         Chamber of Commerce         Consular         Customs         Health         Agriculture         Environment         Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company	Supplier	Consignor
Manufacturer         Exporter         Authority         Chamber of Commerce         Consular         Customs         Health         Agriculture         Environment         Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Payee
ExporterAuthorityChamber of CommerceConsularCustomsHealthAgricultureEnvironmentNuclear/Atomic EnergyIntervention Board (EU)LicensingReceiving Authority (Port Authority)Standards InstituteIntermediaryBank / Financial InstitutionBrokerCarrierCredit Checking Company		Seller
Authority       Chamber of Commerce         Consular       Customs         Health       Agriculture         Environment       Nuclear/Atomic Energy         Intervention Board (EU)       Licensing         Receiving Authority (Port Authority)       Standards Institute         Intermediary       Bank / Financial Institution         Broker       Carrier         Credit Checking Company		Manufacturer
Authority       Chamber of Commerce         Consular       Customs         Health       Agriculture         Environment       Nuclear/Atomic Energy         Intervention Board (EU)       Licensing         Receiving Authority (Port Authority)       Standards Institute         Intermediary       Bank / Financial Institution         Broker       Carrier         Credit Checking Company		Exporter
Chamber of Commerce         Consular         Customs         Health         Agriculture         Environment         Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company	Authority	*
Customs         Health         Agriculture         Environment         Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Chamber of Commerce
HealthAgricultureEnvironmentNuclear/Atomic EnergyIntervention Board (EU)LicensingReceiving Authority (Port Authority)Standards InstituteIntermediaryBank / Financial InstitutionBrokerCarrierCredit Checking Company		Consular
Agriculture         Environment         Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Customs
EnvironmentNuclear/Atomic EnergyIntervention Board (EU)LicensingReceiving Authority (Port Authority)Standards InstituteIntermediaryBank / Financial InstitutionBrokerCarrierCredit Checking Company		Health
Nuclear/Atomic Energy         Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Agriculture
Intervention Board (EU)         Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Environment
Licensing         Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Nuclear/Atomic Energy
Receiving Authority (Port Authority)         Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Intervention Board (EU)
Standards Institute         Intermediary         Bank / Financial Institution         Broker         Carrier         Credit Checking Company		Licensing
Intermediary     Bank / Financial Institution       Broker     Carrier       Credit Checking Company		Receiving Authority (Port Authority)
Bank / Financial Institution Broker Carrier Credit Checking Company		Standards Institute
Broker Carrier Credit Checking Company	Intermediary	
Carrier Credit Checking Company		Bank / Financial Institution
Credit Checking Company		Broker
		Carrier
Credit insurer		Credit Checking Company
		Credit insurer
Commission Agent		Commission Agent
Export Agent		
Freight forwarder		Freight forwarder
Import Agent		Import Agent
Insurer		Insurer
Inspection company		Inspection company
Receiving authority		

This large number of actors is a key factor in the vulnerability of the Supply Chain to infiltration or interference for security reasons.

21. There are also many processes that take place in the completion of an international trade transaction. The five main Use Cases (processes) in the Supply Chain Model are:

- Identify Potential Trading Partner (Market intelligence gathering);
- **Establish Business Agreement** (Selection/negotiation, Establish framework or contract with selected supplier including agreement on payment terms and delivery terms (Data Alignment);
- **Order** (Including order change, confirmation etc.);
- Ship (Including transport and all appropriate administrative and regulatory actions);
- **Pay** (Including invoicing or other means of instigating a payment, disbursements, taxes, and the payment itself).

22. Although the Model covers the whole trade transaction process, the most relevant component in the security context is the Ship Use Case in which all actors - Customer, Supplier, Intermediary, Authority - are involved. Within the Ship Use Case, the supplier dispatches the products according to the terms of trade specified and the customer receives the product, all transport arrangements are made and executed, and the requirements laid down by the relevant authorities are met.

