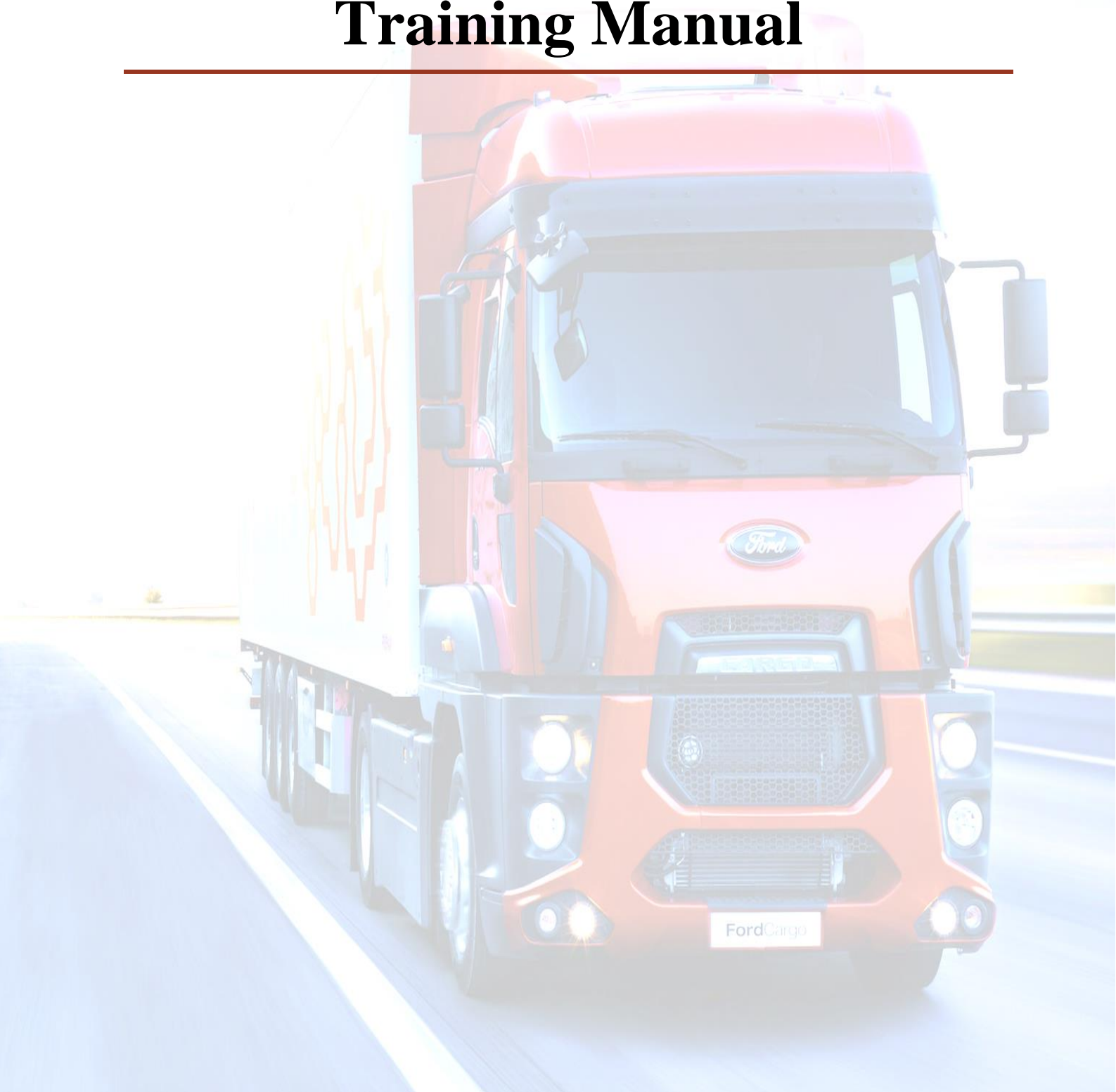

Guide on Paperless Transit

Training Manual



The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) is the regional development arm of the United Nations and serves as the main economic and social development centre for the United Nations in Asia and the Pacific. Its mandate is to foster cooperation between its 53 members and 9 associate members. ESCAP provides the strategic link between global and country-level programmes and issues. It supports Governments of countries in the region in consolidating regional positions and advocates regional approaches to meeting the region's unique socioeconomic challenges in a globalizing world. The ESCAP office is located in Bangkok, Thailand. Please visit the ESCAP website at www.unescap.org for further information.

The United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific (UNNExT) is a community of knowledge and practice for experts from developing countries and transition economies in Asia and the Pacific, involved in the implementation of electronic trade systems and trade facilitation. Established by ESCAP and the United Nations Economic Commission for Europe (UNECE), UNNExT aims to support national, subregional and transcontinental Single Window and paperless trade initiatives. Its emphasis is on training, knowledge sharing and application of international standards for trade facilitation. For more information on UNNExT, please visit <http://unnnext.unescap.org/>

This guide was prepared by Transport Division ESCAP as part of UNNExT, under the “Development Account Project – Eighth Tranche entitled “Deepening Regional Connectivity: Strengthening Capacities of Asian Developing Countries to Increase Intra-regional Trade by Implementing Paperless Trade and Transport Facilitation Systems”. The draft of the guide was prepared by Mr. Goran Andreev, Consultant, under the supervision of Mr. Sandeep Raj Jain, Economic Affairs Officer, Transport Facilitation and Logistics Section (TFLS), Transport Division. Overall guidance was provided by Mr. Li Yuwei, Director, Transport Division.

The views expressed in this guide are those of the authors and do not necessarily reflect the views of the United Nations Secretariat. The opinions, figures and estimates set forth in this guide are the responsibility of the authors, and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations.

The designations employed and the presentation of the material in this guide do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Mention of firm names and commercial products does not imply the endorsement of the United Nations.

This guide is issued without formal editing.

Table of Contents

Overview	1
Introduction.....	1
Training programme on paperless transit	1
Scope of the guide.....	3
Structure of the guide.....	3
 MODULE 1 Introduction to transit	6
Introduction.....	6
Module objectives	6
1.1 Defining transit	7
1.2 Customs related requirements of transit	10
1.3 Other requirements of transit	17
1.4 Advantages of paperless solutions in transit systems	20
Reflecting on this module	28
 MODULE 2 Operational paperless transit systems	32
Introduction.....	32
Module objectives	32
2.1 European transit systems - background	33
2.2 Key principles of the European common transit procedure.....	35
2.3 New computerized transit system (NCTS)	39
2.4 European transit procedures in practice	45
2.5 Advantages of European transit systems	53
Reflecting on this module	55

MODULE 3 Guarantee management systems for paperless transit.....58

Introduction.....	58
Module objectives	58
3.1 General principles of transit guarantees.....	58
3.2 Types of transit guarantees	60
3.3 Transit guarantees in paperless transit systems	60
Reflecting on this module	68

MODULE 4 Risk management systems to support paperless transit71

Introduction.....	71
Module objectives	71
4.1 General principles of risk management	71
4.2 Risk management process in paperless transit environment.....	73
4.3 Developing efficient risk management for paperless transit.....	80
Reflecting on this module	83

MODULE 5 Institutional arrangements for paperless transit87

Introduction.....	87
Module objectives	87
5.1 Legal requirements for establishing transit systems	87
5.2 General legal requirements for paperless trade and transport environment	90
5.3 Legal requirements for establishing paperless transit transport.....	93
Reflecting on this module	98

MODULE 6 Role of the governments and international organizations in introducing and promoting paperless transit systems101

Introduction.....	101
Module objectives	101
6.1 The role of national coordination mechanisms	102
6.2 The role of governments in international coordination and introduction of international paperless transit systems	106
6.3 The role of regional, sub-regional and international organizations	109
Reflecting on this module	118

MODULE 7 Selected national, regional and international case studies on paperless transit	122
Introduction.....	122
Module objectives	122
7.1 The ASEAN Customs Transit System (ACTS)	123
7.2 International Transit of Goods (TIM) System in Mesoamerican Countries	126
7.3 Examples of sub-regional customs transit systems in Africa	128
7.4 National Customs Transit System in Malaysia.....	131
7.5 National Customs Transit System in Thailand	133
7.6 National Customs transit system in Ghana	135
Reflecting on this module	137
 MODULE 8 Challenges in establishing paperless transit systems and possible ways to address them	 140
Introduction.....	140
Module objectives	140
8.1 Overall trade and transport environment, regional integration and political commitment	140
8.2 Coordination between stakeholders	142
8.3 General design of paperless transit systems.....	143
8.4 Establishing legal framework	146
8.5 ICT and providing interoperability	147
8.6 Addressing implementation issues.....	148
8.7 The way ahead	149
Reflecting on this module	153
 Annex 1 Outline for national case study presentation on status of transit	 155
Annex 2 Train-the-trainers workshop agenda.....	156
Annex 3 Train-the-officials workshop agenda	158
Annex 4 Overheads	159
Annex 5 Evaluation Questionnaire	160

LIST OF ABBREVIATIONS and ACRONYMS

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
ASYCUDA	Automated System for Customs Data
CCN/CSI	Common Communications Network / Common Systems Interface
CCS	Cellular communication systems
COMESA	Common Market for Eastern and Southern Africa
COMESA RCTG	COMESA Regional Customs Transit Guarantee
DG TAXUD	Directorate-General for Taxation and Customs Union
DTI	Direct traders input
EAC	East African Community
EDI	Electronic data interchange
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
EFTA	European Free Trade Association
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
GATT	General Agreement on Tariffs and Trade
GNC	Globally Networked Customs
GPS	Global positioning systems
IBRD	International Bank for Reconstruction and Development
ICT	Information and communication technology
IDB	Inter-American Development Bank
IRU	International Road Transport Union
ISO	International Organization for Standardization

MRN	Movement reference number
NCTS	New Computerized Transit System
NSW	National Single Window
OECD	Organisation for Economic Co-operation and Development
PKI	Public Key Infrastructure
RADDEx	Revenue Authorities Digital Data Exchange
RFID	Radio frequency identification
SAD	Single Administrative Document
SADC	Southern African Development Community
TAD	Transit Accompanying Document
TIFFA	Thai International Freight Forwarders Association
TIM	International Transit of Goods (<i>Spanish: Tránsito Internacional de Mercancías</i>)
UCR	Unique Consignment Reference
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNECE	United Nations Economic Commission for Europe
UNNEXT	United Nations Network of Experts for paperless Trade
UNTDDED	United Nations Trade Data Elements Directory
USAID	United States Agency for International Development
WB	World Bank
WCO	World Customs Organization
WTO	World Trade Organization
XML	Extensible Mark-up Language

Overview

Introduction

Trade and transport procedures among the developing countries of the region are complex and leading to high transaction costs. The renewed interest to enhance intraregional trade hinges on how effectively trade and transport facilitation concerns are addressed, particularly through the application of information and communications technology (ICT). In this regard paperless systems can play a substantial role by reducing repetitions, duplications and thereby the transport costs.

In order to assist member states in building their capacity to implement paperless systems for cross-border trade and transport and support the implementation of national and regional single windows, ESCAP and ECE are implementing United Nations Development Account Tranche Eight Project entitled “Deepening Regional Connectivity: Strengthening Capacities of Asian Developing Countries to Increase Intra-regional Trade by Implementing Paperless Trade and Transportation Facilitation Systems”.

As a part of the project, a study on paperless transit has been developed, with the aim of enhancing the capacities of member countries to develop and implement such systems. Based on the ESCAP study on paperless transit the guide is prepared to provide support to the training programmes for capacity building of officials, to design and implement paperless transit systems.

Training programme on paperless transit

The training programme on paperless transit is designed to be implemented in three phases:

- Phase I: Train-the-trainers workshops (two and a half days)
- Phase II: Train-the-officials workshops (one day – shortly after phase I)
- Phase III: Follow-up activities (in several months period after phase II)

The phase I train-the-trainers workshops are intended to develop local skills to conduct further training on paperless transit to relevant officials in their countries. Main goal of the training program is to increase awareness and understanding of paperless transit and to help design and implement paperless transit and transport systems in the region. A multi-country approach is suggested for the phase I, with participation from the neighbouring countries along transit corridors in the region.

Participants in train-the-trainers workshops will have to be able to organize phase II workshops in their countries with the officials from relevant organizations such as customs administration, ministries responsible for transport issues and other transit related

organizations. Therefore it should be considered to have future trainers from the key organizations involved in transit. It is desirable if the future trainers have previous trainer experience.

Phase I of the training program will be based on this guide. In addition, it is recommended for the future trainers to prepare short case study presenting the status of transit in their country. Suggested outline of national case study presentation is given in Annex I of this guide. National case study presentations of the participating countries in train-the-trainers workshops will provide better understanding of country transit specifics along transit corridors among all participants at the workshop. That will create the ground for productive discussion on possible options for design and implementation of paperless transit solutions in the region and it could contribute to sharing of good practices with regard to transit. Discussion findings and recommendations from the train-the-training workshops will help planning phase II workshops. Suggested agenda for the phase I train-the-trainers workshop is presented in Annex II of this guide.

The phase II workshops may be organized subsequently, by lead transit agency (e.g. customs administration), shortly after train-the-trainers workshops. The train-the-officials workshops may be designed at national level with participants mainly from transit relevant organizations such as: customs administration, ministry of transport, border agencies and permits/certificates issuing agencies. It is recommended to include representatives from private sector such as chambers of commerce and national transport and forwarding associations.

Countries may wish to encourage participation of high-level customs and other officials considering that their endorsement will be vital to the success of the policies for designing and implementing paperless transit and transport systems in the region. Phase II of the training programme has to take into account the recommendations from phase I workshops. Even though this guide is primarily intended for train-the-trainers workshops, it could be used and further customized for train-the-officials phase. Suggested agenda for phase II train-the-officials workshop is presented in Annex III of this guide.

The phase III follow-up activities may be built up on discussion findings and recommendations from the train-the-officials workshops. Workshops reports from phase II should be prepared and shared with all participating agencies and organizations. The leading agency may wish to draft concepts on design and implementation of paperless transit and transport systems in the country and prospects for regional connectivity. All relevant national stakeholders should provide inputs to it. ESCAP can provide secretarial support with respect to harmonization of national draft concepts on paperless transit systems and identify the needs for further support.

Scope of the guide

This guide is designed as a training manual necessary to conduct training programmes on paperless transit for Asian developing countries. Information and guidance provided with this guide could be complemented with ESCAP Study on paperless transit and ESCAP Train the trainer - Training fundamentals (2001), which provide guidance on how to effectively deliver a training program. Extended support may be provided with reference materials listed at the end of this guide.

The guide describes general principles of paperless transit based on international conventions, instruments and recommendations. It also provides practical implementation examples of paperless transit systems and paperless transit solutions. Clear understanding of general principles and best practices related to paperless transit paves the way for developing paperless transit systems in the region. However designing and implementing paperless transit system requires taking into consideration a variety of country and regional specific factors. Therefore trainers for train-the-trainers workshops could use this guide as a training material and as a tool to map the status of transit in participating countries and guide the discussion on prospects for paperless transit in line with country/regional specifics.

Future trainers should use this guide as a resource document to design country-specific training material for phase II of the training programme, taking into consideration:

- a) current status of transit in the country and along relevant transit corridors;
- b) national and regional strategies and policies for development of transit and transport corridors, transport facilitation, automation, regional integration and connectivity; and
- c) discussion findings and recommendation from phase I of the training programme.

Customs and other relevant officials, as well as other stakeholders involved in transit at policy level are the final target group of the training programme, and the main objective of the training is to raise awareness and support capacity building efforts of national governments to design, develop and implement paperless transit systems in the region.

Structure of the guide

This training manual contains eight modules and provides generic workshop elements, such as session plans, programme agenda, overheads and evaluation questionnaire. Module 1 introduces the key requirements of a transit system, including basic principles governing international transit and types of transit. It gives an overview of customs related requirements of transit and presents other requirements of transit. This section also explains advantages of the paperless transit systems, particularly to the private sector and to the governments to foster trade and transport facilitation.

Module 2 documents existing operational paperless transit systems, namely European transit

systems, with view to understand the key design and implementation issues in paperless transit. The principles of European New Computerized Transit System (NCTS) and European common transit procedure are addressed including their practical implementation. Module 3 focuses on guarantee management, which is one of the key elements of transit systems. It explains main topics that could be addressed with guarantee management and stresses key issues for design of integrated paperless transit systems.

Module 4 addresses risk management to increase control capacity of customs and other cross border agencies and its integration to paperless transit systems. Module 5 explores institutional arrangements including key legal requirements necessary for establishing paperless transit systems at general level, as well as specific transit arrangements with regional context. Module 6 gives an overview on the role of the governments and international organizations in introducing and promoting paperless transit systems. It includes operation tools developed by UN and World Customs Organization (WCO) and stresses the importance of data harmonization and standardization.

Module 7 presents selected national, regional and international case studies on paperless transit. Case studies presented include ASEAN customs transit system, International transit of goods (TIM) system in Mesoamerican countries, examples of sub-regional customs transit systems in Africa, as well as national experiences of paperless transit systems in Malaysia, Thailand and Ghana.

Module 8 discusses challenges in establishing paperless transit systems with regard to political commitment, involvement of all relevant participants, design of paperless transit systems, establishment of legal framework, ICT infrastructure and interoperability, implementation capacity, lack of demand and resistance and other impediments to transport environment. It suggests possible ways to address those challenges, provides recommendations and options for the way ahead. Going forward, it proposes implementation of ESCAP secure cross-border transport model to support development of paperless cross-border transit and secure transport systems. Long term vision and intermediate solutions to develop and implement paperless transit systems are also suggested.

Each module ends with a session plan, which could be used by the instructor as specific guideline on delivering the training, highlighting module objectives and content as well as training methods and training resources.

The Annexes of this guide contain further useful background and resource materials, including generic training materials such as, agendas, and overheads as an important visual tool to be used during the training.

MODULE 1

Introduction to transit

Principles and international
arrangements governing transit

Introduction

Module objectives

1.1 Defining transit

1.2 Customs related requirements of transit

1.3 Other requirements of transit

1.4 Advantages of paperless solutions in transit systems

Reflecting on this module

Module 1 - session plan

MODULE 1 Introduction to transit

Principles and international arrangements governing transit

Introduction

It is common to have different understandings of transit from the perspective of the stakeholders involved, as well as from the specific transit environment the country may have. Several international institutional arrangements define general principles and characteristics of transit; however details are mainly managed with national regulations and practices.

This training program is focused on transit that involves cross-border movements of goods and therefore it is necessary to first address the common ground and introduce key transit issues and requirements based on general principles and international arrangements. Common understanding of general transit principles as well as information provided on status of transit along transit corridors will help the participants to adapt this module for the needs of the train-the-official phase.

Special attention on options for paperless solutions in transit systems and identification of advantages associated with automation will enable participants to highlight the areas where paperless transit will mostly contribute on facilitation of cross-border movements.

Module objectives

On completion of this module participants should be able to:

- Understand various transit definitions and types of transit;
- Identify key requirements of transit (customs and other);
- Know advantages of paperless transit;
- Relate national transit arrangements in the framework of general principles and international arrangements;
- Correlate national transit arrangements with other countries national transit arrangements along relevant transit corridors in the region.

1.1 Defining transit

A number of terms are in existence with reference to the term ‘transit’. Some of these are transit trade and transit traffic/ transit transport. Generally, transit trade is referred to as the external trade of a country that passes through the territory of one or more third countries prior to reaching its destination. When discussing transit traffic or transit transport the term transit is used in different contexts such as ‘transit freedom’ or ‘customs transit’, which though related, vary in substance.

Box 1: Four main legal instruments containing definition of transit traffic
1. Convention and Statute on Freedom of Transit (1921)
2. General Agreement on Tariffs and Trade (GATT 1994), now part of the WTO
3. Convention on Transit Trade of Landlocked States, 1965
4. United Nations Convention on the Law of the Sea (1982)

Broadly, international instruments define transit, as a passage through the transit country where the journey starts and ends outside the country, and where the journey through the transit country is only a portion of the entire journey.

The legal instruments listed in Box1 contain provisions for equal treatment, transit facilitation, the right of access to and from the sea for landlocked countries, and define transit traffic. It may however be pointed out that these instruments do not provide harmonised definitions of various concepts in transit. Apart from the United Nations Convention on the Law of the Sea, all also contain provisions on duties, taxes and charges. The freedom of transit represents a basic principle, which is set out by the General Agreement on Tariffs and Trade (GATT) and includes provisions for non-discrimination with respect to the place of origin, departure, entry, exit or destination, or any circumstances relating to the ownership of the goods or of the means of transport.

In addition to through country transit, some countries refer to interstate transit in order to define transit movements based on rights agreed with bilateral or multilateral agreements among the parties of such agreements.

Where appropriate, transit may be accompanied with transshipment, warehousing, breaking bulk, or change of the mode of transport. Transit of goods is essential for landlocked countries, which totally depend on transit corridors passing through their neighbours. Transit can be very important for coastal countries as well, especially when they are part of active transit corridors.

Our main interests in this training are opportunities to introduce paperless solutions in regard to regulatory aspects of transit, which includes customs and other transit related documents and procedures. Therefore an understanding of customs transit is necessary, as is coordinating and integrating customs and other requirements of transit.

Customs transit is described as a procedure whereby goods are transported under customs control from one customs office to another and includes:

- through transit;
- outbound (outward) transit;
- inbound (inward) transit; and
- internal transit.

The customs transit system enables inland movement of goods by postponing customs clearance formalities including temporary suspension of payment of applicable customs duties and taxes. Goods in transit should be able to simply and easily move through the transit country and various measures of import commercial policy generally should not be applied for them.

Types of transit

Transit of goods transported in a single customs territory under the corresponding national legislation is known as “**national transit**”. The goods could move under national transit procedure:

- from a customs office of entry to a customs office of exit of that customs territory (through transit);
- from a customs office of entry into the customs territory to an inland customs office (inward transit / or transit for importation);
- from an inland customs office to a customs office of exit from the customs territory (outward transit / or transit for exportation); or
- from one inland customs office to another within that customs territory.

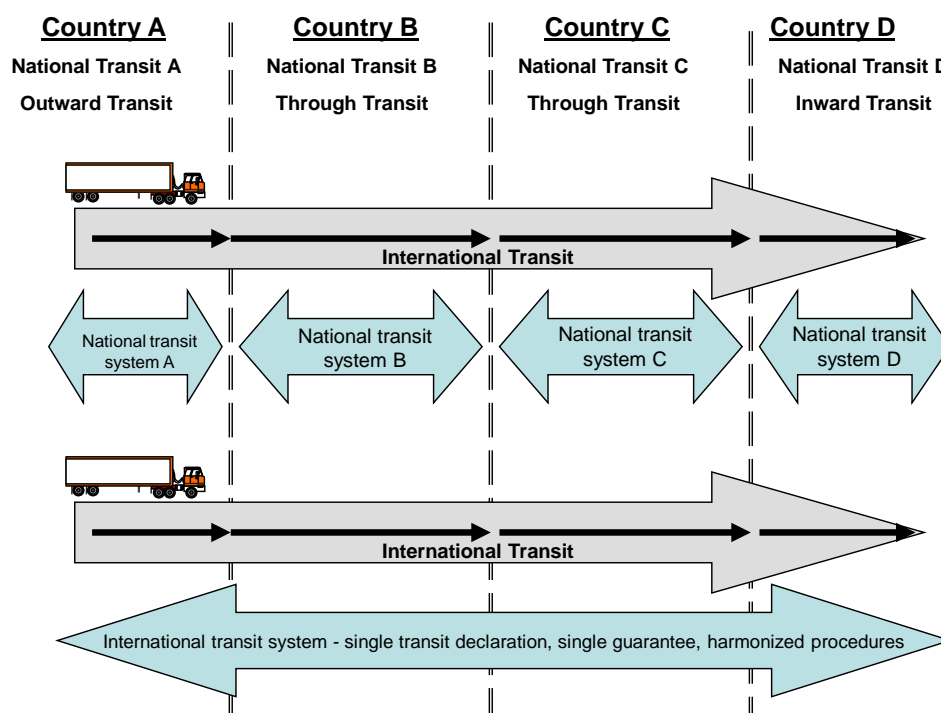
Outward transit includes the movements of goods from the inland departure points (e.g. inland customs depots, free zones, of other bonded areas) to the exit points of the customs territory.

Inward transit includes the movements of goods from the entry points in the customs territory to the inland destination (e.g. inland customs depots, customs warehouses, free zones, of other bonded areas) where the goods in transit could be cleared for home use or other customs procedure.

“**International transit**” differs from national transit by the fact that transport of goods covers not one but several customs territories. Therefore international transit may be represented as a chain of national transit movements between neighbouring countries. When two or several national transit movements are combined, the challenge of creating efficient international transit procedures is substantial. To provide seamless flow of transport in this case a large number of issues need to be addressed, including: harmonization of transit legislation and procedures; compatibility of transit related documents and guarantee requirements; communication and exchange of information.

To develop efficient international transit it may be necessary to introduce an international transit system based on international instruments (e.g. bilateral, regional, or multilateral agreements), which could provide much better grounds for integration. Examples of paperless international and regional transit systems include European common transit system and ASEAN customs transit system, which will be discussed in the subsequent modules.

Figure 1: International transit and relation with national transit systems



Source: Author's depiction of information in the text.

The system of international transit has a variety of essential components, which includes political commitment, physical infrastructure, and cooperation among public and private stakeholders. Among these components, provisions and procedures governing the transit can be regarded as the vital piece of international transit systems.

Questions and discussion topics

1. Do you have examples of other definitions of transit in your country?

2. What terms do you use in your country to cover various types of transit movements?

Note: Phase II of the training should cover broad understanding of transit and all national definitions and terms related to transit movements should be included.

3. How is international transit presently organized in your country?

(Only through the national customs transit system or as part of international customs transit system based on bilateral or multilateral agreement)

4. Does your country have any strategic plans for future development of international transit?

1.2 Customs related requirements of transit

The basics of the regulatory requirements and principles of transit with regard to customs provisions and procedures can be found in several international conventions, which are generally accepted by customs administrations around the world.

Box 2: Main international convention related to customs transit

1. International Convention on the Simplification and Harmonization of Customs Procedures, (Revised Kyoto Convention)

2. International Convention on the Harmonization of Frontier Control of Goods

3. Convention on Temporary Admission, (Istanbul Convention)

The Revised Kyoto Convention (RKC) along with many other WCO instruments greatly supports harmonization of customs transit procedures. Common principles, standards and recommending practices, of the RKC and particularly Specific Annex E (Chapter 1 - Customs transit) outline technical details on implementation of transit procedures.

The RKC standards and recommendations for customs transit procedures address:

- customs transit formalities, such as: transit formalities at the customs office of departure, en route and at destination, as well as termination of customs transit;
- goods declaration for transit and identification of consignments;
- customs seals including provisions for sealing and minimum requirements;

- security (guarantee system) for potential claims of customs duties and taxes; and
- simplified procedures in transit.

The **International Convention on the Harmonization of Frontier Control of Goods** advocates the simple and speedy treatment for goods in transit, especially for those travelling under an international customs transit procedure. Limited inspections when they are justified by the actual circumstances or risks, and transit facilitation when the containers or other transport units have appropriate security is also recommended. Co-operation between bordering countries is encouraged on a best endeavour basis with arrangement of joint control of goods and documents, and shared facilities. The issues of harmonization of working times, operating control services, and accepted categories of goods and modes of transport are also addressed.

Istanbul Convention supports facilitation and simplification of transit procedures with regard to temporary admission of transport means. This Convention provides the possibility for temporary admission with total conditional relief from import duties and taxes and without application of import restrictions or prohibitions of economic character. Temporary admission can be granted without a customs declaration or security being required.

1.2.1 Customs transit formalities

Customs transit procedures can be understood as formalities involved in the movement of goods between the “customs office of departure” and the “customs office of destination”. These offices could be located at different locations in the same country (e.g. at border on entry or exit of the customs territory or inland) and in case of an international customs transit system they are located in different customs territories.

Formalities at the customs office of departure include:

- lodging of a goods declaration for transit with appropriate supporting documents required (such as guarantee);
- acceptance of the goods declaration, and checking the goods declaration;
- examination of goods and inspection of transport means if required;
- affixing customs seal; and
- release of the goods in the customs transit.

Requirements for termination of customs transit include:

- presentation of the goods with the relevant goods declaration at the customs office of destination; and
- intact customs seals and compliance with other transit requirements.

Questions and discussion topics

1. Are there other specific customs transit formalities in your country, which are not listed?
2. Are there customs offices of departure and destination electronically connected in your customs information system?

1.2.2 Goods declaration for transit

The form and the manner of presentation of the transit goods declaration is usually prescribed by the national customs administrations or it could be agreed multilaterally with an international agreement. A distinction can be made between a paper based goods declaration and a goods declaration in electronic format, the latter being of particular interest in this guide.

The format of the electronically lodged goods declarations for transit, their processing and exchange is expected to base on the international ICT standards, such as WCO Data Model and UN/EDIFACT Rules for Electronic Data Interchange. For the paper format of transit related documents, conformity with the UN-Layout Key which promotes the principle of establishing aligned series of documents, and outlines a set of minimum data elements of key trade and transport documents is desirable.

The content of a goods declaration for transit may be limited only to such particulars as deemed necessary. The same limitation applies to the documents supporting the declaration. As could be expected, interpretation of the ‘necessity’ differs among countries and examples of asking for more data and more supporting documents than is actually needed seems to be common. The fact that customs clearance formalities are postponed and payment of applicable duties and taxes are suspended, should entail less data requirements for transit if compared with import/export data requirements.

The description of goods should be focused on identification of the goods rather than on establishing the elements necessary for calculation of customs duties and taxes (e.g. tariff classification, customs valuation and origin of goods), which can be done in the subsequent phase of the customs clearance if necessary. For example tariff classification is mandatory for import, however it could be optional for transit. Tariff classification may be required only if it is already available (e.g. same declarant prepares export and following transit declaration) or for the goods that involve greater risk of fraud. Requesting systematic tariff classification on goods in transit may unnecessarily burden transit formalities.

Instead of creating new supporting documents (e.g. a specification of goods created exclusively for the transit procedure) it is recommended to use existing and common transport or commercial documentation (e.g. loading lists or other commercial descriptive

lists) which will reduce the burden of providing supporting documents and will enable audit trail. Use of supporting documents based on the UN Layout Key and other internationally standardized forms is also encouraged in order to simplify processing of the goods declaration. Generally the customs authorities should not require a translation of the particulars from the supporting documents.

Questions and discussion topics

1. How many types and forms of transit customs declarations exist in your country?
2. Compare roughly the content of transit declarations in two participating countries. Are there any substantial differences? What are mandatory data required under your national legislation and operation?
3. In your country, do you have experience with paperless customs declaration in customs procedures other than transit?

1.2.3 Security (Guarantee system)

Security that might be required for customs transit and guarantee systems is one of the key elements of transit and will be addressed in detail in Module 3 of this training. Main characteristics of guarantees are: the form of guarantee, amount of guarantee and its validity. The guarantee management system is expected to provide efficient handling of guarantee documents, including the control of validity and amount of guarantee. Guarantee management systems are usually integrated with customs transit systems.

1.2.4 Responsibility of persons in customs transit procedures

Persons responsible for compliance with the obligations incurred under customs transit procedures are identified in national legislation of the transit countries, and their responsibilities can vary from one customs territory to another. Distinction can be made for responsibility to:

- lodge goods declaration for transit;
- furnish a guarantee;
- follow customs control measures for the transit operation;
- ensure that the goods are produced intact at the office of destination; and
- pay the customs duties and taxes if the goods declaration for transit is not properly discharged.

The principals (holders) of the transit procedure are usually identified as the persons liable for all of the responsibilities mentioned above. The carriers are often identified as principals and they are responsible to follow customs formalities for the transit operation and to present the goods intact at the office of destination. Freight forwarders, customs agents and customs brokers could be legally required to lodge goods declarations for transit as well.

Guarantors are usually banks, financial institutions, insurance companies or guaranteeing associations, which are responsible for providing a guarantee to the principal. The guarantors undertake to pay jointly and severally with the principal, potential claims of customs duties and taxes that may become due as a result of irregularities in customs transit procedure.

1.2.5 Customs seals

One of the main requirements of transit is to ensure that the goods will arrive at the customs office of destination in the same state and quantities as they left the customs office of departure. However customs transit is vulnerable to security breaches and customs authorities implement various customs control measures to secure movement of goods. The most common measure is the sealing of load compartments and containers with customs seals. This should ensure that goods in transit procedure cannot be removed from sealed space or other goods cannot be added without either breaking the customs seal or leaving visible marks on the sealed compartment or container. Construction of loading compartment and containers should provide that any unauthorized interference could be easily detected.

Customs seals, used as a mechanism to ensure the physical integrity of the goods, can be mechanical or electronic. Mechanical seals could be indicative (easily broken by hand), secure (which are relatively more difficult to tamper) and highly secure (which offer greater protection against intrusion and must be removed by bolt or cable cutters). Electronic seals combine physical seals, data storage and radio frequency identification (RFID) components.

Electronic seals may be equipped or interfaced with satellite positioning systems (SPS) and cellular communication systems, which will enable vehicle electronic tracking through the transit movement. The possibility to interrogate electronic seals by readers is opening new options for communication between electronic seals and other customs information systems, which could contribute to further automation of customs formalities and support paperless transit.

In the case of international transit, acceptance of customs seals affixed by customs administrations of other countries reduces the need for repeated inspections at border customs offices. In this regard the Revised Kyoto Convention recommends customs seals affixed by foreign customs authorities be accepted for the purposes of customs transit, unless they are

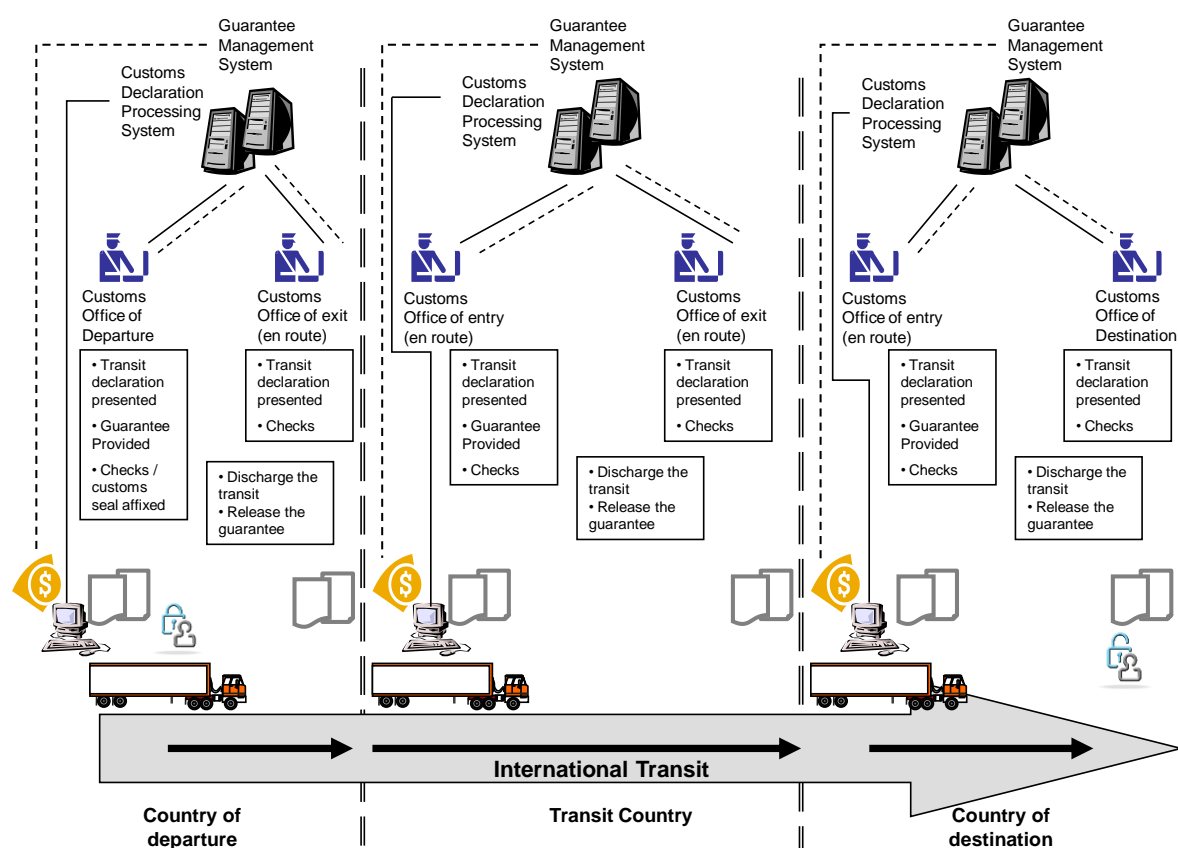
not sufficient and secure. However the customs authorities en route will retain the right to decide to proceed with an examination of the goods in justified situations.

Minimal requirements for customs seals are standardized with Revised Kyoto Convention (Appendix to Annex E). Conditions for sealing of load compartments of vehicle and containers, including standardization, criteria and technical details required to recognize vehicles and containers as suitable for sealing, are also addressed in international conventions, such as Customs Convention on Containers (1972) and Convention on the International Transport of Goods under Cover of TIR Carnets (1975) as amended.

1.2.6 Repetition of customs requirements of transit

One of the challenges of international transit is to avoid, or reduce the burden of repetitive customs related requirements while crossing the border from one country to another. When the full set of the transit formalities in the office of departure and in the office of destination is repeated in each transit country (which still happens in many cases in international transit), the transport of goods suffers from delays.

Figure 2: Repetitive cycle of transit formalities in international transit



Source: Author's depiction of information in the text.

The most logical streamlined transit solution for efficiency improvement of international transit is to cover whole international transit movements with a single transit document. In that case the office of departure will be in the country where the transit procedure is initiated and the office of destination will be in the country where the transit procedure is terminated (and the goods are released for home use or other customs procedure).

Having a single international transit document will greatly simplify the formalities in customs offices en route, and will allow transit movement without termination and start of the transit at each consecutive border crossing. There will be no need to lodge new goods declarations or to start new customs transit procedures in each country. The reduction of customs documents for transit, and procedural simplification in such cases will be most evident in customs offices en route in each subsequent transit country.

However, a number of issues will emerge from such a solution e.g.: mutual recognition of the transit document (in paper or electronic form); mutual acceptance of customs controls and custom seals; guarantee requirements covering different customs territories; exchange of information and interoperability between customs administrations of different countries. The challenges and paperless options to deal with such issues will be addressed with this training programme.

1.2.7 Simplification of customs requirements of transit

Customs administrations are introducing various simplifications of transit procedures and they could facilitate and simplify: customs transit formalities; data requirements and supporting documents of goods declaration for transit; formalities for affixing the customs seals; requirements to use a prescribed itinerary or guarantee requirements.

The most significant simplification of transit procedures, recommended by Revised Kyoto Convention, is to designate the person(s) carrying out transit processes as authorized consignor or authorized consignee status upon fulfilment of conditions set by customs administrations. Among other conditions, those simplifications usually depend on effective communication with customs authorities, which includes electronic goods declarations and electronic exchange of other relevant information and messages.

Box 3: Authorized consignee and Authorized consignor

Authorized consignee - is a person empowered to receive goods directly at his premises without having to present them at the office of destination.

