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UN/CEFACT RECOMMENDATION 33 – ANNEXES*/

Establishing a Single Window to enhance the efficient exchange of information between trade and government

This document has been issued as a complement to UN/CEFACT Recommendation 33 (TRADE/CEFACT/2005/25) and is **for information**. It contains the following Annexes to the Recommendations:

Annex A:	Examples of existing Single Windows
Annex B:	Practical steps in planning the implementation of a Single Window
Annex C:	Key Components of the feasibility study
Annex D:	Tools available to assist in implementing a Single Window
Annex E:	Signposts for further information

Recommendation 33 can be downloaded from the UNECE website at www.unece.org/cefact

The Recommendation and its Annexes were developed by the International Trade Procedures Working Group (ITPWG-TBG15) of the UN/CEFACT International Trade and Business Processes Group (TBG).

*/ The UNECE Trade Development and Timber Division has submitted the present document after the official documentation deadline due to resource constraints.

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ANNEX A - Examples of existing Single Windows

In developing these Guidelines, a number of existing Single Windows were reviewed[1]. A description of a selected sample of these Single Windows is provided below.

Mauritius: The Single Window in Mauritius allows the submission of customs declarations, their processing and their return by electronic means through TradeNet, a proprietary system developed by Mauritius Network Services Ltd. in collaboration with Singapore Network Services Ltd. (which now operates under the name 'Crimson Logic'). The system is an EDI-based network application that allows the electronic transmission of documents between various parties involved in the movement of import and export goods, namely the Customs & Excise Department, Freight Forwarders, Shipping Agents, Customs Brokers, the Cargo Handling Corporation, the Ministry of Commerce, Operators within the Freeport, and Importers and Exporters. Banks will also be connected to TradeNet in the future to allow the electronic payment of duties and taxes via the Mauritius Automated Clearing and Settlement System (MACSS) of the Bank of Mauritius.

TradeNet has also provided the Customs & Excise Department with an opportunity to embark on a major computerisation project, by way of the implementation of the Customs Management System (CMS), that links with it in the processing, approval, and clearance of customs declarations.

The TradeNet system has been implemented in phases to ensure a smooth and gradual change from traditional methods, and a better acceptance of this new way of dealing with Customs. The first phase, launched in July 1994, dealt with the electronic authorisation by Customs for the delivery of goods in cases where no Customs inspection was required. Later, in January 1995, a second phase was introduced allowing the electronic submission to Customs of sea manifests by shipping agents. At the implementation of the third phase in 1997, facilities were introduced to cater for the electronic declaration and processing of bills of entry. By July 2001, additional functionalities had been added in the fourth and fifth phases to include the transfer of containers from the port area to forwarders' stations and import/export authorisation by controlling agencies respectively. It is estimated that TradeNet has decreased the average clearance time of goods from about 4 hours to around 15 minutes for non-litigious declarations, with estimated savings of around 1% of GDP.

Trade Net is a public-private partnership between several agencies of the Mauritian Government, the Mauritius Chamber of Commerce and Industry, and Crimson Logic, the partner company that operates its own version of TradeNet in Singapore. All services are charged for on a pay-as-you-use basis, in addition to an initial registration and set-up charge for each user. Most importantly, the project is self-sustaining and generates enough resources for it to proceed with further investments in the field of e-Government within the country. Also, the Mauritian TradeNet system has been purchased and adapted by Ghana for its internal needs.

Source for further information:
http://mns.intnet.mu/projects/tradenet.htm

[1]In preparing these Guidelines, the UN/CEFACT International Trade Procedures Working Group (ITPWG/TBG15) reviewed the operation or development of the Single Windows in Australia, The Czech Republic, Finland, Japan, Mauritius, The Netherlands, Norway, Sweden, Singapore, Thailand, United Kingdom and the United States of America.