23. The Ship Use Case Description is presented below and is elaborated in the annex to the current paper.

Name	Ship
Traceability	D-P&SI-1.U-Ship-2-4
Indicator	
Actors	Customer, Supplier, Intermediary, Authority
Description	The necessary preparations are made to enable goods to
	be delivered to the customer. Goods are cleared by
	authorities and delivered to the agreed customer location.
Pre-condition	Order has been confirmed.
Post-conditions	Cleared goods have been delivered to customer.
Scenario 1.	Starts when Supplier has accepted the order from the
	Customer
	Supplier requests Export license from Authority
	Authority responds
	Health certificates requested from Health Authority
	Authority provides certificates (required by Import
	Country Health Authority)
	Radiation, isotopic and salubrity certificate
	Conformity certificate for Import Health Authority
	Bacteriological certificate
	Physical Chemical certificate
	Veterinary and sanitary certificate
	Analysis certificate

### SHIP USE CASE DESCRIPTION

Name	Ship
	Dangerous Goods Note prepared and provided to Carrier
	Supplier requests and obtains certificate of Origin from
	Chamber of Commerce
	Supplier produces and supplies relevant export
	documentation including:-
	For Customer
	Packing Weight List/Delivery Note/Invoice
	For Export Customs
	. Relevant Customs Documents (e.g. Customs Product
	List
	T1, C88A-LEC, T5 documents, EUR1, Customs Invoice)
	For Import Customs
	Relevant Customs Documents.(e.g. Certificate of Origin
	Age certificates and batch codes, Customs Invoice)
	Intermediary(insurer) provides Supplier with Insurance
	Certificate (for Customer)
	Transport booked with Intermediary (carrier or freight
	forwarder) by Customer and/or Supplier according to
	agreed delivery terms.
	Supplier provides Standard Shipping Note and Bill of
	Lading Instructions to Intermediary (carrier/shipper)
	Intermediary (carrier or freight forwarder) agrees contract
	for transport of goods and collects and delivers goods to
	Customer's agreed location.
	Supplier (Ship from) issues Despatch Advise to
	Customer(Ship to)
	Intermediary (carrier/shipping line ) provides supplier
	with Certificate of
	Shipment and Bill of Lading (for Customer,
	shipper/carrier)
	Pre shipment inspection arranged, order details provide
	by
	Supplier and inspection carried out by
	Intermediary(inspection company)
	Goods cleared for export by Authority(customs) after
	checking documentation and goods
	Goods cleared for import by Authority(customs) after
	checking documentation and goods
	Ends when Customer records receipt of cleared goods at
	agreed location.
	451000 100001011.

24. The process of shipping is thus quite complex and any approach to strengthening the security of this process must be well thought out and coordinated.

25. Papers <sup>6</sup> presented at the 3<sup>rd</sup> Meeting of the WCO Trade Task Force on Security and Facilitation in February 2003 detailed a high level supply chain approach to the provision of advance cargo information for risk assessment. These papers also outlined a possible model for the overall operation of Customs in the new supply chain context, and propose that stringent controls be introduced over the entire supply chain in an attempt to make the movement of goods more secure.

26. In June 2003, the Task Force will report to the WCO Council on the progress made in the development and implementation of the measures recommended. Officials of the Member administrations will then assess the results and decide how to proceed. The success of the initiative will always depend on the political will to act and the long-term commitment, alongside Customs, of the private sector and all the competent authorities. There is no doubt that the WCO is able to promote modern risk management techniques on a global scale, and that the application of such modern techniques will be extremely helpful in combating terrorism.

27. However, the task of addressing the security issues in the International Supply Chain <u>at the detailed</u> <u>level</u>, and the need for relevant standards, will be a complex task. This can clearly be seen from the Ship Use Case Description. Possible approaches to this task are considered below.

# 5. POSSIBLE SPECIFIC AREAS WHERE TRADE SECURITY STANDARDS ARE REQUIRED

28. Given the plethora of actors in the full supply chain, standards should be developed, amended or implemented in a variety of different areas. The following are some examples from sea transport:

- Documentation
- Submission of documents (manifests and transport documents) to the next link(s) in the transport chain and to Customs authorities
- Handling of goods before they are loaded into ocean containers
- Quality of seals
- Quality of containers
- Handling of the goods inside the containers
- Handling of the containers themselves
- Storage of the loaded container
- Storage of the empty container
- Transport of the containers
- Tracking of the containers
- Control of personnel who may come into contact with the cargo/container

<sup>&</sup>lt;sup>6</sup> WCO Proposed Customs guidelines on advance cargo information, TF0005E1; Supply chain security, discussion paper prepared for the WCO Trade Security Task Force by the Netherlands

- Reporting between Customs authorities
- Procedural reporting
- Training.