Authorized consignor - is a person empowered to send goods directly from his premises without having to present them at the office of departure.

Authorised economic operators such as importers, exporters, carriers, freight forwarders, customs agents or customs brokers, who meet the criteria set by customs administrations, have their high compliance and reliability confirmed. Examples of benefits for authorized economic operators in customs transit procedures include: reduction of guarantee amounts or guarantee waivers, fewer data elements in goods declaration for transit, fewer physical and document-based controls and inspections, receiving authorized consignor and/or authorized consignee status.

1.3 Other requirements of transit

1.3.1 Transport requirements

While customs requirements are essential for complying with transit procedures, the transit system extends beyond customs. Transport requirements related to transit include transport rights and road transport permits, insurance coverage for vehicles, vehicle weight and dimension limitations, and registration and inspection of vehicles. Restrictive transport policies and road transport permits can create serious obstacles to transit and diminish all other transit facilitation undertakings. Ineffective transloading practices may burden transit movements and increase transport costs.

1.3.2 Immigration requirements

Visas for professional drivers and crews of road vehicles are requirements of immigration departments, and can also have an impact on transit. Complex and restrictive visa requirements may limit transit movements irrespective of the level of liberalization of other transport requirements.

1.3.3 Sanitary, veterinary and phytosanitary requirements

Sanitary, veterinary and phytosanitary measures are sometimes required on goods in transit, though on a lower level than those anticipated for import formalities. Sanitary requirements address issues for protection of the life and health of persons; veterinary requirements are focused on animals and animal products with a view to protect the life and health of persons and animals; and phytosanitary requirements are concentrated on preventing the spreading of pests of plants and plant products.

1.3.4 Other prohibitions and retractions on transit

Other requirements on prohibitions or restrictions with respect to transit of goods are often imposed in relation to public safety, morality and health, or for the protection of the environment, cultural heritage or industrial, commercial and intellectual property.

1.3.5 Paperless solutions for other requirements of transit and transport facilitation

Some of the requirements and measures identified in this part could be supported by paperless solutions, such as: electronic application for different permits, certificates or visas; access in data bases at national level between partner border agencies - sharing relevant data, including electronic documents on an automatic basis, at national or international/regional level between corresponding partner agencies.

Responsibilities related with requirements listed above and agencies involved may vary from country to country, but most common government agencies present at border crossings are: border police and immigration authorities, transport authorities, sanitary, veterinary and phytosanitary inspections. Each of those agencies could be assigned with transit related tasks in their field of competencies.

When legal basis is provided, some of the responsibilities of certain government agencies could be transferred to other partner agencies (e.g. part of the responsibilities for transport legislation requirements from the transport agencies are transferred to customs authorities or border police). Transfer of responsibilities between border crossing authorities could reduce the number of agencies present at border crossings, streamline border-crossing formalities, reduce the time for processing the transit operations and lower the costs.

It should be noted again that customs transit postpones clearance formalities, so commercial policy measures applied to transit should be reduced and limited, compared to the measures applied on actual import. The customs administrations and other border crossing agencies should undertake an approach that transit consignments may be inspected only when it is justified by the actual circumstances or risk.

The existence of various requirements in relation to transit procedures and involvement of many agencies at border crossings creates a complex environment which is mirrored on both sides of the border crossing, and furthermore this situation is repeated at every border crossing along the transport corridor. Such complexity is a serious impediment to seamless international transit and regional integration. Therefore it is essential to harmonize customs and other controls and to apply border crossing facilitation measures in order to develop effective and efficient transit systems.

This is well recognized by many international institutions, regional initiatives and individual countries and there are various programs and activities in support of facilitation of border crossing formalities, which include transit. Paperless transit solutions could contribute to better integration of cross border movements of goods, providing basis for easier way of communication and exchange of information between all interested parties.

Coordination, cooperation and exchange of information between customs authorities and all other government agencies, should be regarded at national level and at bilateral or regional level as well. Successful implementation of any border crossing facilitation initiative requires strong political commitment, a comprehensible legal basis in the form of international agreements and memorandum of understandings, coherent legislation based on harmonized international standards and practical and effective mechanisms of cooperation.

Single window initiatives are one of the mechanisms for cooperation and exchange of information between different agencies, which could cover transit as well. There are many single window initiatives all over the world and despite harmonization efforts of WCO and UN agencies, the scope and approaches to the single window environment differ from case to case due to unique requirements and conditions in different countries.

Simplifications and facilitations enabled with the implementation of single window concept could considerably improve the process of providing and sharing the necessary information. When implementing single window environment it could be expected that the number of paper based documents will be reduced and procedures will be streamlined and better organized, which could strongly support the efforts for introduction of paperless transit.

Another general issue that should not be neglected is payment of different fees that might be imposed for transit movements by various government agencies. Having in mind that transport operators usually deal with several agencies at each border crossing and often have to pass several border crossings during the transit movement, the burden of accumulated fees could seriously hamper international transit. GATT provisions on fees and charges stipulate that they should be limited in amount to the approximate cost of services rendered and shall not represent an indirect protection.

Transit systems need to be developed in strong partnership with transport and trade sectors. Public-private consultation will improve understanding of business community needs. Responding appropriately to report difficulties, observations and suggestions initiated by private sector, can improve implementation of transit systems. The involvement of trade and transport associations in the process of changes of transit systems in all stages, from planning, developing legal and procedural aspects and testing of new solutions, could contribute to straightforward acceptance of those changes.

Transparency in respect of transit systems should be provided by all government agencies involved, with publication of regulations, procedural requirements and applicable fees in an easy and accessible manner for all interested parties. Furthermore it might be very useful to have integrated transit information at national level or even better on transit corridor level, including information from several countries. Improved knowledge and access to accurate information could have positive effects on the uniform application of transit

regulation and compliance. Increased predictability could enhance the use of transit systems and reduce corruption. Partnerships with private sector and transparency are important requirements for introduction of paperless transit solutions.

Last but not least, efficient and ethical customs administration and other government agencies are essential for effective transit systems. When this requirement is not fulfilled, all other efforts for improvement of transit systems, including the most sophisticated paperless transit systems could be easily undermined. Therefore the countries should put integrity issues, continuous training, and organizational improvements high on their transport facilitation agenda.

Questions and discussion topics

1. Are there other specific requirements of transit in your country, which are not listed?
2. Do you have experience with paperless solutions for some of the requirements of transit in your country? (*e.g. electronic application for different permits, certificates or visas; and electronic permits or certificates*)
3. Which agencies other than customs have competencies in transit in your country?
4. Is there any practice for transfer of responsibilities between agencies and/or single window initiative in your country? Is transit covered by such practices and initiatives?

1.4 Advantages of paperless solutions in transit systems

This training programme is focused on paperless transit in the regional context and its role in boosting intra-regional trade. The term “paperless transit” used in this training primarily refers to transit based on electronic documents instead of paper-based documents. However paperless transit also includes transit with simplified processing of paper based documents, when the simplification is a result of electronic information exchange and communication of electronic documents related to those paper based documents.

Even the most advanced transit systems currently use some paper documents. Therefore, introducing paperless transit could be understood as a process of optimization of transit facilitation measures with use of available and affordable ICT, rather than achievement of the ultimate goal for total absence of paper documents in transit per se.

It should be also noted that regulatory and procedural reforms are major factor in reduction of number of transit related documents and simplified processing. Thus transformation towards paperless transit should not be regarded only as simple translation of paper based documents to documents in electronic form. Automation of transit cannot bring

any substantial advantages if current transit processes are not analysed and simplified in the manner that is only supported by paperless solutions.

Technological innovations in ICT and possibilities to have instant and direct communication with all participants in transit procedures and to exchange electronic data in a secure way have triggered the process of replacing paper based with electronic documents. Paperless transit systems are becoming ever more visible, and the electronic exchange of transit information for faster more secure and processing of paper based transit documents is becoming standard for many customs administrations.

Effective transport connectivity, which is essential for regional economic cooperation, could be achieved if several conditions are fulfilled such as developed physical infrastructure and efficient international transit systems with streamlined cross-border formalities. International transit is particularly vulnerable to various non-physical barriers, which could potentially emerge in every country and at each border crossing along the transport corridors. Long and burdensome multiple customs transit procedures under different national legislations, multiple transit documents, long waiting times at the border crossings, multiple examinations and inspections of the goods and transport means, could significantly increase the time and the costs of transport and hamper regional trade.

The paper based transit systems have serious disadvantages if compared with transit systems with computerized and paperless solutions. Handling physical documents creates unwarranted delays and increased costs. Submission of paper-based transit declarations is more burdensome. Requesting a hard copy of the transit documents means that physical delivery of the documents to the authorities is necessary (that often entails idle waiting until documents are processed; followed by physically receiving processed documents and delivering them to all other interested stakeholders).

Paperless solutions could not only address such inefficiency of paper-based transit systems, but they offer further streamlined implementation as a result of business reengineering of transit processes supported by electronic solutions (e.g. reusing of data, easier exchange of information and improved visibility of each step of the processes).

With paper based transit systems tracing and monitoring transit operation is not available. Discharging of transit is very slow because paper based proof for termination of transit has to be sent by mail from the office of destination to the office of departure, which can be time-consuming. Slow and inefficient management of paper based transit systems reduce capacity for timely detection of frauds. Objectives of paperless transit systems are to provide modern and efficient management of transit operations and to overcome many weaknesses of the paper based transit systems. Paperless solutions on the other hand could offer increased security and improved capacity for risk analysis and enhanced prevention and detection of fraud.

Paperless transit systems are based on the use of advanced computer systems and effective electronic communication between all participants in the transit operations. Electronic data processing includes data from the goods declaration for transit and other necessary information in order to provide streamlined implementation of transit procedures.

Many regional/international initiatives are trying to promote and ensure secure and efficient transit systems. Efficient international transit systems reduce transport costs, improve the competitive position of business, and provide a positive environment for increased regional trade flows and integration. Use of ICT and paperless solutions in transit systems are powerful tools for improving efficiency of customs transit systems.

One of the advantages of paperless transit systems is to significantly increase efficiency and effectiveness of the transit operations with:

- reduction of time-consuming paper work,
- automation of processes and decrease of idle time,
- reduction of administrative burden, and
- lower transaction costs.

Computerization of paper-based transit accompanied by redesigned business processes has a potential to offer more streamlined and easier to implement transit procedures. Electronic data processing systems enable exchanges of electronic documents and electronic messages. Some of the processes based on paper document could be reduced or even eliminated when they are replaced with automatic checks running in the background of the customs information systems and automatic creation of messages. The amount of paper documents in transit procedures could be drastically reduced and simplified, reducing the unnecessary workload typically associated with paper based documents.

Introducing a paperless transit system requires high initial costs, but the benefits for the transport and trade sectors and for the customs authorities and the countries in general could be significant as well. High operational savings could be generated, transport operations will be more secure and potential revenue losses prevented.

Paperless transit systems could support both options of international transit:

- a) organized as a chain of national transit systems; or
- b) organized as an international transit system
(e.g. based on comprehensive international transit agreement).

In both cases, introduction of paperless transit will offer benefits for the transport and trade sector which paper-based systems are not able to support. However it should be noted that paperless support in the case of international transit organized as a chain of national transit systems will be limited, due to the disadvantages resulting from fragmentation of the

systems. On the other hand paperless solution could even further enhance the advantages of international transit systems.

Box 4: General advantages of international transit systems

Well-designed international transit systems (even if they are paper based) have clear advantages over international transit as a chain of national transits systems. One transit declaration/guarantee for movement through several countries (instead producing transit declaration/guarantee in every entry-border crossing) and mutual recognition of customs control measures and formalities contributes to:

- Lower documentary costs and less time for production of documents;
- Eliminated needs for carriers to stop at the border crossings and ask for services related to production of transit declaration/guarantee;
- Paying only once for the services to obtain a single transit document/guarantee, which simplifies transit and eliminates currency exchange and payment related delays;
- Reduced time and costs as a result of streamlined border formalities (e.g. elimination of multiple examination of goods, inspections of vehicles, affixing new customs seals at each entry border crossing);
- Possibility to speed up transit flows and open “fast” lanes for international transit;
- Decreased overall waiting time on the border crossings and lower costs for moving across the borders;
- Improved security of transit operations due consistency of the transit data;
- Reduced risk of inaccurate information and making changes of the goods description;
- Increased transparency and predictability;
- Better knowledge of transit requirements, and easier and less costly preparation of the carriers for transit operations;
- Timely following of any new transit requirements and elimination of delays at the border crossings resulting from lack of awareness of those changes;
- Shrinking the window for informal and illegal payments and other corruptive actions and thereby increasing integrity.

1.4.1 Advantages of paperless transit to private sector

Electronic filing and lodging of customs transit declarations provides flexibility for presenting such declarations as the declarants can send electronic transit declaration directly from their offices and availability of those services is 24/7, regardless of the working hours of customs authorities. When convenient, electronic systems provide options to save incomplete declarations and finalize lodging of the declaration when all necessary data are available.

Declarants and principals can use more efficiently the time for filing and lodging the customs transit declarations according to their needs.

With the use of electronic customs declarations, declarants will not have costs for going to the customs office of departure to physically present customs transit declaration and the time for waiting at customs offices will be eliminated, which will increase their efficiency. Because electronic declaration will be sent in advance, transport operators will reduce the waiting time at customs offices of departure.

In the case of authorized consignors, reduction of the costs is even more substantial. The authorized consignors are entitled to start the transit procedure from their facilities and are not obliged to go to the customs office of departure to present the goods, they will have additional savings in terms of transport expenses and time. Authorized consignors may be allowed to start transit operations 24/7 without regular presence of customs authorities and without limitation of working hours of the customs office of departure, which will increase efficiency of transport operators, and give further benefits to the traders.

Electronic transit systems facilitate filing of customs transit declarations using lists of different codes (e.g. customs offices codes, and other customs codes) and automatic filling of data when possible. An automatic validation is also regularly provided (e.g. on principal/declarant identity, guarantee validity and free amount) as well as an automatic check for filing of mandatory data. Instant feedback is provided to the declarants about errors, or various warnings, possible restrictions or specific rules and conditions. Regular updates of the system ensure better compliance with the transit related requirements. In general electronic transit systems improve accuracy and reduce possible errors.

Electronic transit systems enable reduction of repeated data entry in several levels:

- First, in the case of trader/declarant integrated information systems, when data entered in internal information systems can be re-used for further creation of electronic transit declaration. Internal information systems or other electronic systems used by traders/declarants or principals could offer an option to create and print other transport documents that may be required (e.g. consignment note) or transit related documents (e.g. transit accompanying documents). For such actions they could automatically use the same data as the data from the related transit declaration without repeated data entry.
- Second, where the declarants are using pre-defined templates for creation of new electronic transit declarations; and
- Third, in the case of international transit systems, when the data from the office of departure will be automatically sent to the customs offices of transit and customs office of destination and there will be no need to involve other customs agents en

route or to be required from the customs authorities to repeat the data entry. Reducing repeated data entry makes the process of submission of the transit declaration more efficient and less costly.

Different options to access the electronic customs transit systems offer various benefits in accordance with the needs of the businesses. In the case of EDI access solutions with specialized transit software integrated with the internal information systems of the companies, the advantages available include: reduction of data entries, accuracy of data in business systems, improved operational and financial planning, effective internal audit, and improved security of data transfers. Such solutions can be costly and economically justified only in case of high volume of operations.

Web-based service providers could offer solutions for submission of transit declarations where specialized software is not required on traders' side. They usually offer standard benefits for reduction of paperwork. Specialized software is also not needed when direct traders input is used for submission of transit declarations to the specialized web site of the customs administration. In this case the main advantage is that an investment on the traders' side is not required, except access to Internet.

Electronic systems for transferring, processing and exchanging of transit related messages with customs authorities provide transparency of the transit operation. Exchange of electronic messages is provided in real time, and all participants are instantly aware about the status of each step in processing of transit operations.

The principals and declarants can closely follow-up lodged transit declarations and their status. Tracing of transit operation could be provided and traders could timely follow passing of their consignment through each customs office of transit and arrival at customs office at destination. For the users of EDI solutions the option for real time following of the status of the transit operations can be incorporated in their software applications by default. And for the users of web based applications options to check the status of their transit operations may be offered as well. Tracing of transit operation addresses the concerns about security of the transit and timely delivery of the goods.

Customs transit formalities in paperless transit systems can be accelerated in all customs offices under such system, which reduces the waiting times and cost of the transport. Pre-arrival electronic transit declarations and other messages are automatically sent to all customs offices of transit and to the customs office of destination. They are utilized for early risk analysis and making decision of possible control of the goods before they actually arrive at the border. The customs authorities can expedite the customs formalities at transit offices and minimize them only to read bar code printed on TAD with a bar code reader; and checking the customs seals.

Simplified procedures for the authorized consignees enables advantages for reliable traders, which no longer need to physically present the goods at the customs office of destination. In this case transport operators will directly go to the approved location where the procedure for termination of the transit procedure can be initiated. It should be noted that simplification of authorized consignee status is usually associated with other authorizations for simplification such as authorization for local clearance, which will allow continuation with intended customs procedure upon ending of the transit procedure.

Transport operators will benefit from the authorized consignee simplification in similar way as in the case of the authorized consignor with savings in terms of transport expenses and time. Authorized consignees could initiate ending of transit operations 24/7 without regular presence of customs authorities and regardless of the working hours of the customs office at destination, which increases efficiency and reduces the transport costs.

Another important advantage of electronic transit systems is faster discharge of transit procedure because an electronic message is used between customs office of destination and customs office of departure, instead of returning the paper based proof about termination of transit procedure by mail. Discharge of transit procedure with paper documents has shown many weaknesses as a result of slow postal services and inefficient operations where some of the paper documents could be misplaced and lost. In such cases delays may be substantial and that could affect release of the guarantee and increase guarantee related costs.

With the use of electronic messages the time of release of the guarantee is shortened leading to reduction in related cost. Functional transit systems effectively synchronize physical movement of goods with flows of the transit documents. Well designed and effectively implemented electronic transit systems could provide almost simultaneous monitoring of the end of transit movement, followed with quick processing of transit declaration for termination of transit procedure, discharge of transit and release of the guarantee.

Electronic transit systems improve the management of transit declarations, and traders can easily store transit related information, make relevant queries, and download their transit customs declarations and other transit information they may need from the system.

Efficient and effective transit systems supported with ICT solutions also offer:

- minimum interference and reduced direct contacts with the customs authorities;
- improved transparency;
- timely exchange of relevant information;
- consistency of transit data across the customs administrations; and
- uniform implementation of customs formalities.

These advantages will not only speed up the transit operations and reduce transport costs but could also significantly reduce corruption and any informal and illegal payments which could also represent serious obstacles to transit movements.

Transport and trade sectors can enjoy the benefits offered by electronic transit systems when fully electronic transit declaration is in use and when international transit systems support effective exchange of electronic transit data among various customs administrations.

In dual systems, when customs authorities request paper based transit declarations in addition to electronic information, the benefits of reduced processing time will likely be diminished to a certain extent. When a national transit system of the customs administration is not successfully integrated, potential benefits will be reduced not only with regard to effectiveness and costs but in relation to security of transit operations as well.

1.4.2 Advantages of paperless transit to governments

It is obvious that many of the advantages of the electronic transit systems for the private sector elaborated above could be considered as advantages for the governments and customs administrations as well. For instance, increased effectiveness of processing the transit operations with the use of automation, which reduces time consuming paper workload (e.g. using lists of codes, reduction in repetitive activities, automatic validation and background checks) are the same.

Customs administrations could also indirectly benefit from advantages offered to the principals and declarants. For example increased compliance, accuracy and low level of errors in transit declarations will increase efficiency of customs authorities. Electronic transit systems are efficient tools for simplification of administrative procedures and developing business oriented approach.

In addition to increased efficiency and effectiveness the main advantage of paperless transit systems is improved security of transit operations. Electronic information is easier to process and also more reliable. Real time data and automatic processes (e.g. validation of guarantee and checking available free amount) reduce manual interventions and address associated risk at the same time.

Improved communication between customs authorities with automatic information sharing of transit related electronic messages (e.g. advance cargo information and data related to transit declaration) not only accelerate and facilitate customs transit formalities, but also enable better risk management in order to address security and fraud threats to safety and revenue losses.

An international electronic transit system could enable cross border automatic electronic exchanges of transit data from the customs authorities in the country of departure to the customs authorities in transit countries and the country of destination. That will increase their effectiveness and capacity to deal with security issues. An automatic reconciliation of transit data between customs authorities in departure country and customs authorities in destination country tremendously accelerates discharge of transit procedures and enables early identification of potential irregularities.

Paperless transit systems could provide efficient real time tracing of goods from start of the transit operation at the country of departure, through their passage at border crossings of transit countries until end of the transit procedures at the country of destination. In addition, those systems could be supported with optional use of electronic vehicle tracking systems, where monitoring of movements is enabled with use of electronic seals and other equipment, based on technologies that may include radio frequency identification (RFID), global positioning systems (GPS) and cellular communication systems (CCS). Tracing and tracking systems are regarded as an effective tool to improve customs control during transit operations, instead of current practices such as frequent inspections en route, mechanical customs seals, customs convoys, and high guarantees.

Transit systems have always been vulnerable to fraud, because temporary suspended payment of applicable customs duties and taxes involve a huge amount of money. Computerized transit systems could overcome inefficiency of paper based system and they could successfully deal with various types of fraud (e.g. false customs declarations; false clearance; false guarantee documents, insufficient guarantees etc.).

Efficient management of transit systems will help customs administrations to better utilize available human and other resources, which could bring fiscal savings and improvements of low enforcement capacity because customs officers could be reassigned from purely administrative duties to risk assessment, customs control and combating fraud tasks.

Reflecting on this module

This module offers broad understanding of transit and its principles defined by international arrangements. It highlights key transit features such as transit declaration and security. International transit systems with paperless transit solutions could overcome weaknesses of paper based transit systems and provide important advantages to:

- the transport and trade sector; and
- the governments and customs administrations.

With streamlined and efficient transit procedures transport costs in regional transit operations could be significantly reduced, and international trade and transport could have substantial savings. This positive impact could increase intra-regional trade and regional integration. Paperless solutions ensure security of transit operations, reduce the vulnerability to fraudulent actions and corruption, which contributes to protection from revenue losses, security and safety threats and improves business environment.

The knowledge acquired with this module should help the participants to adapt this module for train-the-official phase taking into consideration own national arrangements, as well as the arrangements along relevant transit corridors (presented as case studies for status of transit by participating countries).

Even though more comprehensive studies may be needed for detailed analyses on the advantages of paperless transit at participating countries, a general understanding of the benefits of paperless solutions will enable participants to identify areas where most important improvements may be expected and even to make some rough estimation on reduced time per transit operation and associated expected cost reduction and savings.

Module 1

Introduction to transit

Introduction (5 min)

Necessity to introduce large picture on key transit issues and requirements based on general principles and international arrangements. Relations to national transit arrangements.

Module objectives (5 min)

- To catalogue and recognize various transit definitions and types of transit
- To identify key requirements of transit (customs and other)
- To analyse advantages of paperless transit
- To demonstrate national transit arrangements in the framework of general principles and international arrangements
- To correlate national transit arrangements with other countries' national transit arrangements along relevant transit corridors in the region

Content (110 min)

1. Defining transit (20 min)
2. Customs related requirements of transit:
 - Customs transit formalities (10 min)
 - Goods declaration for transit (10 min)
 - Security (Guarantee system) (5 min)
 - Responsibility of persons in customs transit procedures (5 min)
 - Customs seals (5 min)
 - Repetition of customs requirements (10 min)
 - Simplification of customs requirements (5 min)
3. Other requirements of transit (10 min)
4. Advantages of paperless solutions in transit systems (30 min)

Summary (5 min)

Broad definition of transit. Key transit features: transit declaration and security. Automation of customs transit formalities and other transit related requirements and related advantages.

Feedback and adaptations (25 min)

Feedback on this module and discussion on adaptation needed for train-the-official phase (own national arrangements and arrangements along relevant transit corridors). Reference to case studies on national presentations for status of transit in participating countries.

Instructor's notes:

Instructor:

Date and time:

Location:

Training methods

- Lecturing and explaining
- Questioning
- Discussion
- Case studies

Training resources

- ESCAP Guide on paperless transit (Module 1, including Module 1 overheads in Annex 4, and outline for national case study presentations on status of transit in Annex 1)
- Hand-outs on national case study presentations (prepared by participating countries)
- ESCAP Study on paperless transit (Chapter II and IV)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3 & 3.3.4)
- Additional resources
 - WCO (2014), Transit Handbook
 - WCO, Kyoto Convention: Guidelines to Specific Annex E (Chapter 1 - Customs Transit)
 - IBRD/WB (2011), Border Management Modernization (Chapter 17)

MODULE 2

Operational paperless transit systems

European transit systems

Introduction

Module objectives

- 2.1 European transit systems – background
- 2.2 Key principles of the European common transit procedure
- 2.3 New Computerized Transit System (NCTS)
- 2.4 European transit procedures in practice
- 2.5 Advantages of European transit systems

Reflecting on this module

Module 2 - session plan

MODULE 2 Operational paperless transit systems

European transit systems

Introduction

Developing an international transit system can be a demanding and extensive process. European countries have been working for a very long time in that regard in order to facilitate transit movements in the region. Presently the European transit systems are regarded as one of the most successful in the world offering efficient management of transit and many advantages to trade and transport sectors in regard to facilitation and reduction of costs for moving goods across Europe.

The European transit systems have become a model for many regional and sub-regional initiatives, and presently only the European common transit system could be recognized as a fully developed paperless international transit system. Therefore, understanding principles and the functioning of the European transit systems is an important step toward capacity building for designing and implementing paperless transit systems in other regions. Extended knowledge of the European common transit system will help the participants to recognize necessary features needed to build similar paperless transit systems. That will be also beneficial to identify the areas, which have to be addressed due to various regional specifics, including critical implementation issues.

Module objectives

On completion of this module participants should be able to:

- Understand and explain principles and functioning of European transit systems, (particularly European common transit system and NCTS);
- Recognize the key features of European transit systems, that may be taken into consideration to build similar paperless transit system for Asian developing countries;
- Identify national and regional specific issues that have to be addressed when designing paperless transit systems, particularly those that may lead to implementation difficulties.

2.1 European transit systems - background

Customs transit is often regarded as one of the cornerstones of European integration. European Union (EU) presently has 28 Member States and several candidate countries. Together with EU integration processes and EU enlargement, integrated customs transit systems have been incrementally developed and extended. Freedom of movement of goods, services and people is closely connected with development of transit systems, which have an important role for EU countries and other applicant countries in the pre-accession phase before joining the EU. Transit is fundamental to economic activities and it supports enhanced connection of European businesses.

Box 5: EU Customs facts

- EU – 28 Member States (+ 6 Candidate countries in 2015)
- EU Single customs territory / *multiple fiscal territories*)
- 28 national Customs administrations
- EU Customs legislation
 - Community Customs Code (Union Customs Code from 01.05.2016)
 - Implementing regulation
 - Common Customs Tariff
- No customs duties on EU internal trade;
- Free circulation of goods within the EU Customs territory,
No customs control on internal borders between member states

There are several transit systems within the European Union: Common and Community transit, TIR Convention transit, ATA Convention transit, Rhine manifest transit, NATO movements and movements of post and postal parcels. Two main European customs transit systems are the Community and Common transit system. TIR transit is also an important international transit instrument commonly used in Europe; however TIR carnets are still paper documents despite the attempts for computerization and the on-going e-TIR initiative. Therefore, this training is focused on the paperless transit solutions available in the Common transit system.

The **Community transit system** is applicable for customs transit movement of goods within EU. The Community transit could be compared with national customs transit because EU represents single customs territory, without customs control at internal borders between member states. The Community transit is based on the Community Customs Code and related implementing regulation. All EU countries apply directly the Customs Code and implementing provisions. Therefore all 28 national customs administrations have to work, as they were one. The European Commission is responsible to propose customs legislation and to monitor its implementation.

The Community transit is generally applicable for customs transit movement of:

- non-Community goods between the EU Member States - for example customs transit movement of goods (e.g. arrived from an Asian country), from a port in one EU country to destination in another EU country (where the goods should be customs cleared; or the goods should exit EU customs territory), and
- Community goods between two points in EU through the territory of a third country - for example transit movement of goods produced (or already customs cleared) in one EU country, through non-EU third country, to another EU country.

Box 6: Types of transit and status of goods in EU

▪ External transit – marked as “T1” transit in customs declarations - for transit of “non-Community goods” (e.g. goods from a country in Asia and Pacific region).

Exclusions where T1 transit is mandatory for the community goods (which normally move under T2 transit) in the case of:

- refunds related to EU Common Agricultural Policy (CAP) or
- customs procedures with repayment or remission of customs duties.

Note: In the case of external T1 transit, customs duties (or other similar dues) for the goods are in stake.

▪ Internal transit – marked as “T2” transit in customs declarations - for transit of “Community goods”.

Note: In the case of the internal T2 transit, goods have been already in free circulation, however customs transit is needed if the movement goes through the territory of third country.

All transit features necessary for implementation of Community transit are detailed in the Community Customs Code and implementing regulation, including:

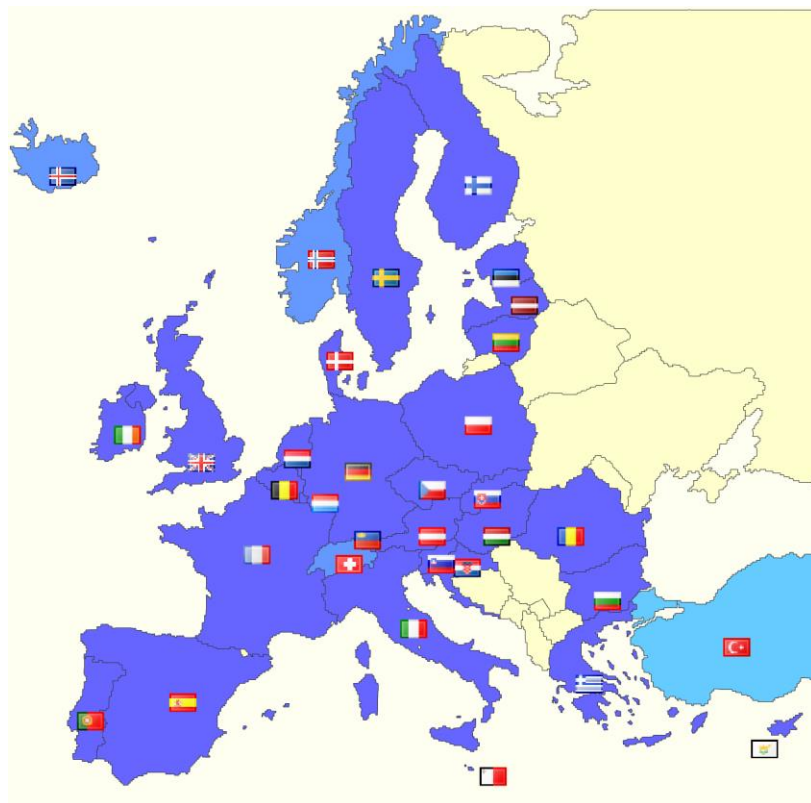
- obligations of the principal in transit,
- customs transit declarations,
- transit guarantee,
- transit procedure and simplifications,
- customs debt in transit and its recovery.

2.2 Key principles of the European common transit procedure

The European common transit offers extension to EU transit systems to the other European countries, which are important EU partners, such as EFTA countries. Historically, many of present EU countries have also joined the Conventions establishing common transit until their accession to EU. All future Contracting Parties are considered as EFTA countries with the meaning of those Conventions. The use of common transit procedure is supporting integration processes and it contributes to harmonization of customs transit legal environment and implementation practices.

The European common transit represents regional transit system that is presently used for the movement of goods between the 28 EU Member States, the EFTA countries (Iceland, Norway, Liechtenstein and Switzerland) and Turkey (*considered as EFTA country with the meaning of Conventions establishing common transit*).

Figure 3: European countries using Community and Common and Community transit



Source: European Commission ■ 28 EU Countries ■ 4 EFTA Countries and Turkey

The Common transit procedure introduces customs transit procedure and transit formalities for the carriage of goods between the Community and the EFTA countries and between the EFTA countries themselves.

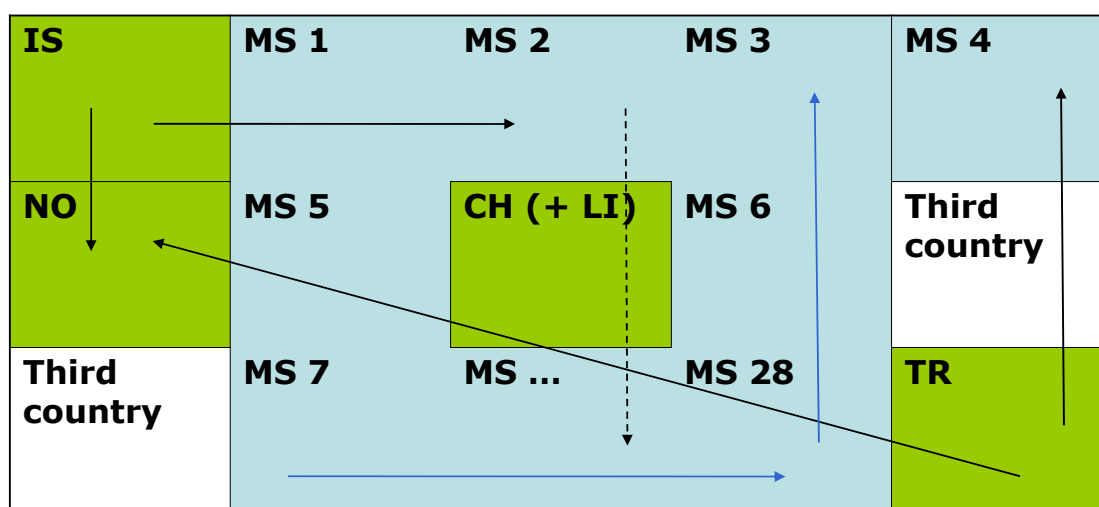
Similar to the Community transit, the common transit also distinguishes between T1 and T2 transit. T1 transit enables transit movement between the Community and EFTA countries, as well as between EFTA countries themselves regardless of the kind and origin of goods. T2 transit is being used only in particular circumstances when Community goods are transported in the Community through the EFTA country where they were brought under T2 transit and remain under the customs control.

Therefore Common transit is generally applicable for customs transit movement of:


- non-Community goods when “T1” transit suspends the measures usually applicable on import in the Contracting Parties - for example customs transit movement of goods (e.g. arrived from an Asian country), from a port in a Contracting Party to destination in another Contracting Party where the goods should be customs cleared;
- Community goods when “T2” transit suspends the measures usually applicable on import in the EFTA country - for example transit movement of goods produced (or already customs cleared) in one EU country, through Switzerland (an EFTA country), to another EU country.


Various scenarios for application of Community or common transit procedure are presented in the figure below.

Figure 4: Scenarios for application of Common and Community transit



Source: European Commission, DGTAXUD

EU goods (free circulation) (common transit procedure T2): 

Non-EU goods (common transit procedure T1): 

Non-EU goods (external Community transit):

The Common transit system is based on the Convention on Common Transit¹ and the SAD Convention.² Common Transit has started as paper based system and the SAD Convention had a very important role in that time introducing fully harmonized customs transit declaration in a form of single administrative documents (SAD).

With the reform on transit systems in Europe (both Community and common transit) and introduction of electronically connected environment, paper based transit declarations have been replaced with electronic declarations, however data requirements remain harmonized generally based on SAD data requirements. Presently as a general rule, a common transit declaration must be made electronically (mandatory since 2007), without presentation of paper-based copy. Submission of a paper based transit declaration (in the form of SAD) could be accepted only in special circumstances as an exception (for example in fall-back procedures if the electronic system is not operational).

Joint Committee that include representatives of the Contracting Parties, usually on the level of general directors of the customs administrations is responsible for administration of the common transit, and takes decisions by consensus. EC/EFTA Working Party chaired by a representative of the European Commission coordinates the work on the Common transit and assists the Joint Committee. Based on the Joint Committee recommendations the Contracting Parties may decide to amend the Convention on common transit or to adopt implementing measures.

The Convention on Common Transit with its annexes provides all procedural details for implementation of the common transit system and it is incorporated in the Community customs legislation. Community transit rules and common transit rules are fully harmonized which enables integration of those transit systems.

Harmonization includes all main transit features necessary for implementation in both transit systems such as:

- obligations of the principal in transit,
- customs transit declarations,
- transit guarantee,
- transit procedure and simplifications,
- customs debt in transit and its recovery.

¹ Convention of 20 May 1987 on a common transit procedure

² Convention of 20 May 1987 on the simplification of formalities in trade in goods

There are only a few specific situations where key transit requirements for Community and common transit differ. One of the main differences between Common and Community transit is the definition of the office of transit as presented in Table 1 below.

Table 1: Definition of the Office of transit

The Office of transit	Common transit	Community transit
Point of entry	- into a Contracting Party	- into the customs territory of the Community when the goods have crossed the territory of a third country in the course of a transit operation,
Point of exit	- from a Contracting Party when the consignment is leaving the customs territory of that Contracting Party in the course of a transit operation via a frontier between that Contracting Party and a third country.	- from the customs territory of the Community when a consignment is leaving that territory in the course of a transit operation via a frontier between a Member State and a third country other than an EFTA country.

Source: European Commission, DGTAXUD Transit Manual

The use of common transit procedure is not mandatory, so the operators may choose between most convenient transit options for them (e.g. Common transit, TIR transit, Community transit combined with national transit in third country; or exports and imports at borders and movement without customs transit). The advantage of the common transit is the fact that the system extends community/national transit systems (with whom the operators are familiar). That is one of the reasons why the common transit is widely applied in Europe connecting the larger economically integrated area.

The common transit system operates in electronically connected environment. Electronic communication between economic operators, national customs offices and customs administrations support common transit procedures, providing paperless transit solutions. Fully developed European transit systems (Community and common) have proved to be attractive for the transporters.

Box 7: EU transit in numbers

- Total of 17 million transit customs declarations processed in 2012
- Distribution of number of transit documents (*in 2003*)*
 - Community transit – 64%
 - Common transit – 21%
 - TIR transit – 15%

(* due to enlargement of EU it could be expected that the parts of Common and TIR transit have been reduced)

2.3 New computerized transit system (NCTS)

The European transit systems are managed with the New Computerised Transit System (NCTS), which offers some of the most advanced paperless transit solutions regionally implemented.

Development of the NCTS is a product of the transit reform in Europe, and it was backed up by ICT progress. The transit reform has addressed challenges of a changed economic and political environment in Europe due to the introduction of single market, the fall of ‘iron curtain’, and enhanced political and economic relations with the countries in central and Eastern Europe. This reform has also provided opportunities to overcome weaknesses of paper-based Community and common transit systems, detected in the early 1990s.

Box 8: Weaknesses of paper based Common and Community transit, in early 1990s

- The paper-based system turned out not to be fraud-proof;
- There was a growing lack of clarity in procedures and an increasing lack of parallelism between the two systems;
- The incapacity of the systems to deal with specific situations, which meant the risks grew higher and reliability decreased;
- The administrations were incapable of complying with the regulations in force, as administrative communication and cooperation were insufficient.