Sweden: The present Swedish Single Window system, known as "The Virtual Customs Office" (VCO), allows the submission, by electronic means, of customs declarations and of applications for import and export licenses, for licenses for strategic products and for both the import and export licences. It can further be integrated into the business system of traders and can then automatically update changes in exchange rates, tariff codes and duty rates. The Single Window also includes all trade-related regulations and can provide traders with automated updates on changes via Internet and/or SMS-services. The VCO also offers interactive training courses and the possibility to customize and create personal virtual customs offices, which will contain all information and processes that each trader uses and finds relevant to their needs and wants.

Import and export declarations can be processed both via Internet and UN/EDIFACT. All services are pooled on a single VCO web page, currently more than 150 e-services are available. The information and procedures on the VCO support ten different languages.

The system currently involves the Swedish Customs (lead agency), the Swedish Board of Agriculture, the National Board of Trade, the National Inspectorate of Strategic Products, the Police, the National Tax Administration and Statistics Sweden.

A customer using the electronic customs declaration will get a reply within 90 seconds. Should the processing take longer, the trader will have the option of receiving frequent updates on the progress of the transaction via SMS and e-mail. Feedback from traders has shown that 80 % found the virtual customs office saved time, 54 % directly saved money, 72 % experienced increased flexibility and 65 % found that the quality and speed of the service had improved.

The Customs have simultaneously been able to cut costs, increase the efficiency of internal procedures and relocate resources to core activities.

The Single Window system has been developed continuously as a natural consequence of the Swedish governmental policy of transparency and interaction with business and citizens. The Customs has, along with other partner authorities, developed the system on a need-and-request basis from both internal and external (business) parties.

The system is fully financed by government funds and all services are free of charge.

Source for further information:
http://www.tullverket.se/TargetGroups/General_English/frameset.htm

Netherlands: The Single Window at Schiphol Airport allows the electronic submission of the cargo manifest by airlines to Customs. Information is supplied by trade to Customs to the so-called VIPPROG system, which was developed by Customs. The VIPPROG system is an EDI-based network application that allows the electronic transmission of the Freight Forward Message, a standard message defined by IATA that is available in the SITA system of IATA. The information from SITA is transmitted via the privately owned community system 'Cargonaut', when the airline has given an authorisation to 'Cargonaut' to provide customs with the information. Customs pays 'Cargonaut' a fee for use and maintenance of the community system.

The Single Window is based on co-operation with other enforcement agencies that resulted in the establishment of a so-called “cargo clearance point”(CCP) in 1994. It was established to improve the handling of goods by various enforcement agencies. This CCP is based on a covenant between Customs, 10 other enforcement agencies and trade. The other enforcement agencies include the Marechaussee (immigration), the Health Care Inspectorate, various divisions of the Inspectorate General of Transport, Public Works and Water Management, the Inspectorate for Health Protection and Veterinary Public Health, National Inspection Service for Livestock and Meat and the Plant Protection Service. The CCP is managed by Customs.

In order to be able to give the other enforcement agencies the relevant information that they need to perform their tasks, these agencies provide Customs with risk-profiles on the basis of which Customs analyses the information and passes it on, either electronically or on paper, to the other agencies. The other agencies inform customs in return whether they want to check the goods. If more than one agency (including Customs) wants to check the goods, the CCP co-ordinates the checks of all the agencies involved. The aim is to have the goods checked at one point in time, to prevent multiple checks that will unnecessarily disrupt the logistical process.

The sphere of activity of Dutch Customs is not limited to collecting duties, but it is also involved in the control of the import and export and transit of goods within the framework of prohibitions, restrictions, or measures of control in respect of certain goods such as drugs, arms, waste products, items of cultural significance and endangered species. The legislation in these areas is mainly the responsibility of other ministries. In 1996 Memoranda of Understanding with different ministries or enforcement services were concluded with provisions for Customs to carry out controls on behalf of other enforcement agencies.