A brief explanation of the needs in each of the above areas is presented below:

### 5.1 Documentation:

29. Poor documentation can lead to incorrect reporting of information and subsequent difficulty in checking the accuracy of information. This clearly creates many possibilities for fraud. Standardised aligned documentation would help overcome this problem. UN/CEFACT has already drawn up global standards for documentation, the United Nations Layout Key (UNLK), and the task here would seem to be more one of implementing such standards than of developing new ones. In addition, the application of UNeDocs, which provides for standardised "digital paper" documents, could help bring about the early availability of "document" information in electronic form (XML and UN/EDIFACT), especially in developing countries.

#### 5.2 Submission of documents (manifests and transport documents) to the next link in the transport chain

30. For goods/containers bound for the United States, US Customs has already introduced sweeping new measures regarding advance cargo information that will have to be complied with regardless of any UN standards being introduced. WCO is preparing recommendations for the submission of advance cargo information as a global application. As a follow-up, it is suggested that more in-depth analysis be undertaken to develop a more efficient longer-term approach and standard.

31. The current problem is one of getting the required information to the United States Customs in time. It has already proved impossible to comply with the "24-hours prior to departure" requirement in the air cargo industry. The measure has therefore been modified to "one hour before landing". For ocean transport the measures may be implementable.

#### 5.3 Packing of the goods into containers

32. This is an area of the utmost importance and where implementable standards must be developed. For example, this would require that only authorized personnel may in any way be admitted to the vicinity and into the container itself. Once the container has been filled, it must be sealed with an approved, tamper-proof seal. The problem here is the lack of control regarding the quality of the workers who engage in the stowage of the goods inside the containers. And it becomes even more complicated in the transport of Less then Container Load (LCL) shipments. When containers may legitimately be opened several times along the transport chain to add or subtract individual consignments, this becomes an extremely sensitive area as goods already inside the container may need to be restowed when new goods are added.

33. Although a global policy on restricting access to containers and their nearby environment may be difficult to implement, particularly in some developing countries where security concerns may be less pronounced, it is clearly desirable to have an agreed standard, based on best practice, for the packing of

containers to an agreed security level. Containers packed to this standard could be certified as such. It is suggested that the joint IMO/ILO/UNECE *Guidelines for Packing of Cargo Transport Units*7 be reviewed in the light of current security issues. If necessary, UNECE should also consider establishing a fast-acting working group to consider these aspects with the full participation of WCO, IMO, ILO, the other regional commissions and UNCTAD.

#### 5.4 Quality of seals

34. Originally, container seals were used by Customs to verify that the container, once it had been sealed by one Customs authority, had not been opened before it had been inspected by a subsequent Customs authority. The first seals were rather simple aluminium devices with a seal number stamped on them. They were, however, also very easy to break, or worse, easy to tamper with. It was possible to remove the seal, open the container and then to put the seal back in place. This in due course led to the introduction of stronger seals that could not easily be removed, but miscreants soon learned to manufacture almost identical-looking seals - even with the same seal numbers and markings - and then break the original seal and replace it with a fake once entry into the container had been made. There is obviously a great need for "tamper-proof seals" to be invented and used by all Customs authorities. The International Organization for Standardization (ISO), in cooperation with other interested parties, is currently developing standards in this area.

#### 5.5 Quality of containers

35. For the supply chain to be more secure, only tamper-proof containers will be of any security value. By "tamper proof" is meant that it will be impossible to enter a sealed container <u>by any means</u> without this being evident. In other words, new manufacturing standards for standard ISO containers should be developed. Today it may be possible to enter containers without breaking the seals, e.g. by lifting off the doors, or lifting off the entire roof of a container and then putting the container back into "perfect" condition with the seals intact.