Source: European Communities, 2001, New Customs Transit Systems for Europe

The NCTS began as a pilot project in several EU countries and started with implementation in 2001. This new computerized system was progressively extended to all customs offices in all countries included in the European transit systems. The pioneering experience of NCTS has also supported development of other pan-European computerized systems.

Box 9: Main Objectives of the NCTS

- To increase the efficiency and effectiveness of transit procedures;
- To improve both the prevention and detection of fraud;
- To accelerate transactions carried out under a transit procedure and to offer security for them.

Source: European Commission, Transit Manual

The NCTS is applicable to the European Community and other Contracting Parties to the Convention on Common Transit. This system represents a tool for management and control of the transit systems including the Community transit and common transit and it provides a harmonized operating environment. TIR Transit is also managed by the NCTS/TIR system, which contributes to the computerization of this paper-based system.

The NCTS supported transformation of Community and common transit from a paper based transit to transit based on electronic information exchanges and greatly promoted paperless transit solutions. One of the main requirements of the system is to establish effective procedures for electronic exchange of data.

The NCTS and Common transit procedure upgrade the transit solutions in Europe and enable efficient and modernized regional transit. Application of the Common transit procedures is characterized with:

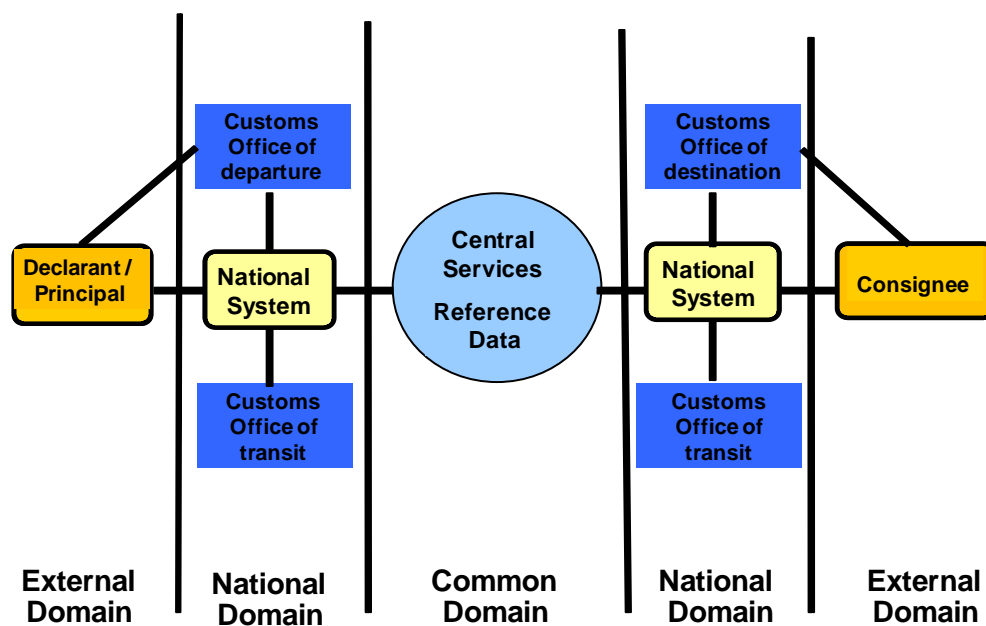
- Electronically connected economic operators, national customs offices and customs administrations;
- Single electronic customs transit declaration and electronic processing of the declaration;
- Exchange of electronic messages with respect to each step of customs transit procedure, including pre-arrival information automatically distributed from customs office of departure to customs offices of transit and customs office of destination;
- Printed transit accompanying document with bar code included, which provides easily readable information on customs transit operation in question;
- Simplifications of regular customs transit procedures with authorizations for compliant traders;
- Integrated customs information systems and guarantee management systems;
- Various options for single guarantee and automatic control of the guarantee;
- Automated termination and discharge of the customs transit procedure, and quick release of the guarantee.

Application of the Common transit procedure requires using electronic messages including electronic customs transit declaration by means of data processing techniques. Use of the electronic data processing techniques for transit formalities during Common transit procedure through NCTS is laid down as a standard procedure (the use of paper based transit declaration in the NCTS, is allowed only in exceptional circumstances).

The electronic message exchange takes place at three domains of responsibility:

- External domain: for interconnection between economic operators (e.g. declarant, principal, consignor, consignee) and the national customs administration; under sole responsibility of that administration;
- National domain: for interconnection between customs offices of one country; under sole responsibility of the national customs administration; and
- Common domain: for interconnection amongst national customs administrations themselves and the European Commission; under shared responsibility of national customs administrations and the European Commission.

Figure 5: Architecture of NCTS



Source: Authors' adaptation from UNECE Informal document No.6 (2001), Technological Approaches and Solutions, NCTS approach, transmitted by the European Community

In the common domain there is not a central NCTS application, but the European Commission operates central services such as monitoring; maintenance of common reference data; coordination and compiling of statistics on the overall system. For the secure exchange of data in the common domain the parties are using the European Community's Common communications network.

Exchange of the electronic messages in the national domain has to be done through national NCTS applications. Each Member State of the European Community and each Contracting Party to the Convention has to set up its own national NCTS infrastructure and organization, including operating national NCTS application.

The national NCTS applications are developed in compliance with the functional and technical documentation elaborated by the European Commission.³ For development of NCTS, application countries can use the Minimal Common Core (MCC) software package provided by the EU Commission. MCC is a modular programme, which provides basic functionality required for the transit procedure processing.

The national NCTS application has to be linked with GMS (Guarantee Management System), which is another modular programme that provides computerized registration and control of transit guarantees. National NCTS applications provide data exchange between NCTS components – (e.g. MCC and GMS), as well as exchanges with other parts of national customs information systems including risk management systems.

In the external domain, national customs administrations authorize access to their national NCTS applications to interested economic operators. Options for the access may vary between the countries, however generally we could distinct:

- Web based access through internet: In this case the access is provided directly on dedicated NCTS websites usually managed by national customs administration or through web-based service provider. Access could be protected with digital certificate, pin or other appropriate method. This access method is not costly and does not require special software. Economic operators with low and medium volume of transit operations could find this method most appropriate for use. This method is relatively more rigid than other methods.
- Access using Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) messaging: In this case the access could be provided with a specialised NCTS software application which uses EDIFACT coded messages for communication with national NCTS application. This method provides improved security, accuracy, and option for integration with internal information systems of the economic operators. Costs for procurement or developing of such software could be substantial and therefore this method might be more appropriate for economic operators with higher volume of transit operations.
- Access using Extensible Mark-up Language (XML) channels: In this case the access is provided with specialised XML web based applications. This method provides fully automated solution with possibility to structure how the message will be transported and how the data will be represented. This method is also more appropriate for economic operators with higher volume of transit operations.

³ Functional Transit System Specification (FTSS) and Design Documentation for National Transit Application (DDNTA)

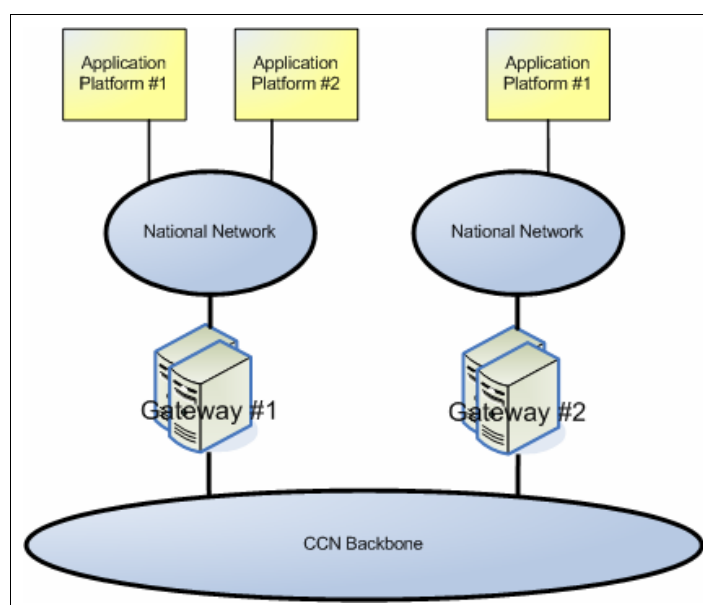
Electronic transit declaration produced by means of a data processing technique could be made by:

- Direct traders input (DTI), when web based access to national NCTS application is provided; or
- Electronic data interchange (EDI), when access to national NCTS application is provided by UN/EDIFACT messaging or XML channels.

All national NCTS applications are connected through Common Communications Network/Common Systems Interface (CCN/CSI). To connect national NCTS applications, high security standardized methods are being used. National NCTS applications in each country could exchange data with information systems of the European Commission, and other national NCTS applications via the CCN/CSI gateway.

CCN is a fully private network, composed of a series of physical gateways located either in the national administration or on the Commission premises. CSI is a set of protocols and application programming interfaces allowing exchange of information through the CCN backbone. This distributed middleware ensures the interoperability between the relevant heterogeneous systems.

Figure 6: Connection of national NCTS applications through CCN/CSI

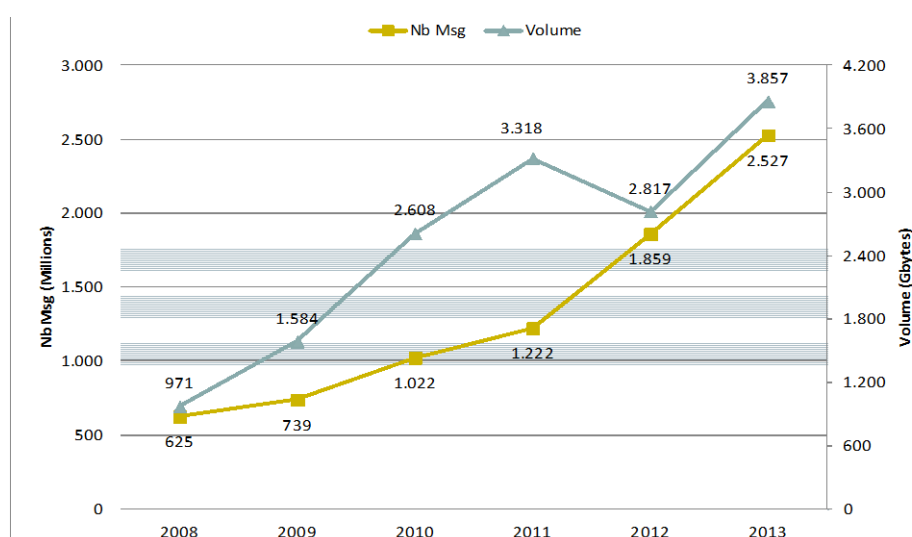


Source: European Commission, DGTAXUD

CCN/CSI is platform independent; it provides autonomy of the national partners and it supports various technologies. CCN/CSI enables the exchange of information between the national administration of the customs/taxation area and covers exchanges from several

information systems. The number of total messages exchanged through this secure and closed European network is rapidly growing, reaching about 2.53 billion exchanges in 2013.

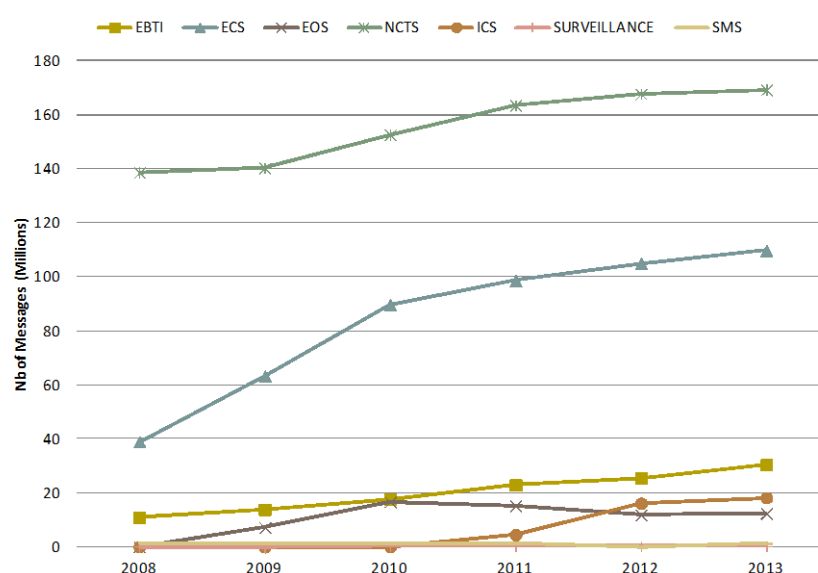
Figure 7: Evolution of total CCN messages quantities and volumes



Source: European Commission, DGTAXUD (2014), 2013 E-Customs progress report

With regard to the customs systems messages, in addition to NCTS, CCN/CSI is being used for exchanges from other customs systems such as: import control system (ICS), export control system (ECS), economic operator's registration and identification system (EORI), customs risk management system (CRMS); European binding tariff information (EBTI). Exchange of NCTS messages represents a substantial part of customs systems exchanges, accounting for almost a half (49%) of system messages exchanged in 2013.

Figure 8: System messages evolution



Source: European Commission, DGTAXUD (2014), 2013 E-Customs progress report

For introduction of NCTS all legal, technical and financial requirements have to be met, including connection to the CCN/CSI. The CCN/CSI is centrally managed by EC. The role of the European Commission and DG TAXUD is to maintain the common network.

The CCN/TC contractor provides CCN/CSI service management, including service desk for the national administrations. Various DG TAXUD contractors provide service delivery and support, ICT infrastructure management, operations management, security management and application development. The CCN/WAN2 contractor provides the private secured IP network services of CCN including their maintenance.

In order to provide connection and functioning of their national NCTS applications national administrations are responsible for:

- providing their computer infrastructure (servers, workstation, network), which is compatibility with the CCN/CSI;
- setting up national helpdesk and providing support for applications;
- integrating NCTS into the existing procedural and organisational framework; and
- training customs staff and traders.

2.4 European transit procedures in practice

The Common transit procedure offers two possibilities for carrying out transit customs formalities:

- Standard (regular) procedure, or
- Simplified procedure.

Traders that have low volume of transit operations or traders that cannot meet conditions to use simplified procedures are the users of regular Common transit procedures.

The electronic transit declaration is based upon the particulars of SAD in accordance with the detailed structure and content defined in the technical specifications provided by national customs authorities. For the supporting documents, that might be necessary for implementation of transit procedure, the customs authorities may provide a possibility for submission of those documents in electronic form or to allow such documents not to be lodged with the electronic customs declaration. For the latter, reference to the documents will be recorded in the transit declaration and the trader will be obliged to keep necessary supporting documents to the customs authorities' disposal.

Rules for the electronic transit declaration and other electronic messages, common data sets and format of the data messages, including electronic transit declaration are defined in various technical specifications. Security of electronic communication and storage of electronic data is addressed with appropriate measures and arrangements.

Box 10: Main Electronic Messages in the Common Transit Procedure

- The electronic transit declaration data (IE015).
- The allocation of movement reference number (MRN), a unique registration number, given by the national NCTS system to the transit declaration to identify the movement after acceptance of transit declaration (IE028).
- The 'anticipated arrival record' (AAR) message, sent by the office of departure to the declared office of destination (IE001).
- The 'anticipated transit record' (ATR) message, sent by the office of departure to the declared office(s) of transit to notify the anticipated border passage of a consignment (IE050).
- The 'release for transit' message, sent by the office of departure after having checked the consignment to confirm that the transit movement can actually start (IE029).
- The 'arrival advice' message, sent by the office of destination to the office of departure when the goods arrive (IE006).
- The 'control results' message, sent by the office of destination to the office of departure after the goods have been checked, where necessary (IE018).
- The 'guarantee use' message, sent by the customs office of departure to customs office of guarantee (IE203).
- The "guarantee use result" message sent as reply by customs office of guarantee to customs office of departure after automated control of the guarantee (IE205).
- The "guarantee use cancellation" sent after termination of customs transit procedure, which will enable automated release of guarantee, once the customs procedure is discharged (IE204).

Source: European Commission, DG TAXUD, Transit Manual.

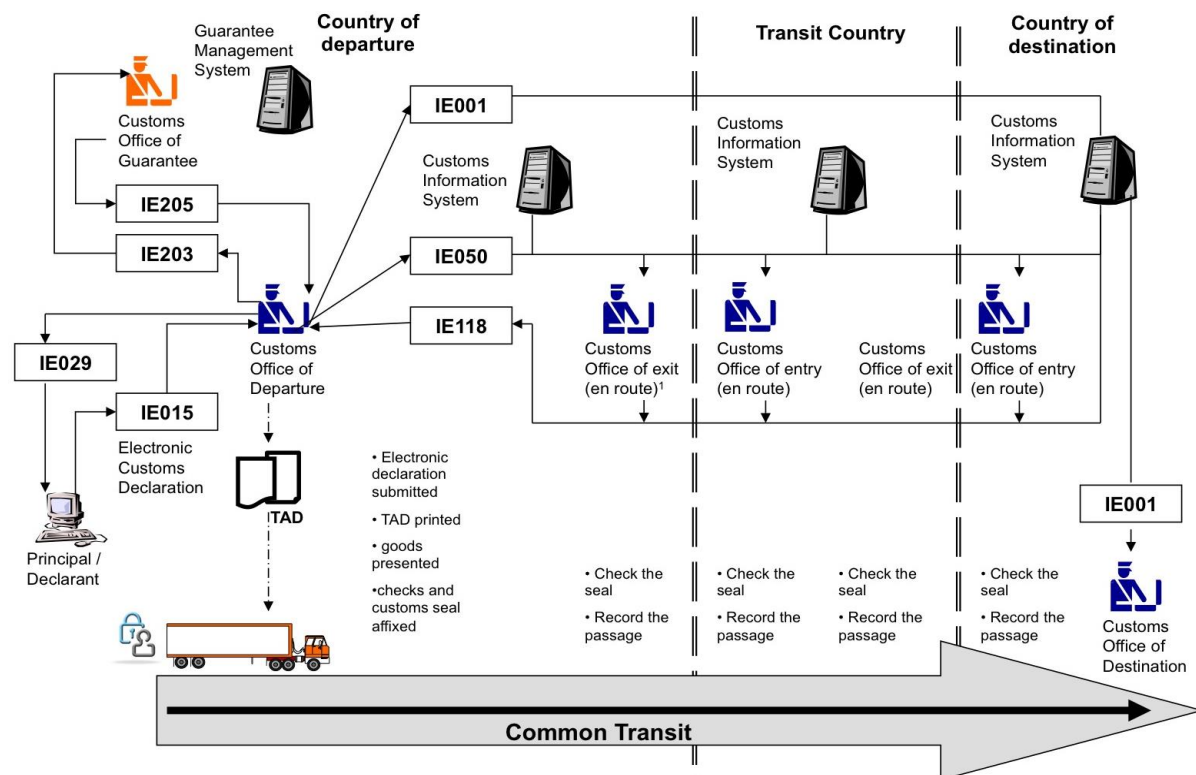
Regular procedures

The regular procedure starts at the customs office of departure where the electronic transit declaration is submitted (IE015) and the goods and transport means should be presented. It may be noted that the electronic transit declaration should be lodged by principal or by authorized representative who makes the electronic declaration on behalf of the principal. The principal has a responsibility to provide a guarantee for the transit operation. In this case the customs office of departure is responsible for taking identification measures, and as a general rule that is done with sealing the means of transport and containers with customs seal.

Following the "release for transit" message (IE029) the Transit Accompanying Document (TAD) based on transit declaration will be printed by the customs NCTS application. The form and the content of the TAD are specified with the Convention for Common Transit Procedures.

Figure 9: Common Transit Procedure

(at the Customs Office of Departure and Customs Offices of Transit)



¹ The customs office will act as transit office of exit only if the transit country is a third country (non contracting party)

Source: Author's depiction of information in the text.

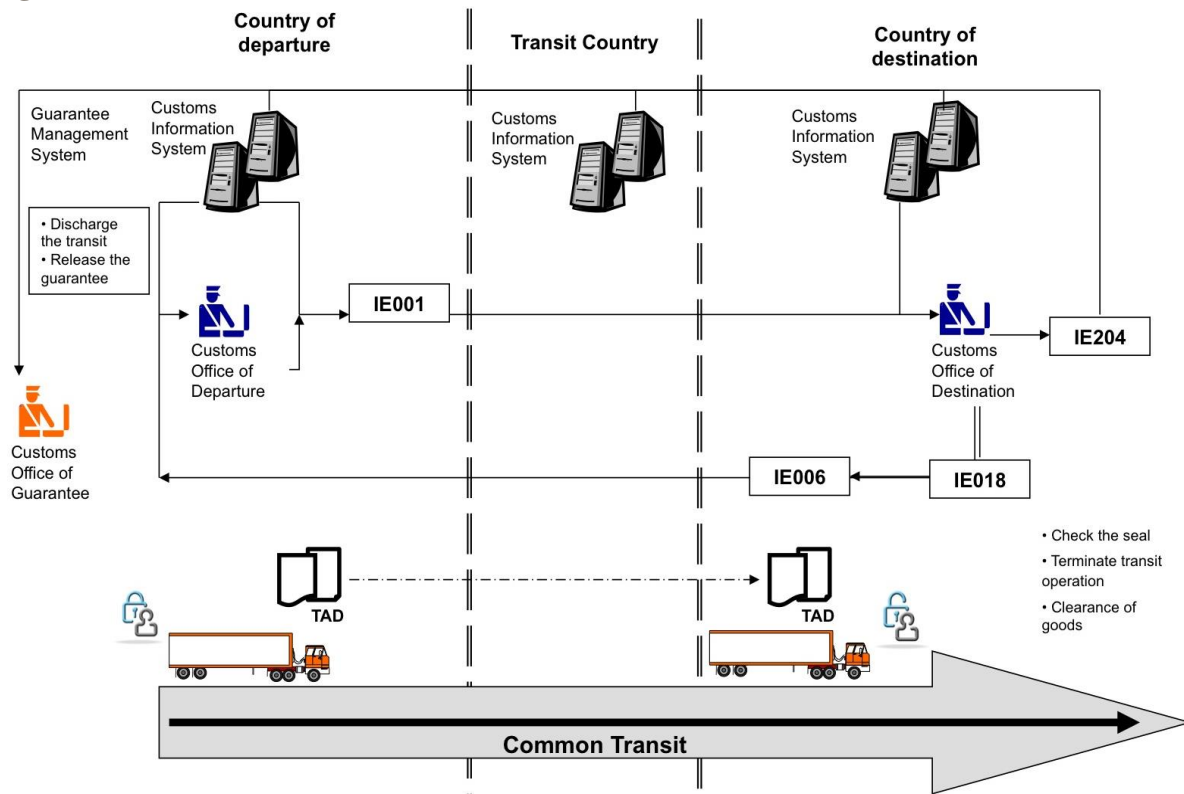
The TAD bears an identification of unique 18 digits movement reference number (MRN), which is also printed in bar code mode. Where necessary a list of items is printed by the computer system and attached to the TAD. During the transit movement the TAD has to accompany the goods under the Common transit procedure.

The national NCTS application at the customs office of departure automatically sends messages with relevant information on the transit operation to all indicated customs offices of transit and to the customs office of destination. At the external land border crossings of the Contracting Parties of the Convention on Common Transit Procedure, the consignment and the TAD shall be presented at each of the customs offices of transit.

The office of transit, which has already received pre-arrival "anticipated transit record" message (IE050) from the office of departure, shall record the passage of the consignment in the national NCTS application. Customs seals and customs controls are mutually recognized by all Contracting Parties, however where necessary the customs offices of transit may examine the goods and inspect transport means. After completion of necessary controls, the customs office of transit shall notify the customs office of departure for crossing the frontier with relevant message (IE118).

Transport operation ends at the customs office of destination where the goods and other required documents are presented. The customs office of destination, which already has received "anticipated arrival record" message (IE001) from the office of departure, shall notify back the arrival of the goods with "arrival advice" message (IE006). This notification is done on a same day when the goods and the transport means are presented.

Figure 10: Common Transit Procedure (at the Customs Office of Destination)



Source: Author's depiction of information in the text.

After completion of any necessary controls, the customs office of destination sends to the customs office of departure the "control results" message (IE018). This message includes any additional information introduced during the transport (e.g. transshipment, new seals or accidents).

The customs authorities discharge the Common transit procedure when they compare data available to the office of departure and those available to the office of destination, and confirm that the procedure has ended correctly. NCTS applications usually provide automated termination and discharge of customs transit procedure. Enquiry procedure in order to obtain the information needed to discharge common transit procedure will start if customs office of departure does not receive the "arrival advice" message or "control results" message from the office of destination.

International transit between the Contracting Parties may be carried out across third countries. In that case Common transit procedure may be applied only if the carriage across the third countries is covered with a single transport document (e.g. CMR) drawn up in the territory of a Contracting Party. In such case the transit operation under Common transit procedure could start at the customs office of departure, it will be suspended at the customs office of exit and through the territories of the third countries and it will resume in the transit office of entry in the customs territory of a Contracting Party.

Simplified procedures

Simplifications of regular procedure are another area, which makes common transit attractive to traders. Different types of simplifications are laid down in the Convention on Common Transit Procedure, which provide transit facilitation to the compliant traders.

Box 11: Simplifications in Common Transit Procedure

- Use of a comprehensive guarantee or guarantee waiver;
- Use of seals of a special type;
- Exemption from the requirement to use a prescribed itinerary;
- Authorised consignor status;
- Authorised consignee status;
- Procedures specific to certain modes of transport:
 - goods carried by rail or large container;
 - goods carried by air;
 - goods moved by pipeline;
- Simplified procedures introduced among the countries based on bilateral or multilateral agreements.

Source: Title III – Simplifications to Appendix I of Convention on common transit procedure of 20 May 1987

All simplifications are subject of authorization granted by the customs authorities. General conditions for authorization include requirement to:

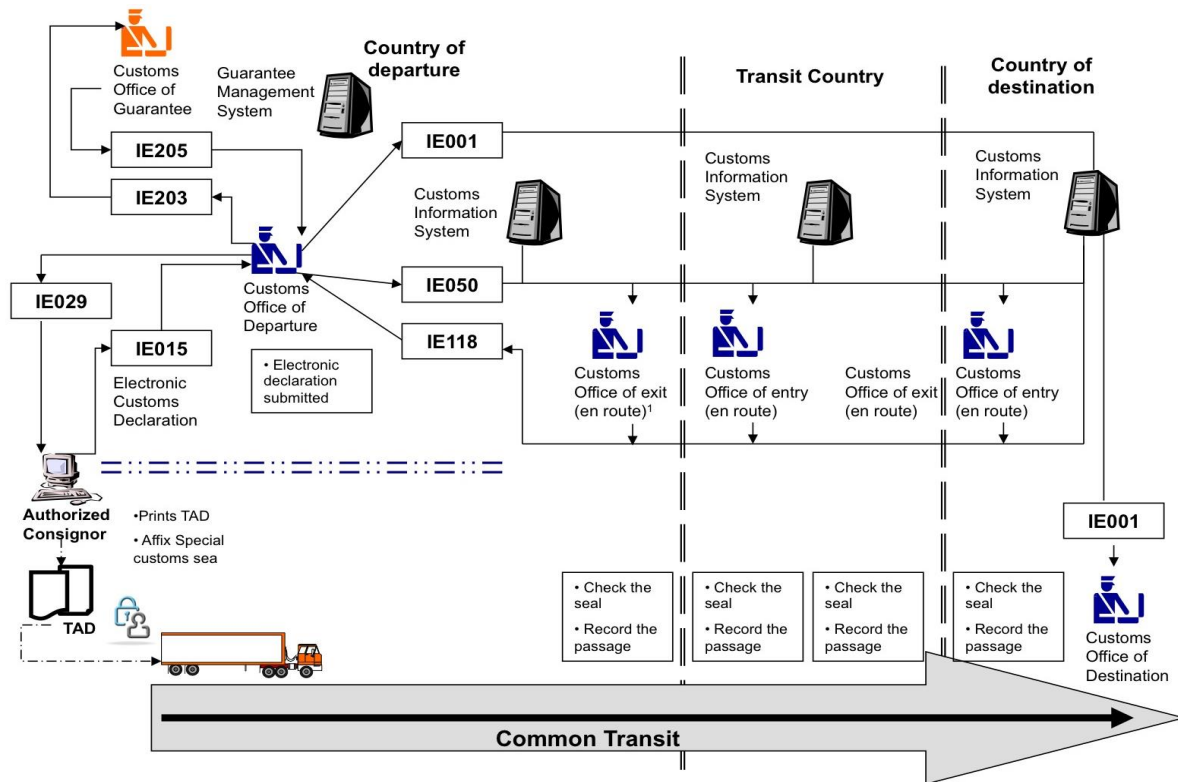
- be established in a Contracting Party of the Convention where activities of the applicant could be traced and controlled by customs authorities;
- regularly use the Common transit arrangements;
- prove compliance without having any serious or repeated offences against customs or tax legislation committed,
- keep records which enable the customs authorities to carry out effective controls.

Authorized consignor

Simplified procedure with authorized consignor status enables start of Common transit operation without presenting the goods at the customs office of departure. The authorisation for this simplification specifies the office responsible to supervise and control the start of transit operations under the authorization. Authorized consignors will have to prepare the goods for the beginning of transit operations at his premises and to submit an electronic transit declaration (IE015) to the designated customs office of departure.

A time limit has to be set for the authorization, defining the period after lodging of the transit declaration, for waiting before the release of the goods in transit procedure. This time period should allow the customs authorities to take actions for checking the consignment, if necessary. Within this time period customs authorities can perform the checks at the authorized consignor's premises or to notify the authorized consignor about the further course of actions for carrying out the checks.

Figure 11: Common Transit Procedure (Authorized Consignor)



¹ The customs office will act as transit office of exit only if the transit country is a third country (non contracting party)

Source: Author's depiction of information in the text.

An authorized consignor has to be authorized to affix special seals without presence of customs authorities. After receipt of the message that the goods are "released for transit" (IE029) from the office of departure, the authorised consignor can print out TAD from his own computer system.

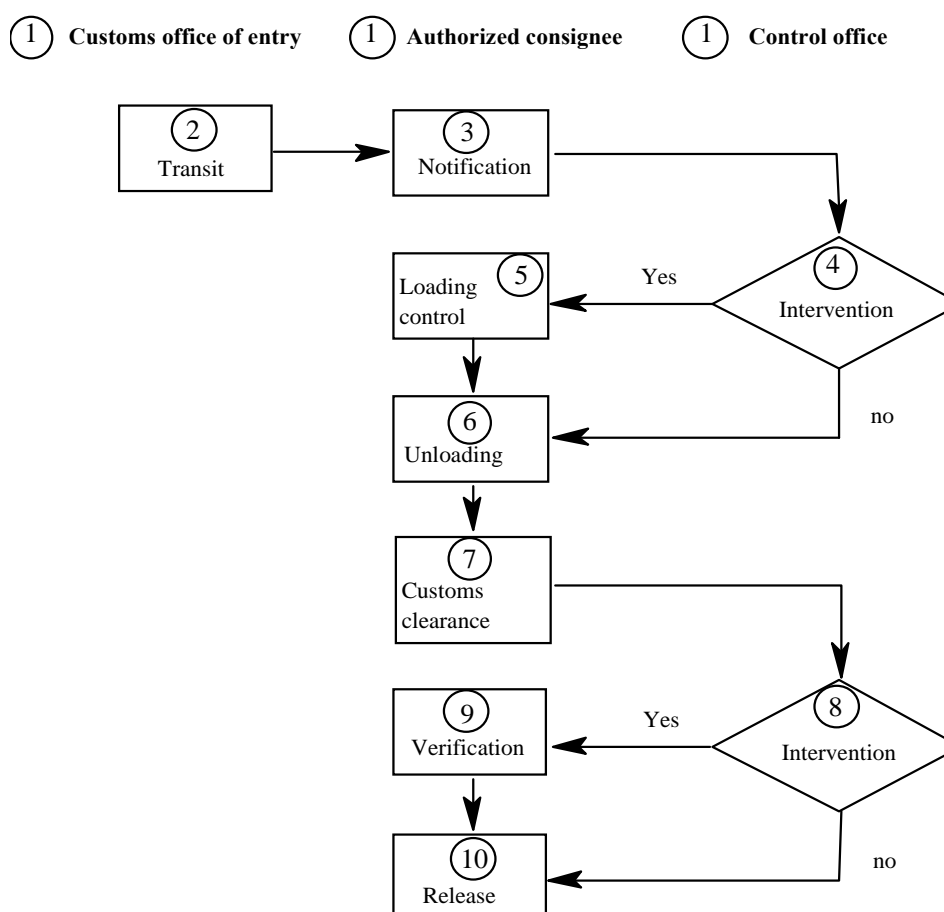
Authorized consignee

Simplified procedure with authorized consignee status enables receiving of goods under Common transit procedure at the premises of authorized persons or at any other specified place without presenting the goods at the office of destination.

The authorized consignee is obliged to notify the customs office of destination, designated for customs control, and the customs will have the opportunity to decide if any intervention is necessary. Authorized consignee simplification accompanied with simplified import clearance, authorize the economic operator to use local clearance procedures and release the goods for free circulation at its premises.

This procedure is accompanied again with notification to the control customs office, which may decide to intervene. If customs does not plan to do any control, the authorized consignee is allowed to carry out some of tasks usually performed by the office of destination, such as removing the customs seal.

Figure 12: Example of authorized consignee processes



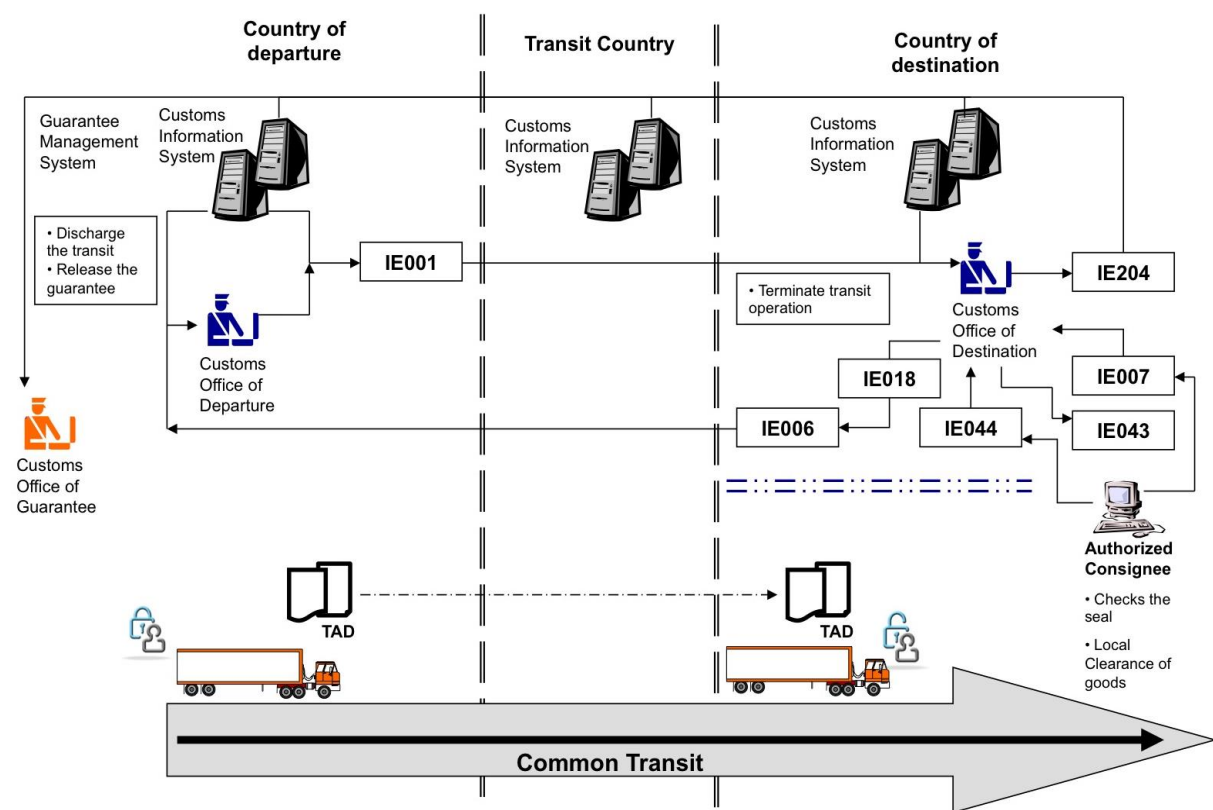
Source: WCO, Kyoto Convention: Guidelines to Specific Annex E
(Chapter 1 - Customs Transit – Appendix I – Methods of Application – Switzerland)

When the goods arrive at the premises specified in the authorisation, the authorised consignee immediately informs the responsible office of destination by the "arrival notification" message (IE007) and wait for the agreed time limit or until the "unloading permission" message (IE043) is received.

When necessary, the customs office may inform the authorized consignee that intends to check the goods or carry out a physical inspection and take appropriate actions for that. After the agreed time limit has passed and the unloading of the goods is approved, the authorized consignee may remove customs seals and unload the goods (authorization for temporary storage may be required). The authorized consignee shall send "unloading remarks" message (IE044) and report any differences to the office of destination, in accordance with the procedure laid down in the authorisation.

Obligations of the principal under common transit procedure are fulfilled and the transport operation deemed to have ended, when the TAD together with the intact customs seals and goods are delivered within the prescribed period to the authorised consignee. The authorized consignee is obliged to send to the office of destination a copy of the TAD. The office of destination is responsible to introduce the "control results" message (IE018) in the NCTS system.

Figure 13: Common Transit Procedure (Authorized Consignee)



Source: Author's depiction of information in the text.

2.5 Advantages of European transit systems

The European transit systems with their paperless solutions, have introduced significant improvements of transit formalities and they provide considerable benefits to its users with respect to time and costs savings related to transport operations. The Common transit system and NCTS almost eliminates direct contacts between customs authorities and freight forwarders, customs agents and customs brokers due to computerization and electronic exchange of messages.

Table 2: Advantages of NCTS for trade and customs

Advantages of the NCTS for trade

- Improved quality of service:
 - Less time spent waiting at customs,
 - Greater flexibility in presenting declarations;
 - Earlier discharge of the transit procedure / faster release of the guarantee;
 - Reduced high costs, in relation with the addressed inefficiency of paper-based system (e.g. lengthy procedures involving much time and effort);
 - A greater clarity of the transit operation, for the benefit of trade;
 - Time savings at the office of destination because customs will have decided well in advance of the arrival of the goods whether to check the consignment;
 - Authorised consignors linked to the NCTS system no longer have to carry out the cumbersome formalities that are necessary in a paper-based environment;
-

Advantages of the NCTS for customs

- Improved communication and coordination between the customs administrations;
 - Reduction of repetitive activities;
 - Time savings and eliminated risks from duplication of information;
 - Faster processing of data, due to creation of more coherent and flexible system;
 - Harmonisation of operating criteria and reduction of divergent interpretations on implementation;
 - Greater security and a higher tempo in managing transit;
 - More reliable data and better monitoring of movements.
-

Adapted from WCO, Kyoto Convention: Guidelines to Specific Annex E (Chapter 1 - Customs Transit – Appendix I – Methods of Application – European Community)

The NCTS experience suggests that implementation costs for introduction of the system have reached an approximate amount of €68 million (or around US\$92 million) and 531 man/years, however the operational savings of the customs administrations from the introduced transit improvements are estimated to offer more than a satisfactory return on investment for each participating country, even before taking into consideration the impact of the NCTS on trade as well as on the fight against fraud.⁴

Box 12: Repayment of investments in paperless NCTS

- Productivity gain of 30 minutes for each transit operation with introduction of the NCTS (based on trade community surveys in Europe)
- Estimated €132 million (or around US\$180 million) annual cost savings, (calculated on the basis of productivity gain, average labour costs and number of transit movements.)