Trade has shown to be a great supporter of this co-operative approach. The benefits for trade are fewer delays in airfreight logistics, and a reduction in staff costs with regard to submitting the summary declarations and other documents. Through the years it has even resulted in arrangements between Customs and trade to hand in pre-arrival information on a voluntary basis, as this further speeds up the clearance of goods. The advantage of the Single Window for Customs is that it has a fairly comprehensive overview of incoming air freight on a pre-arrival basis.

In the near future, Dutch Customs will introduce a new system called “Sagitta binnenbrengen’ which allows for the pre-arrival submission of summary declarations to customs. It will be possible to submit information via the port authorities’ system or directly. The system will also interface with other Customs systems, and this will make it possible to submit customs declarations. This new system, which will be introduced in 2004, has a nationwide scope. It will therefore make the local system VIPPROG redundant.

United States: The initial concept of the International Trade Data System (ITDS) was a result of a special task force, the Future Automated Commercial Environment Team (FACET). The objective of FACET was to examine government international trade processing procedures and to make recommendations for future Customs automation. Among key FACET recommendations was the use of the same data for import and export processing and integrated government oversight of international trade processing. As a result of the FACET Report, the Vice-President directed the US Department of the Treasury to establish the ITDS Project Office. The Project Office was guided by an interagency Board of Directors and was staffed by representatives of Customs (CBP), Participating Government Agencies (PGA’s), government oversight bodies, and contractors (consultant) personnel. ITDS held extensive consultation and outreach with PGA’s and trade industry sectors.

One of the first objectives of the Project Office was to survey PGA operating procedures and information requirements. This was accomplished by surveys and questionnaires. The Project Office reviewed all forms required by various agencies and assembled an inventory of data elements collected by trade agencies. The data inventory revealed the redundancy and duplication of data collected by trade agencies on over 300 forms consisting of nearly 3,000 data fields. Over 90% of this information was redundant. Through a process of analysis and harmonization, ITDS established the Standard Data Set (SDS) consisting of less than 200 data elements. This is in sharp contrast to the original 3,000 data fields.

Also studied were emerging trends in international trade and technology. The globalisation of business, the commercial standardization taking place in business, and the rapid exchange of information made possible through the Internet were factors that needed to be taken into consideration.

Under the North American Free Trade Act (NAFTA) a proof of concept of ITDS called North American Trade Automated Prototype (NATAP) was conducted. NATAP was a joint effort with Canada and Mexico. NATAP, albeit limited in scope, demonstrated that it is possible to achieve the objectives of ITDS of a standard data set for multiple agency import, export, and transit processes. Also demonstrated was the use of the Internet as the communications technology. In addition to NATAP, U. S. Customs and Border Protection (CBP) conducted the International Trade Prototype (ITP) with the United Kingdom. Since these two prototypes were multilateral both revealed the need for international harmonization and standardization to achieve greater facilitation and efficiency.

After extensive consultation with the trade community and participating agencies the ITDS Project Office issue a preliminary ITDS Design Report. Included in the preliminary design report were: concept of operations, cost benefit analysis, configuration management, data models, processes, work flows, standards, technical infrastructure and reference models, and user functional requirements.

Concurrent with the work of the ITDS Project Office was the development of the new Customs automated system called Automated Commercial Environment (ACE). There was a perception that ACE and ITDS were competing. While this resulted in some delays, this perceived conflict between the development of ACE and ITDS was resolved. ITDS is a part of ACE. Components of the preliminary ITDS Design Report are being updated to reflect these changes.

Paragraph 8 of the guidelines for establishing a Single Window (as found in annex to document TRADE/CEFACT/2005/25) outlines key factors that must be considered for the successful design, development, and implementation of a Single Window System. Following are a summary of ACE/ITDS experience with these factors:

Political Will and Lead Organization: Beginning with the FACET Task Force, the Vice-President's order, and continuing with Customs and Border Protection (CBP) endorsement of the ITDS/Single Window there has been clear direction from the highest levels of government to ITDS. Any confusion that may have existed in the early conceptualisation of ITDS has disappeared and been replaced by clear commitment to proceed with ITDS. A Board of Directors representing the major trade agencies governs ITDS.