36. Several initiatives are currently under way to address this issue. The IMO is considering possible updating of the International Convention for Safe Containers, (Geneva, 2 December 1972). This Convention contains in its annexes I and II a series of requirements for the containers that fall under this Convention.

37. The standards included in the Convention are of an operational nature, established to ensure that containers can be lifted and stacked without harming the goods or the containers themselves. Security aspects were by no means top priority when the Convention was negotiated in the early 1970s.

38. UNECE and the WCO are now considering where and how the Customs Convention on Containers, adopted in Geneva in 1972, can be updated. This Convention contains in chapter III, Approval of containers for transport under Customs seal, and its annexes 4 and 5, a series of instructions on how the containers may qualify for the treatment set out in the body of the Convention. There are some instructions regarding security aspects of the construction of containers; however, practical experience over the years has shown these to be

<sup>7</sup> IMO/ILO/UNECE Guidelines for Packing of Cargo Transport Units, IMO, London, 1997, IMO-284E, ISBN 92-

inadequate. There is, however, a possibility that increased security concerns may add kilos if not tons to the weight of each container, thus restricting their carrying capacity and increasing the transport costs.

39. Careful consideration of these aspects must be given before new standards are adopted. It is suggested that a meeting be called by the UNECE to consider the overall issue of container security, with UNECE handling technical issues, WCO covering Customs, operational aspects with the IMO (for the CSC), and quality aspects with ISO. The harmonization and/or alignment of the above two conventions should also be considered.

#### 5.6 Handling of the containers themselves

40. ISO sea containers are handled by mechanical devices such as cranes and forklift trucks as well as by the various means of transport such as lorries, river and ocean-going vessels, and trains. Handling of containers thus takes place either in some terminal where the containers are stationary for long periods, or when they are moving onboard some of the transport means listed above. In the air transport industry the use of "containers" is mainly in the form of igloos or small "belly containers". The problem is that loaded, sealed containers are often left unattended for considerable periods. This issue needs to be examined and practical standards developed regarding the handling of containers.

#### 5.7 Storage of the loaded container

41. Storage of loaded containers occurs in many places along the supply chain. For instance, in ocean terminals (ports) or inland clearance depots (ICDs), both of which are normally under Customs control, the security risk is manageable. However, containers are stored in many other places as well. This may be in unsecured container yards or just at a drop-off point along the route. The parking of a trailer with a container onboard may also be considered as "storage", even if it is of a temporary nature. Such parking often takes place outside proper container yards or terminals. The problem is again one of lack of supervision with the containers. While one could suggest that containers should always be stored inside secure container yards, this again will turn out to be a requirement that will be impractical if not impossible to enforce. This is an issue that needs to be examined and practical standards developed.

#### 5.8 Storage of the empty container

42. Storage of empty containers normally takes place outside restricted areas such as port terminals where space is at a premium. Instead, containers are relegated to convenient empty areas where land prices are low and security non-existent. Containers may "go astray" and end up on top of mountains where they may be discovered months after having found their way to such locations. It would appear impractical to attempt to set standards for the storage of empty containers. However, it may be possible to set standards for the inspection of empty containers before they enter the supply chain.

#### 5.9 Transport of the containers

43. The sealed container moves the goods along the supply chain. At any point during the transit terrorists may be in a position to tamper with the container, even if they do not penetrate its walls, doors, ceiling or floor. While it may be impossible, at all times, to keep containers out of contact with unknown persons, for example, when the containers are located on a train or a truck, major efforts should be made to limit the possibility for unauthorized persons to gain access to the containers in transit. This could, for example, be done by minimizing stops of trains and trucks outside secure areas. It is suggested that individual countries may wish to review the manner in which container trains are scheduled to minimize such stops, and where they are necessary for operational reasons, then ensure that container trains are kept under constant surveillance while immobilized. Similarly, countries may need to establish special secure holding areas for container road vehicles so that stops will only be allowed in secure parking areas where constant surveillance is possible. It is clear that both of these new requirements will add a considerable amount to the cost of transport of goods. When the containers are on board a means of transport the safety aspects differ according to the mode. Those on board aircraft probably have the least security risks. Next on the list come those on board ocean-going vessels; but with regard to containers on river craft, trains and trucks, which all move in close vicinity to humans, the risk to the security of the container is high.