Such indications strongly suggest that investment in paperless transit could repay itself and bring additional benefits and savings.

Source: IBRD/WB, 2011, Border Management Modernization, Chapter 15 - Information and communications technology in support of customs unions: a case study of the European Union, Tom Doyle and Frank Janssens

Amount of paper documents in transit procedures has been drastically reduced and simplified (for example in common transit procedure the sole paper based document is TAD printed out from national customs NCTS application or traders computer systems). In that way the unnecessary workload, which is typically associated with paper based documents is significantly reduced.

Regular updates of the system ensure better compliance with the transit related requirements. In general electronic transit systems improve accuracy and reduce possible errors. For example quality of the operations in NCTS in the 2013 is very high and the error rate fluctuates between 0.10 percent and 0.18 percent thanks to the continuous efforts from the national and central project teams.⁵ Reduction of errors from processing of the transit documents also contributes to reduction of unnecessary waiting time for the transport operators.

Efficient management of European transit systems helps national customs administrations to utilize better available human and other resources, which brings fiscal savings and improvements of law enforcement capacity because customs officers could be

⁴ ADE, September 2003, The Community Transit System in the Perspective of Enlargement

⁵ European Commission, DGTAXUD, 2013 E-Customs annual progress report

reassigned from purely administrative duties to risk assessment, customs control and combating fraud tasks. For example with introduction of NCTS important operational cost reductions were achieved (e.g. the Czech customs administration expected that approximately 500 customs officers will be released from operating the transit system and assigned to other tasks).⁶

Questions and discussion topics

1. What are the main differences in EU transit processes and transit practices in your region? (*Unique EU experience vs. the Asia and Pacific regional/sub-regional specifics; use of simplified transit procedures*)
2. Main messages in EU NCTS and their adaptation to cover national/sub-regional specifics.
3. The risks to international transit when introducing diverse paperless transit solutions at national / bilateral / multilateral level, without regional coordination. (*Transit data and processes not harmonized, difficulties for data sharing, lack of interoperability, inefficient use of resources and infrastructure, wasted opportunities of the paperless solutions, further complexity for trade (various requirements, interfaces, etc.)*)

Reflecting on this module

This module provides details on European transit systems, and particularly European common transit and NCTS. Describing main features of Common transit and NCTS: such as legal base and procedures as well as ICT and technical requirements, it highlights key principles and reasons for successful design and implementation that have to be taken in consideration in order to benefit from European experience.

The knowledge acquired with this module should help the participants not only to understand better European transit systems, but also to recognise the need for regional cooperation in order to design and implement efficient paperless transit systems. This knowledge will be beneficial to identify and analyse national and regional specifics that have to be addressed when designing and implementing similar paperless transit systems, identifying the risks and measures to mitigate implementation difficulties.

⁶ ADE, September 2003, The Community Transit System in the Perspective of Enlargement

Module 2 - Operational paperless transit systems

Introduction (5 min)

Understanding European transit systems and how to benefit from the European experience when developing and implementing similar systems.

Module objectives (5 min)

- To understand and explain principles and functioning of European transit systems, (particularly European common transit system and NCTS);
- To recognize the key features of European transit systems, that have to be taken in consideration if European experience is being transferred to the region to build similar paperless transit systems;
- To be able to identify national and regional specifics that have to be addressed when designing paperless transit system, particularly those that may lead to implementation difficulties.

Content (105 min)

1. European transit systems - background (10 min)
2. Key principles of the European common transit procedure (10)
3. New Computerized Transit System (NCTS) (45)
4. European transit procedures in practice (30)
5. Advantages of European transit systems (10 min)

Summary (5 min)

Main features of Common transit: legal base, ICT infrastructure, and procedures. Advantages and key reasons for successful design and implementation.

Feedback and Discussion (15 min)

Feedback on this module and discussion on regional specifics in relation to transferring European experience when designing and implementing similar paperless transit system.

Instructor's notes:

Instructor:

Date and time:

Location:

Training methods

- Lecturing and explaining
- Questioning
- Discussion

Training resources

- ESCAP Guide on paperless transit (Module 2, including Module 2 overheads in Annex 4)
- ESCAP Study on paperless transit (Chapter III)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3)
- Additional resources
 - European Communities, (2001), New Customs Transit Systems for Europe
 - European Commission, DG TAXUD, (2010) Transit Manual
 - Convention of 20 May 1987 on a common transit procedure
 - WCO (2014), Transit Handbook
 - IBRD/WB (2011), Border Management Modernization (Chapter 15)

MODULE 3

Guarantee management systems for paperless transit

Introduction

Module objectives

3.1 General principles of transit guarantees

3.2 Types of transit guarantees

3.3 Transit guarantees in paperless transit systems

Reflecting on this module

Module 3 - session plan

MODULE 3 Guarantee management systems for paperless transit

Introduction

Moving the goods under customs transit procedure (within the country or across the country), when applicable customs duties and taxes are not paid, represents a risk that customs authorities have to address. Customs control measures applied (such as customs sealing) are not considered to be sufficient, and customs authorities usually require transit guarantee, to ensure payment of potential duties and taxes.

In paperless transit systems, transit guarantee also has to be dematerialized in some point, and guarantee information has to be exchanged electronically. Electronic exchanges about transit guarantee make guarantee management more reliable and provide prompt information on each step related with the use of the guarantee. This makes guarantee management systems an important component of paperless transit. A well-functioning system for issuing guarantees and guarantee management is crucial for a successful customs transit system.

Module objectives

On completion of this module participants should be able to:

- Understand and explain general principles and types of transit guarantees;
- Identify main requirements of transit guarantees in paperless transit systems (particularly in European transit systems);
- Analyse main challenges related to transit guarantees in paperless transit environment in national and regional context.

3.1 General principles of transit guarantees

Guarantees for customs transit provide security to the customs administration that in case of violations and consequent liability for customs dues during transit, those dues are recoverable. A guarantee usually takes the form of a deposit or a legal obligation (a bond).

A surety to the bond is usually required. “Guarantee” is defined as an undertaking by which the surety assumes obligations towards the customs administration. Providing a security (guarantee) and an efficient guarantee management system are essential requirements of a customs transit.

If the transit procedure is not properly terminated, a guarantee should cover potential claims of customs duties and taxes in the transit country. Main characteristics of guarantees are the form of guarantee, amount of guarantee and its validity.

One of the general principles of transit guarantee is to be limited only to payment of duties and taxes (RKC General Annex, Standard 5.6). This means that transit guarantees usually do not cover other chargeable amounts such as penalties or interest for delayed payment. Guarantees are sometimes limited in relation to value and types of the goods.

The amount of guarantee required could be:

- flat, with determined maximum amount (e.g. sum per transport operation) which customs authorities may claim;
- any amount sufficient to cover full amount of the customs duties and taxes that may become due for transport operation; or
- up to a reference (estimated) amount that shall cover customs duties and taxes that may become due from transport operations.

Flat amount may be set by national legislation or international agreement (e.g. limited maximum amount with TIR Convention \$ 50,000 or € 60,000). Calculation of sufficient amount is done based on corresponding customs tariff and tax rates. Such calculation may be demanding and time consuming which will burden transit procedures.

To simplify determination of the amount of guarantee before each transit operation Customs authorities may apply reference (estimated) amount set by the transit regulation. Calculation on reference (estimated) amount could be done on basis of duties and taxes (paid or liable) during the previous specified time (e.g. one week) and previous number (and estimations on future number) of transport operations carried out. Reference (estimated) amount could be periodically checked and adjusted if necessary.

When simplifications are allowed, the customs authorities may authorize reduction of guarantee amount or guarantee waiver. Such simplifications are usually provided for persons who meet established criteria for higher standards of reliability.

Another important general principle of transit guarantees is requirement to discharge the guarantee without delay, once obligations from customs transit procedure have been fulfilled (RKC General Annex, Standard 5.7). This principle supports reduction of time for discharge of the guarantees, which increases efficient use of the guarantees and reduces the relative costs of the guarantees for multiple uses. Paperless transit systems are able to provide automatic discharge of transit procedure with exchange of electronic messages when the transit procedure ends. That provides possibility for automatic release of guarantee with elimination of any delays related to discharge of guarantees.

3.2 Types of transit guarantees

The guarantee may be:

- national, if it is valid only in one country (national transit guarantee), or
- international if it is covering the payment of customs duty and taxes in several countries (international transit guarantee).

In the case of international transit and moving the goods through several countries it is more efficient to have one regional or international transit guarantee, than having several national transit guarantees (separate guarantee in each of the transit operation countries). Guarantee requirements are not generally harmonized and national provisions of transit countries regulate them. In the case of specific international transit systems, guarantee requirements may be addressed by corresponding international agreements.

The guarantee may also be:

- individual – valid only for a single transit journey, or
- comprehensive (general) guarantee, covering several customs transit movements.

Guarantees are usually issued in form of:

- a bond as a legal obligation accepted by a bank or other financial institution, or
- an insurance by an insurance company or issuing/guaranteeing association reinsured by reliable insurance company.

Other forms of securities such as a cash deposit or other instruments such as mortgage, cession of a claim, savings bank book or entry in the national debt register are not commonly in use or recommended.

3.3 Transit guarantees in paperless transit systems

Management of transit guarantees in national or international transit systems is a crucial requirement for an effective and efficient paperless transit system. Guarantee management system is expected to provide efficient handling of guarantee documents such as:

- registration of guarantee documents and guarantee waivers;
- information exchange between offices on central/regional level (e.g. customs office(s) designated for acceptance of guarantee documents and authorization of applications for reduced amount of guarantee or guarantee waivers) and customs offices involved in customs transit operations;
- control of validity and available amount of guarantee at start of transit operation;

- release of guarantee after the end of transit operation.

Guarantee management system represents important component of overall paperless transit system, which enables significantly improved management of transit guarantees. Even if a transit guarantee itself is not in electronic format, related electronic exchanges between, principal, guarantor and Customs increase efficiency and security of guarantee management and lead to full integration of guarantee management systems and information systems for processing of goods declarations. Such integration further improves efficiency of customs transit and support paperless transit, reducing the number of paper based guarantee related documents.

Guarantee management in European transit systems

In the case of European transit systems, the guarantee requirements (e.g. the form of guarantee) are set with EU regulation (and with the Convention on Common Transit). The Guarantee management system is an integrated component of the national NCTS applications. The management of transit guarantees is organized on national level and includes:

- guarantee office(s) - established in each EU Member State (and Contracting Party of the Convention on Common Transit). The guarantee office is the office where the transit guarantees shall be lodged. The national authorities may decide to establish central/regional guarantee office(s) and/or to empower some customs office to act as guarantee offices (e.g. departure customs offices for individual guarantees);
- guarantors - approved by competent authorities according to the national provisions in force in the country concerned;
- principals - registered for use of guarantees at national guarantee office and provided with access code(s) (PIN code) for the NCTS Guarantee management system;
- transit guarantees - accepted by guarantee office and allocated with guarantee reference number (GRN);
- guarantee certificate(s) - issued by the guarantee office to the principal (when it is relevant depending on the type of the guarantee/simplification);
- NCTS Guarantee management system which provides:
 - verification of transit guarantee (with GRN and principal access code) at the customs office of departure when customs transit declaration is initiated; and
 - control of available guarantee amount (with relevant electronic messages

at start and end of the transit operation).

Effective NCTS guarantee management systems provide exchange of electronic messages between various actors involved: the office of guarantee, guarantors, principals, declarants and customs offices involved in the Community and common transit procedure.

Within the framework of the Community and common transit rules, the national laws determine the legal relationship between the guarantor and the national customs authorities. Regulations on national level detail the general procedures at guarantee offices and they may differ from country to country. For example details on criteria for guarantors to be approved by customs authorities or details on procedures for registration of guarantees (such as the way of communication between guarantor/principal and guarantee office or time limits (e.g. number of days for advance submission of guarantee for registration)).

The guarantee office may refuse to approve the guarantor or to refuse to accept the guarantee if it does not appear certain to ensure payment of any debt liable to be incurred, or up to the maximum amount of the guarantee. The guarantee office may also cancel or revoke transit guarantee/guarantee certificates if the conditions under which they have been accepted/issued are no longer fulfilled.

Responsibilities of Principal and Guarantor

In Community and common transit systems, the principal is responsible to provide a guarantee to cover the amount of customs duties and taxes suspended during the movement of the goods. The cost and the conditions for obtaining the guarantee is a part of private business relationship between principal and the guarantor.

The guarantor undertakes in writing to pay jointly and severally with the principal any potential claim of customs duties and taxes up to the limit of the amount guaranteed. The guarantor should be established in a EU member state, or in the Contracting Party of the Common Transit Convention where the guarantee is furnished.

One important requirement for guarantors is to have the address for service or to appoint an agent in each of the Contracting Parties. The address for service represents the business office registered in accordance with the laws of that country, where the customs authorities can conduct all formalities relating to the guarantor in legally binding form. In this way written communications from customs authorities to the guarantor (e.g. notification for transit operation not discharged) can be delivered and legal actions can proceed in the country where the customs duties and taxes may be claimed in connection with goods under the transit procedure. The requirement for the guarantors to issue guarantees and when necessary to cover claims in other countries, requires harmonized national regulations, which could ensure such financial transactions.

Individual and Comprehensive Guarantee

The guarantee in the Community and common transit can be a cash deposit or an undertaking furnished by a guarantor (e.g. bank or financial institution).

When regular procedures of the Common transit are used, the principal furnishes a guarantee valid only for one single transit operation (an individual guarantee). That guarantee should cover full amount of the potential customs duties and taxes. Individual guarantee issued by the guarantor to the principal may be in the form of a bond or in the form of vouchers for an amount of EUR 7000. The principal shall lodge to the office of departure the guarantee or required number of vouchers to fully cover potential amount of custom duties and taxes.

A comprehensive guarantee is a simplification, which may be granted to the persons who regularly use the Common transit procedures. Such a guarantee provides an option of covering several transport operations for a defined period of time. Authorizations for simplified procedures with authorized consignor and authorized consignee status may be granted solely to persons authorised to use a comprehensive guarantee or a guarantee waiver. The comprehensive guarantee is issued by the guarantor in form of bond, up to a reference amount.

The reference amount is set up by the office of guarantee and estimated as the amount of the customs duties and taxes which may become due in respect of the goods that the principal places under the Common transit procedure during a period of at least one week. Such estimation is made in collaboration with the principal and it is based on the information for goods carried in the past and the approximated intended volume in the future. The calculation is done with the highest rates of customs duties that would be applicable in the country of the office of guarantee if goods of the same kind were imported from a third country and cleared for home use.

Reduction of reference amount and guarantee waiver

When the principal could prove that its finances are sound and that he meets the standards of reliability laid down in the Common Transit Convention, Customs authorities may authorize: reduction of reference amount (to 50% or 30%) or guarantee waiver.

Additional requirements for guarantee waiver include sufficient experience of the Common transit procedure, very close cooperation with the customs authorities and command of the transport operations. The guarantee waiver authorization empowers the principal to use the Common transit procedures without guarantee.

Even in the case of goods involving increased risk (identified with the EU legislation and Convention on Common Transit), there are special provisions, which provide possibility for reduced reference amount (as presented in Table 3 below for sensitive goods involving increased risk (SG)).

Table 3: Requirements for reduction of reference amount and guarantee waiver

<i>Requirements</i>	<i>Reduction % and Waiver</i>		<i>50%</i>		<i>30%</i>		<i>Guarantee Waiver</i>	
	<i>NSG</i>	<i>SG</i>	<i>NSG</i>	<i>SG</i>	<i>NSG</i>	<i>SG</i>	<i>NSG</i>	<i>SG</i>
Sound finances	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sufficient experience of the Common transit procedure	Six months	One year	One year	Two years	Two years	Two years	Two years	
Very close cooperation with the customs authorities	-	Yes	Yes	Yes	Yes	Yes	Yes	
Command of transport operations	-	Yes	-	Yes	Yes	Yes	Yes	
Sufficient financial resources to meet obligations	-	-	-		Yes	Yes	Yes	

Guarantee waiver may not be granted

(NSG – Non sensitive goods; SG – Sensitive goods involving increased risk)

Source: the Convention on Common Transit Procedure

Customs authorities may issue to the principal one or more comprehensive guarantee certificates or guarantee waiver certificates based on the authorization for reduction of reference amount or guarantee waiver.

With the implementation of simplifications related to guarantee reference amount (reductions and guarantee waivers), the level of guarantee requirements is adjusted with the level of actual risk. In this way the principle of introducing incentives for compliant traders is promoted.

In Common transit procedure, the guarantee is in general valid for all Contracting Parties involved in any particular transit operation. However, Contracting Parties may agree among themselves to waive the guarantee for transit operations in the part of their territories, or to decide not to require a guarantee for the part of the operation between the office of departure and the first office of transit.

Electronic exchanges in Guarantee management system

At the time of initiating transit operation, the check in the Guarantee management system involves verification of: Guarantee reference number, access code and available funds to meet the liability of the operation. The liability amount is automatically deducted from the

principal guarantee reference account in Guarantee Management System, and is credited back when the transit movement arrives at the office of destination and it is recorded in NCTS.

When the principal submits an electronic transit declaration he proves with the access code that he is authorized to use the guarantee. At the time of initiating the transit operation the existence and validity of the guarantee is automatically checked using guarantee reference number and access code. This check is completed with automatic exchange of messages between national NCTS application at the customs office of departure and guarantee management system at the office of guarantee (IE203 and IE205). Guarantee management system provides automatic control of the sum of the guarantees in use and information on free amount of the guarantee.

After receiving the control message from the customs office of destination and discharge of the transit operation at the office of departure, the guarantee used for that purpose could be released. This action is also enabled with an automatic exchange of messages between the national NCTS application and the guarantee management system (IE204). When the transit operation is not properly ended and enquiry procedure can not provide information needed to discharge the Common transit procedure, the customs authorities establish whether customs duties and taxes and other charges have become due and identify the person(s) directly liable.

Irregularities and claims of customs duties and taxes for goods in transit

The customs authorities may carry out post-clearance verification of the information and documents related to the Common transit procedure, especially where doubts arise or fraud is suspected; or on the basis of risk analysis; or by random selection. As result of such verification the customs authorities may also detect irregularities that lead to a customs duties and taxes and other charges becoming due in respect of the goods placed under the Common transit procedure. Examples of irregularities include:

- unlawful removal of the goods,
- failure to comply with conditions for the transit procedure;
- failure to fulfil obligations arising from the transit procedure.

The customs authorities claim payment of the customs duties, taxes and other charges from the person(s) directly liable, which will not affect the continuation of guarantor's liability. The customs authorities shall notify the guarantor the first time to inform him that the transit operation has not been discharged and second time to inform him about the claim of the customs duties, taxes and other charges that he is or might be required to pay.

Where necessary and on request, the customs authorities in the countries where the goods have moved under Common transit procedure communicate between themselves all

findings, documents, reports, records of proceedings and information with respect to the transport operations under common transit procedure, including information on irregularities or infringements in connection with such operations. They assist each other in determining which customs authorities are competent for claims of the customs duties, taxes and other charges. They also render each other assistance for the recovery of such claims.

Advantages and disadvantages of Common transit system over TIR system

Present advantages of the Common transit system over TIR system are based on successfully implemented paperless solutions and integration with national/community transit systems. However the Common transit system is very demanding and requires integrated operation of highly developed ICT, and depends on higher level of regional integration with legislative harmonization in the field of customs transit and transit guarantees.

Box 13: TIR Guarantee and eTIR initiative

TIR transit guarantee (paper-based TIR carnet/guarantee):

- valid for all contracting parties
- national issuing/guarantee association authorized by national customs
- payment of claims guaranteed in own country (national and foreign carriers)
- international guarantee chain links all national guarantee associations
- supported by international insurance companies and administered by IRU
- flat and limited with maximum recommended amount (\$ 50,000/ € 60,000)
- straightforward claim procedure

Options for future e-TIR guarantee under on-going eTIR initiative:

- based on original TIR guarantee concept
- holder requests guarantee from guarantee chain, which provides guarantee reference number and registers the issued guarantee with eTIR international system
- information on unique TIR guarantee reference number associated with electronic TIR declaration
- electronic information exchange between holder, national association, eTIR system and Customs authorities.

Advantages of TIR guarantee is in the simplicity and uniformity of the system, which provides easy access to the interested transport operators. The Common transit guarantee system on the other hand might be more complex and demanding to be established, however it has its advantages in providing more customized solutions to the specific needs of the

traders and principals, and unlike TIR System the competition is enabled between various guarantors, which could reduce overall costs.

Box 14: The Cost of transit guarantee

The guarantees are financial products and their price may vary depending on national financial regulation, access to guarantees, market liberalization and competition. The form and the type of the guarantee could contribute to the variation of the price, as well as guarantors risk coverage policies.

Cost of the guarantees increases with higher risk as result of unclear transit procedures and imperfections of customs transit systems. Efficient transit systems (such as paperless transit systems) reduce the risk for the transit operations and consequently lower the cost of the guarantees.

To issue internationally recognized guarantees, the guarantors need clear and harmonized rules, strong regional presence, knowledge and trust in regionally integrated economic areas. If these conditions are not fulfilled the advantages of having single international guarantee over time consuming procurement of multiple national guarantees at each border crossing could be diminished.

Paperless transit could reduce relative costs of the guarantee for multiple uses (e.g. comprehensive guarantee) because the time for discharge of transit operations is shorter and the guarantee is released faster, so the holder could use such guarantee more efficiently.

The guarantees for single use (e.g. TIR Carnet) are not affected in a similar way and they may be more expensive. However, a cost for the TIR Carnet, based on a chain of national guarantee associations, is on average priced at 0.2 per cent of customs duties and taxes or 0.1 per cent of the value of the goods, and it is often cheaper than providing a national guarantee in each transit country.*

An example of national transit guarantee in Ghana shows that the State Insurance Company is responsible for issuing the transit guarantee and guarantee fee is 0.5 per cent of the duties and taxes in risk. Guarantee reform in Ghana' reduced the cost of guarantee (changing the formula for calculation of guarantee from percentage of value to percentage of duties and taxes in risk); and improved guarantee management connecting State Insurance Company and Customs information systems.**

Source: * IBRD/WB, 2011, Border Management Modernization, Chapter 17 – Transit regimes, Jean-Francois Arvis

** WCO, 2014, Transit Handbook

Questions and discussion topics

1. What are the challenges for introduction of transit guarantee in the paperless transit environment at national level in your country?
2. The role of guarantee costs in paperless transit systems.

3. Challenges to replicate European Common Transit and TIR Transit international guarantee in the region. (*Note: examples of GMS Cross-Border Transport Agreement (GMS-CBTA), Common Market for Eastern and Southern Africa (COMESA), and the Southern African Development Community (SADC) customs transit systems.*)

4. Regional innovative solutions for transit guarantee in international transit (in paperless transit environment).

Reflecting on this module

This module explains general principles and types of transit guarantee. Paperless transit systems do not necessarily require paperless transit guarantee, however it is essential to have an efficient guarantee management system for implementation of paperless transit system. Guarantees in European transit systems, managed with NCTS and national guarantee management system are example of successfully functioning system. The guarantee management system handles registration and allocation of guarantee reference numbers, verification of validity of the guarantee and available amount. Establishing a similar transit guarantee model as the model of European Common transit could be very demanding and depends on a higher level of regional integration with legislative harmonization in the field of customs transit and transit guarantees.

The knowledge acquired with this module should help the participants to understand main principles of transit guarantees and guarantee management systems in general, as well as the specifics of the guarantee model in European transit systems. This knowledge will be beneficial to analyse the challenges with the introduction of paperless transit systems at national level and to open discussion on regional innovative solutions for transit guarantee in sub-regional/regional transit systems.

Module 3 Guarantee management systems for paperless transit

Introduction (3 min)

The role of transit guarantees in general and in paperless transit systems in particular. Guarantee management systems as an important component of paperless transit systems.

Module objectives (2 min)

- To understand and explain general principles and types of transit guarantees;
- To identify main requirements of transit guarantees in paperless transit systems (particularly in European transit systems)
- To analyse main challenges related to transit guarantees in paperless transit environment in national and regional context

Content (30 min)

1. General principles of transit guarantees (5 min)
2. Types of transit guarantees (5 min)
3. Transit guarantees in paperless transit systems (20 min)

Summary (5 min)

Variety of options for transit guarantees. Paperless transit system depends on efficient system for issuing guarantees and adequate guarantee management.

Feedback and Discussion (5 min)

Feedback on this module and discussion on main challenges for introduction of transit guarantees in paperless environment in national and regional context.

Instructor's notes:

Instructor:

Date and time:

Location:

Training methods

- Lecturing and explaining
- Questioning
- Discussion

Training resources

- ESCAP Guide on paperless transit (Module 3, including Module 3 overheads in Annex 4)
- ESCAP Study on paperless transit (Chapter III)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3)
- Additional resources
 - WCO (2014), Transit Handbook
 - WCO, Revised Kyoto Convention: General Annex E (Chapter 5)

MODULE 4

Risk management systems to support paperless transit

Introduction

Module objectives

4.1 General principles of risk management

4.2 Risk management process in paperless transit environment

4.3 Developing efficient risk management for paperless transit

Reflecting on this module

Module 4 - session plan

MODULE 4 Risk management systems to support paperless transit

Introduction

Using risk management in the application of customs controls, and using risk analysis to determine which goods and transports should be examined by customs, are standards established by WCO Revised Kyoto Convention, which are applicable for transit as well. Risk management provides the opportunity for the customs authorities to deal with increased transit flows, while keeping appropriate control of high-risk consignments. Compliant traders and transporters will benefit from risk management, with faster and streamlined transit clearance where the need for extensive customs control measures is minimized. Paperless transit is reducing the level of risk in transit and it is supporting efficient risk management.

Module objectives

On completion of this module participants should be able to:

- Understand and explain general principles of risk management
- Comprehend risk management process in paperless transit environment
- Identify general threats in transit and risk indicators for risk analysis; analyse risk treatment options for paperless transit
- Recognize the importance of developing an efficient risk management system to support paperless transit

4.1 General principles of risk management

Main objective of customs transit is to enable movement of goods under customs control, from the customs office of departure to customs office of destination, providing that goods will arrive at the customs office of destination in the same state and quantities as they left the customs office of departure.

The risk in transit is the uncertainty of not being able to meet the transit objectives. The goods may not be presented at the customs office of destination at all, or they may be presented differently than originally declared, or in a different state or quantity, pose a threat to revenue, national security, protection of society and the economy. Customs authorities and other border agencies analyse the risks in transit, systematically using all available information, to determine likelihood and consequences from identified risks. Risk assessment enables evaluation and prioritization of identified and analysed transit risks.

Risk management in transit is defined as coordinated actions by Customs to mitigate

the risk. Even though risk management may not be computerized, automated risk management systems increase efficiency of the whole process of risk management and are almost becoming necessary for efficient dealing of risk.

Several international instruments address risk management and establish general principles and standards for its implementation. Revised Kyoto Convention (RKC) standards include:

- use of risk management in customs controls, which includes customs control in transit as well (General Annex, Standard 6.3). Selection for goods and transport means for examination should be based on risk analysis;
- the extent of customs controls proportionate to the level of identified risk. (General Annex, Standard 6.4). In this way facilitation to low-risk legitimate trade and transport may be provided;
- introduction of compliance measurement (to determine the degree to which traders, carriers and goods conform to customs rules and procedures), to support risk management (General Annex, Standard 6.5). Compliance measurement enables identifying the areas of low compliance where the risk analysis should be focused.

Box 15: WCO SAFE Framework of Standards (risk management related standards)

The Customs administration should establish a risk-management system to identify potentially high-risk shipments and automate that system. The system should include a mechanism for validating threat assessments and targeting decisions and identifying best practices. (*Pillar 1, Standard 4*)

Customs should use sophisticated methods to identify and target potentially high-risk cargo, including advance electronic information about cargo; strategic intelligence; automated trade data; anomaly analysis; and the relative security of trader's supply chain. (*Pillar 1, Standard 5*)

The Customs administration should require advance electronic information in time for adequate risk assessment to take place. (*Pillar 1, Standard 6*)

Customs administrations should provide for joint targeting and screening, the use of standardized sets of targeting criteria, and compatible communication and/or information exchange mechanisms; (for future development of a system of mutual recognition of controls). (*Pillar 1, Standard 7*)

The Customs administration should maintain statistical reports that contain performance measures including, but not limited to, the number of shipments reviewed, the subset of high-risk shipments, examinations of high-risk shipments conducted, examinations of high-risk shipments by NII technology, examinations of high-risk shipments by NII and physical means, examinations of high-risk shipments by physical means only, Customs clearance times and positive and negative results. Those reports should be consolidated by the WCO. (*Pillar 1, Standard 8*)

Source: WCO, June 2012, SAFE Framework of standards

The WCO SAFE Framework of standards advocates a common risk-management approach, advance electronic manifest information, inspection of high-risk cargo at port of origin, and enhanced trade facilitation for legitimated trade, which includes greater procedural simplifications for Authorized Economic Operators (AEO).

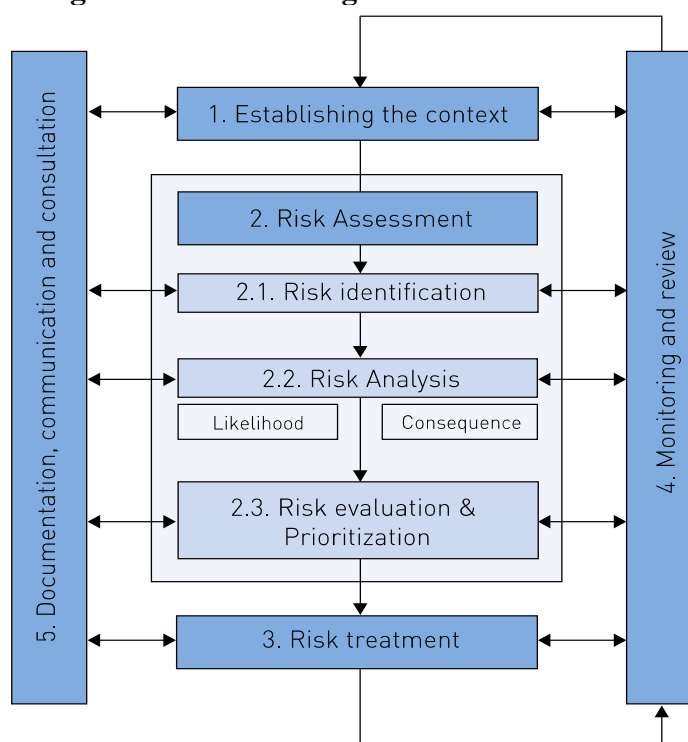
WTO Agreement on Trade Facilitation also addresses risk management (Art.7.4), highlighting the need to design and apply risk management to avoid arbitrary or unjustifiable discrimination. Risk management should be based on an assessment of risk through appropriate selectivity criteria.

4.2 Risk management process in paperless transit environment

The general risk management process has several phases including: establishment of the risk management context; risk identification; risk analysis; risk evaluation and prioritization; risk treatment; and monitoring and reviewing the process through compliance measurement. The process has to be documented, which provides audit trail and supports future cycles of the risk management process. The risk management process presented in Figure 14, applies for transit risk management as well and several transit specifics are highlighted below.

Establishment of the context, in the case of transit risk management, refers to unique strategic and organizational transit aspects of the country. In this phase transit risk areas have to be identified.

Figure 14: Risk Management Process



Source: WCO, 2012, Customs Risk Management Compendium

Objectives of transit (e.g. to enable movement of goods under customs control to the customs office of destination) are setting general context for transit risk management. Transit fraud is the risk area that is usually associated with failure to meet the objectives of transit (e.g. to present goods at the office of destination; or presenting different goods than originally presented and/or different quantities of goods). In such case there is deliberate non-compliance with transit customs control measures (e.g. tampering customs e-seal). Operating environment has to be taken in consideration in this phase.

It has to be pointed out that paperless transit reduce the level of risk compared to paper-based transit systems (e.g. with automatic electronic data exchanges between customs offices, tracing the transit, fast discharge of transit procedure, automatic validation of transit guarantee etc.). In addition to identified risk areas, the criteria against which risk will be established have to be defined.

Risk identification clarifies what, why and how the risks can happen. For example transit fraud can arise from:

- false declaration at customs office of departure (e.g. fake documents of fictitious traders/carriers or false documents);
- false clearance at customs office of destination (e.g. with forged/stolen/illegally used customs stamps);
- false guarantee documents;
- tampering/breaking the customs seals or intrusion of sealed space in order to remove the goods from container/transport means and illegally divert goods into the commerce, with or without substitution of with different goods.

Transit fraud schemes can occur in transit through customs territory; however it could also happen with inward transit (e.g. when the office of destination for intended import clearance is not at the border but inland) or outward transit (e.g. for the goods exported from free zones).

This phase shall include risk identification with regard to:

- participants/stakeholders;
- place, time, and mode for risk occurrence;
- strengths and weakness of the transit system to deal with the risks;
- threats (e.g. to revenue collection, national security, protection of society and economy) and their impact from the transit fraud; and
- reasons that allow opportunities for transit fraud.

Box 16: Paperless transit systems and reduced threats from transit frauds

Paperless transit systems can successfully deal with or reduce some of the threats from transit frauds, for example:

- international paperless transit systems, or systematic exchanges between customs administrations could reduce opportunities for false declarations;
- the threats from false clearance and false guarantee documents could be almost eliminated, because of timely data exchanges between the customs offices.

Information for identifying risk may come from various sources such as: transit declaration processing system, transit guarantee management system, other customs information systems, strategic intelligence, customs officers experience, etc.

A continually updated risk register, which attempts to cover all possible risks, should be the outcome of the risk identification phase.

Risk analysis provides quantification of likelihood and consequence of all identified risks, regardless if they are:

- proven with past records (of the administration or of the administrations in other countries) or
- potential (suspected risks based on adequate risk analysis).

Likelihood of the risk should be ranked (e.g. High, Medium, Low) based on likelihood indicators (e.g. number of occurrences in the country or other countries with whom risk information is exchanged in a specific period of time).

Similarly the consequence of all identified risks may be ranked (e.g. High, Medium, Low) based on consequence indicators (e.g. long-term consequences, serious/limited inability to meet goals and commitment to government, society, economy).

A combination of likelihood and consequence gives an estimated level of risk. With risk analyses process, the risk data has to be compared with other relevant data, and the relevance of the sources of risk considered. Customs administrations use various and multiple risk analysis techniques in this phase.⁷

Estimations of risk level should be done on regular basis, and changes of the estimated level of risk can be expected due to the treatment of risk and preventive measures taken.

Risk evaluation and prioritization provides comparison of estimated risk levels against significance criteria, which are previously established. Having a set of common significance criteria, methods and procedures for evaluation, and prioritization, is minimizing subjectivity in this phase. Significance ranking levels may be simple (e.g. high, medium, and low), or much more complex and more detailed.

⁷ WCO, 2012, Customs Risk Management Compendium, Volume 1, Annex 1, lists risk analysis techniques such as: Bayesian statistics and Bayes nets; Bow tie analysis; Cause-and-consequence analysis; Cause-and-effect analysis; Consequence/probability matrix; Cost/benefit analysis; Decision tree; Environmental risk assessment; Event tree analysis; Failure mode effect analysis; Fault tree analysis; FN curves; Hazard Analysis and Critical Control (HACCP); Hazard and Operability Studies (HAZOP); Human reliability analysis; Layer protection analysis; Markov analysis; Multi-criteria decision analysis; Reliability centered maintenance; Risk; Indices; Root cause analysis; Scenario analysis; Structure “What if?” (SWIFT))

One of the most spread ranking methods use matrixes (tables) where likelihood and consequences intersect, and these intersections represent the level of significance and adequate response criteria to the risk. Then the resources should be deployed to prevent or to respond adequately to the risk.

The outcome of this phase is a continually updated risk register, with included significance level, risk owners responsible for mitigation and monitoring the risk and response criteria. Based on risk evaluation and prioritization Customs authorities should make decisions to respond to some risks or to accept them.

It should be noted that Customs authorities have limited capability and capacity to respond to risks. For example a transit customs office has capacity for physical control of a limited number of trucks in transit per day. Therefore decisions on the scope of response and the response level have to take into consideration such limitation. This may lead to adjusting response criteria to the capacity of the particular customs offices and/or to increase the level of capability and capacity of customs offices when it is necessary to adequately respond to risks.

Figure 15: Risk register example

	Objective	Risks	Likelihood	Consequence	Significance	Risk Owner / (Response criteria)
1	Effective and secure movement of goods under customs transit	1.1 Fraud	M	H	High	Head of Operations (must manage and monitor risks)
		1.2 Ineffective procedures	M	M	Medium	Head of Customs Procedures (management effort worthwhile)
		1.3 Integrity	L	M	Low	Head of Administration (accept but monitor risks)

Source: Modification from examples presented in WCO, 2012, Customs Risk Management Compendium

Paperless transit systems may reduce risk levels, partially for fraud likelihood (as previously elaborated), significantly in regard to ineffectiveness of customs transit procedure, and they could also have a positive impact in regard to integrity. However the consequences of transit fraud still may have high impact, even in the case of paperless transit and therefore customs authorities are expected to take appropriate measures to respond to this risk.

Risk treatment is the next phase of the risk management process when customs authorities choose to accept and tolerate low-priority risks or decide to treat the risk. Tolerating the risk will be very often acceptable in the case of paperless transit.

The risk in this case will be controlled and monitored by standard processes and regular control measures taken, for example:

- use of customs seal and containers/transport means that are suitable for sealing;
- use of transit guarantee;
- automatic confirmation of registered principles;
- automatic validation of transit guarantee and control of its availability;
- automatic discharge of transit guarantee based on exchange of electronic messages;
- monitoring time limits for transit operation and automatic notification if the time limit is extended;
- tracing the transit along several customs offices in several countries in case of international transit systems.

In order to manage the risks, customs authorities sometimes may decide to treat the risk. With the treatment chosen customs authorities intend to reduce likelihood and consequence of risk. Treatment often means having additional control measures, which will reduce the level of risk.

With regard to transit, additional control measures may include physical control of goods and inspection of transit means at the customs office of departure/destination. In the customs offices en route, transit is usually exempted from physical controls however in exceptional circumstances customs authorities may decide to inspect the consignment (e.g. indications that customs seals have been tampered or strong transit fraud indications). Decision to have physical controls is based on findings at customs offices (e.g. status of customs seal), intelligence information, and risk profiles and selectivity.

Risk profiles include a number of risk indicators, for example:

- known principals and their compliance record, type of goods;
- generalized description of goods;
- high duty goods;
- nature of the goods unusual for transit/transit route;
- unusually large quantities of goods;
- unusual transit route;
- unscheduled change of route without sufficient cause.

Computerized risk profiles may be processed with risk management systems. Efficient automated risk management systems are able to:

- support risk analysis;
- process the data collected from various sources, for example:
 - advanced electronic cargo information;
 - customs transit declaration processing systems;
 - intelligence and investigation systems;
 - automated systems for vehicle/container recognition;
 - automated vehicle weight systems, etc.
- apply risk profiles in customs transit declaration processing systems.