Partnership between Government and Trade: ITDS has been integrated into the design, development and implementation of ACE. ACE formed the Trade Support Network (TSN). The TSN is an extensive network of over 300 representatives of the trade community meeting twice a year in both sub-committees and plenary. Specific to ITDS, there is an ITDS subcommittee co-chaired by representatives of the trade community and government. All decisions regarding ITDS are vetted through this sub-committee.

Establishment of Clear Objectives and Boundaries: The overall objective of ITDS are clear; an integrated, government-wide system for international trade. While there is a long-term vision, implementation of ACE/ITDS is designed in manageable, incremental phases.

User Friendliness and Accessibility: ITDS is not replacing agency-specific systems. The intent of ITDS is to serve as a utility for the collection, dissemination, and use of data by Participating Government Agencies (PGA's). In some instances, ITDS will transmit agency specific data to the existing agency system (interfaced). In other instances, agencies will have selectivity and processing capability in ACE/ITDS (integrated). ACE/ITDS has also employed web technology to develop a web portal for agencies to access ACE/ITDS data for review and to generate reports of activity.

Legally–Enabling Environment: It is inevitable that legal considerations will arise. Among these considerations is the authority to collect data, data sharing, and access to data. As legal issues arise, they will be addressed by the PGA. ACE/ITDS and PGAs also agree to a Memorandum of Understanding (MOU) detailing the responsibilities, operations, processing details, data requirements, etc.

International Standards and Recommendations: ACE/ITDS will be compliant with international data standards and messages being developed by the World Customs Organization (WCO), UN/CEFACT, and ISO. Representatives of ACE/ITDS actively participate in WCO Customs Data Model, Data Modelling, and Unique Consignment Reference (UCR) working groups. In addition, ACE/ITDS is closely following the Revised Kyoto Convention on the Simplification and Harmonisation of Customs Procedures and the accompanying Application of Information and Communications Technology guidelines being developed by the WCO. As PGA's identify their information requirements, the data elements are mapped to the WCO model. If an element is not included in the WCO Data Model, appropriate actions are taken with the WCO to ensure inclusion of the agency data in the WCO model.

Promotion, Marketing, and Communications Strategy: Promotion, marketing, and communications strategy is conducted at two levels with the government and trade community, both domestic and international. Workshops are conducted for agencies covering the following range of topics: ACE/ITDS Introductory Integration Workshop (the process a PGA needs to go through to participate in ACE/ITDS), ACE/ITDS Scope Workshop (defining ACE/ITDS from the business process perspective), Business Process Analysis Workshops (discusses how PGAs should document their business processes with a focus on the as-is and to-be processes), Data Harmonization (providing information on analyzing information requirements at the attribute level), Concept of Operations (understanding the types of agency details for developing the agency MOU), Budget Workshop (understanding and planning financial considerations for ACE/ITDS based on anticipated functionality needs). ACE/ITDS also takes advantage of opportunities to educate and promote Single Window by attending and speaking at various conferences, workshops, and government and trade associations meetings at both the domestic and international level.

Identification of Possible Obstacles:

- Commitment of resources: The lead agency, in particular, and PGA's must commit financial and personnel resources if a Single Window system is to be successfully implemented. PGA's often include ITDS responsibilities as collateral duties.
- Cost: Cost is a considerable factor. Fortunately, CBP automation is undergoing a complete redesign under Customs Modernization. Cost of design, developing, and implementing Single Window have been incorporated into Customs Modernization. Countries considering implementation of a Single Window should conduct a comprehensive cost benefit analysis. One important cost consideration is the cost of designing, developing, and maintaining individual agency systems versus the Single Window concept. This is a factor for both government and traders who must maintain different files, standards, and systems to meet different agency requirements.
- Perceived intention or motivation: In developing a Single Window concept, agencies may have the mistaken impression that the lead agency is attempting to take over and dominate the international trade process. This perception must be addressed early in the concept phase, making it clear that the lead agency has its own role and responsibilities and is interested in improving, not dominating, the process.
- Cultural resistance to Change: This is not unique to Single Window. Any radical change to a process, as Single Window is, will encounter resistance. Education and inclusion are two methods for reducing this resistance. Agency personnel are often focused on their particular function in the trade process. Single Window leaders should stress the importance of the agency role in the entire international trade process. Attempts should be made to re-focus agency mission on the broader scope of security, protection of society, environment, etc.
- Data requirements: Developing a standard data set is critical to achieving efficiency in a Single Window. In defining data, care should be taken to ensure that agency information requirements are included in the standard data set. Another consideration in terms of cost and technology is the integration of international standard data into existing legacy systems. Specifically, methodologies must be developed to cross over new standards into existing systems standards and a plan to migrate legacy systems to the new standards.

Sources for further information:

http://www.itds.treas.gov
http://www.cbp.gov

ANNEX B - Practical steps in planning the implementation of a Single Window

Implementing a Single Window is a significant undertaking, involving many stakeholders and requiring commitment from many players in both government and business. It is essential, therefore, that a systematic approach be adopted from the outset. Some of the key steps involved are discussed below.

1. Developing the Initial Concept for the Single Window

Serious work on the establishment of a Single Window in a country often starts with the preparation of a concept or briefing paper, based on some initial research. This work is usually undertaken by the lead governmental authority or agency, or private organisation likely to be heavily involved in the eventual implementation of the project (for a discussion on the preferred lead agency see Section 3.1). Such a paper would usually describe the overall objectives and potential benefits of a Single Window, and would present a general overview of what would be involved in its implementation. The paper would typically focus on the practical issues involved and would avoid excessive technical jargon and in-depth discussion of technical concepts. It is important to understand that the objective of the concept paper is to facilitate initial discussion on the topic and obtain approval for a more in-depth study into the need for, approach to and feasibility of a Single Window. It is not intended at that stage to seek agreement for the implementation of a Single Window.

2. Making the Initial Decision to Examine the Feasibility of a Single Window

Following the preparation of the concept paper, and in the framework of an open partnership between government and trade, a meeting would typically be organised for high-level representatives from all relevant trade related organisations[2], and governmental authorities and agencies to discuss the Single Window concept (on the basis of the concept paper). The object of such a meeting is to get agreement on the project concept and to launch a feasibility study that would include a detailed needs analysis and a technological assessment. Significant "behind the scene" lobbying and project promotion work may be required before the meeting, in order to ensure that participants understand the concept and are positively predisposed towards the idea. As stated elsewhere in these Guidelines, the political will to support the implementation of a Single Window is one of the key pre-requisites for its success.

Presuming that a positive decision is reached to proceed with the feasibility study, the meeting should establish a Project Management Group made up of senior representatives of the key agencies who will be directly involved in implementing and utilising the Single Window. This Project Management Group should have the power to commit funds to the project, make resource allocation decisions and commit their relevant organisations to participating in the project. A draft 'Objectives, Responsibilities and Terms of Reference' text should be drawn up for the Project Management Group ahead of time, and agreed upon at the meeting.

The meeting should also set up a Task Force composed of appropriate technical and management representatives of key agencies, to take charge of the carrying out of the organisational and implementation work required for the project. Again, a draft 'Objectives, Responsibilities and Terms of Reference' document should be drawn up for the Task Force ahead of time and agreed upon at the meeting.