44. It is suggested that a Recommendation be developed regarding the transport of containers, based on current best practice.

#### 5.10 Tracking of the containers at all times

45. Knowing where the container is at any given time will give considerable assistance in the fight against terrorists, but of course will not in itself make tampering with the container impossible. It would, however, seem to be desirable for some form of guidelines or standards to be set for the concept of container tracking. The problem at present is that only a small minority of containers are fitted with transponders that will allow the container to be tracked 24-hours a day. A solution would be to force the installation of such transponders and then to make sure that not only has someone the necessary tracking equipment, but also that intelligent evaluation of containers that may go astray is undertaken. It is suggested that a Recommendation be developed regarding the tracking of containers, based on current best practice.

#### 5.11 Control of personnel who may come into contact with the cargo/container

46. While it may be possible to tamper with a container without persons physically touching or handling it, the persons who actually handle containers are clearly the best placed to interfere with its safe transit or its contents. It would therefore be desirable to have strict standards regarding who may come in contact with the container and standards for their screening. Unfortunately, realities of life would seem to indicate that this might not be implementable in a number of countries.

#### 5.12 Reporting between Customs authorities

47. In order to ensure that all Customs authorities in the country of importation can be confident of the quality of the information they receive from the Customs authorities located in the country of exportation, it may be desirable for the WCO to establish standards for such reporting. At the moment, very few Customs authorities have the capability of undertaking such reporting. WCO is currently addressing this issue of the exchange of information between Customs Authorities and the use of ICT and EDI standards such as UN/EDIFACT are strongly recommended to enhance the exchange of this information.

#### 5.13 Security of Information and Procedural reporting

48. The transmission of information concerning goods in the supply chain must be secure and computer records of such information must be kept safe. Standards on ensuring the security (from theft or copying etc) of information provided by trade and exchanged between Customs and other government authorities will need to be developed. Further, a set of standard procedure should be developed for reporting cases where incorrect information is provided or tampering with the container or the goods is suspected .

#### 5.14 Training

49. For standards of the type described above to be introduced in an effective and consistent manner, high-quality training would have to be introduced <u>all along the supply chain</u>. Such training must start at the very beginning of the chain, often the "weakest point", in some small factory in a developing country. The cost of such training is likely to be high and also to be resisted because its needs would be ill understood at that point of the chain. It would be of the utmost importance to make available the necessary funding to develop such training schemes as a top priority. The following are examples of areas that would seem to be the most critical ones and also those that may be relatively amenable to standard setting:

- Quality of employees (minimum standards)
- Vetting of employees
- Restriction of access to premises
- Quality of documentation
- Licensing of companies

#### 6. HOW CAN TRADE SECURITY STANDARDS BE VERIFIED AND BY WHOM?

50. It is envisaged that once the standards have been endorsed and published, authority would be given to specific accreditation bodies to audit and accredit suitable certification bodies.

51. The accreditation body could, for example, be the WCO, which could accredit individual customs authorities and/or private sector certification bodies. Alternatively, those customs authorities accredited by WCO could, in turn, audit and accredit private sector certification bodies that would act to complement the work of Customs.

52. Such accredited certification bodies would be permitted to certify the compliance of the various parties in the supply chain with the standards. The certification process would involve periodic audits at the premises, and locations of operation, of the parties in the supply chain. Hence whole supply chains could become certified which would facilitate cooperation between customs authorities in different jurisdictions with a view to granting various trade facilitation measures to such supply chain parties.

53. Although a major task, with good coordination it could reasonably be achieved. UNECE would be an appropriate forum to host an international conference to discuss the details with representatives from the key parties concerned. Obviously this would have to be well focused to avoid duplication.