With the process of selectivity based on risk profiles the majority of the consignment/customs declarations will be chosen for immediate release without examination. However some may be selected for physical examination.

Efficient risk management could reduce delays in transit process at the initiation of transit. Though there are many reasons for delays at initiation of transit the most apparent is that the Customs authorities follow the same procedure for transit goods as they do for normal imports. The risk parameters (e.g. classification and valuation of goods) need not be as rigorous as they are for normal imports. For reducing delays, transit can be initiated based on the information in the shipping manifest.

Despite all control measures taken at the customs offices of departure and destination (or en route) customs transit is still vulnerable to transit fraud during the movement between the customs offices. Customs escorts as a control measure to address transit risks are being abandoned due to inefficient use of customs resources, increased transit costs and number of implementation issues.

One of the measures to respond to transit fraud risk is by electronic tracking of transit movement with electronic seals. ESCAP Secure Cross Border Transport Model (presented in the last module) is a transport facilitation model, which defines a concept for designing a system for transit electronic tracking cross.

Instead of being focused on transaction by transaction (or transit operation by transit operation), another control approach is to be focused on compliant traders and carriers and to provide simplifications in transit for them. This approach is in line with authorized economic operator approach and authorized consignors/authorized consignees, which have been discussed earlier.

Box 17: General conditions for granting authorized consignor or authorized consignee status in Switzerland

Customs could accept as authorized consignor or consignee any person subject to Customs obligations, provided that:

- they have an appropriate record;
- they regularly send or receive goods;
- their domicile is sufficiently close to the competent Customs office to enable controls to be carried out without generating excessive administrative work;
- they designate premises and/or a room for placing under Customs control the goods for consignment or receipt (the tasks of placing goods under Customs control is assigned to the authorized consignor or authorized consignee);
- their administrative management and user system are organized in such a way that the arrival of a consignment can be checked at any time without fail, from arrival up until removal; by transmitting data the authorized consignor or consignee takes on an obligation to Customs;
- they provide Customs with the necessary infrastructure (writing desk, possibly telephone),
- they furnish a security to guarantee payment of duties and taxes in case of irregularity.

Source: WCO, 2014, Transit Handbook

In the case of paperless transit, to confirm compliant status of authorized consignors/consignees in addition to general conditions for granting the status, it is necessary to fulfil the conditions for electronic data processing and exchange of electronic messages with relevant customs offices.

Specific paperless transit systems may impose additional criteria to determine compliance for authorized consignors/consignees, (e.g. European Common transit requires that authorised consignors have to be authorized to use a comprehensive transit guarantee or granted a guarantee waiver, which entails conformity with additional conditions, as discussed in previous module).

Monitoring and reviewing is important aspect of risk management process and it has to cover all phases of the process. The risks change over the time and treatment measures are changing the operating environment. For example some treatment measures (e.g. introducing electronic vehicle tracking) may change the behaviour of the transporters (e.g. they will not make unnecessary detours and long stops on the transit route). The change of operating environment (e.g. the behaviour of the transports) will have to be taken in consideration in regard to the risk indicators (e.g. unusually long time to take the transit route).

Therefore it is necessary to keep the risk management process updated and continually strive to improve it. In this regard compliance measurement and compliance

management have an important role not only to improve operational selectivity and targeting practices but also to improve the compliance with changing the behaviour of involved stakeholders. Introducing paperless transit systems and implementing ESCAP secure cross border transport model can significantly increase voluntary compliance and reduce the level of risk in the transit domain.

Documentation, communication and consultation are an integral part of the risk management process. Each phase of the process has to be documented and risk registers are key documents in use. To provide that decision-making is accountable and transparent all important steps and elements of the risk management process have to be recorded, for example:

- assumptions;
- methods used;
- data sources;
- logic and analysis;
- results; and
- decisions made and the reasoning behind them.

Communication and consultation with all relevant stakeholders is also necessary for effective risk management.

4.3 Developing efficient risk management for paperless transit

Introducing risk management as overall corporate culture in Customs and other border crossing authorities is a complex and timely process. Many countries are implementing risk management with a phased approach, continually widening the scope of risk management and improving risk management systems. Transit procedures have to be covered and incorporated in overall risk management system. In that sense efficiency of paperless transit systems also depends on integration with efficient risk management systems.

Moving from traditional control methods to controls based on risk management has to be supported with clear risk management strategy and policies that include transit as well. Mandate and commitment from high-level managers is necessary to spread the risk management culture in decision-making processes from high-level to operational levels in various departments and to integrate risk management in organizational processes.

In designing a framework for managing the risk in transit it is very important to have a thorough understanding of the operating environment and to take in account specific factors in the country and in the administrations as well (e.g. overall management and governance structure; types of information and systems in use; procedures and processes and ethics).

Countries may have different organizational approaches in development of risk management system (e.g. risk management committee, a central risk management unit, risk assessment/targeting center), however there are several same general principles of the risk management architecture that could be followed (as presented in the box below). Nevertheless responsibility has to be clearly defined for each step in risk management process. Functions in regard to risk management, of dedicated organizational units and other operational units have to be well elaborated and collaborative environment has to be provided.

Box 18: General Principles of Risk Management Architecture:

- Contribute to the achievement of objectives and improve performance;
- Be tailored and aligned with the administration's external and internal context and role;
- Be an integral part of all organizational processes;
- Be part of all the decision-making processes;
- Be systematic, structured and timely;
- Based on best available information;
- Be transparent and inclusive;
- Be dynamic, iterative and responsive to change;
- Facilitate continual improvement; and
- Take into account human and cultural factors recognizing capabilities, perceptions and intentions of external and internal people that can facilitate or hinder achievement of authority's goals.

Source: WCO, 2011, Customs Risk Management Compendium

Automated risk management systems are a very effective tool for risk management. Such risk management systems use ICT solutions to support analysis of selectivity criteria. National customs databases store different kinds of information that could be used to identify risk areas.

Paperless transit is based on electronic exchanges of transit data and messages related to transit processes. Information provided from paperless transit exchanges is important source for automated risk management systems. Computerized risk profiles database may represent the basis for a selectivity module in paperless transit system. Therefore an automated risk management system could and should be well integrated with computerized paperless transit system in order to provide support for increased efficiency and security of transit procedures.

Customs Risk Management in EU transit systems

EU Customs regulation provides legal bases for risk analysis in transit. Security provisions have introduced obligations to lodge entry summary declarations before the goods are brought into the customs territory of the Community (e.g. at least 1 hour before arrival for road traffic). Based on entry summary declaration data, customs authorities are able to carry out risk assessment by evaluating data against risk criteria. For the goods in transit, the transit customs declaration may be used as entry summary declaration and risk assessment.

The risks in transit in EU are addressed by national customs administrations taking in consideration EU and national threats. A common framework for customs risk management has been established at EU level in order to enable necessary consistency and uniformity. The EU common risk management framework consists of:

- Common risk criteria and standards;
- Exchange of risk information among member states customs authorities;
- Common priority control areas.

Common risk criteria and standards are applied in the national IT risk management systems, which are integrated with national NCTS applications. Exchange of risk information may take part through NCTS channels, as communication on identified risks in automated risk assessment.

EU strategy for customs risk management supports creation of a common repository to enable appropriate and timely sharing of information to ensure effective customs risk management. The EU Customs Risk Management System (CRMS) allows the exchange of risk information between EU member states and between member states and the European Commission. Exchanges of risk related information include risk information forms, positive results of risk-based controls and negative risk-based control results if the threat is considered to be a high risk elsewhere in the EU.

Box 19: Finnish Customs Risk Management

Risk management in Finnish Customs take place within the EU Common Risk Management Framework (CRMF).

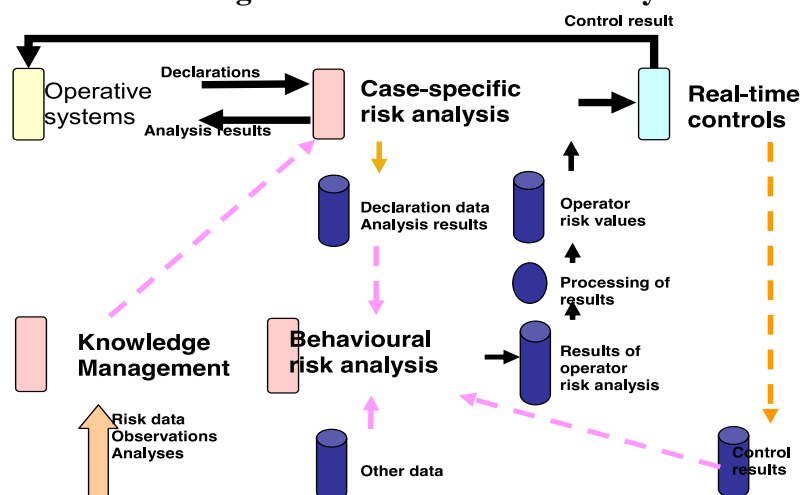
Finnish Customs National Risk Analysis Centre (NRAC) is established to better coordinate operative risk analysis and control functions. The NRAC operates in three locations (Helsinki, Turku and Tornio) in connection with the electronic Customs clearance centres.

The NRAC is responsible for: a) setting risk rules into the risk analysis system; b) issuing directions for risk-based controls; and c) cooperating with other offices (e.g. regional risk analysis groups) and performing various analyses.

Finnish Risk Management and Control System (RITA) system

The RITA system is the main instrument for operative risk analysis in Finnish Customs. Risk management covers the collection of risk data and observations (including directions for risk-based control). The system performs risk analysis by using NCTS data, export data, and data for intelligence and investigation. Further integration of other data systems, such as knowledge management (e.g. data from EU, other member states, other authorities, customs personnel) and behavioural risk analysis (e.g. assessments of the operators) is also intended.

Figure 16: Finnish Risk Management and Control - RITA System



Source: Stefan Aniszewski, June 2011 - WCO Research Paper No. 15 Risk Assessment/Targeting Centre

Reflecting on this module

This module describes general risk management principles and risk management process, highlighting features specific for paperless transit. Understanding general principles and process is necessary for future implementation where the process will be accommodated for the local context and operating environment. Paperless transit systems generally reduce the level of risk, however transit fraud threats remain and have to be managed. One of the options to further level of the risk in transit is introducing electronic goods/vehicle tracking based on ESCAP Secure cross border transport model. Introducing automated risk management system in integration of such system with paperless transit is necessary for increased efficiency and security.

Questions and discussion topics

1. What are the challenges for introduction of risk management in paperless transit environment at national level in your country?
2. What are the technical and/or legal issues and challenges in sharing information to

implement regional risk management system?

Module 4 Risk management systems to support paperless transit

Introduction (3 min)

Risk management as a standard of WCO RKC. General benefits of risk management. The role of risk management systems in paperless transit.

Module objectives (2 min)

- To understand and explain general principles of risk management
- To comprehend risk management process in paperless transit environment
- To Identify general threats in transit and risk indicators for risk analysis; analyse risk treatment options for paperless transit
- Recognize the importance for developing efficient risk management system to support paperless transit

Content (30 min)

1. General principles of risk management (5 min)
2. Risk management process in paperless transit environment (20 min)
3. Developing efficient risk management for paperless transit (5 min)

Summary (5 min)

General risk management principles /process tailored for local implementation. Paperless transit is reducing the level of risk in transit however transit fraud has to be managed. Automated risk management system integrated with paperless transit to support efficiency and security.

Feedback and Discussion (5 min)

Feedback on this module and discussion on main challenges for risk management in paperless transit environment at national level.

Instructor's notes:

Instructor:

Date and time:

Location:

Training methods

- Lecturing and explaining
- Questioning
- Discussion

Training resources

- ESCAP Guide on paperless transit (Module 4, including Module 4 overheads in Annex 4)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3)
- Additional resources
 - WCO (2014), Transit Handbook
 - WCO, (2011), Customs Risk Management Compendium
 - OSCE/UNECE, (2012), Handbook of Best Practices at Border Crossings (Chapter 5)

MODULE 5

Institutional arrangements for paperless transit

Introduction

Module objectives

5.1 Legal requirements for establishing transit systems

5.2 General legal requirements on paperless environment

5.3 Legal requirements for establishing paperless transit

Reflecting on this module

Module 5 - session plan

MODULE 5 Institutional arrangements for paperless transit

Introduction

To introduce paperless transit it is necessary to have legal framework and appropriate institutional arrangements. The legal framework will be different depending on type of the transit (e.g. national or international) and it will be fully covered with national legislation. In the case of international transit some parts of the transit system will be covered with legal framework at international level, and corresponding institutional arrangements (e.g. international conventions; multilateral or bilateral agreements; memorandums of understanding etc.).

To establish paperless transit systems the first condition is to have transit legal framework and then to be able to upgrade the system in paperless environment. Legal framework for paperless environment could be general and applicable for transit as well. Nevertheless it is also necessary to introduce at least minimum legal requirements for paperless transit in the transit legal framework.

The legal framework and the institutional arrangements for paperless transit may be structured in various ways depending on national legislative requirements and negotiations between the countries (in the case of international institutional arrangements). Therefore in this module we will be primarily focused on legal requirements that could be structured accordingly in various forms of institutional arrangements.

Module objectives

On completion of this module participants should be able to:

- Review legal requirements for establishing various types of transit systems
- Understand general legal requirements on paperless environment for transport and trade
- Recognize legal requirements for paperless transit in institutional arrangements

5.1 Legal requirements for establishing transit systems

Regulated transit legal framework is one of the conditions to establish transit system, regardless if it is paperless or not. The institutional arrangements that represent foundation of transit legal framework may be different and vary in their objectives and scope. In the case when legal framework for international transit is not provided, transit movements will be

covered only with national legislation for national customs transit (e.g. transit for exportation or transit for importation).

To provide operational and effective transit system it is often necessary to supplement main international transit legal instruments (e.g. Convention and Statute on Freedom of Transit, General Agreement on Tariffs and Trade, now part of the WTO, Convention on Transit Trade of Landlocked States, United Nations Convention on the Law of the Sea) with international, regional, sub-regional or bilateral agreements that enable sufficient level of regulation for practical implementation of the transit system.

When a legal framework for international transit exists, that framework may differ substantially from case to case, depending on institutional arrangements that are addressing certain transport and transit aspects (e.g. transit rights; road transport permits; technical requirements for vehicles; third-party insurance; temporary admission for vehicles and containers; recognition of driving licenses; etc.) and institutional arrangements that are covering customs transit.

Customs related requirements of transit presented in Module 1 of this Guide (e.g. customs transit formalities; goods declaration of transit; transit guarantee; responsibilities of persons in customs transit procedures; customs control measures, including customs sealing; and simplification of transit procedures) have to be addressed in institutional arrangements on customs transit at national level (e.g. national customs legislation) and when relevant at international level (e.g. international customs transit agreements/protocols).

Transport and transit agreements have different levels of trade facilitation potential. Selected transport and transit agreements in ESCAP region have been analysed, with the intention to identify good practices and alignment with the draft text of the WTO Trade facilitation agreement.⁸ The analysis of selected transit agreements in the ESCAP region show that only a few of them (such as GMS-CBTA) establish paper based customs transit system, however despite the high level of trade facilitation potential in these cases, implementation of international customs transit system face serious challenges.

Transport and transit aspects, as well as international customs transit could be covered with comprehensive institutional arrangements (addressing all transport and transit aspects including customs transit) or specific, only for certain transport and transit aspects or customs transit. Institutional arrangements may vary in their geographical scope and these legal instruments might be global, regional, sub regional, multilateral or bilateral.

⁸ Cousin, Louis and Yann Duval, 2014, Trade facilitation potential of Asian transit agreements in the context of the WTO negotiations, ESCAP Trade and Investment Division, TID Working Paper No. 01/14, 27 January 2014. Bangkok; Available at www.unescap.org/tid/publication/

Large number of diverse agreements addressing transport and transit at various levels, although contributes to transit facilitation, may produce serious implementing challenges as result of divergent and inconsistent practices and complexity of multiple arrangements.

Box 20: Typical Elements of Sub-regional Transport Facilitation Agreements (STFA)

1. Preamble
2. Definitions and Abbreviations
3. Objectives, Strategic Goals, Purposes, Aims, General Provisions
4. Scope, Ambit, Area, Participation, Sectoral Coverage
5. Specific Provisions
 - (a) The Right of Transit
 - (b) Designation of Transit Routes
 - (c) Facilitation of International Road Transport
 - i) Harmonization of Traffic Rules and Regulations, Signs and Signals
 - ii) Harmonization of Technical Requirements for Vehicles
 - iii) Motor Vehicle Third-Party Insurance
 - iv) Mutual Recognition of Driving Licenses
 - v) Road Transport Permits
 - vi) Transit Charges and Other Financial Obligations
 - (d) Facilitation of Border Crossing
 - i) Physical Infrastructure Facilities
 - ii) Harmonization and Simplification of Customs Procedures
 - iii) Temporary Admission
 - iv) Customs transit
 - v) Customs cooperation
 - vi) Immigration control
 - vii) Sanitary and phytosanitary control
 - viii) Police control
 - (e) Financing International Transport/Transit Facilitation
 - (f) Institutional Arrangements, Implementation and Monitoring Mechanisms
 - i) Inter-Governmental Structures
 - ii) National Structures for Implementation and Monitoring
 - iii) Secretariat Support
 - iv) Participation of Non-Governmental Organization
6. Final Provisions

Source: ESCAP, 2007, "Towards a Harmonized Legal Regime on Transport Facilitation in the ESCAP Region"

ESCAP study “Towards a Harmonized Legal Regime on Transport Facilitation in the ESCAP Region” provides support for harmonization of transport and transit facilitation efforts, analyzing typical elements of sub-regional transport facilitation agreements and structure of transport facilitation bilateral agreements. The study provides guidelines for harmonization and possible ways ahead.

5.2 General legal requirements for paperless trade and transport environment

Legal and regulatory framework for replacing paper-based documents with electronic data is usually set at national level with framework legislation that enables paperless environment in trade, transport and customs. Legal requirements on paperless environment set in that general legislation, shall then complement institutional arrangements on transit when they have provisions on paperless solutions included.

The legal framework on paperless environment may refer to legal requirements for

- accessing and sharing of cross-border information;
- validation of electronic documents, recognition and acceptance of electronic signatures;
- mutual recognition of electronic information exchanges;
- data security, data protection, privacy and confidentiality;
- data retention and electronic archiving; data integrity,
- procedures for correction of electronic data and audit trail;
- recognition of electronic evidence in judicial and administrative proceedings; and
- liability for submission of electronic data and disputes settlements.

Several national laws and regulations may cover legal requirements on paperless environment and furthermore these legal requirements shall probably differ from country to country. With regard to the level of coverage, some countries may have fully regulated and very detailed requirements; however in other countries such provisions could be very basic and general. This variety with regard to regulation of paperless environment brings the challenges for identification of jointly acceptable legal requirements.

In the case of cross-border electronic exchanges of data related to transit or in the case of international customs transit systems it is necessary to harmonize the legal requirements on paperless environment in the countries involved. If national legal frameworks are not interoperable the international transit systems will not be able to operate effectively. Several international instruments and recommendations are addressing the issues for providing and harmonizing paperless environment in trade, transport and customs.

Box 21: Recommendations on paperless environment in trade and transport
1. UNCITRAL Recommendation on the legal value of computer records (1985)
2. UNCITRAL Model law on electronic commerce (1996)
3. UNCITRAL Model law on electronic signature (2001)
4. WCO RKC ICT Guidelines (2004)
5. UN ECE Recommendation No. 35: Establishing a legal framework for international trade Single Window; (2010)
6. UN CEFACCT Revision of Recommendation 14: Authentication of Trade Documents, (2014)

United Nations Commission on International Trade Law (UNCITRAL) Model Law on Electronic Commerce provides support for creation and harmonization of legislation that regulates the use of alternatives to paper-based transactions and storage of information. The Model Law establishes the concept of legal effect, validity and enforceability of electronic data messages.

The Model Law also provides criteria for functional-equivalent approach of the concepts of “writing”, “signature” and “original” in the case of data messages. UNCITRAL Model Law on Electronic Signatures extends and clarifies criteria of technical reliability for the equivalence between electronic and hand-written signatures based on non-discrimination, technological neutrality and functional equivalence. The Model Law makes reference to “certification” and “certification provider” that may provide services to support the legal effect of electronic signatures. And it provides legal basis for recognition of foreign certificates and electronic signatures.

WCO Revised Kyoto Convention (RKC) sets the standards for electronic lodgment of goods declaration and supporting documents (Transitional Standards 3.21 and 3.18), advocates use of ICT to the greatest possible extent to enhance customs control (Transitional Standard 6.9) and requires establishing national legislation where electronic commerce methods provide an alternative to paper-based documentary requirements and electronic authentication methods (Standard 7.4).

The RKC ICT Guidelines provide further details on improving services and control capacity of Customs authorities by using ICT technologies.

The RKC ICT Guidelines also identify legal issues that have to be considered in electronic environment such as:

- EDI issues (e.g. formalistic requirements, digital signature);
- acceptance of electronic data;
- security-linked issues (e.g. format and storage of data, authentication, integrity);
- data protection (e.g. restriction of data access);
- confidentiality;
- operational responsibility; and
- fall-back provisions etc.

Implementation of transit under Single window concept can help streamline transit procedures and support introduction of paperless transit. Establishing legal framework for Single window is addressed by ECE (Recommendation 35) and ESCAP.⁹

ESCAP Study on regional arrangements for facilitation of cross-border paperless trade in Asia and the Pacific reviews existing practices of paperless trade and recommends a draft text of regional arrangement/agreement, which will promote creation of paperless trading environment, and support interoperability among paperless trade, transport and customs systems and national single windows.¹⁰

UN CEFAC Revision of Recommendation 14 provides an update of the recommendation taking in account improvements of ICT and corresponding opportunities for authentication of trade documents. The Revision of Recommendation 14 encourages the use of electronic data transfer and recommends review of national and international requirements for signatures on trade documents in order to eliminate the need for paper-based documents by meeting the requirement for manual-ink signatures through authentication methods that can be electronically transmitted.¹¹

This recommendation and related guidelines for implementation detail functions of the signature, methods that can be referred to as an electronic signature and differences between electronic signature and digital signature (when technological choice has been implied – e.g. public key infrastructure (PKI) signature technology).

⁹ ESCAP/UNECE/UNNEXT, 2012, Electronic Single Window Legal Issues: A Capacity-Building Guide

¹⁰ ESCAP, 2013, 'Study on Regional Arrangements for Facilitation of Cross-Border Paperless Trade in Asia and the Pacific'

¹¹ UN/CEFACT, 2014, Revision of Recommendation 14: Authentication of Trade Documents. Accessible at: http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec14/ECE_TRADE_C_CEFAC_2014_6E_Rec14.pdf

It also refers to use of authentication methods, technological neutrality, levels of reliability, typologies of electronic authentication methods, use of third party services, security of data, transmission of data, archiving/retrieval, and creation of legally enabling environment.

Box 22: Legally enabling environment

Recommended checklist for government agencies when reviewing their legal environment

- ✓ Compliance with applicable laws and regulations?
- ✓ Compliance under confidentiality laws?
- ✓ Comprehensive plan to address all issues raised by moving to an electronic system?
- ✓ Consultation with impacted parties, including other relevant offices and agencies?
- ✓ Is any information used in the process required by law or regulation to be in a particular form, paper or otherwise? If part of the process is paper, how will this be satisfied?
- ✓ Is there a legal requirement or an agency need to maintain the information?
And if so, for how long?
- ✓ Is the information of importance to national security, public health or safety, public welfare, the protection of the environment, or other important public purposes?
- ✓ Is there impact to the public if this information is not available? What is the importance of the information to the agency's mission/programs?
- ✓ Is there a revenue impact to the agency?
- ✓ Might the information be needed for use in criminal proceedings or other legal proceedings?

Source: UN/CEFACT, 2014, Revision of Recommendation 14: Authentication of Trade Documents

5.3 Legal requirements for establishing paperless transit transport

Legal requirements for transport and transit aspects and general legal requirements on paperless environment set the background for institutional arrangements that establish paperless transit systems. General legal requirements for the systems that support paperless transit include provisions on:

- legally acceptable electronic transit declaration;
- authentication of electronic transit documents, such as electronic signatures; and
- storage and protection of electronic transit data.

For national transit systems such provisions are usually part of national customs legislation for transit. In the case of international transit systems, which enable connection and exchange of information among several countries, an institutional arrangement between contracting parties shall be necessary to provide legal framework on paperless transit.

Institutional arrangements for European transit systems

In the case of European transit systems, main institutional arrangements with regard to transit are:

- Convention on Common Transit and SAD Convention (for common transit) and
- Community Customs Code and implementing regulation¹² (for community transit)

Several provisions in these institutional arrangements are addressing the transit in paperless environment.

Convention on Common Transit provides that:

- standard transit procedures (T1 or T2) shall be carried using electronic data-processing technique (Art.4.1);
- the rules for defining and governing exchange of messages and common data set; and format of the data messages exchanged, have to be adopted in agreement among Contracting Parties (Art.4.2);
- for information exchange the EU infrastructure is in use (European Community's Common Communications Network/Common Systems Interface (CCN/CSI) with financial participation from EFTA countries (Art.5).

Box 23: Definitions from Convention on Common Transit

"data-processing techniques": the exchange of EDI standard messages with the competent authorities; or the introduction of information required for completion of the formalities concerned; into the data-processing systems of the competent authorities;

"EDI (electronic data interchange)": the electronic transmission of data, structured in accordance with agreed message standards, between two computer systems;

"standard message": a predefined structure recognised for the electronic transmission of data;

Conditions on data-processing techniques are defined such as:

- checking the source of data; protection from accidental or unlawful destruction or accidental loss, alteration or unauthorised access; security arrangements for identification and recording of each input, modification or deletion of data; storage of data (Art. 6) and
- protection of personal data (Art.7).

¹² EU customs regulation ((EEC) No 2913/92 establishing Community Customs Code and implementing regulation (EEC) No 2454/93 as amended

Transit declaration by means of data processing technique is defined in detail, including structure and particulars of the declaration; codes to be used in declaration; structure of information exchange and attributes of data (Appendix III). A reference is made that transit declaration shall contain an electronic signature.

Community Customs Code and implementing regulation (IR) are harmonized with provisions from Convention on Common transit. EU customs regulation defines that:

- formalities under Community transit procedure should be carried out by an electronic data processing technique (IR Art. 344a);
- conditions for carrying out formalities by a data-processing technique include measures for checking the source of data and for protecting data against the risk of unauthorized access, loss, alteration or destruction (IR Art. 4a);
- the customs authorities shall determine the rules for replacement of the handwritten signature by another technique (Art 4b).

New EU Union Customs Code¹³ expected to be applicable on 1st May 2016 and to replace present Community Customs Code. The new customs regulation has objective to complete the shift to a paperless and fully electronic environment.

Convention on common transit and EU customs regulations do not provide details on electronic signatures, however specified conditions (e.g. protection against, unauthorized access, loss, alteration) imply use of advanced digital signature, which is defined with EU directive on a Community framework for electronic signatures¹⁴ and nationally implemented under national legislation of EU Member States.

Common rules on road transport are not part of Convention on common transit. Several regulations and directives cover and harmonize the rules on road transport within the EU (e.g. access to the market; maximum weights and dimensions; road transport operators; attestation of drivers; minimal standards on driving time and use of tachograph; minimum annual vehicle taxes and rules for tolls etc.).

Road transport between EU and non-EU countries is based on agreements between EU and non-EU countries, or bilateral agreements between individual EU Member States and third countries.

¹³ EU Union Customs Code (EU) No 952/2013,

¹⁴ EU directive on a Community framework for electronic signatures (EC No 93/1999 as amended)

Categorization of institutional arrangements for international transit transport

Different institutional arrangements with various scopes with regard to transport and transit aspects and customs transit may provide diverse transit opportunities, and following five groups could be identified:

A. Only general provisions for freedom of transit¹⁵ without any implementing details for further operationalization of international transit

In this case international transit is organized as a chain of distinct national customs transit systems without any transit integration. Lack of institutional arrangements on transport and transit aspects may bring serious disruptions of international transit and be burdensome crossing the borders.

Introduction on paperless transit solutions could be done with provisions in national customs transit legislation in each of the national transit systems.

B. Institutional arrangements that regulate certain transport and transit aspects, however without any regulation concerning customs transit

In this case international transit is organized as a chain of distinct national customs systems, however regulated transport and transit aspects provide limited integration of transit movements. Institutional arrangements on transport and transit aspects can reduce impediments on international transit, however the burden of repetitive customs transit formalities will remain due to the lack of institutional arrangements that could support customs transit.

Similarly like in previous case paperless transit solutions could be established with provisions in national customs transit legislation in each of the national customs transit systems.

C. Institutional arrangements that regulate certain transport and transit aspects and institutional arrangements that enable customs data exchanges that may support customs transit, however without any regulation of international customs transit

In this case international transit is organized as a chain of national customs transit systems, however regulated transit aspects and customs data exchanges provide extended integration of transit movements. Institutional arrangements on transport and transit aspects can reduce impediments on international transit on similar way like in previous case. Even though international transit is organized as a chain of national customs transit systems, integration of transit systems is supported by institutional arrangements that

¹⁵ For example directly from Convention and Statute on Freedom of Transit, 1921; General Agreement on Tariffs and Trade (GATT), that is now part of the WTO; Convention on Transit Trade of Landlocked States, 1965; and United Nations Convention on the Law of the Sea, 1982.

provide systematic exchanges of data between customs administrations of neighbouring countries.

Many customs administrations have introduced legal requirements for electronic pre-arrival information, which applies to the customs transit as well. Primary role of advance electronic cargo information relates to security purposes and risk analysis, however focusing on risky consignments would also help the customs administrations to facilitate the rest of the transit. Pre-arrival information could be also validated with information systematically exchanged with neighbouring customs authorities. For example under EU-Russia pilot project NCTS SPEED platform has been developed for systematic cross border exchanges of customs transit data, which could be used for analysis purposes.

Higher level of transit integration, supported by systematic customs data exchanges, could be achieved if exchanged data is re-used for transit procedures in next country (in NCTS SPEED platform example such re-use was not achieved due to the legal differences for the scope of data provided and data requested between the parties involved). One successful example for re-use of systematically exchanged data is RADDEX system in East Africa, which will be discussed in one of following modules.

Using ESCAP secure cross model (backed with corresponding institutional arrangement) is another example where systematic exchanges of information between customs authorities may support customs transit system and streamline procedures on border-crossings.

In this case paperless transit solutions could be established with provisions in national customs transit legislation in each of the national transit systems, however unlike previous two cases a certain level of harmonization will be necessary in order to provide efficient electronic data exchanges. Such harmonization has to be addressed in the institutional arrangement that regulates systematic exchanges of data.

D. Institutional arrangements that provide international customs transit, however some transport and transit aspects have not been regulated (or not facilitated)

This is the case when the international transit is organized under the international customs transit system, however disruptions of transit exist (e.g. necessity of transloading at border crossings) from unregulated/ burdensome transport and transit aspects.

In this situation paperless transit has to be introduced with international institutional arrangement. This case only highlights the need to cover all transport and transit aspects that may impede cross border movements. Otherwise even the introduction of a paperless transit system at international level will not have the desired effects.

E. Institutional arrangements that cover all transport and transit aspects, including institutional arrangements for international customs transit

In this case international transit could be organized as fully integrated transit under international customs transit system. In this sense European transit systems discussed earlier provides an example for full integration of transit. Transit integration could be achieved though a range of several institutional arrangements (as presented in this Module for European transit systems) or through comprehensive institutional arrangements (as will be discussed for ASEAN transit further on).

Reflecting on this module

This module presents legal requirements on transport and transit aspects and general legal requirements on paperless environment in trade, transport and customs as a necessary background for paperless transit. The module also identifies key legal requirements in institutional arrangements for paperless transit (electronic transit declaration; authentication of electronic documents, electronic signatures, storage and protection of electronic information). Opportunities from different institutional arrangements with various scopes in regard of transport and transit aspects and customs transit have been categorized in five groups with corresponding levels of integration of international transit systems.

Questions and discussion topics

1. Institutional arrangements that address: a) international transport and transit aspects and b) international customs transit in your country/sub-region and prospects for the introduction of paperless international customs transit?
2. What is the legal framework on paperless environment in your country?
3. How the main issues on paperless environment (e.g. acceptance of electronic data, data authentication and electronic signatures are regulated in your country, and is it possible to apply them for customs transit?
4. What are the challenges to develop institutional arrangements, which could achieve most desirable/most realistic solution for sub-regional transit where your country is included?

Module 5 Institutional arrangements for paperless transit

Introduction (3 min)

Legal framework for: a) transit systems and b) general paperless environment as background for legal framework on paperless transit. Focus on legal requirements.

Module objectives (2 min)

- To review legal requirements for establishing various types of transit systems
- To understand general legal requirements on paperless environment for transport and trade;
- To recognize legal requirements for paperless transit in institutional arrangements

Content (30 min)

1. Legal requirements for establishing transit systems (10 min)
2. General legal requirements on paperless transit (10 min)
3. Legal requirements for establishing paperless transit (10 min)

Summary (5 min)

Necessity for institutional arrangements for transport and transit aspects and general paperless environment. Identification of key legal requirements for paperless transit. Five groups of institutional arrangements with corresponding levels of integration of international transit systems.

Feedback and Discussion (5 min)

Feedback on this module and discussion on presented categorization of institutional arrangements, (present, most desirable and most realistic solutions) and challenges expected.

Instructor's notes:

Instructor:

Date and time:

Location:

Training methods

- Lecturing and explaining
- Questioning
- Discussion

Training resources

- ESCAP Guide on paperless transit (Module 5, including Module 5 overheads in Annex 4)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3)
- Additional resources
 - ESCAP, (2007), Towards a Harmonized Legal Regime on Transport Facilitation in the ESCAP Region
 - ESCAP, (2013), Study on Regional Arrangements for Facilitation of Cross-Border Paperless Trade in Asia and the Pacific

MODULE 6

Role of the governments and international organizations in introducing and promoting paperless transit systems

Introduction

Module objectives

- 6.1 The role of national coordination mechanisms
- 6.2 The role of governments in international coordination and introduction of international paperless transit systems
- 6.3 The role of regional, sub-regional and international organizations

Reflecting on this module

Module 6 - session plan

MODULE 6 Role of the governments and international organizations in introducing and promoting paperless transit systems

Introduction

Individual governments are responsible for development and implementation of paperless transit systems in practice. In the case of international cooperation for support of international transit or in the case of international customs transit systems, the governments have an essential role in initiating such cooperation and providing effective collaboration with their counterparts.

Regional and sub-regional bodies often do not have an operational role in the development of transit systems; however they are in a position to:

- promote transit systems and to assist the countries in the process of harmonization of related strategic objectives;
- facilitate coordination in the process of development and implementation of new systems; and
- offer financial or technical assistance where such support is mostly needed.

United Nations and other international organizations have the main role in creating a positive environment for introduction of international paperless transit with various conventions, international standards, models of legislation, dissemination of best practices, providing technical assistance and supporting or implementing various projects related to transit and cross-border facilitation.

Module objectives

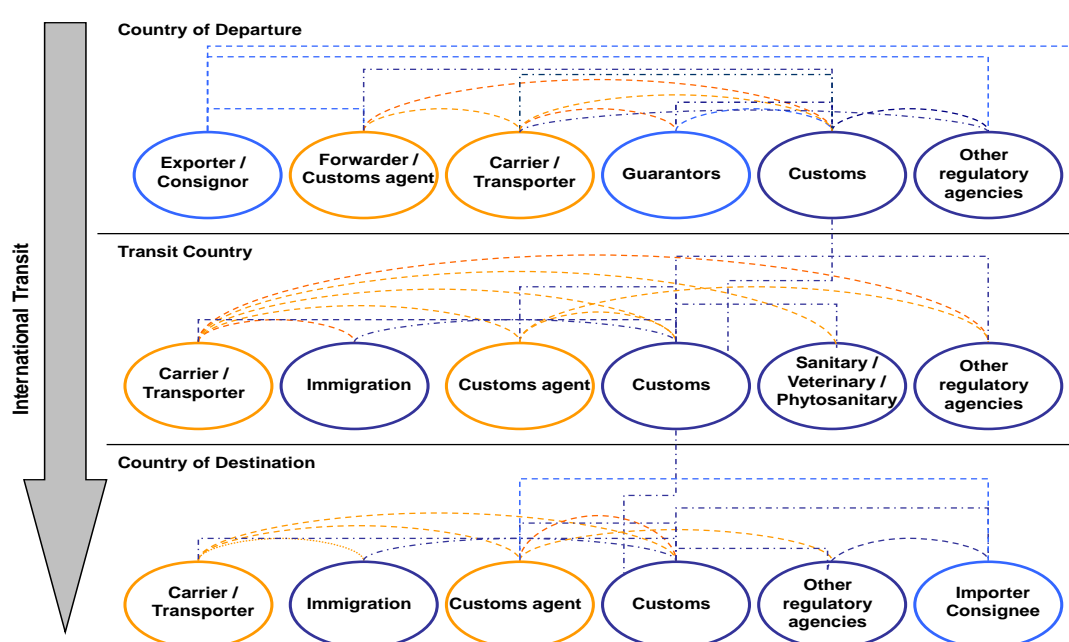
On completion of this module participants should be able to:

- Recognize the role of governments in introducing paperless transit systems
- Understand the importance of efficient national coordinating mechanisms for establishing paperless transit system
- Identify how regional, sub-regional and international organizations can support introduction of paperless transit systems

6.1 The role of national coordination mechanisms

International transit operates in a complex environment. Variety of participants are directly or indirectly linked with the cross border transit movements. The movement of the goods under international transit is a result of trade processes, which include buyers, sellers and manufacturers of goods, involving numerous documents and transactions linked with the transit procedures. Physical carriage of goods under customs transit, as a part of transport processes, could include various transport operators, as well as logistics and service operators at ports, airports, land border crossings, warehouses and inland customs depots where customs transit operation could start or end.

Figure 17: Complex Environment of International Transit



Source: Author's depiction of information in the text.

Customs functions are only one part of the overall border management functions that has to be taken into consideration. Movements across the borders of the carriers, transport means and goods under the customs transit procedure are also subject to other regulatory requirements in each of the countries where the transit is carried out.

Those requirements may include measures with respect to immigration; transport and traffic rights; sanitary, veterinary and phytosanitary protection; public safety and security; protection of the environment, intellectual property etc. To enforce compliance with those regulatory requirements various cross-border agencies have their presence at the border crossings (e.g. border police and immigration authorities; transport authorities; sanitary, veterinary and phytosanitary inspections; other specialized inspections).

Unlike exports and imports where customs and other regulatory formalities are completed at a single location, the customs transit by its nature involves several customs offices and several countries/border crossings, which multiplies complexity of the transit environment.

Facilitation of international transit with numerous participants, different procedures, repeated exchanges of various documents represents an operational challenge that has to be addressed on systematic and organized manner. Improving national customs transit systems, or introducing international customs transit systems, based on paperless transit solutions are only part of the activities that could resolve these challenges.

Establishing and strengthening national coordination mechanisms for trade and transport facilitation is one way to effectively address the challenges of the complex environment comprehensively and continuously. Many countries in the region have introduced a framework for inter-agency coordination, where different agencies and ministries could coordinate their activities in developing and introducing solutions for trade and transport facilitation. However many of these coordinating bodies face challenges in providing sustainability, operational capability and funding.