3. Undertaking the Feasibility Study

The feasibility study is a key element of the overall Single Window development. The study should determine the potential scope of the Single Window, the level and type of demand, possible scenarios for implementation, potential for and nature of a pilot implementation, resources required (financial, human,

[2] Typical trade related organisations that could be involved include the National Chamber of Commerce, Importers and/or Exporters Association, Confederation of Industry, Business Associations, etc. When the Single Window has a payments component, banks and other financial institutions must be involved.

technical, etc), potential benefits and risks, a time frame, and an implementation and management strategy. It is strongly recommended that this study be based on direct face-to-face interviews with key players in both government and trade, complimented by relevant questionnaires to collect information from a wider circle of potential participants and users. ***Some of the key areas that should be covered in the feasibility study are presented in Annex C***.

The objective of the feasibility study is to provide decision-makers with an insight into the options available and their consequences for each governmental authority. The study should provide advice on which option is preferable and feasible for the country, the manner in which the implementation should take place (i.e. full or phased implementation), the possible steps for a phased implementation, the nature and extent of an initial pilot implementation, the potential for revenue collection (for fees, duties, etc), the identification of 'key' deliverables and a recommended timetable for development and implementation.

It is important to emphasise here that the development of a Single Window does not presuppose the existence of or requirement for a sophisticated computerised information system for the receipt, storage and sharing of information. Clearly information technology can have a huge positive impact on the potential for sharing information in a Single Window context, and this is the more common approach in Single Windows reviewed in the development of the Guidelines. However, it is possible to develop a manual Single Window, whereby the relevant documents are submitted in one central location and are subsequently redistributed to the relevant governmental authority or agency.

It should also be stated that, when considering the technical requirements for a Single Window, the value of and investment in existing legacy systems should be respected. Although it may sometimes be necessary to replace such systems, a practical approach for sharing and exchanging information between agencies may well be the establishment of a central portal or gateway.

3.1 Use of Consultants

A decision will have to be made as to whether the feasibility study should be undertaken in-house by the project Task Force itself or contracted out to a third party. The major advantage of hiring external consultants is that the report is more likely to have an independent focus; also, the consultants can perhaps put forward comments and recommendations that would be difficult for individual government agencies to suggest (for political or other reasons). Furthermore, the necessary skills, experience and required time may not be available in-house to undertake the analysis within the time frame required. However, the major disadvantage of undertaking the work through consultants is that the report may be seen as an external one not connected to the key players in the organisation (i.e. there may be little or no buy-in to the report). A third option is to hire consultants to assist the Task Force in undertaking the feasibility study, but clear lines of authority and responsibility would then have to be defined for this option. The actual approach adopted will generally be decided on the basis of available resources, the time frame for the report and also political considerations.

4. Consideration of the Feasibility Study Report

The findings of the feasibility study will have to be considered and approved by the Task Force and eventually submitted for consideration by the Project Management Group. Sufficient time should be allowed for this process, as it is essential to have the maximum input and agreement before the report is finalised.

After the study has been accepted by the Task Force and Project Management Group, and a preferred Single Window option and the accompanying implementation option chosen, these decisions should be presented to the wider government and trade community. A good approach to this is the organisation of a national symposium on the establishment of a Single Window, where the Task Force (and/or consultants in the case where the work was contracted out to a third party) can present the research findings and preferred option for implementation. Apart from the obvious communications value, such an exercise will help to ensure that important areas have not been missed in the analysis and that the proposed Single Window option, including proposed pilots and/or phased implementation, makes sense to and has the support of the user community, before the final implementation decisions are made.