# 7. POSSIBLE AREAS FOR A COLLABORATIVE APPROACH TO THE DEVELOPMENT OF STANDARDS TO ENHANCE TRADE SECURITY AND FACILITATION

54. The task of developing and enhancing standards for trade facilitation and security is vast and this work has been undertaken by many organisations for over 40 years. In recent times, the work has accelerated, with new organizations entering the standards development area and existing organizations taking a broader approach to the topic. Within this environment, greater collaboration and coordination will be required to ensure harmonisation and integration of the standards development work. Based on the above examples of where standards development is required, some possible areas of collaboration in the development of trade security and facilitation standards are as follows (the list is meant to be more illustrative than exhaustive):

## 7.1 Documentation

55. This would seem an obvious area for the UNECE to tackle in cooperation with the IMO, the WCO and ISO.

#### 7.2 Submission of documents (manifests and transport documents) to the next link in the transport chain

56. This would also seem to be an area where the WCO, UNECE, IMO could make a positive contribution in setting global standards.

#### 7.3 Quality of containers

57. The UNECE Inland Transport Committee working closely with the ISO and the WCO may be the right bodies to deal with this issue.

#### 7.4 Handling of the goods inside the containers

58. This would seem to be an area where WCO, IMO, FIATA, UNECE, the regional commissions and UNCTAD might be well placed to develop standards.

#### 7.5 Handling of the containers themselves

59. This would seem to be an area where IMO, the International Road Transport Union (IRU), EAN International, International Chamber of Shipping (ICS), UNECE and UNCTAD might develop standards.

#### 7.6 Tracking of the containers at all times

60. Standards in this area could be developed through collaboration between the UNECE Inland Transport Committee, the regional commissions and UNCTAD's Advance Cargo Information System (ACIS) programme.

#### 7.7 Control of personnel who may come into contact with the cargo/container

61. This area would probably require collaboration between the UNECE Inland Transport Committee, the regional commissions, UNCTAD, IMO, IRU, EAN International and ICS together with the WCO.

#### 7.8 Procedural reporting

62. This would also seem to be an area where UNECE could make a positive contribution in setting global standards.

#### 8. CONCLUSIONS

63. Setting standards in the area of security and having those standards implemented in the near future will be an enormous task that will require very considerable resources. The sums having already been spent at United States airports and seaports would seem to lend credence to this.

64. The international community needs to decide whether it wants global standards for the security of goods in transit from country of origin to country of consumption and, if so, whether it is ready to pay the considerable cost associated therewith. Inability to agree on global standards is likely to increase the overall cost of implementation and also reduce the effectiveness.

65. On the other hand, the implementation of security standards which enable the parties in the supply chain to demonstrate their compliance should provide an excellent opportunity for customs administrations to grant trade facilitation benefits to the parties in such certified supply chains. This could include green channel cargo clearance and implementation of the integrated seamless transaction concept whereby the export declaration data may be used as the import declaration data. The objective should be that the costs associated with the implementation of security measures would be more than compensated for by the trade facilitation benefits.

66. A concerted effort from <u>all</u> the relevant organizations involved in international trade facilitation and standards will be required in order to ensure that the developed standards are effective and that they achieve the dual aim of enhancing both security and trade facilitation for all countries. Strong collaboration and coordination amongst the relevant standards-setting organizations is the only way to achieve this.

67. It is recommended that a meeting of all organizations involved in trade facilitation and security be arranged as soon as possible to determine who is doing what and identify and agree on the priority areas for new standards development. It is also recommended that prior to the meeting, the UNECE International Supply Chain Model should be used as an analytical tool to prepare an analysis of the current work and standards on trade facilitation and security within the framework of the international supply chain. This analysis should attempt to identify current overlaps and gaps related to the new security requirements.

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#### Annex

#### SHIP USE CASE ELABORATION- PREPARE FOR EXPORT

The Ship Use Case described in section 4 is elaborated below based on the information provided in the International Trade Transaction (ITT) Model. This scenario is based on the ITT model scenario "Preparation for Export" and references the Activities/Roles used in that model description.