ESCAP (2012) guidelines on national coordination mechanisms¹⁶ lays down broad principles, fundamental aspects and main requirements for establishing and strengthening coordination mechanisms that will support efficient trade and transport systems in the region, which certainly include international transit systems.

Table 4: Types of national coordination mechanisms

Types	Examples
1. Permanent coordination institution	• National trade facilitation committee
	• National transport facilitation committee
	• National trade and transport facilitation committee
2. Temporary coordination	• Coordination body for specific programme
	• Coordination body for specific project
3. Case-based coordination	• Coordination of specific initiative through meetings
	• Coordination of specific initiative through official communications

Source: ESCAP, 2012, Guidelines on establishing and strengthening national coordination mechanisms for trade and transport facilitation in the ESCAP region.

¹⁶ ESCAP, 2012, Guidelines on establishing and strengthening national coordination mechanisms for trade and transport facilitation in the ESCAP region.

There are various examples of national coordination mechanisms; however a permanent coordination institution is the most stable form since it is established with a clear long-term mandate and organizational structure. Permanent facilitation committee for example, can be used for coordination of a broad and specific facilitation initiatives, including paperless transit. The role of national coordination mechanisms is to provide a platform where all stakeholders from public and private sector can discuss and suggest facilitation solutions. In that sense, paperless transit solutions could be addressed and discussed from initial phase of providing support for developing national strategies and policies, to actual implementation at national and international level.

National coordination institutions could be established under sub-regional trade and transport arrangements or under national requirements for inter-agency cooperation in the projects on country level. It is highly desirable to avoid duplication of coordination mechanisms in one country, which will contribute to effective use of resources, consistency in overall facilitation policies and it could prevent potential conflicts.

Box 24: Examples of national coordination

National coordination established under sub-regional trade or transport agreements, e.g.:

- National Transit Transport Coordinating Committees (NTTCC) under ASEAN Framework Agreement on Facilitation of Goods in Transit;
- National Transport Facilitation Committees (NTFC) under Agreement on Facilitation of Cross-Border Transport of Goods and People in the Greater Mekong Sub-region (GMS CBTA);

National coordination established under national requirements, e.g.:

- national interagency bodies for implementing single window concept (e.g. Indonesia, Mongolia, the Republic of Korea, Thailand and Viet Nam);
- national coordination for introduction of automated customs clearance;
- national coordination relating to transit transport of landlocked countries.

Source: ESCAP, 2012, Guidelines on establishing and strengthening national coordination mechanisms for trade and transport facilitation in the ESCAP region.

Appropriate legal bases and clear mandate of national coordination mechanisms are necessary in order to provide their efficiency and sustainability over time. Strong political support expressed with the rules set for inter-agency cooperation and mandate given, may address possible issues with conflicts of interests and ensure that all stakeholders are contributing to jointly established objectives.

The form of the legal instrument may be different in accordance with legislative requirements of the country. The appropriate legal instrument has to specify salient features of the coordination mechanism; composition of the members from public and private sector;

the scope; objectives and main areas for coordination. The issues of secretariat support and financing may also be addressed.

The ESCAP guide identifies the following main functions of a national trade and transport facilitation coordinating institution:

- simplification, standardization and harmonization of procedures and documents;
- assisting in introduction of ICT tools in trade and transport facilitation;
- studying changes in international trade and transport environment;
- assisting in conception, negotiation and implementation of trade and transport facilitation agreements;
- developing capacities of stakeholders.

Paperless transit could be of particular interest in the working agenda of national coordination first in order to study paperless solutions that could support national transit vision and strategies, then to suggest to the government best options for introduction of paperless solutions at national or sub-regional level; and if such initiatives are being approved, to work on development and introduction of paperless transit system.

Box 25: Suggested long-term work plan for national coordination institutions

1. Formulation and implementation of sub-regional agreements on cross-border and transit transport;
2. Formulation and implementation of intergovernmental agreements of trade or transport;
3. Consultation for opening of new border crossings and routes for transport;
4. Accession to international conventions related to trade and/or transport facilitation;
5. Ratification of the Intergovernmental Agreements on Asian Highway Network and Trans-Asian Railway Network;
6. Coordination on the implementation of the Single Window;
7. Coordination on simplification and harmonization of procedures and documentation;
8. Studies on emerging facilitation issues;
9. Training courses on new facilitation measures; and
10. Field visits.

Source: ESCAP, 2012, Guidelines on establishing and strengthening national coordination mechanisms for trade and transport facilitation in the ESCAP region.

Paperless transit and other initiatives that support international transit (such as systematic cross border electronic data exchanges and electronic vehicle tracking based on ESCAP Secure Cross Border Transport model) could be also part of activities of national coordination institutions in regard to efficient border management. With coordinated border management, at both pillars (domestic and international), paperless transit initiatives may be linked with other present activities (e.g. single window, joint border controls, joint use of non-intrusive inspection equipment).

6.2 The role of governments in international coordination and introduction of international paperless transit systems

National institutions are usually responsible for managing the process of development and implementation of paperless transit systems. Transition from national paper based transit system (or even from national paperless transit system), to international paperless transit system is a comprehensive and long-term process. Efficient coordination at national level (with participants from public and private sector) has to be upgraded and extended with cross-border cooperation at bilateral, sub-regional or regional level.

The governments may decide to initiate or to join initiatives for introduction of international paperless transit system if that is in line with their strategic interest, and if there is such demand from trade and transport sector (e.g. channelled through national coordination mechanisms). Such decision requires a background in development of related national policies and strategies. Consistency and coordination with regard to transit related issues at national level and appropriate articulation of policies and strategies concerning investment in transport infrastructure, liberalization of transport sector, trade and transport connectivity and facilitation priorities, are necessary.

The scope of planned integration in regional or sub-regional economic environment, overall plans for modernization of customs and other cross-border formalities and ICT development have to be considered in order to set sound foundations for development of future paperless transit system.

Introduction of paperless transit system will be more viable if the countries already participate in some form of sub-regional economic or political integration structure. ASEAN customs transit system, is expected to be the first operational international paperless transit system in the region in near future.

Other countries in the region may decide to use existing sub-regional bodies, entities or initiatives and their structures to discuss and promote paperless transit systems, harmonize their strategic objectives and proceed with further actions if they reach a common ground for introduction of such systems. Such existing organizations include: Economic Cooperation Organization (ECO), the Mekong River Commission (MRC), South Asian Association for Regional Cooperation (SAARC), Shanghai Cooperation Organization (SCO)) which already have experience with implementation and negotiation of sub-regional transport facilitation agreements

To develop an efficient international transit system it is necessary to have evident political will, close international cooperation and trust, and appropriate legal framework. The development of new international paperless transit system could be very challenging if:

- the level of political cooperation and integration among the countries interested to introduce new international transit system is low;
- the countries have different priorities about international transit; and
- there is an absence of common or fully harmonized customs transit legislation.

Once the interested parties have harmonized their strategic objectives with respect to international paperless transit system, and the coordination and managing structures are established, the negotiation process could start with the aim to change the transit legal environment with introduction of new or upgraded transit system. In the beginning of the negotiations the governments have to reach an agreement for the concept and general design of the new transit system.

High-level commitment and leading role of the governments is essential in this phase. Even though certain extent of technical understanding on transit systems is necessary, reaching agreement on concept and general design is a political rather than technical decision.

For example in the case of development of ASEAN Customs transit system, a national transit transport coordinating committee was established in each of the Contracting Parties and a transit transport coordinating board was established on sub-regional level in accordance with provisions for institutional arrangements from ASEAN Framework agreement on the facilitation of goods in transit. The national transit transport coordinating committees have role in coordination and implementation of the Agreement at national level, and the transit transport coordinating board composed of senior officials nominated from each Contracting Party and a representative of the ASEAN Secretariat, oversees coordination and supports implementation of the Agreement.

National government are also responsible for negotiation and drafting an international instrument which will enable an appropriate legal environment for implementation of the paperless transit system and provide interoperability between national information systems for cross border exchange of electronic transit declarations and related messages. Coordination on regional or sub-regional level in designing legal framework and interoperability requirements, compliant with international standards, for introduction of international transit systems need to be supported by regional or sub-regional bodies and coordinative structures. Governments have an important role in this process, which requires strong political support.

When the concept and general design is previously agreed and accepted by all parties, the process of developing legal framework and providing conditions for interoperability will be significantly facilitated, especially if harmonization and compliance with international standards is ensured. The example of on-going activities for introduction of ASEAN Customs

transit system for more than 15 years, where efficiency of the overall process and established coordinative structures have not been demonstrated, shows that challenges for introduction of new international transit system could be substantial.

When the international instrument is agreed, the governments concerned should initiate a revision process of domestic legislation in order to provide alignment of internationally agreed provisions with national legislation and implementing regulation. New legislation or amendments should address:

- international customs transit and related domestic legislation; and
- ICT requirements and related national legislation (e.g. recognition and acceptance of electronic signatures; data security and data protection, recognition of electronic evidence in judicial and administrative proceedings).

Investment in ICT and automated systems

The governments of the countries, which are going to introduce international paperless transit system, have to demonstrate financial commitment and to extensively invest in ICT development,. The countries that are already using modern ICT, and paperless environment in their national information systems, should be better prepared for the next step in cross border electronic exchanges of information related to international transit procedures.

The costs for ICT investments in hardware, software and networks for introduction of new transit systems could be substantial; however the cost will vary depending on the initial state of the ICT infrastructure, alignment with international standards and the scope of the reform. Long-term operating, maintenance and upgrading costs also need to be considered.

Efficient customs declaration processing systems are essential for paperless transit. Customs transit procedure directly involves at least two customs offices and information systems should enable effective monitoring of goods declarations for transit, with established communication and exchange of information between the office of departure and destination.

Many customs administrations have their nationally developed customs information systems for processing of goods declaration for transit. However wide spread opportunities for electronic submission of customs declarations does not reflect achievement of paperless customs solutions because in many cases paper based declarations are still required for continuation with transit customs procedure.

Automation greatly increases efficiency for exchange of electronic information. Information sharing between border agencies and customs administrations is important aspect for efficiency improvement in terms of facilitation and represents the first step towards implementation of single window concept and integration of international transit.

Training and awareness activities, technical support and integrity

Training for the public sector personnel (e.g. customs administrations and other cross border regulatory agencies) is one of the important factors for the future success of newly introduced paperless transit system. Lack of awareness and skills needed for dealing with new transit formalities, and new or upgraded information system requirements could impede smooth implementation.

Training activities may include seminars on specific topics, comprehensive transit training module as a part of activities of national customs training centres, training programs for border-crossing agencies, and on the job training programs. Awareness programs and training for trade and transport sector are also necessary in order to support the implementation of paperless transit system. That will help all involved stakeholders to understand paperless transit concept, possible options, benefits and cost of the systems; and to assist them to successfully meet the requirements and to effectively use the new transit system.

It is advisable to provide assistance and support to the participants of the paperless transit system and to include operational help-desk (e.g. web-site and call centre), easily available regulation, detailed technical specifications and requirements and specific guidelines for use of paperless transit system, newsletters and public announcement which will provide timely information on all important steps and changes with regard to the new transit procedures.

Implementation of new international transit should be coordinated among individual countries and gradually expanded with the trial phase, where the system could be tested, and the operational phase when the paperless systems will begin to replace paper based transit procedures. Individual governments are responsible to provide appropriate measures and to check if correct and uniform application of the new transit rules is provided, as well as to carry out activities for monitoring and evaluation of the effects from introduction of the new international transit system.

Integrity programs may be combined with capacity building programs and training activities, in order to maximize the effects of introduction of new transit systems.

6.3 The role of regional, sub-regional and international organizations

Harmonization of strategic objectives and legal framework

International transport requires harmonization of legislation and implementing practices. The process of harmonization begins with harmonization of related strategic objectives, which may include introduction of international paperless transit system. This process could be promoted and facilitated by various international, regional or sub-regional

bodies. For example, ESCAP supported and promoted Regional strategic framework for the facilitation of international road transport, which was adopted with Ministerial declaration on transport development in Asia and the Pacific in 2012.

Box 26: ESCAP Regional Strategic Framework (RSF) for Transport Facilitation

RSF establishes several common long term targets and approaches, which could guide ESCAP members in formulation of their national transport policies, and provide harmonization of strategic objectives.

Common targets for fundamental elements of international road transport:

- wider application of multiple-entry and multilateral road transport permits,
- multiple entry visas for professional drivers and crews of road vehicles,
- application of international conventions on temporary importation of road vehicles,
- third-party insurance through the use of Green Card or similar system,
- unification of vehicle weights and dimensions requirements,
- standardized vehicle registration and inspection certificates.

Common approaches for key modalities for international road transport facilitation:

- building an effective legal regime,
- wider application of new technologies,
- development of professional training for international road transport,
- establishment/strengthening of national facilitation coordination mechanisms,
- promotion of joint control at border crossings,
- promotion of economic zones at border crossings, dry ports and logistics centres,
- further application of facilitation tools.

Source: Extracts from ESCAP Booklet, June 2013, Regional Strategic Framework for the Facilitation of International Road Transport

One of the important components of the Regional strategic framework is establishment of the Regional network of legal and technical experts on transport facilitation, and its initial work is also supported and facilitated by ESCAP. This regional network, designed as a forum for exchange of information, coordination, and identification of constraints and solutions for the transport facilitation instruments could have major role in promotion and harmonization efforts.

In 2012 ESCAP members adopted Resolution 68/3 on “Enabling paperless trade and the cross-border recognition of electronic data and documents for conclusive and sustainable intraregional trade facilitation” which invites the member States to work towards the development of regional arrangements on the facilitation of cross-border paperless trade which could also include elements of paperless transit systems. Wider application of new technologies and cross-border recognition of electronic data will support transition to international paperless transit systems.

Implementation of Resolution 68/3 is also supported by activities of United Nations network of experts for paperless trade in Asia and the Pacific (UNNExT). The UNNExT activities include promotion of international standards in this area; training and sharing lessons learned and outcomes from the existing bilateral and sub-regional pilot projects on the recognition and exchange of trade-related electronic data and documents, as well as actions to initiate new projects. The activities related to Resolution 68/3 are closely connected to establishment of Single window environment however they could also have important role in harmonization and facilitation with regard to paperless transit initiatives.

Harmonization of legal framework and interoperability is among the topics covered by the activities of UNECE and ESCAP. For example ESCAP has published Guidelines on harmonized legal regime on transport facilitation and Study on regional arrangements for facilitation of cross-border paperless trade in Asia and the Pacific that offers a draft text of regional arrangement/agreement, which will ensure interoperability among national single windows and other paperless trade systems.

International instruments that promote transit harmonization and simplification

International organizations and various development partners (e.g. WTO, WCO, UNECE, ESCAP, World Bank, ADB) have been contributing to promotion and harmonization of trade and transport facilitation initiatives relating to paperless transit with various instruments, standards, activities and projects. Harmonization efforts of international organizations could reduce incompatibility among different national transit systems from legal, procedural and technical point of view.

Agreement on Trade Facilitation is the latest WTO instrument, which addresses the issues of harmonized and streamlined customs and cross border procedures. Among other topics, the Agreement:

- a) clarifies and improves relevant aspects of Articles V of the GATT 1994 with regard to freedom of transit;
- b) introduces provision for advance lodging of documents in electronic format for pre-arrival processing;
- c) promotes simplification of formalities and documentation requirements, acceptance of electronic copies, use of international standards and single window;
- d) establishes institutional arrangement for cooperation with the Committee on trade facilitation – at international level and national committees for trade facilitation.

The Agreement does not regulate cross border exchanges of customs information and data, however a reference for possibility of bilateral, multilateral and regional agreements in such direction is mentioned.

WCO tools, international instruments and programs promote harmonization, uniform application and simplification of customs procedures, including transit and enhanced use of ICT. WCO Revised Kyoto Convention, WCO Data Model and WCO Single Window Compendium contribute to global interoperability of customs systems. Globally Networked Customs (GNC) is one of the building blocks of the WCO strategic vision – Customs in the 21st Century.

The long-term vision of GNC implies gradual “creation of an international “e-Customs” network that will ensure seamless, real-time and paperless flows of information and connectivity”.¹⁷ Under GNC model customs business processes are divided into individual Utility Blocks (e.g. transit, Authorized Economic Operator, commercial fraud, etc.) and the customs authorities could choose, in accordance with their priorities, which information they prefer to share.

WCO Members are initiating and working on development of individual utility blocks on a voluntary basis, and after finalization of certification process coordinated by WCO, those utility blocks will be offered for re-use to other members. The process of development of utility blocs includes strategic aims, business processes, legal issues, functional approaches and technical specifications and several layers of interoperability (e.g. entities, business rules, data cluster, trigger, interface, integration and communication).

United Nation Economic Commission for Europe (UNECE) and United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) are extensively contributing to the process of trade and transport facilitation, which includes transit, and have significant role in standardization and promotion of paperless trade and transport environment. United Nations instruments relevant for transit include:

- conventions (e.g., Customs Convention on the Temporary Importation of Commercial Road Vehicles (Istanbul Convention), International Convention on the Harmonization of Frontier Controls of Goods);
- facilitation recommendations (e.g. UN Layout Key for Trade Documents, UN Electronic Data Interchange for Administration, Commerce and Transport Standard (UN/EDIFACT), Single Window, Data Harmonization and Code Lists); and
- standards (e.g. United Nations Trade Data Elements Directory (UNTDDED), Core Component Library (CCL), UN/EDIFACT syntax rules, and XML schemas).

¹⁷ WCO, 2008, Customs in the 21st Century: Enhancing Growth and Development through Trade Facilitation and Border Security.

With the development of trade and transport facilitation models, publishing various publications and studies related to transit, and paperless trade and transport environment, and with the support of numerous activities and programs UNECE and ESCAP are actively involved in promotion and support of paperless transit.

Promotion and support of paperless transit

United Nations Commission on International Trade Law (UNCITRAL) is the core legal body of the United Nations system, which also contributes to modernization and harmonization of the international business environment. For example UNCITRAL Model Law on Electronic Signatures is relevant for paperless transit because establishes criteria of technical reliability for the equivalence between electronic and hand-written signatures based on non-discrimination, technological neutrality and functional equivalence.

The work of international organizations is often supported by various development partners such as ADB and World Bank, which provide valuable financial and technical support to specific projects related to trade and transport facilitation. In the case of budgetary constraints, financial and technical support from regional or sub-regional bodies may be necessary, and such assistance could provide important impulse for successful introduction of international paperless transit systems.

For example, EU experience with NCTS shows that even though each Member State has to implement its own national NCTS application, the European Commission and DG TAXUD also have important and active role including:

- development of common rules and user requirements;
- functional and technical specifications for the common domain;
- preparation of conformance tests of the systems;
- maintenance of common infrastructure network
- offering some specific applications (e.g. Minimum Common Core transit application).

Allocation of human resources for development of NCTS on the Commission level has enabled introduction of NCTS with less staff from national administrations. Specific EU action programs have contributed to further development and harmonization of national customs information systems of the Member States.

Promotion activities supported by regional or sub-regional bodies, international organizations and development partners include various publications, studies, presentations and seminars, and training activities. Technical assistance may also be offered from regional or sub-regional bodies, international organizations and development partners to the individual governments. Such technical assistance may include specific studies to ensure the feasibility

of future paperless transit systems, for development of legal framework or technical interoperability.

The support and technical assistance provided could raise the awareness for the role of international paperless transit systems, its advantages, challenges and requirements, and will help the governments in decision making process and in the design process of paperless transit systems, which will also support capacity building for development and implementation of new paperless transit system.

Single Window

Creating and implementing single window environment at national level corresponds well with introduction of paperless transit solutions. Having in mind that developing single window environment is complex, time consuming and expensive process, it is understandable that countries are taking more pragmatic step-by-step approach based on their priorities and capacity for such demanding undertaking. Even though import/export processes usually are the first to be addressed with single window concept, it will be beneficial to further extend single window for transit regulatory processes.

The United Nations network of experts for paperless trade (UNNEX) identifies that development of paperless customs represents the first step towards building effective single window environment, which could cover transit processes as well. Paperless customs transit systems at national level are already successfully implemented by many customs administrations. Such paperless customs transit systems are within reach to other customs administrations, which have to make further step in abandoning dual systems where paper based transit declaration and/or accompanying documents are still required.

When developing single window environment, which covers international transit procedures, the main challenge is dependency on cross border information exchanges. Efficient cross border information exchanges are desirable but could be demanding to achieve, however even without them, a national single window (NSW) could streamline transit procedures as result of improved interaction among national border agencies and introduction of paperless solutions. Such NSW paperless solutions may include automated information transaction system for electronic submission of various applications required and electronic transmission of approvals/permits back to the principal or his agent. However, this procedure has to be repeated in each of the countries involved in international transit.

With integration of NSWs and development of operational international/regional single windows, cross border transit exchanges could be ultimately streamlined and the aim for one time submission of information, which will cover whole international transit may be achieved. If international transit systems are operating in international single window environment, information on advance cargo declaration and customs transit declaration will be submitted only once from the country of departure to all customs offices in the transit

countries and in the country of destination. In addition to customs data, the cross border exchanges from the country of departure could address the other transit related regulatory requirements in the transit countries and the country of destination.

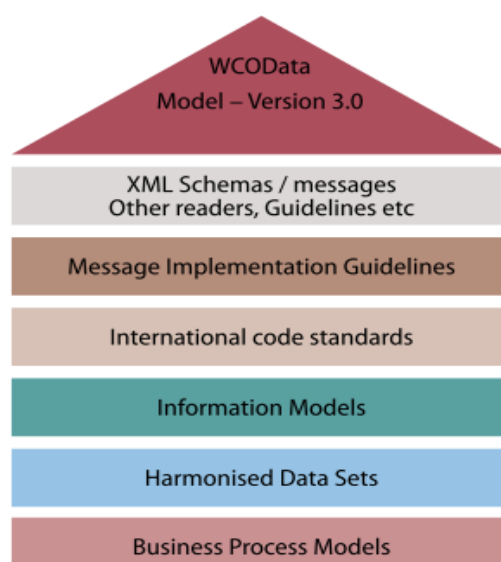
Customs authorities and other cross border regulatory agencies have different transit related business processes and often use different paper or electronic documents, however, for each specific transit operation, many information and data are the same. With paperless transit in single window, most of the formalities will be based on electronic data and information exchanges could become easier. However, even if the information and data are same or similar, the challenge of compatibility for efficient exchange remains to be addressed. Therefore harmonization of information and data requirements among cross border regulatory agencies and other relevant government institutions is an important step for cross-border data exchanges and development of single window environment.

WCO Data Model

One of the important tools for harmonization and standardization of cross border exchanges and single window environment is the WCO Data Model. This Model is used as a base document for the implementation of message formats.

The WCO Data Model is based on Revised Kyoto Convention and includes transit requirements. Transit was first added with the WCO Data Model version released in 2005 and further developed with the updated version in 2009. Transit data set, developed with this model, consist a list of transit data elements in standardized form for automated data exchange between parties involved in transit operations.

Figure 18: WCO Data Model Components

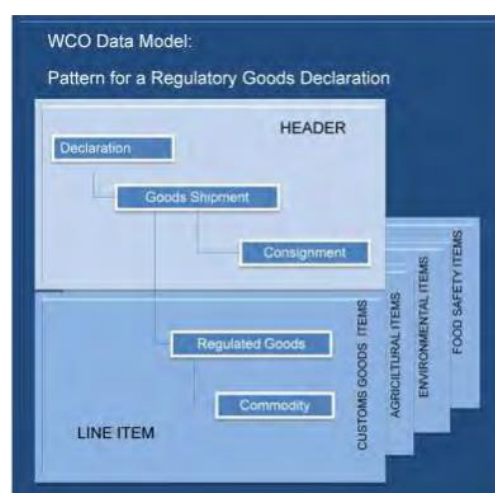


Source: WCO, 2009, WCO Data Model – Technical Brochure (p.14)

The WCO Data Model provides the basis for electronic transit declarations and therefore represents one of the cornerstones for paperless transit. However, the WCO Data Model is not just a list of data elements, because this model offers an analysis and optimization of procedural requirements and processes; develops related customs business processes; illustrates the information flows from all cross border regulatory agencies and provides their categorization; assembles a range of models and produces messaging guidelines.

The WCO Data Model data sets and data elements enable goods declarations (e.g. goods declaration for customs transit) to be captured and organized for structuring electronic format of the documents. Harmonization of a data set among other regulatory declarations enables arranging a common regulatory declaration pattern (Figure 19).

Figure 19: Common Regulatory Goods Declaration



Source: WCO Compendium, 2011, How to Build Single Window Environment - Volume 1: The Executive Guide (Figure p.110)

To obtain electronic structure of the document a specific EDI or XML syntax has to be applied. Those electronic structures represent the equivalent of the paper declaration in electronic format. The WCO Data Model message implementation guidelines for EDI and XML messages support creation of messages between Business-to-Government (B2G), Government-to-Business (G2B) and Government-to-Government (G2G). Simplification of message processing is also possible using re-usable message components.

Paperless transit rely on efficient information exchange, therefore the WCO Data model, with its harmonized and standardized data sets and guidance for electronic messages, could offer to the customs administrations significant support for design and implementation of international transit systems with paperless solutions.

In order to achieve cross border compatibility and efficient exchange of data, customs administration and other cross border regulatory agencies should extensively use the WCO Data Model. Alignment with international standards will provide possibility for effective integration and interaction between information and communication systems of different agencies. It should be noted that the WCO Data Model is neutral with regard to the type of information system, kind of computer hardware or software platform.

There are several benefits from implementation of the WCO Data model, applied with paperless transit. Efficiency of cross border movements will be improved as result of simplified data requirements and improvements in information exchange. Harmonized electronic information, which could be exchanged among various information systems reduces amount of regulatory data required and eliminates redundant and repetitive data. This is particularly valuable for transit systems, which are prone to cycles of repetitive data exchanges. Improved efficiency of cross border procedures could increase the pace of cross border formalities, enabling faster release of goods and reduced costs for the regulatory agencies and for the business.

UNCTAD ASYCUDA

United Nations Conference on Trade and Development (UNCTAD) has developed popular customs management system ASYCUDA, which has significant global contribution for customs modernization and computerization, and it is widely used around the world.

ASYCUDA has transit functions, for monitoring and control movement of goods in customs transit procedure. Transit function was first introduced with ASYCUDA ++ version with possibility to handle various transit documents (e.g. TIR carnet and T1 form based on the Single Administrative Document (SAD)).

The users of ASYCUDA (e.g. customs agent) are processing transit documents using a specific ASYCUDA module (MODBRK), which offers different actions (e.g. to capture, view, local store, store, retrieve, print, amend, delete and list transit documents). Transit documents are validated in customs ASYCUDA module (MODTRS), which also enables control of transit movements. MODTRS also offers the options to: view, retrieve, amend, store, validate, print, transmit and list the transit documents.

After validation of transit data at the office of departure, an automatically generated message is transmitted to the office of destination. The office of destination could retrieve electronic version of the transit document from the transit ASYCUDA module (re-keying of data is not needed) and proceed with transit formalities when the cargo arrives. Once the destination office confirms the end the transit procedure in the ASYCUDA system, an electronic message is generated and automatically returned to the office of departure, which enables to close the transit operation and to release the transit guarantee.

Box 27: ASYCUDA - Automated SYstem for CUsoms DATA

- Handles manifests and customs declarations, accounting procedures, transit and suspense procedures;
- Takes into account the international codes and standards developed by ISO, WCO and UN;
- Can be configured to suit the national characteristics of individual Customs regimes, National Tariff and legislation;
- More than 90 countries have adopted the ASYCUDA programme, there are 51 operational projects, including 7 regional and interregional projects;
- Current versions of software
 - a) ASYCUDA World: Internet client-server, 100% Web-based, Any devices (PCs, PDAs, Mobile Phones, Tablet PCs ...), communication via Web, Internet & Intranet, data exchange using EDIFACT and XML, Built-in PKI, electronic signature etc.
 - b) ASYCUDA++: Client-server, PCs under Microsoft Windows, communication via TCP/IP protocol, data exchange using EDIFACT.

Source: UNCTAD ASYCUDA web site: <http://www.asycuda.org/default.asp>

Transit module of web-based ASYCUDA World version further supports possibility to introduce paperless transit and includes processing of electronic documents and electronic signature. ASYCUDA could also support single window initiatives and enable e-licensing and multiagency risk-management. The system is technically designed to cover extension from national to regional transit and to enable data exchange of messages between countries.

ASUCUDA provides full integration of transit procedures with other customs clearance process and formalities. ASUCADA transit modules interacts with other ASYCUDA modules, which enables:

- transit documents to be generated from waybills and export declarations;
- integration with guarantee management;
- integration with risk analysis and selectivity;
- linkages/discharging with previous/subsequent customs clearance formalities (e.g. warehousing).

Enhanced technical capabilities of ASYCADA World enable integration of images into ASYCUDA transit documents (e.g. scans of driving license, passport of vehicle driver; and X-ray images from customs control of the cargo). The system could be upgraded with various technical functionalities such as: automatically generated e-mails and SMS for specified events; integration with barcode readers, portable devices, number plate recognition systems etc.

Reflecting on this module

This module highlights essential role of the governments for introducing paperless transit at national level and initiating, developing and implementing paperless transit

solutions in cross-border transactions. It is recommended that national coordination institutions study, and suggest best options for paperless transit, while taking in account overall transport and transit environment and facilitation efforts.

If the countries in the sub-regions have harmonized strategies towards international transit and paperless solutions, national coordination could be upgraded on cross-border level with intention to introduce new or upgrade present transit systems.

Regional, sub-regional and international organizations have important role for promoting and supporting introduction of paperless transit systems. They could encourage harmonization of strategies on regional/sub-regional level, facilitate coordination between partner countries and strongly support and enable harmonization and standardization necessary for introduction of paperless transit systems.

Questions and discussion topics

1. What kind of national coordination mechanisms for trade and transport facilitation exist in your country?
2. Why is the role of national coordination mechanism important and why is there a need for it?
3. Does present national coordination institutions for trade and transport facilitation in your country have mandate to address international transit and ICT solutions in cross border trade and transport?
4. What role governments have in promoting paperless transit?
5. What role international organisations have in supporting paperless transit? Which are the instruments developed?

Module 6 Role of the governments and international organizations

Instructor:

Date and time:

Location:

Introduction (3 min)

Responsibility of individual governments for developing and implementing paperless transit; and initiating international transit cooperation. Regional, sub-regional and international organizations are promoting paperless transit, support harmonization and standardization and assist the governments.

Module objectives (2 min)

- To recognize the role of individual governments in introducing paperless transit systems
- To understand importance of efficient national coordinating mechanisms for establishing paperless transit system
- To identify how regional, sub-regional and international organizations are supporting introduction of paperless transit

Content (30 min)

1. The role of national coordination mechanisms (10)
2. The role of governments in international coordination and introduction of international paperless transit systems (10)
3. The role of regional, sub-regional and international organizations (10)

Summary (5 min)

Essential role of the governments for introducing paperless transit at national level and initiating paperless transit solutions in cross-border transactions. National coordination institutions should for study and suggest best options for paperless transit. If national strategies towards international transit and paperless solutions are harmonized national coordination could be upgraded on cross-border level. Introduction of new or upgraded transit systems could be supported by regional, sub-regional and international organizations. They could facilitate coordination between partner countries and provide enabling environment with support of harmonization and standardization on legal, procedural and technical level.

Feedback and Discussion (5 min)

Feedback on this module and discussion on national coordinating institutions and mandate for addressing paperless transit.

Instructor's notes:

Training methods

- Lecturing and explaining
- Questioning
- Discussion

Training resources

- ESCAP Guide on paperless transit (Module 6, including Module 6 overheads in Annex 4)
- ESCAP Study on paperless transit (Chapter V and VIII)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3)
- Additional resources
 - ESCAP, (2012), Guidelines on establishing and strengthening national coordination mechanisms for trade and transport facilitation in the ESCAP region

MODULE 7

Selected national, regional and international case studies on paperless transit

Introduction

Module objectives

- 7.1 The ASEAN Customs Transit System (ACTS)
- 7.2 International Transit of Goods (TIM) System in Mesoamerica
- 7.3 Examples of sub-regional customs transit systems in Africa
- 7.4 National Customs Transit System in Malaysia
- 7.5 National Customs Transit System in Thailand
- 7.6 National Customs transit system in Ghana

Reflecting on this module

Module 7 - session plan

MODULE 7 Selected national, regional and international case studies on paperless transit

Introduction

Best practices for international customs transit systems around the world are clearly set by most developed worldwide systems, such as European common transit system. New Computerized Transit System (NCTS), which manages transit systems in EU, offers best practice for automation of regional customs transit and practical implementation of paperless transit system. European common transit system and NCTS have been role model for many other regional initiatives around the world. Naturally those other regional initiatives are taking into account needs and specifics that distinguish their regions and they look for innovative solutions to adapt customs transit systems according to their economic environment and their goals for transit facilitation. In this module a short overview is given of customs transit systems with paperless solutions in the case of ASEAN countries, Mesoamerican countries and sub-regional initiatives in Africa.

When international transport is not supported with international customs transit system, cross border movement relies on national customs transit systems and various bilateral transport related agreements. Well-designed national customs transit systems with paperless transit solutions could facilitate national part of the transit and have great potential to support international transit as well. Furthermore a developed national paperless transit system is a precondition for any further integration in efficient sub-regional or regional customs transit systems. Several countries in Asia and Pacific region have highly developed electronic customs declaration-processing systems integrated with national single window. In this module we will present examples of national transit systems in Malaysia, Thailand and Ghana.

Module objectives

On completion of this module participants should be able to:

- Understand principles and main features of sub-regional customs transit systems in the case of ASEAN, Mesoamerican countries, and eastern and southern Africa (COMESA, SADC, EAC);
- Recognize various options for supporting paperless transit at national level with single window environment and electronic vehicle tracking through examples of national transit systems in Malaysia, Thailand and Ghana.

7.1 The ASEAN Customs Transit System (ACTS)

ASEAN Framework Agreement on the Facilitation of Goods in Transit, from 1998, is expected to provide transport facilitation and to resolve a number of impediments to movements of vehicles and goods across borders in this sub-region. ASEAN Framework Agreement on the Facilitation of Goods in Transit came into force in 2000 however it can not be fully implemented so far, pending finalization and signing of the protocols necessary for practical implementation of this Agreement.

The objectives of ASEAN Framework Agreement on the Facilitation of Goods in Transit include:

- Transport facilitation of goods in transit, in order to support the ASEAN free trade area, and to provide favourable conditions for integration of the economies in the region;
- Simplification and harmonization of transport, trade and customs regulations and their requirements concerning goods in transit; and
- Establishing an efficient and integrated transit system.

This Agreement determines the rights of transit transport in the meaning of transport across the territory of one or more Contracting Parties, when the passage across such territories is only a portion of a complete journey. Inter-State transport is agreed among ASEAN Contracting Parties with another Agreement.

ASEAN Framework Agreement on the Facilitation of Goods in Transit and ASEAN Framework Agreement on the Facilitation of Inter-State Transport are comprehensive and both address the issues of: designation of transport routes and facilities; traffic regulations; transport services; road transport permits; technical requirements of vehicles; mutual recognition of inspection certificates and driving licenses; third-party insurance scheme; customs control and sanitary and phytosanitary measures; and other special provisions from the transit transport perspective and the inter-state transport perspective accordingly. Many of those specific issues covered with those agreements have to be detailed in the nine protocols of ASEAN Framework Agreement on the Facilitation of Goods in Transit and their negotiation has been prolonged and it is still on going.

Implementation of the ASEAN agreements on transport facilitation is identified as one of the priorities in achieving ASEAN connectivity, and the importance of finalization of the Protocols, providing technical assistance and political support is stressed with ASEAN strategic plans. Last protocol, which remains to be finalized, is Protocol 2: Designation of Frontier Posts, that is presently under negotiation.

Preparatory work and negotiations of necessary protocols seems to be very lengthy process with need for intensified cooperation and technical assistance support (e.g. ASEAN-EU Programme for Regional Integration Support for Protocol 7).¹⁸

**Box 28: ASEAN Framework Agreement on the Facilitation of Goods in Transit:
Status of Protocols**

Protocol 1: Designation of Transit Transport Routes and Facilities – signed in 2007 (in force 2011)

Protocol 2: Designation of Frontier Posts – not signed yet

Protocol 3: Types and Quantity of Road Vehicles – signed in 1999 (in force 2010)

Protocol 4: Technical Requirements of Vehicle – signed in 1999 (in force 2010)

Protocol 5: ASEAN Scheme of Compulsory Motor Vehicle Insurance - signed in 2001 (in force 2003)

Protocol 6: Railways Border and Interchange Stations – signed in 2011 (not in force)

Protocol 7: Customs Transit System – signed in 2015 (not in force)

Protocol 8: Sanitary and Phytosanitary Measures – signed in 2000 (in force 2011)

Protocol 9: Dangerous Goods – signed in 2002 (not in force)

Source: ASEAN web site: http://agreement.asean.org/search/by_pillar/2/8.html - last accessed on 21.06.2015

Development of the ASEAN customs transit system, which is one of main pillars for transit facilitation, will be based on Protocol 7. The Protocol 7 provides legal basis for implementation of ASEAN customs transit and defines the core elements such as uniform customs transit declaration/document, regulated guarantee system and management of the transit system. ASEAN countries have expressed their determination for increased use of computerized customs clearance processes based on international standards for electronic information exchange developed by the WCO and other relevant international organizations.

Accordingly, the Protocol 7 should provide opportunities for computerized ASEAN customs transit system and paperless transit solutions. The design of ASEAN customs transit system is expected to offer:

- Option for access to the ASEAN customs transit system to all traders who can comply with ASEAN custom transit procedural requirements;
- Electronic communication between traders and customs authorities, as well as electronic communication between customs authorities of member countries themselves for each step in application of ASEAN customs transit procedure;
- Single regional customs transit declaration;

¹⁸ ASEAN annual report 2012-2013

- One transit guarantee valid for all ASEAN countries, provided by approved guarantors from financial sector;
- Simplifications and exemptions from standard requirements for authorized compliant traders based on regionally agreed criteria.¹⁹

ASEAN customs transit system should provide real time exchange of electronic messages between traders and customs authorities for the submission of electronic transit declarations, for discharge of transit movements, and other transit formalities, which will strengthen risk management and support, fight against fraud.²⁰

ASEAN customs transit system could benefit from the infrastructure of ASEAN single window, which has been developed to provide communication and cross border information exchange. Having in mind that ASEAN single window supports exchange of ASEAN Customs Declaration Document (ACDD), it also supports transit declaration in the form of sub-set of ACDD. A pilot project for paperless transit based on computerized ASEAN customs transit system is viable in near future (e.g. a pilot North-South corridor between Singapore, Malaysia and Thailand) using the same infrastructure as the ASEAN single window.²¹ Further integration and development of single window environment may provide systematic exchange of advance cargo information for more effective risk analysis and exchange of information with other cross border regulatory agencies.

ASEAN customs transit system has a potential to become efficient regional transit system with paperless transit procedures, provided that implementation challenges are going to be successfully addressed. When actually implemented, the real benefits offered by this system could be tested. Expected outcomes under the design of this system are: transit facilitation; streamlined cross border transit movements; and reduced border delays and transport costs. However overcoming implementation challenges, starting from legal harmonization of national transit procedures among ASEAN countries, creation and successful operation of guarantee system and easing restrictive transit and transport related requirements is another critical phase where partnership with trade and transport sector is crucial.

¹⁹ ADB, 2012, Trade and trade facilitation in the Greater Mekong Subregion. Chapter 4: Trade Transit System in the GMS—Can It Work as Proposed? Des Grimble and Gordon Linington

²⁰ ASEAN / EU, APRIS II: The ASEAN Programme for Regional Integration Support Phase II document

²¹ ASEAN / EU, APRIS II: The ASEAN Programme for Regional Integration Support Phase II document

7.2 International Transit of Goods (TIM) System in Mesoamerican Countries

In 2004 Mesoamerican countries initiated development of International Transit of Goods (TIM),²² a sub-regional customs transit system project based on use of ICT and paperless transit solutions. The objectives of the project include reduction of trade transaction costs and border crossing waiting times, with improved interoperability of government agencies; expeditious customs and administrative procedures based on simplification and/or harmonization of customs procedures and border formalities; and efficient use of ICT for improved electronic data exchange and control of transit procedures.²³

International best practices and particularly EU NCTS were used as a reference model for TIM, however that does not mean that the EU system was simply replicated, but rather has been adjusted to legal requirements and implementation related specifics of the countries in Central America (e.g. requirements for predetermination of transit routes).²⁴

First implementation phase of the TIM project began in 2008 with testing the system at one border crossing between El Salvador and Honduras (El Amatillo) where the volume of transit movements in Central America is highest.²⁵

Box 29: The results of TIM project

- reduced border crossing time - from an average of 62 minutes to an average of 8 minutes;
- the volume of paperwork greatly reduced; and
- traceability and security of transit operation strengthened.

Source: Alvaro Sarmiento, Krista Lucenti and Aurelio Garcia, May 2010, Automating the Control of Goods in International Transit: Implementing the TIM in Central America

As a result, of successful implementation at El Amatillo the presidents of Mesoamerica Project member countries agreed to expand TIM to customs processes in Mexico, Guatemala, Nicaragua, Costa Rica, and Panama.²⁶ Presently TIM transit system is extended at many border crossings of Pacific Corridor from Mexico to Panama.²⁷

²² TIM is Spanish acronym for “International Transit of Goods” or “Tránsito Internacional de Mercancías”.

²³ Inter-American Development Bank, 2011, Aid for Trade Case Story: International Transit of Goods (TIM)

²⁴ Alvaro Sarmiento, Krista Lucenti and Aurelio Garcia, May 2010, Automating the Control of Goods in International Transit: Implementing the TIM in Central America

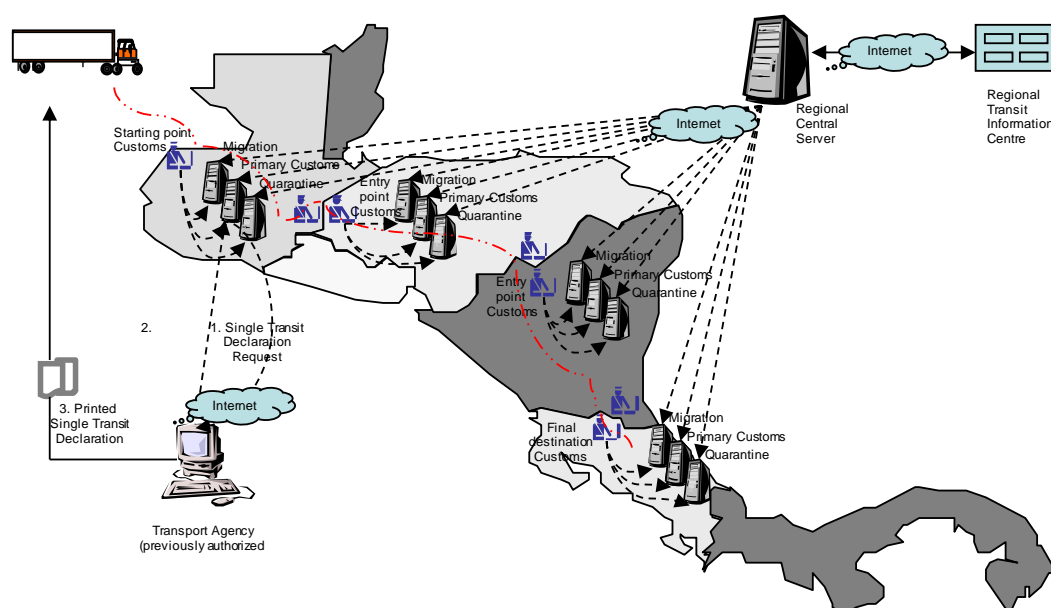
²⁵ IDB, INTAL Monthly Newsletter N° 186, February 2012, IDB supports full implementation of Transit of Goods in Central America

²⁶ Inter-American Development Bank, 2011, Aid for Trade Case Story: International Transit of Goods (TIM)

²⁷ Border crossings where TIM system operates are listed in Project Mesoamerica web site:
http://www.proyectomesoamerica.org/joomla/index.php?option=com_content&view=article&id=656&Itemid=112

The TIM transit system is based on single transit document that integrates transit data requirements for customs authorities and other data needed by migration and phytosanitary agencies, which is electronically submitted. IT infrastructure is providing the information exchange on transit control procedures between the participating agencies through a common Intranet platform. Risk analysis options are also included in the system. Local transit systems are interconnected with regional central server and they are using services of web based regional transit information centre.

Figure 20: Operation of TIM System in Central America



Source: Adapted from Alvaro Sarmiento, Krista Lucenti and Aurelio Garcia, May 2010, Automating the Control of Goods in International Transit: Implementing the TIM in Central America

Further development of TIM system is considered with respect to extension of information exchange between all land, sea and air border ports in the region, adaptation of TIM system in order to cover multimodal transport modality, and involving all countries from the Mesoamerica Project.²⁸

The TIM system represents an example of paperless transit, which contributes to transport facilitation and provides increased traceability and security of transit movements. Supported by single window environment this system offers comprehensive cross border solution.

IDB video on TIM is available on following link: [No Delay at Customs](http://www.iadb.org/en/videos/watch,2173.html?videoid=5180#.VUw4Ds7nKrI)
<http://www.iadb.org/en/videos/watch,2173.html?videoid=5180#.VUw4Ds7nKrI>

²⁸ IDB, INTAL Monthly Newsletter N° 186, February 2012, IDB supports full implementation of Transit of Goods in Central America

7.3 Examples of sub-regional customs transit systems in Africa

Regional integration initiatives in Africa provide grounds for development and implementation of numerous sub-regional customs transit systems. Main sub-integration initiatives in eastern and southern Africa are: Common Market for Eastern and Southern Africa (COMESA), the East Africa Community (EAC) and the Southern African Development Community (SADC). COMESA and SADC have developed their own customs transit systems, and presently they are working on their integration. Revenue Authorities Digital Data Exchange (RADDEx) system connects national transit systems in EAC countries.

COMESA and SADC transit systems have many similarities, however they differ in area of guarantee requirements. Transit management system based on COMESA Regional Customs Bond Guarantee System was agreed in 2005, and after testing the system (with pilot activities) it was officially launched in 2010. The SADC Customs Bond Chain Agreement and related transit regulation was finalized in 2008 and pilot trials have started afterwards. Both transit management systems are based on single transit document (COMESA Customs Declaration or SADC Customs Declaration) and have similar basic principles.

The COMESA Regional Customs Transit Guarantee (RCTG) system uses a carnet based on TIR model and a network of financial bodies, where the banks and insurance companies are organized in the Council of Surety. SADC transit management system requires a bond taken by the principal. In this case it is necessary to establish a network of designated representatives, related to the bond guarantee respectively in each transit country. COMESA and SADC transit systems have faced number of implementation issues including difficulties to transform the pilot test activities into regular operations, lack of awareness and very low interest and involvement on trade during the trials. Operational challenges related to guarantee requirements are especially evident in the case of SADC transit system.²⁹

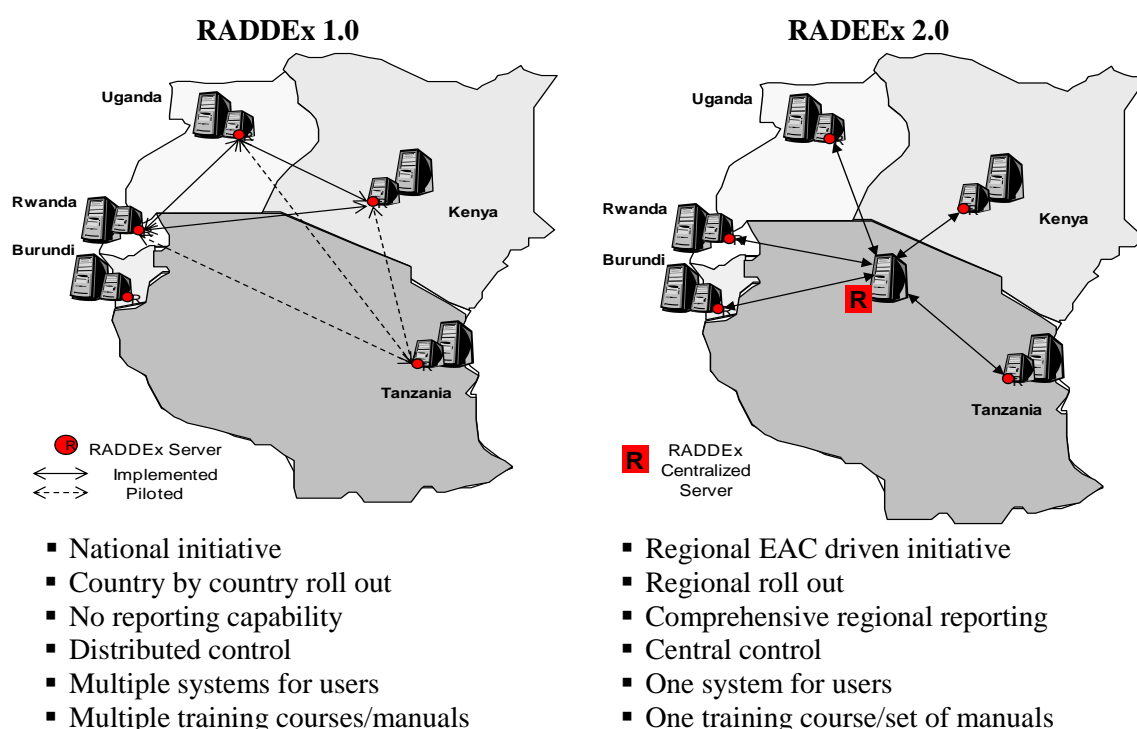
Among other measures to improve efficiency of the regional transit systems both COMESA and SADC have been working on enabling electronic data exchange of transit related information. COMESA was supported with Regional ASYCUDA Project (CARP) executed by UNCTAD. In addition to ASYCUDA software provided and training organized, the project has designed and developed Web-based Transit Data Transfer Module (TDTM), which was first tested in 2009. SADC also started developing similar Transit Data Transfer Module. ASYCUDA has contributed to faster, simplified and standardized national customs procedures and TDTM has to contribute to improved cross-border transit movement.

²⁹ COMESA/EAC/SADC, September 2011, Evaluation of the COMESA/SADC Transit Management Systems, Final Report, Stallard Mpata.

TDTM allows transit declaration to be automatically uploaded and centrally stored on regional web servers at COMESA or SADC centres accordingly. Dissemination of transit information to the users is enabled with “pull” system where the XLM format of transit declaration could be used by authorized operators to view and download the information which could be used in lodging of customs declaration in next customs office. Customs authorities could also benefit from such exchange having advance cargo information and easier verification of cross border information. COMESA TDTM systems trials began in 2009, however the real benefits of the system were delayed until 2012 when some of the difficulties of the implementation of COMESA scheme were addressed and the usage of RCTG system on pilot corridors started to steadily grow. Links between TDTM and web based RCTG application, were also developed which could improve operational potential of the system.

Revenue Authorities Digital Data Exchange (RADDEx), developed and implemented with assistance from USAID, was initiated in 2007 between Uganda and Kenya and has provided practical solution for communication between different nationally owned and managed electronic customs systems (e.g. ASYCUDA++ in Uganda and SIMBA 2005 in Kenya). Introduction of RADDEx was well accepted by trade community, and transit transactions were covered in high percentage on some key transit routes.

Figure 21: RADDEx1.0 and RADDEx 2.0 comparison



Sources: Adapted from: WCO Research Paper No. 11, February 2011, Case Studies on Systematic Exchange of Commercial Information between Customs Administrations in Bilateral and Regional Arrangements, Tadashi Yasui; USAID, Revenue Authorities Digital Data Exchange (RADDEx) – Customs Technology that Reduces the Cost of Doing Business and USAID, October 2013, RADDEx in the Making - Background, Strategy and Implementation.

Even though the customs authorities still require paper based customs documents, presently RADDEx platform enables exchange of customs declarations information among the five countries of the EAC and access to authorized public and private sector. First version of RADDEx that was based on bilateral approach was replaced with RADDEx 2.0 version, officially launched in November 2012. The new version of RADDEx provides the architecture for regional interconnectivity.

Access to RADDEx 2.0 application on local servers of national revenue authorities so-called satellites, is provided for clearing agents and customs officers for their daily operations. Satellites communicate only with a centralized server and the Central Control Server manages control of the exchange of information between the countries on regional level. When a new declaration is lodged in a national customs information system, a communication between the Central Control Server and partner states satellites is initiated. Central Control Server assigns unique identification and push the declaration to the satellites on the transit route. Clearing agent in the subsequent country can access the declaration at local satellite and download it in appropriate format, which could be used for lodging of new national customs declaration.

The Central Control Server verifies the declaration comparing its details with previous records and when discrepancies are not found, it pushes the declaration to the affected satellites. With the RADDEx unique identification each declaration will be associated with the previous declaration entry, which enables tracking of the declaration. On that way, it is possible to follow the history of the declaration, and to determine the status of the declaration through the transit route.

Box 30: Benefits from use of RADDEx system

- elimination of delays due to lack of information;
- simplified preparation of customs documents;
- elimination of multiple data entries;
- reduction of clearing agents processing time as a result of reuse of the transit data entries;
- advance clearing of goods and reduction of delay time on border crossings;
- electronic proof for termination of transit procedure which enables faster bond release;
- reduced average release time on Ugandan border from 3-4 days before introduction of the system to 3 hours in 2010;
- reduction of transit costs (estimations for the Malaba border from Kenya to Uganda indicate savings of US\$32,000 a day in transit cost or US\$11.68 million in a year).

Sources: WCO Research Paper No. 28, April 2013, Transit Facilitation for Regional Economic Integration and Competitiveness, Tadashi Yasui and USAID, Revenue Authorities Digital Data Exchange (RADDEx) – Customs Technology that Reduces the Cost of Doing Business.

7.4 National Customs Transit System in Malaysia

Customs modernization in Malaysia started with improvements in seaports and airports, and eventually has covered national customs transit between various customs checkpoints and border posts. Other government agencies have upgraded traditional information systems in order to provide more sophisticated IT solutions as well. These initiatives have provided solid grounds for development of national single window environment and improvement of customs information system, which enables effective use of paperless solutions including paperless transit.

Malaysian Single Window portal “myTRADELINK” offers improved functionality; electronic document exchange and reporting; and new value added services, including electronic cargo tracking. The portal provides a single point for exchange of information among all participants, with respect to fulfilment of requirements in regulatory trade processes for import, export or transit. Data from 2012 are showing that around 95 per cent of importation, exportation, transshipment, and transit movements are covered with electronic declarations under national single window at 166 out of 167 customs offices nationwide.

With the Security and Trade Facilitation System project initiated in 2011, Malaysian Customs have provided new paperless transit opportunities and improvement of customs transit formalities. With introduction of secure transit procedures and electronic submission of transit declaration, subsequent lodgement of paper based transit declaration (K8 form) was no longer required. The objectives of this system include: easy detection of security threats, reduced traffic congestion at checkpoints, efficient automatic and paperless customs transit clearance, and improved customs formalities for discharge of transit procedure.

Security and Trade Facilitation System is based on use of Radio Frequency Identification (RFID) technology. Electronic customs seals, which combine physical seal and Radio Frequency Identification (RFID) component, are utilized on transit movements under a RFID system. They enable tracking of transit movements, which is addressing security concerns, and in the same time offer new possibilities for transport facilitation. The RFID system and the Customs information system are integrated and tracing information could be used to automate processing of transit customs clearance. The RFID system promotes streamlined and simplified transit formalities where, paper transit declaration has become redundant, and totally paperless checkpoints could operate.

Registered traders for the services in Security and Trade Facilitation System are authorized to submit electronic customs transit declaration on the portal and to proceed with transit formalities without paper-based form of the declaration. They have right to:

- program electronic seal with their desktop RFID readers after receiving transit approval message from customs authorities and to affix the electronic seals at users' premises by themselves (in a case of high compliance traders) or

- bring the electronic seal at customs office to be affixed by customs officers (in a case of standard traders).

Beginning of transit procedure is automatically detected at the customs checkpoint of departure. When electronic customs seal is activated a unique number is assigned (Electronic Product Code – EPC), stored and exchanged in the system. Along transit movement, information could be gathered in regards to the location and time of the events during transport, including alerts on tampering the seals. The customs authorities could automatically retrieve information on transit movement with each passing through the customs checkpoints.

The customs authorities could monitor the movement and in a case of alerts they could investigate the cause and react promptly. On arrival at destination customs checkpoint, the status of the electronic seals will be automatically detected. If the RFID has not recorded any tampering, the seal will be automatically unlocked and transport procedure terminated. In the case of alerts, the customs authorities will proceed with investigation and inspection and take all necessary measures.

Box 31: Benefits of Malaysian Security and Trade Facilitation System

- reduced processing time and minimized waiting time at the customs check points/offices;
- eliminated transit paper based customs documents and reduced load of paperwork;
- optimized human resources and improved services and efficiency;
- cost savings with respect to lower waiting time and operational improvements (decreased direct contacts with customs officers and reduction of manual interventions);
- visibility and tracing of the transit movements and higher level of security;
- automated clearance is nine times more efficient than manual process (average savings in time of 47 minutes per container).
- indications that the system could generate US\$202 million in gross national income;
- indications that investments in RFID infrastructure could be returned multiple times;

Sources: Lee Cheng Suan, 2012, GS1 Asia Pacific Regional Forum 2012, Malaysian Customs Security & Trade Facilitation System Using RFID and Johanna Morden, April 2011, Malaysian Customs launches RFID

Malaysian case shows an advanced paperless transit solutions at national level. Further challenge will be to extend the benefits of paperless transit solutions to international transit in future and to provide more integrated options, which could connect national transit system in the region. It should be noted that Malaysia's neighbours are using or developing similar RFID systems as well. Connecting those systems in the future could represent a challenge.

7.5 National Customs Transit System in Thailand

Thailand has advanced support for trade and transport facilitation with use of ICT, which enables information exchange and paperless environment. Web based E-Customs system offers several services including: e-Import, e-Export, e-Manifest, e-Payment, and e-Warehouse and they provide paperless environment for carrying out wide range of customs operations. Improvement and facilitation of export and import processes, has been main focus of e-Customs initiative, with objectives to reduce paperwork requirements and lower operational costs to business and government agencies.³⁰

Thailand national single window, which is closely connected with e-Customs, offers exchange of electronic information in relation to import, export and transit regulatory requirements, among government authorities and business communities. Presently 36 government agencies and trading communities are involved in paperless information exchanges. Thailand NSW covers about 660 customs stations nationwide (e.g. customs houses, container yards, inland container depots, free zones, export processing zones, warehouses, seaports and airports) and provides exchange of wide range of key documents including Land Cargo Manifest Declaration, Cargo Movement Declaration, Cargo Release Notification, Good Transit Declaration, RFID Declaration.³¹

Customs modernization efforts in Thailand and initiatives to provide balance between trade facilitation measures for compliant traders and effective customs control, resulted with development of RFID Electronic Seal (e-Seal) public-private collaboration project. The project was initiated as Secure Free Zone project with objective to facilitate movements of bonded goods among free trade zones, export processing zones and airports in Bangkok area.

In the beginning technology behind e-Seal service was based solely on communication with Radio Frequency Identification (RFID) signals. Web based application platform designed for the Secure Free Zone project has been used to exchange details for movement of the consignment between authorized trader and customs authorities. Electronic seals with RFID components were used for exchange of relevant movement information.

The trader could affix the e-seals before the start of the movement, provided that customs authorities have not decided to make inspection before departure. Mobile or fixed RFID devices are enabling electronic activation or deactivation of the e-seals. RFID reader devices on exit points of free zones will register the start of the movement and through RFID signals will transmit the status of electronic seal to the web application platform.

³⁰ Thailand Customs Departments web site: <http://www.customs.go.th/wps/wcm/connect/custen/e-customs/e-customs>

³¹ Sinmahat Kiatjanon, UNNExT, Brief No. 08, August 2012, Towards a Single Window Trading Environment: Developing a National Single Window for Import, Export and Logistics in Thailand (p.5).

At the destination RFID reader devices will check the status again, including all information recorded by electronic seal during the movement. If irregularities or tampering attempt are not detected, the end of the movement will be registered. Otherwise customs authorities will be alerted through the communication between RFID reader and web platform, and they could proceed with all necessary measures. Secure free zone project has offered successful paperless solution for secure movement of bonded goods, and provided savings in terms of time and operational costs.

Table 5: Benefits of Using e-Seal (RFID) for the Export in Thailand

Procedures	Before	Present
Customs Procedure at the Source	Manually Inspection Against the Documents	No Customs Inspection Required
Processing Time at the Source	Hour	5 Minutes for Locking e-Seal
Customs Procedure at the Border	Manually Submit Car Manifest and Customs Inspection	Submit Car Manifest in Advance to e-Customs Before the Truck Arrives
Processing Time at the Border	2-3 Hours	Less Than a Minute

Source: Sinmahat Kiatjanon, February 2013, Presentation for The Customs and Excise Committee: Thailand National Single Window. Accessible at: <http://www.thainsw.net/INSW/index.jsp?nswLang=E>

E-Seal project evolved and improved over the time. New solutions, which include new requirements, were developed (e.g. an e-Lock system with device that combines RFID, GPS and GPRS technologies has been developed and tested in 2010). The options for use of e-seal services with included e-tracking have been extended to import and export bonded movements between border posts, seaports and airports, inland customs depots, free zones, export processing zones and other bonded areas.

Table 6: Benefits of Using e-Seal (RFID) for the Import in Thailand

Procedures	Before	Present
Submit Car Manifest	Manually Upon the Arrival of Truck	Submit Car Manifest in Advance to e-Customs before the truck arrives
Customs Procedure at the Border	Manually Inspection Against the Documents	No Customs Inspection Required
Processing Time at the Border for the Import	6 Hours	5 Minutes for Locking e-Seal
At the Destination in Thailand	Manually Inspection Against the Documents	No Customs Inspection Required IF the e-Seal is not Tampered and the Traveling Time is Within the Limit
Processing Time at the Destination	1 Hour	Less Than a Minute

Source: Sinmahat Kiatjanon, February 2013, Presentation for The Customs and Excise Committee: Thailand National Single Window

E-Seal services implemented in Thailand have improved efficiency of bonded transit movements and they bring benefits to the participating traders. It is estimated that decreased operational costs and significant reduction of paperwork processing in the case of the Western Digital Secure Free Zone project reduced the whole expenses for transportation by 60 per cent.³² Experience from this project is also showing benefits for Customs authorities, with improved security of the movements, monitoring of late arrivals and tampered shipments and efficient use of human resources potential.³³

7.6 National Customs transit system in Ghana

Responding to the trade sector concerns on slow, cumbersome and expensive clearance procedures, and intending to decrease trade and transport costs, Ghana's government introduced several important customs reforms in last decade including computerization, single window environment and transit tracking system.

An important reform in Customs has been introduction of Ghana Community Network Services (GCNet) as a public private partnership initiative. The GCNet trials started in 2002 and the GCNet system has been operational in Ghana since end of 2003. The GCNet system consists of two main complementing components:

- Ghana Customs Management System (GCMS) – an automated system for processing and management of customs declarations and other customs formalities, based on Electronic Data Interchange (EDI); and
- Ghana TradeNet – the EDI platform that enables GCMS to exchange electronic messages between traders, customs authorities, other regulatory agencies and other parties involved.

GCNet System design provides: electronic submission of manifests and customs declarations; electronic confirmation of payment of duties and taxes; electronic transmission of customs clearance approvals; and transfer or various electronic messages between traders, customs authorities, other parties concerned regarding import, export, warehousing, free zones and transit operations. The system is connecting stations at seaports, international airport and land borders. GCNet System has facilitated processing of cargo clearance and reduced transaction costs and customs clearance delays.

The GCNet System has been upgraded over the time and it also supported transit reform in Ghana with regard to its national transit. Reengineering of national transit procedures began in early 2006, which included:

- Changes in customs sealing practices for non-containerized trucks;

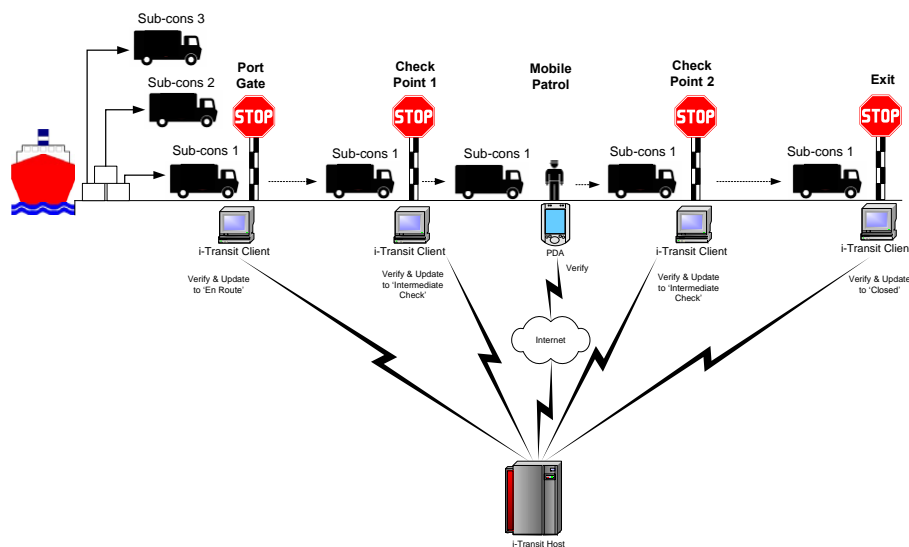
³² U-Koj Plangprasopchoke and Wutjanin Muttitanon, March 2013, Intelligent Evaluation for E-Seal Adoption in Customs.

³³ ESCAP, 2011, Monograph Series on Facilitation of International Road Transport in Asia and the Pacific (p.43) (based on presentation by Mr. Anusorn Lovichit, TIFFA).

- Introduction of electronic processing of transit guarantees granted by State Insurance Company, which is connected through GCNet and has real time information from GCMS for verification and release of transit bonds;
- Gradual introduction of new transit module (i-Transit) that connects customs offices at ports with customs offices at land border crossings; improved document flow, where the manual system for discharge of transit procedure was replaced with electronic system, and also enables prompt release of transit guarantees;
- Training and authorization of operators and agents which participate in transit trade and
- Replacing reliance on ineffective and costly customs escort system with electronic transit tracking system.³⁴

Transit vehicles and foreign importers have to be registered in order to use electronic tracking system. The cargo is secured with customs seals and customs officers supervise the sealing of trucks. Electronic tracking is enabled by integrated solution with use of combination of specialized software and hardware. On-line tracking on port gate, defined checkpoints and exit border crossing provides logical tracking on predefined route.

Figure 22: On-line Tracking and Check Points in Ghana's i-Transit System



Source: GCNet 2007 presentation: Ghana CEPS i-Transit System

Satellite tracking is enabled with electronic tracking devices fixed to the vehicles, which are registered in i-Transit system. Vehicle position is determined by global positioning system (GPS) and the data about truck position is communicated to Transit Control Centre via communication satellite system and Internet.

³⁴ Luc De Wulf, 2010, World Bank, Ghana Leads West Africa in Transit Reform

IP Camera System at entry and exit points, as well as at checkpoints supports the electronic tracking system. Customs officials can monitor transit cargo in real time and communicate with mobile teams on ground to intervene if needed. Authorized traders can also track their cargo on GCNet. The system presently covers south-north and east-west corridors through Ghana and it is used for monitoring between 2,500 and 3,200 trucks per month.³⁵

Box 32: Benefits of transit reform in Ghana

- faster clearance times;
- more transparent and predictable processes;
- improved professionalism and increased customs revenue;
- decreased transit times and costs

(e.g. on Ghana – Burkina Faso corridor (between Tema and Paga) the transit time from more than 5 days before 2006, it was cut down to 3.3 days for containerized trucks and 3.4 days for non-containerized trucks in late 2006, and further reduced to 3 days in 2008).

Source: Luc De Wulf, 2010, World Bank, Ghana Leads West Africa in Transit Reform

Reflecting on this module

This module proves that there are no “one size fits all” solutions for transport facilitation and paperless transit. There are many examples of developing sub-regional and national paperless transit solutions, where countries are using best practices and taking in account sub-regional, as well as national specifics and operating environment.

Presented case studies are showing that computerization, single window environment, cross border exchanges and electronic transit tracking may be organized in various ways, based on preferences of the countries. These facilitation measures support paperless transit and bring benefits to the trade and transport sectors and to the governments as well.

Questions and discussion topics

1. What are the key sub-regional and national specifics that have to be considered when developing paperless transit systems?

³⁵ SGS, Omnis in Action, Cargo Control in Ghana

Module 7 Selected case studies on paperless transit

Introduction (3 min)

Best practices (EU transit systems /NCTS) adapted in other sub-regions taking in account regional specifics and environment. Facilitation of international transit through efficient national paperless transit systems.

Module objectives (2 min)

- To understand principles and main features of sub-regional customs transit systems in the case of ASEAN, Mesoamerican countries, and eastern and southern Africa (COMESA; SADC; EAC);
- To recognize various options for supporting paperless transit at national level with single window environment and electronic vehicle tracking through examples of national transit systems in Malaysia, Thailand and Ghana

Content (30 min)

1. The ASEAN Customs Transit System (ACTS)
2. International Transit of Goods (TIM) System in Mesoamerica
3. Examples of sub-regional customs transit systems in Africa
4. National Customs Transit System in Malaysia
5. National Customs Transit System in Thailand
6. National Customs transit system in Ghana

Summary (5 min)

There are no “one size fits all” solutions for transport facilitation and paperless transit. Developing sub-regional and national paperless transit solutions using best practices and taking in account sub-regional / national specifics and environment. Computerization, single window environment, cross border exchanges and electronic transit tracking may be organized in various ways and could strongly support paperless transit.

Feedback and Discussion (5 min)

Feedback on this module and discussion on sub-regional and national specifics, as well as environment that have to be considered when developing paperless transit systems.

Instructor's notes:

Instructor:

Date and time:

Location:

Training methods

- Lecturing and explaining
- Questioning
- Discussion

Training resources

- ESCAP Guide on paperless transit (Module 7, including Module 7 overheads in Annex 4)
- ESCAP Study on paperless transit (Chapter VI)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3)

MODULE 8

Challenges in establishing paperless transit systems and possible ways to address them

Introduction

Module objectives

- 8.1 Overall trade and transport environment, regional integration and political commitment
- 8.2 Coordination between stakeholders
- 8.3 General design of paperless transit system
- 8.4 Establishing legal framework
- 8.5 ICT and providing interoperability
- 8.6 Addressing implementation issues
- 8.7 The way ahead

Reflecting on this module

Module 8 - session plan

MODULE 8 Challenges in establishing paperless transit systems and possible ways to address them

Introduction

Developing international transit systems and introducing paperless transit is complex undertaking and numerous challenges could be expected. The challenges could appear in various stages from inception phase to final implementation of paperless transit systems. Identification of those challenges in order to carry out appropriate mitigation actions before they could emerge as a major concern is important step in development of new or upgrading existing transit systems.

The challenges in establishing paperless transit systems could differ from country to country and from region to region. This module sums up the challenges discussed in previous modules; gives a general overview of the challenges, which could be relevant for development of paper transit systems and suggest the ways how to address them. It also gives directions for possible way ahead for establishing paperless transit systems.

Module objectives

On completion of this module participants should be able to:

- Identify relevant challenges for development of new or upgrading existing transit systems;
- Recognize the actions that may be taken to address identified challenges;
- Analyse possible ways ahead for establishing paperless transit systems.

8.1 Overall trade and transport environment, regional integration and political commitment

Transit by its nature involves multiple countries and several transactions with regard of movement of goods across the borders. Therefore to facilitate transit it is not sufficient to address transit issues only at national level. Transit has to be regarded as integral part of overall trade and transport environment in the sub-regional and regional aspect. Challenges within trade and transport environment (e.g. absence of effective transport agreements; limited road transport permits and traffic rights), could be reflected as challenges for successful introduction of paperless transit system.

The policies which protect or favour domestic transport and logistic sector over foreign carriers could lead to increased practices of transloading at border crossings. In the case of inefficient transloading, the benefits from introduction of paperless transit systems will be minimized. Restrictive policies with regard of transit routes selection could also represent impediment to international transit. It is clear that if overall trade and transport environment is not favourable, then there is not much that paperless transit could offer to change that situation.

Measures to provide favourable transport environment include:

- Formulation of facilitation policies, agreements, programmes and projects with common long-term targets for fundamental elements of international road transport (e.g. ESCAP Regional Strategic Framework for Transport Facilitation);
- Increasing cross border transport efficiency (e.g. with recommendations provided with ESCAP, 2012, Efficient Cross-Border Transport Model).

Efficiency of transit systems cannot be achieved in disintegrated trade and transport environment. Consequently establishing a productive paperless transit system requires sufficient level of political commitment for bilateral, multilateral, sub-regional or regional integration. Strongly expressed political will and leadership to support international transit systems with paperless solution is necessity for development of new or upgrading present transit systems.

Countries in the region are generally expressing the will to improve transit systems and to increase the use of ICT solutions, and it seems that general political will in that direction is not lacking, however the real challenge is to harmonize strategic objectives among countries and to provide political support for actual reform of international transit. Large differences between national priorities could represent significant challenge for reaching consensus on vision and strategic objectives for international paperless transit solutions. Making political decision to improve international transit requires joint vision for enhanced regional integration, trust, and high level of cooperation between the countries and their respective administrations.

Multilaterally agreed vision and strategic objectives for international paperless transit will provide basis for clear strategic planning, which will ensure coherent national transit policies and enable development of integrated or interoperable transit systems. If the vision for the regional or sub-regional integration is not very clear and if the policies for overall trade and transport environment and ICT development are not coherent, it will be very challenging to plan, to develop or to upgrade international transit with paperless solutions.

Countries are often joining (or considering) various trade and transport facilitation initiatives, which include paperless trade; single window environment; electronic customs; and cross-border cooperation. Those initiatives might overlap the coverage of paperless

transit. Thus, it is important to have coordination and prioritization amongst the various initiatives. That will enable to address the issue of development of paperless transit system while considering all other perspectives, planning the use of resources in most efficient way and taking in consideration absorption capacity of administrations and other participants concerned with the reform processes.

8.2 Coordination between stakeholders

As we have discussed in Module 6 an international transit includes large number of stakeholders from public sector and private sector. Coordination and communication challenges for involvement of all participants in effective public private cooperation could be substantial. ESCAP (2012) guidelines on national coordination mechanisms, offers analysis and recommendations for establishing and strengthening national coordination institutions that will support establishing efficient transit systems.

Designation of national leading agency (e.g. customs authorities) could facilitate coordination at national level in the process of development and implementation of the paperless transit. Ensured representation and active participation, of all agencies concerned, in interagency management and coordinative structures at national level in early phases of development of international transit system is important in order to develop stronger joint ownership and full commitment for such project.

Some agencies may be reluctant to adopt the necessary legislative, organizational, and ICT infrastructural changes required by paperless transit systems and their early involvement will help them to better understand overall strategic objectives and benefits of the future transit paperless system and to adapt the use of the system within their internal plans for development of paperless environment. With transparent process of decision making, where total control of the leading agency is not assumed and where appropriate mechanisms for dispute settlement are agreed, the newly developed paperless transit system could be better accepted and implemented by all regulatory agencies involved.

As pointed out in Module 6, extending coordination from national to cross-border level (bilateral, multilateral, sub-regional or regional) is necessary for efficient international transit. Coordination at international level, where the countries could discuss and propose options for development of paperless transit solutions has proven to be very challenging process (as the case of ASEAN customs transit shows for example). To address this issue it is necessary to assure that the mandate of cross-border coordination structure is clearly established, and that the joint vision and strategic objectives for international paperless transit solutions have been harmonized and agreed in advance.

Coordination at national and international level requires strong political support from national governments. Sub-regional bodies, entities or initiatives that promote regional

cooperation and integration could also provide operational support for facilitation of coordination at international level.

8.3 General design of paperless transit systems

Designing international paperless transit solutions brings number of challenges not only due to the complexity of the process, but with regard to the choice of the most feasible design option for the transit system as well. It would be more convenient if agreed strategic objectives are already suggesting outline and preference for the international transit. Intended level of regional or sub-regional integration could also influence the design of international transit. General design has to be agreed before proceeding with more detailed technical design of paperless transit system.

With regard to design options, the countries may decide about:

- preference between having international transit as a chain of national customs transit systems with paperless solutions that could provide partial integration or having fully fledged international paperless customs transit system;
- the level of harmonization of national transit with international transit systems;
- joining or upgrading existing international customs transit systems or developing new regional or sub-regional transit alternatives;
- preference between centralized or decentralized customs transit system application;
- operating in national or international single window environment;
- mandatory or optional use of paperless transit systems.

All of these options have their own advantages, disadvantages and risks.

It is easier to organize international transit as a chain of national customs transit systems then to introduce fully-fledged international paperless customs transit system (e.g. transit systems like European Common transit and NCTS or ASEAN customs transit). In the case of international transit as a chain of national customs transit systems, partial integration could be provided through paperless solutions, which include:

- systematic cross-border electronic data exchanges on customs transit data;
- cross-border vehicles tracking using ESCAP secure cross border transport model;
- enhanced cooperation at border-crossings.

In this case developing national paperless customs transit systems will be sole responsibility of each of the respecting governments.

Having fully fledged international paperless customs transit system could provide utmost facilitation of international transit, however if existing national transit systems substantially differ from country to country, and if there is low level of regional integration, it will be very challenging to introduce such international customs transit system.

The decision on the level of harmonization between national transit and international transit systems will also have impact on the design of the transit system. If international transit system and national transit systems are totally divided with separate solutions for different transit options (e.g. for through transit; and for outward and inward transit), it might be easier for the countries to reach consensus on the design of the new international paperless transit system. In this case substantial reform of the national transit system in the countries will not be required. However this option may bring implementation challenges from operating various transit systems with different rules and distinctive transit formalities, diverse transit documents and separate information systems.

If national transit is highly harmonized with international transit and if the same or very similar rules and transit formalities exist (as in the case of Community and Common transit in EU), then implementation challenges will be substantially reduced. If single national customs transit information systems manages national and international customs transit (as NCTS in EU) conditions for flawless international transit will be established where international transit represents natural extension of national transit.