Name	Prepare for Export
Traceability Ind.	D-P&SI-1.U-Prepare for Export-3-1
Actors	Customer (consignee), Supplier (exporter), Intermediary (Freight Forwarder, Insurer, Export License Authority, Health Authority, Consul, Carrier, Export Customs, Chamber of Commerce, PFI Agency)
Description	Supplier makes arrangement for export including obtaining / preparing export documentation. Depending on the terms of transport agreed, the Customer or Supplier arrange for the insurance and transport of goods.
Pre-condition	Contract exists and Order has been confirmed.
Post-conditions	Preparations for Export have been completed.
Scenario	Starts when Supplier has accepted the order from the Customer Supplier requests insurance from Intermediary (insurer). (Exprt1). Intermediary (insurer) draws up contract based on agreed scope of cover, type of cargo and route. (CarIns1). Supplier requests transport reservation to Intermediary (freight forwarder or carrier) (Exprt2). Information provided by Supplier includes location for collection and delivery, type and physical details of goods, special handling instructions, etc. The Intermediary (Freight Forwarder) makes arrangements with Intermediary (carrier) for completion of shipment and prepares shipping note. Freight Forwarder requests booking confirmation from Carrier and provides it to Customer. (FrFwEx1). Carrier confirms booking including estimated dates and arrival time and destination. (Carrir1) Supplier prepares Invoice for Customer and Customs. Packing List may also be required. (Exptr3) Freight Forwarder prepares and agrees delivery instructions with Customer based on Carrier information.

Name	Prepare for Export
	collected from Suppliers premises, date and time of collection and any special handling requirements. (FrFwEx2) Carrier creates delivery contract by confirming the booking with
	Freight Forwarder. Carrier requests details of where and how the goods are to be delivered and any special arrangements. If necessary carrier prepares request to determine if goods need any special packing. (Carrir2).
	Supplier (exporter) applies for an Export licence from the Export Control Authority. (Exprtr4) On receipt of appropriate documentation, the National Export Control Authority provides licence to Supplier (exporter) if appropriate conditions are met. (LiAuEx1).
	Supplier (exporter) applies for Health certificate from National Health Authority, if nature of goods require such approval. (i.e Foodstuffs, livestock etc.). (Exprtr5). Health Authority issues certificate if goods meet qualifying criteria. (HeAuEx1).
	Supplier (exporter) applies for Certificate of Origin from Chamber of Commerce or other competent authority. (Exprtr6). Competent Authority issues Certificate of Origin on receipt of certificate set from Supplier (exporter) and possible legalisation by Embassy. (ChmCom1)
	Supplier applies for Consular Invoice from Consul of Importing Country who is based in Supplier's (exporter's) country. Other documents such as sanitary certificates, certificates of origin, may need to be legalized. Supplier pays fee to Consul. (Exprtr7). Consul checks and certifies the invoice and other documents once fees have been paid. (Consul2)
	Supplier prepares Dangerous Goods Note (including packing certificate and Dangerous Goods Declaration) and sends to Carrier (Exprtr8).
	Supplier (exporter) completes preference certificate to claim preferential rates of duty if applicable and provide to Customs for certification at the point of departure. (Exprtr9)
1	Customs certify preference certificate and return to Supplier (exporter).

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Name	Prepare for Export
	(CustEx1).
	Supplier (exporter) prepares packing list showing how goods are packed, their weights and measurements, if this information is not contained on the invoice. Packing list provided to Carrier etc. (Exprtr10). If a pre shipment inspection is needed, the Supplier sends a proforma invoice to the Customer (consignee). Customer (consignee) instructs Inspection agency. Inspection Agency sends a request for inspection to Supplier (exporter). This indicates the documents and procedures necessary to meet the PFI requirements. (Exprtr11). The Inspection Agency inspects the goods and documents and issues an opinion on the goods and their price. If satisfied, a Clean report of Findings will be issued to the Customer (consignee) and Supplier (exporter). If not, a non-negotiable failure report will be issued. (PSICom1).
	Supplier assembles and submits relevant documents to accompany goods. (to receiving authority (Standard Shipping Note, Export Licence etc.) or directly to Intermediaries( freight forwarders, chamber of commerce etc). (Exprtr12).
	Ends when all documents to meet regulatory requirements have been provided and arrangements made for transport and insurance of goods in accordance with the agreed Terms of Delivery.
Alternative scenarios	There are many different scenarios depending on the Terms of Delivery and other terms agreed in the contract. To be developed further.

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