Options for joining existing international transit systems in the region are limited. ASEAN Customs transit system is not implemented yet and its advantages and risks are still not demonstrated in practice. Successful implementation of ASEAN Customs transit system could raise the interest for extension of this system. Shorter time for implementation and reduced implementation risks are some of the advantages of joining existing transit systems. On the other side joining existing transit systems limits possibilities for designing the transit system in accordance with specific needs of the countries, and brings some known disadvantages of the existing system. Upgrading existing transit systems (e.g. introducing paperless transit solutions in GMS CBTA) may involve improvement of present transit options and replacement of paper based with electronic transit declarations.

Developing new sub-regional transit system, for example based on European transit model, offers possibility to adapt the transit system to sub-regional requirements and characteristics. However developing new sub-regional customs transit system could be very complex and time consuming. It brings higher implementation risks and challenges including introduction of operational international transit guarantee. The international guarantee is one of the specific issues that characterize the international transit system. With development of new transit system the challenge of choosing most appropriate type of guarantee appears.

The countries usually opt between:

- Centralized – (e.g. carnet) system where the bond is represented with standardized carnet issued by national issuing/guaranteeing organization member of organized network of organizations across the participating member countries and
- Decentralized - systems where the bond is issued by various financial institutions (e.g. banks), which have appointed representatives in each of the transit countries.

Both systems have their advantages and disadvantages. Centralized system offers simplicity and uniformity of the international guarantee. Establishing network of issuing/guaranteeing organization might represent the challenge, but once that network is set the implementation should be very straightforward. The price of the guarantee is one of the risks of this system because competition between guarantors is lacking.

Advantages of decentralized systems are in providing more customized solutions tailored to the needs of the traders; including options for simplification and reduction of the amount of the bond. However this system is more complex and challenging to be established. Legal and practical implementation could also represent significant challenge because the financial responsibility should be extended from the guarantor in one country to his representative in another country.

An option for centralized transit system with single transit application could be suitable solution if the level of sub-regional integration is very high and transit legislation is fully harmonized. Advantages of centralized transit system include:

- reduced operational efforts and costs for development, maintenance in the case of central transit application;
- uniformity and reduced costs by using single help-desk, and
- further simplification of transit formalities by providing access to the principals and declarants in only one system.

However in this case the role of sub-regional centre has to be considerably strengthened and experience suggests that it is very difficult to develop and operate a centralized system mainly due to political rather than technical reasons.

Decentralized transit systems with distributed architecture are operating by using several existing or newly developed national customs software applications. In this case interoperability of customs information systems has to be provided. Development of decentralized transit system enables better individualization of the national applications tailored to the national requirements; however it entails the challenges of high-level coordination among national authorities. National authorities remain responsible for management and maintenance of their national applications for the international transit, and

regional or sub-regional centre could facilitate and support interfacing of national transit systems.

Submission of electronic transit declarations could be mandatory or optional. Mandatory submission is inline with increasing demands for higher security and also enables using full potential of cross border facilitation. However if the present level of computerization is not very high, mandatory introduction of paperless transit system could bring substantial initial costs, various implementation difficulties and resistance. Therefore in such case gradual introduction of paperless transit systems and optional use of paperless might be more viable.

The challenges developing general design on paperless transit systems should be addressed with analysis of different design options, considering the needs of the trade and transport sector, as well as the requirements of customs authorities and other regulatory agencies under clearly established vision for international transit. The newly introduced paperless transit systems should provide clear benefits for trade and transport sector and for the governments as well. More detailed design of the paperless transit system has to address the challenges of various complex procedures and document requirements, with simplification and business reengineering processes, under the framework of international acceptable standards and best practices.

8.4 Establishing legal framework

Appropriate legal framework, could provide stability and predictability of the paperless transit system. Details for establishing legal framework have been discussed in Module 5 of this training programme including:

- general legal framework that covers transport and transit aspects;
- general legal framework for paperless environment; and
- specific legal instrument for establishing paperless customs transit solutions.

To address the challenges for establishing legal framework it is recommended to harmonize legislation instruments with international standards, guidelines and model legislation (e.g. WCO Revised Kyoto Convention; ESCAP Guidelines towards a harmonized legal regime on transport facilitation; UNCITRAL Model law on electronic signature). Developing regional umbrella Arrangement/Agreement as suggested with ESCAP Study on regional arrangements for facilitation of cross-border paperless trade in Asia and the Pacific could also provide enabling environment for harmonized paperless legal framework.

To develop specific legal instrument for establishing paperless customs transit at international level (e.g. sub-regional transit agreement), best practices of paperless transit

systems as well as national and sub-regional specifics have to be considered. Such international instrument should provide:

- a) standardized customs transit formalities;
- b) cross border harmonization of documents (e.g. transit declaration and international guarantee); and
- c) legal basis for electronic exchange of information and their use.

Transposing international instruments into national legislation and implementing regulation may require drafting a new national legislation or amending existing one. This process could be very time consuming and burdensome if national legislation is not already harmonized with international standards and recommendations. If the national transit related legislation is highly harmonized with international standards and recommendations it is more likely that new international transit instrument will not make significant disturbances and that required changes of national legislation should be minimal, better accepted and more easily implemented. The implementation of newly introduced transit system could experience delays having in mind that all participating countries have to align their national legislation with provisions laid down in the international instrument and some countries may have more efficient processes for introduction of new regulation than others.

Standardization and harmonization of legal framework may require common guidelines and common working methods especially if national laws and regulations are making possible to have different interpretation of the same provisions from international instruments. Developing and maintaining regional or sub-regional legislation database for all national transit related laws, regulations and guidelines will support the process of establishing legal framework for the new transit system and could also facilitate implementation, once the system will be operational.

8.5 ICT and providing interoperability

ICT development and progress around the world brings increased use of paperless solutions in the areas of trade and transport facilitation, however a lack of adequate ICT infrastructure could still represent important challenge. Computerization of customs and other border processes is advanced in many countries; however integration of various systems at national level and providing cross-border interoperability is yet to be developed and requires a lot of attention.

At national level, it is important to integrate customs transit processing system with other customs information systems (e.g. risk management system, transit control system and guarantee managements systems). That will allow more effective risk analysis and monitoring of transit operations. If the transit system operates in single window environment,

interoperability with information systems of other regulatory agencies has to be enabled as well.

At international level (e.g. sub-regional level) interoperability of national customs information systems could be provided, which will allow a seamless exchange of information (e.g. on transit declaration data, various transit control messages, international transit guarantee). ICT coordination efforts and interoperability of information systems in the case of implementation of paperless transit could be very demanding and challenging.

Cross border exchange of information and electronic messages requires integration or interface of several information systems. Customs administrations in different countries in the region are using different customs information systems, and other regulatory agencies have their own distinctive information systems. Diversity of ICT infrastructure with respect to hardware, software solutions, data bases and communication options is burdening interoperability of the information systems.

In order to enable interoperability of various information systems and to provide seamless electronic information exchange, it is essential to follow international ICT guidelines and recommendation and to apply international messaging standards. Guidelines and tools developed by international organizations have been mentioned earlier in Module 6 (e.g. WCO RKC ICT Guidelines, WCO Data Model, UN/EDIFACT and XML message design). Efforts to provide integration and interoperability of various information systems at national, sub-regional or regional level could be substantial given the different level of ICT development among various agencies within the same country and among different countries that participate in international paperless transit system.

Having in mind continuous ICT progress and rapid changes, it is necessary to invest in up-to-date technologies, which could meet future improvements and requirements. When developing or purchasing transit system software applications it should be considered that those software solutions will have to be relatively easy to upgrade and adapt as may be required by future development of the transit system.

8.6 Addressing implementation issues

Changeover from existing national transit systems to improved transit system that supports international paperless transit, requires appropriate management and adequate implementation capacity. Implementing new international paperless transit system is very demanding process, which could be followed by several challenges. Complexity of such project requires detailed and well-developed implementation strategy and plans.

Project management tools have to be used to track the progress and efficient use of the resources. In-house expertise is very desirable and if such knowledge is lacking appropriate measures are necessary before the start of the project. Selection of capable and

experienced national project managers is one of the crucial steps of the project because they will have very challenging role to lead the project; and to maintain effective liaison in the spirit of team building and trust with their national and sub-regional coordinative structures. Adequate human resources have to be dedicated to the project, which should be based on performance management.

Processes of planning, reporting, tracking, and monitoring and evaluation in the implementation of paperless transit system, have to be well organized and to lead to prompt corrective actions because weak practices could result in serious wastage of resources, implementation difficulties and delays. Customs administrations and other cross border regulatory agencies have to be prepared for actual implementation of new transit systems which requires adequate training. Trade and transport sector have to be included in awareness programs and training and when necessary additional assistance for better acceptance of the transit systems novelties may be provided.

Development and testing of the new or upgraded transit system have to be synchronized at international level, which requires significant efforts for coordination. Step by step introduction, from few pilot sites and selected participant and gradual expansion, will enable performance analysis, identification of weaknesses and remedial actions, before the system is spread out to whole customs territories or to other countries.

Implementation of comprehensive paperless transit system is resource demanding, thus high initial costs could represent serious financial challenge. High commitment in terms of resources and budget is necessary for successful introductions of new or modification of existing transit systems.

If paperless transit system is not properly designed and implemented, lack of demand from trade and transport sector and high resistance from all stakeholders included, could represent important challenges for implementation of new transit systems. Thus, coordination between all stakeholders, discussed earlier in this Module, is vital to take into consideration stakeholders' requirements and to provide clear benefits from the use of the new system over existing processes.

8.7 The way ahead

Having in mind the best practices in paperless transit systems, lessons learned from regional and national paperless transit related case studies, and taking into consideration advantages and challenges related to international paperless transit systems, this training programme is suggesting introduction of regional paperless transit system as best option for providing seamless cross border transit movements. Regional paperless transit system could improve overall management of international transit, streamline transit formalities and increase security and quality of customs control.

While nurturing the vision for introduction regional paperless transit system the governments and the regional bodies could work on specific actions related to paperless transit and build positive environment for paperless transit systems. Those actions include:

- introduction of paperless transit systems at national level;
- harmonization and standardization of transit and paperless environment requirements;
- introducing systematic exchanges of transit data at national/cross border level;
- introduction of cross-border electronic vehicle tracking based on ESCAP model.

Paperless transit solutions at national level enable automation of customs transit procedures within each transit country. Lodging electronic transit customs declarations and national exchanges of electronic messages could become standard way of communication between traders and customs authorities. The countries where the national transit procedures are still not handled electronically or where the conditions for electronic customs in general are not sufficiently developed, may make increased efforts to join global trends for replacement of paper documents by electronic data in order to provide reduced costs and decreased delays from customs formalities; enable effective and efficient deployment of resources; and enhance security of customs procedures.

The introduction of national paperless transit system can address some of the major challenges of current transit regimes: the weak information system to reconcile transit declarations, delays at port where transit is initiated and guarantee management. Due to improper management and lack of system to trace transit declarations and transit manifests, often they are not reconciled. This leads to long delays in discharge of bonds and guarantees, which increases the transit transport costs.

Electronic declarations and messages can provide automated reconciliation and as soon as transit is terminated the guarantee can be discharged. The paperless transit can also make guarantee management more efficient by linking all the three places the transit origin, and destination and guarantor. The interface between e-customs and transit system is desirable and practically essential for efficient transit operations and experience of NCTS discussed earlier clearly indicates that paperless transit makes the linkage easier.

Harmonization and standardizations of customs transit rules and ICT requirements is one of the important issues that have to address implementation difficulties and complexity in regard to international transit. Differences of transit procedures and formalities from various national transit systems and transit arrangements (e.g. national transit arrangements for inward, outward and through transit) could seriously burden international transit.

Even if the countries have not decided yet to introduce international paperless transit systems, harmonization and standardizations of national transit systems could streamline

international transit. It is essential that national initiatives for computerization and introduction of paperless transit, national transit reform processes, and arrangements for exchanges of information, take into account related international standards and recommendations.

Standardization will not only support and facilitate those initiatives, processes and arrangements, but will also provide certain level of harmonization which may be very important precondition for any future arrangement on international paperless transit system. Regional and sub-regional bodies and international organizations should continue to promote and support standardization and harmonization of transit and ICT requirements and offer support to the countries in this direction.

Systematic exchanges of information, among enforcement and regulatory agencies are becoming easier with automation and it could be expected that such exchanges will be increased in the future, having in mind that the pressure for efficiency of cross border movements and higher security of supply chains is going to continue. Exchanges of information may take place:

- at national level (e.g. under framework of national single window environment) or
- at international level (e.g. under bilateral or multilateral agreements between customs administrations or regional and sub-regional single window initiatives).

Supporting arrangements for cross-border exchanges of information, building an atmosphere of collaboration and trust among enforcement and regulatory agencies leaves the door open for further cross-border cooperation which may include first support of national transit systems and then introduction of international paperless transit systems in the future.

ESCAP Secure Cross Border Transport Model is a transport facilitation model, which defines a concept and foundations for designing a system for cross border transport monitoring. The model suggest innovative integration of information and communication technologies based on Radio Frequency Identification (RFID), satellite positioning systems (SPS), and cellular communication systems (CCS), such as GPRS/GSM for electronic vehicle tracking.

Standard components of the system based on ESCAP Secure Cross Border Transport Model include:

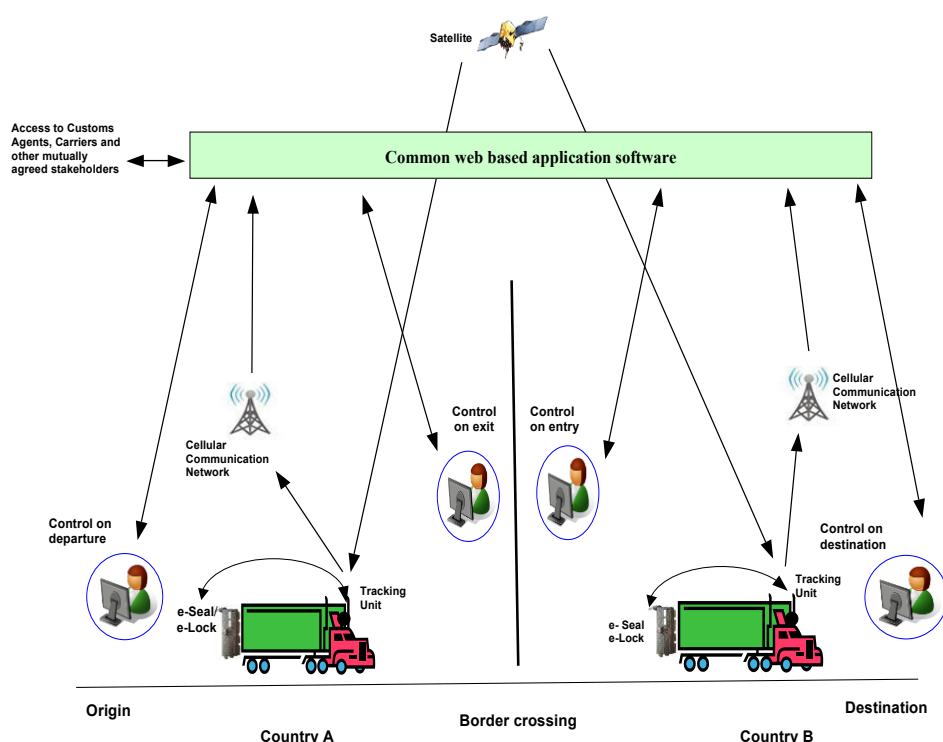
- Tracking unit – that contains RFID, SPS and CCS module and it is located in the vehicle concerned. This unit determines the location of the vehicle using SPS, records the e-Seal status using RFID, and communicates with monitoring platform via CCS;
- Electronic Seal – that combine physical seal to secure the cargo, mechatronic component to identify the e-Seal status and RFID component for joint function

with the tracking unit;

- Monitoring Platform – supported by web based electronic tracking application software to track the transit movements and;
- Mobile/Fixed Device – used to initiate and discharge the transit movement at departure and destination point respectively.

The Model offers options for vehicle tracking of entire cross-border transport from departure to destination country; or independent vehicle tracking only in own country. The systems based on this Model will not only address security and safety concerns, but it will increase confidence, mutual understanding, and trust and it could support introduction of facilitation and simplification measures.

Figure 23: ESCAP Secure cross border transport model



Source: adapted from ESCAP, 2012, Secure Cross Border Transport Model

If the paperless transit is extended from national to international transit system the benefits in relation to reduction of costs and higher security could be greatly enhanced. Electronic exchanges of harmonized data on international transit movements among customs administrations will allow principals and declarants to avoid submission of several customs transit declarations with often similar or same data, to different customs authorities at the border crossings.

Due to complexity of negotiations between many countries where there is a substantial variation of transit priorities and differences in transit procedures and ICT infrastructure, it is advisable to introduce paperless transit on specific bilateral transit corridors to begin with involving few countries only. As an illustration India-Bhutan, India-Nepal can be two such transit corridors. These transit systems can be developed and implemented in a relatively short period of time and if they prove their advantages, as expected, the paperless transit could be further extended and eventually transformed into sub-regional paperless transit system. In this regard successful introduction of ASEAN Customs transit system in near future may give strong impulse for development of multilateral transit agreements in the region.

Integration of paperless transit systems in national or regional single window environment, even though may be preferred for facilitation reasons, should not be set as a condition for development of new transit systems in order to avoid unnecessary delays due to the differences among the countries in this regard.

Based on national priorities and understanding reached in bilateral, multilateral or sub-regional arrangements the paperless transit systems may be introduced in a phased manner, given the differences in transport and transit environment in the countries. (e.g. differently regulated transport and traffic rights). Convergence in previously mentioned areas should be recommended for the ultimate integration of various bilateral, multilateral or sub-regional agreements.

Reflecting on this module

Development of international paperless transit is a continuing process, from setting the vision; through multiple stages that should enable gradual improvements in transit connectivity; and finally to introduction of international paperless transit system. Widening the awareness for the role of paperless transit, continuous capacity building for introduction of modern paperless transit solutions in cross border regulatory requirements will support facilitation of international transit at national, sub-regional and regional level.

Module 8 Challenges and possible ways to address them

Instructor:

Date and time:

Location:

Introduction (3 min)

Sum up of the challenges discussed in previous modules; general overview of the challenges relevant for development of paper transit systems and suggested ways to address them. Directions for possible way ahead for establishing paperless transit systems.

Module objectives (2 min)

- Identify relevant challenges for development of new or upgrading existing transit systems;
- Recognize the actions that may be taken to address identified challenges
- Analyse possible ways ahead for establishing paperless transit systems.

Content (35 min)

1. Overall trade and transport environment, regional integration and political commitment (5 min)
2. Coordination between stakeholders (3 min)
3. General design of paperless transit systems (10 min)
4. Establishing legal framework (2 min)
5. ICT and providing interoperability (5 min)
6. Addressing implementation issues (5 min)
7. The way ahead (5 min)

Summary (3 min)

Development of international paperless transit as continuing process. The role of paperless transit awareness and capacity building.

Feedback (2 min)

Feedback on this module

(Note: Discussion on the way ahead in wrap-up session)

Instructor's notes:

Training methods

- Lecturing and explaining
- Questioning
- Discussion

Training resources

- ESCAP Guide on paperless transit (Module 8, including Module 8 overheads in Annex 4)
- ESCAP Study on paperless transit (Chapter VII and IX)
- ESCAP (2001), Train the trainer - Training fundamentals – Instructor's reference manual (specific training methods in parts 3.2.1; 3.3.2; 3.3.3)

Outline for national case study presentation on status of transit

- Major entry/exit points and transit corridors
- Transit related institutional arrangements
 - o National customs transit regulation
 - o Bilateral, regional or international customs transit agreements
 - o National transport regulation related to transit
 - o Other transit related national requirements
 - o Strategies/Plans for future transit related institutional arrangements
- Customs procedures for transit movement of goods:
 - o through transit;
 - o bilateral movements of goods with neighbouring countries;
 - o exit from the country (including national transit if export procedure is not done at the border but inland (regular and simplified procedures – e.g. authorized consignor);
 - o entry to the country (with national transit if import procedure is not done at the border but inland) (regular and simplified procedures – e.g. authorized consignee);
 - o inland movements (regular and simplified);
- Transit declarations and supporting documents (please provide some samples);
- Transit guarantee requirements;
- Status of electronic customs systems
 - o General (including regulation on electronic documents, electronic signature)
 - o Transit related electronic customs systems
 - o Plans for further automation
- Other relevant transit specifics (e.g. facilitation of border crossing procedures, single window).

Train-the-trainers workshop agenda

Day 1

08:30 - 09:00	Registration of participants
09:00 - 09:30	Opening session <ul style="list-style-type: none">• Welcome address• Workshop objectives• Self-introduction of trainers and participants
09:30 - 10:00	Overview, training materials, expected output
10:00 - 10:30	Module 1: Introduction to transit <ul style="list-style-type: none">• Defining transit
10:30 - 11:00	<i>Break</i>
11:00 - 12:30	Module 1: Introduction to transit (continued) <ul style="list-style-type: none">• Customs related requirements of transit• Other requirements of transit• Advantages of paperless solutions in transit systems
12:30 - 13:30	<i>Lunch</i>
13:30 - 14:00	Module 1: Introduction to transit (continued) <ul style="list-style-type: none">• Discussion (feedback and adaptations for phase II)
14:00 - 14:30	Case Study (Country A) presentation for status of transit
14:30 - 15:00	Case Study (Country B) presentation for status of transit
15:00 - 15:30	<i>Break</i>
15:30 - 16:00	Case Study (Country C) presentation for status of transit
16:00 - 16:30	Case Study (Country D) presentation for status of transit
16:30 - 17:00	Discussion (addressing regional aspects in phase II)

Day 2

09:00 - 10:30	Module 2: Operational paperless transit systems <ul style="list-style-type: none">• European transit systems – background;• European common transit procedure• New computerized transit system (NCTS)
10:30 - 11:00	<i>Break</i>
11:00 - 11:45	Module 2: Operational paperless transit systems (continued) <ul style="list-style-type: none">• European transit procedures in practice• Advantages of European transit systems• Discussion
11:45 - 12:30	Module 3: Guarantee management systems for paperless transit <ul style="list-style-type: none">• Types of transit guarantee• Requirements of guarantee for paperless transit
12:30 - 13:30	<i>Lunch</i>
13:30 - 14:15	Module 4: Risk management systems to support paperless transit
14:15 - 15:00	Module 5: Institutional arrangements for paperless transit
15:00 - 15:30	<i>Break</i>
15:30 - 16:15	Module 6: Role of governments and international organizations in introducing and promoting paperless transit systems
16:15 - 17:00	Module 7: Selected national, regional and international case studies on paperless transit

Day 3

09:00 - 09:45	Module 8: Challenges in establishing paperless transit systems and possible ways to address them
09:45 - 10:30	Wrap-up session <ul style="list-style-type: none">• workshop recommendations
10:30 - 11:00	<i>Break</i>
11:00 - 11:45	Wrap-up sessions continued <ul style="list-style-type: none">• planning train-the-officers workshop
11:45 - 12:30	Closing session <ul style="list-style-type: none">• evaluation and feedback• closing statement

Train-the-officials workshop agenda

08:45 - 09:00	Registration of participants
09:00 - 09:15	Opening session <ul style="list-style-type: none">• Welcome address• Workshop objectives and expected outputs
09:15 - 10:30	Introduction to transit (international and national arrangements) <ul style="list-style-type: none">• Defining transit• Customs related requirements of transit• Other requirements of transit• Advantages of paperless solutions in transit systems
10:30 - 10:45	<i>Break</i>
10:45 - 12:15	Operational paperless transit systems <ul style="list-style-type: none">• European new computerized transit system (NCTS)• Key principles of the European common transit procedure• European transit procedures in practice
12:15 - 13:00	<i>Lunch break</i>
13:00 - 13:30	Guarantee management systems for paperless transit
13:30 - 14:00	Module 4: Risk management systems to support paperless transit
14:00 - 14:30	Module 5: Institutional arrangements for paperless transit
14:30 - 14:45	<i>Break</i>
14:45 - 15:15	Module 6: Role of governments and international organizations in introducing and promoting paperless transit systems
15:15 - 15:45	Module 7: Selected national, regional and international case studies on paperless transit
15:45 - 16:15	Module 8: Challenges in establishing paperless transit systems and possible ways to address them
16:15 - 16:30	<i>Break</i>
16:30 - 17:00	Wrap-up and closing session

Annex 4

Overheads

Annex 5

Evaluation Questionnaire

ESCAP Training programme on paperless transit

Train-the-trainers workshop

Instructor:

Date:

The evaluation is an important element of any training programme. Your feedback is extremely valuable for us to understand how do you find this programme with regard to relevance and curriculum offered. Your responses will assist in programme improvements and identification of areas that might be of further interest.

Therefore you are encouraged to fully complete this form. Your honest evaluation, constructive criticism and innovative ideas are mostly welcomed.

Thank you very much for your thoughtful appraisal and kind cooperation.

1. How relevant do you find the topic of paperless transit?		Not relevant	Slightly relevant	Partially relevant	Relevant	Very relevant
1.1	To your present job assignments	1	2	3	4	5
1.2	Presently, to your country	1	2	3	4	5
1.3	In future (e.g. with enhanced regional integration)	1	2	3	4	5
Comments:						

2. Do you find that overall training programme		Not at all	Not well	Average	Well	Very well
2.1	Has a curriculum, which covers well the topic of paperless transit?	1	2	3	4	5
2.2	Has been well supported with the training materials (e.g. training manual and overheads)?	1	2	3	4	5
2.3	Could be improved if:					

3. Do you find that Module 1 – Introduction to transit		Not at all	Not well	Average	Well	Very well
3.1	Has accomplished well the expected objectives?	1	2	3	4	5
3.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
3.3	Has topics, which are not clear or need additional attention. Such as:					
3.4	Could be improved if:					

4. Do you find that Module 2 – Operational paperless transit systems		Not at all	Not well	Average	Well	Very well
4.1	Has accomplished well the expected objectives?	1	2	3	4	5
4.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
4.3	Has topics, which are not clear or need additional attention. Such as:					
4.4	Could be improved if:					

5. Do you find that Module 3 – Guarantee management for paperless transit		Not at all	Not well	Average	Well	Very well
5.1	Has accomplished well the expected objectives?	1	2	3	4	5
5.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
5.3	Has topics, which are not clear or need additional attention. Such as:					
5.4	Could be improved if:					

6. Do you find that Module 4 - Risk management systems to support paperless transit		Not at all	Not well	Average	Well	Very well
6.1	Has accomplished well the expected objectives?	1	2	3	4	5
6.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
6.3	Has topics, which are not clear or need additional attention. Such as:					
6.4	Could be improved if:					

7. Do you find that Module 5 – Institutional arrangements for paperless transit		Not at all	Not well	Average	Well	Very well
7.1	Has accomplished well the expected objectives?	1	2	3	4	5
7.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
7.3	Has topics, which are not clear or need additional attention. Such as:					
7.4	Could be improved if:					

8. Do you find that Module 6 – Role of the governments and international organizations in introducing and promoting paperless transit systems		Not at all	Not well	Average	Well	Very well
8.1	Has accomplished well the expected objectives?	1	2	3	4	5
8.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
8.3	Has topics, which are not clear or need additional attention. Such as:					
8.4	Could be improved if:					

9. Do you find that Module 7 – Selected national regional and international case studies on paperless transit		Not at all	Not well	Average	Well	Very well
9.1	Has accomplished well the expected objectives?	1	2	3	4	5
9.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
9.3	Has topics, which are not clear or need additional attention. Such as:					
9.4	Could be improved if:					

10. Do you find that Module 8 – Challenges in establishing paperless transit systems and possible ways to address them		Not at all	Not well	Average	Well	Very well
10.1	Has accomplished well the expected objectives?	1	2	3	4	5
10.2	Has provided you well with adequate foundation for train-the-official workshop?	1	2	3	4	5
10.3	Has topics, which are not clear or need additional attention. Such as:					
10.4	Could be improved if:					

11. How do you rate the instructor?		Not at all	Not well	Average	Well	Very well
11.1	The instructor knew the subject matter well.	1	2	3	4	5
11.2	The instructor welcomed questions and gave clear explanations of the topics.	1	2	3	4	5
11.3	The instructor welcomed discussion and facilitated the discussions well.	1	2	3	4	5
11.4	The speed of the lectures was appropriate.	1	2	3	4	5
11.5	Instructor can improve performance and facilitation if:					

12. How do you rate the overall training programme		Poor	Insufficient	Sufficient	Good	Excellent
12.1	Overall training programme was:	1	2	3	4	5
Comments:						

13. I would like to suggest following trade and transport facilitation topics to be discussed on future ESCAP workshops

Reference materials

ADE, September 2003, The Community Transit System in the Perspective of Enlargement. Accessible at: http://www.europarl.europa.eu/meetdocs/committees/cont/20031007_audition/488412EN.pdf

ASEAN, 1998, ASEAN Framework Agreement on the Facilitation of Goods in Transit. Accessible at: <http://www.asean.org/news/item/asean-framework-agreement-on-the-facilitation-of-goods-in-transit-2>

ASEAN, 2009, ASEAN Framework Agreement on the Facilitation of Inter-State Transport. Accessible at: <http://agreement.asean.org/media/download/20140119020132.pdf>

ASEAN, 2012, ASEAN Agreement on Customs, Accessible at: <http://agreement.asean.org/media/download/20140117163238.pdf>

Convention of 20 May 1987 on a common transit procedure (Convention on Common Transit), as amended. Accessible at: http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&numdoc=21987A0813%2801%29&model=guicheti

Convention of 20 May 1987 on the simplification of formalities in trade in goods (SAD Convention), as amended. Accessible at: http://ec.europa.eu/taxation_customs/resources/documents/customs/procedural_aspects/general/sad/convention_simplification_formalities_en.pdf

Cousin, Louis and Yann Duval, 2014, Trade facilitation potential of Asian transit agreements in the context of the WTO negotiations, ESCAP Trade and Investment Division, TID Working Paper NO. 01/14, 27 January 2014. Bangkok; Available at www.unescap.org/tid/publication/

ESCAP, 2002, Train the trainer, *Training Fundamentals*, Instructor's Reference Manual. Accessible at: <http://www.unescap.org/ttdw/common/TFS/FFMultimodalTx/TOT.pdf>

ESCAP, 2007, *Towards a Harmonized Legal Regime on Transport Facilitation in the ESCAP Region – Guidelines*. Accessible at: <http://www.unescap.org/resources/towards-harmonized-legal-regime-transport-facilitation-escap-region-guidelines>

ESCAP, 2011, Monograph Series on Facilitation of International Road Transport in Asia and the Pacific. Accessible at: <http://www.unescap.org/sites/default/files/pub-2607-fulltext.pdf>

ESCAP, 2012, *Guidelines on establishing and strengthening national coordination mechanisms for trade and transport facilitation in the ESCAP region*. Accessible at: <http://www.unescap.org/sites/default/files/NCM-fulltext.pdf>

ESCAP, 2012, 'Secure Cross-Border Transport Model'. Accessible at: http://www.unescap.org/ttdw/Publications/TFS_pubs/SCBM/SCBM-fulltext.pdf

ESCAP, 2012, Regional Strategic Framework for the Facilitation of International Road Transport (Bangkok, March 2012). Accessible at: <http://www.unescap.org/ttdw/common/TFS/RSF/UNESCAP-RSF.pdf>

ESCAP, 2013, *Study on Regional Arrangements for Facilitation of Cross-Border Paperless Trade in Asia and the Pacific*. Accessible at: <http://www.unescap.org/tid/projects/bpatf-report.pdf>

ESCAP, 2013, Trade Facilitation and Paperless Trade in Asia: Results from an Expert Survey. Accessible at: <http://www.unescap.org/tid/publication/swp113.pdf>

ESCAP, February 2014, Update on the implementation of Commission resolution 68/3, accessible at: http://www.unescap.org/sites/default/files/Update%20on%20the%20implementation_English.pdf

ESCAP, RESOLUTION 68/3, Enabling Paperless Trade and the Cross-Border Recognition of Electronic Data and Documents for Inclusive and Sustainable Intraregional Trade Facilitation, accessible at:

http://www.unescap.org/sites/default/files/9%20-%20Annex%20%20Full%20text%20of%20ESCAP%20resolution%2068_3.pdf

European Commission, DG TAXUD, 1 July 2010, TAXUD/A3/0007/2010, *Transit Manual* (Consolidated Version). Accessible at: http://ec.europa.eu/taxation_customs/resources/documents/customs/procedural_aspects/transit/common_community/transit_manual_consolidation_en.pdf

European Commission, DGTAXUD, 18 July 2014, 3(2014) 2098530, 2013 E-Customs annual progress report

European Communities, 2001, *New Customs Transit Systems for Europe*. Accessible at: http://ec.europa.eu/taxation_customs/resources/documents/annex_i_transit_brochure_en.pdf

Inter-American Development Bank, 2011, Aid for Trade Case Story: International Transit of Goods (TIM), Accessible at: <http://www.oecd.org/aidfortrade/47751316.pdf>

Jean-Francois Arvis, 2011, *IBRD/WB Border Management Modernization* (Chapter 17 – Transit regimes). Accessible at: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2011/01/07/000356161_20110107013015/Rendered/PDF/588450PUB0Bord101public10BOX353816B.pdf

OSCE/UNECE, 2012, Handbook of Best Practices at Border Crossings, Accessible at: <http://www.osce.org/node/88200?download=true>

Tadashi Yasui, April 2013, WCO Research Paper No. 28: Transit Facilitation for Regional Economic Integration and Competitiveness. Accessible at: <http://www.wcoomd.org/en/topics/research/~/media/30EA73887EED41E1A3E774175C7FE097.ashx>

Tadashi Yasui, February 2011, WCO Research Paper No. 11: Case Studies on Systematic Exchange of Commercial Information between Customs Administrations in Bilateral and Regional Arrangements. Accessible at: <http://www.wcoomd.org/en/topics/research/~/media/A69B791DADF9434DB5BEB2B8CF11D92A.ashx>

Tom Doyle and Frank Janssens, 2011, *IBRD/WB, Border Management Modernization* (Chapter 15 – Information and communications technology in support of customs unions: a case study of the European Union). Accessible at : http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2011/01/07/000356161_20110107013015/Rendered/PDF/588450PUB0Bord101public10BOX353816B.pdf

UN/CEFACT, 2014, Revision of Recommendation 14: Authentication of Trade Documents http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec14/ECE_TRADE_C_CEFACF_2014_6E_Rec14.pdf

UN/CEFACT, UN/EDIFACT Directories, Accessible at: <http://www.unece.org/tradewelcome/areas-of-work/un-centre-for-trade-facilitation-and-e-business-unecefact/outputs/standards/unedifact/directories/2011-2013.html>

UN/CEFACT, XML Schemas, Accessible at: http://www.unece.org/cefact/xml_schemas/index

UNCITRAL, 2001, Model Law on Electronic Signatures, Accessible at: <http://www.uncitral.org/pdf/english/texts/electcom/ml-elecsig-e.pdf>

UNECE, 1981, Recommendation No.1 - United Nations Layout Key for Trade Documents. Accessible at: http://www.unece.org/fileadmin/DAM/cefact/recommendations/rec01/rec01_ecetrd137.pdf

UNECE, 2005, United Nations Trade Data Elements Directory (UNTDDED 2005), Accessible at: <http://www.unece.org/fileadmin/DAM/trade/untded/UNTDDED2005.pdf>

UNECE, 2012, Trade Facilitation Implementation Guide. Accessible at: <http://tfig.unece.org/index.html>

UNECE, International Convention on the Harmonization of Frontier Control of Goods. Accessible at: <http://www.unece.org/fileadmin/DAM/trans/conventn/harmonie.pdf>

USAID, October 2013, RADDEx in the Making - Background, Strategy and Implementation. Accessible at: http://www.competeafrica.org/Files/RADDEx_in_the_Making_Oct_2013.pdf

USAID, Revenue Authorities Digital Data Exchange (RADDEx) – Customs Technology that Reduces the Cost of Doing Business. Accessible at: http://www.competeafrica.org/Files/RADDEx_2_0_Benefits_Final.pdf

WCO, 2004, WCO Unique Consignment Reference(UCR)
<http://www.wcoomd.org/en/topics/facilitation/resources/~media/633F01FC1783462EA9DBDE125AF48834.ashx>

WCO, 2007, WCO Data Model, Single Window Data Harmonization. Accessible at: http://wcoomdpublications.org/downloadable/download/sample/sample_id/30/

WCO, 2008, Customs in the 21st Century: Enhancing Growth and Development through Trade Facilitation and Border Security. Accessible at: <http://www.wcoomd.org/en/topics/key-issues/~media/3EE76BC165B9409CBE6E31F9923CABB8.ashx>

WCO, 2009, WCO Data Model – General Brochure, Accessible at: http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/~media/WCO/Public/Global/PDF/Topics/Facilitation/Instruments%20and%20Tools/Tools/Data%20Model/DM_Brochure_EN.ashx

WCO, 2009, WCO Data Model – Technical Brochure. Accessible at: <http://www.wcoomd.org/en/topics/facilitation/resources/~media/70998C307D3C47C996DB047B664B92AE.ashx>

WCO, 2010, WCO Data Model 3. Available at: <http://wcoomdpublications.org/data-model-3.html>

WCO, 2011, WCO Compendium: How to Build a Single Window Environment. Accessible at: <http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/single-window/~media/252D1BF37A814526BF5BFFFEAB7F13692.ashx> - Volume 1 and <http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/single-window/~media/861FFA93206B41D8BE754371ADA7A112.ashx> - Volume 2

WCO, 2011, Customs Risk Management Compendium, Accessible at: <http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/~link.aspx?id=165278A87DAB4E4C8336C5DD69D17E19&z=z>

WCO, 2013, Glossary of International Customs Terms. Accessible at: <http://www.wcoomd.org/en/topics/facilitation/resources/~media/949B39871CE147BAB2667EC6758F29C8.ashx>

WCO, 2014, Transit Handbook. Accessible at: <http://www.wcoomd.org/layouts/ConstructionKit/SolrLinkHandler.ashx/?id=A8435CBA5050486D9C1A2D208ADFF0C7&lang=en>

WCO, Convention on Temporary Admission - Istanbul Convention, Accessible at: <http://www.wcoomd.org/en/about-us/legal-instruments/~media/2D53E23AA1A64EF68B9AC708C6281DC8.ashx>

WCO, *International Convention on the Simplification and Harmonization of Customs Procedures (as amended) – Revised Kyoto Convention*. Accessible at:

http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/conventions/pf_revised_kyoto_conv/~/_media/A7D0E487847940AD94DD10E3FDD39D60.ashx

WCO, *Kyoto Convention: Guidelines to Specific Annex E (Chapter 1 - Customs Transit)*. Available at:

<http://wcoomdpublishings.org/cd-rom-convention-de-kyoto-revissee.html>

WCO, SAFE Framework of Standards to Secure and Facilitate Global Trade, Accessible at:

http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/~/_media/55F00628A9F94827B58ECA90C0F84F7F.ashx

WTO, 2013, Ministerial Decision from December 2013 (Bali), on Agreement on Trade Facilitation. Accessible at : http://www.wto.org/english/thewto_e/minist_e/mc9_e/balipackage_e.htm#trade_facilitation

WTO, GATT (1994), Article V. Accessible at: http://www.wto.org/english/res_e/booksp_e/gatt_ai_e/art5_e.pdf