5. Implementation (Pilot, Phased and/or Full)

Irrespective of whether a pilot, phased or full implementation has been decided, it is essential that a clear project management approach be adopted throughout the project implementation. The project management plan, which must be formally agreed upon by both the Project Management Group and the Task Force[3], should contain a set of clearly defined interrelated tasks and event milestones that can assist the Task Force and the Project Management Group to plan, execute, monitor, evaluate, and adjust the project implementation. There are many well-established approaches to project management and several good software programmes available to assist in this process. The Project Management Plan should contain:

- A clear statement of the project's scope, goals and objectives;
- A statement on key deliverables, responsibility for delivery, time frame and milestones for completion;
- Definition of the roles and responsibilities of the various participants, including a clear agreement on who is in charge of the project (the project manager) and the level of authority of this manager;
- Specification of the management and monitoring responsibilities of the project manager and the line of authority and communication between the project manager, Project Management Group and the Task Force;
- A clear strategy for communicating with project stakeholders and potential users on a regular basis throughout the implementation, including an agreement on what information needs to be communicated with what groups and in what manner and frequency;
- A clear and agreed project budget, including financial and human resources; it is essential that the necessary funds and personnel be allocated to the project from the outset;
- A clear statement of the project risks (such as a cutback in budget, delay in required legal reforms, etc.) and an agreed response plan (to the best extent possible) to manage these risks, including contingency plans for high-level risks;
- Agreement on the criteria for measuring the project success;
- An agreed project review and feedback mechanism to provide ongoing monitoring of the project process and to deal with any changes in the implementation that may be required.

[3] A decision will have to be made as to whether the initial Project Management Group and Task Force should continue "as is" or should be reconstituted (a recommendation in this regard will likely be contained in the feasibility study).

As with the needs analysis and feasibility study, a decision will have to be taken as to whether the work will be carried out by internal or external resources. For external contracts, the tendering process will obviously have to comply with existing governmental regulations, which vary from country to country. However, it is suggested that the process should be open, should have clear evaluation criteria (points) agreed by the Project Management Group before the tender is issued (and included in the actual tender documentation), and the tender committee should have representatives from all key organisations involved in the project.

ANNEX C - Key Components of the feasibility study

The feasibility study should cover the following areas:

Project Needs and Potential of a Single Window

- Examine existing requirements, procedures, and processes for the submission of import, export and transit documents and information to government to:
  - Identify key governmental authorities and agencies that can potentially be involved in the system;
  - Determine the extent to which it is possible to harmonise and simplify these requirements, procedures, information flows and documents. In particular, explore possibilities for ensuring the single submission of documents and information;
- Consider the potential of the Single Window to address trade security issues;
- Identify the needs of potential users, especially regarding the design of the eventual service and associated interfaces (either electronic or physical);
- Consider "best practice" methods in existing Single Windows. This may involve visits to operational Single Windows;
- Consider the need for and approach to generating the required political support for the project.

Organisational Aspects

- Examine the overall organisational aspect of the proposed Single Window to determine:
  - Which governmental authorities and agencies should be involved;
  - Which governmental authority/agency, or private organisation should lead the running of the Single Window project - government, private owner under government contract or completely privately-owned by business (service provider);
  - Whether the Single Window should be centralized or decentralized;
  - Should it be an active or passive program;
  - Should a payment system be part of the Single Window system;
  - Should participation be voluntary or mandatory;
  - Should common risk profiles/compliance assessments be part of the system and should they be developed and/or shared;
  - Who bears the risk if/when something goes wrong.

Human Resources and Training

- Review and document existing personnel resources within the relevant governmental authorities and agencies for the project development, implementation, and operation, and consider training,

additional staffing and management requirements related to the implementation of the Single Window;

Legal

- Review the legal issues, privacy legislation and data protection laws associated with the implementation of a Single Window, including the submission of information by traders, the exchange of information between various governmental authorities and agencies, and issues related to the use of electronic signatures.

Note: Exchange of information between governmental authorities or agencies requires an appropriate statutory gateway. Exchange of information between governmental authorities or agencies is often restricted to trader consent, disclosure by order of a court, or in the public interest. Also, data protection legislation may affect the obtaining, use and disclosure of personal data.

Technical aspects of a Single Window

- Review existing technical systems for receiving, storing and exchanging the above information;
- Determine overall technical requirements, including specific requirements for additional systems development, interfaces, outlets and the possible development of interface systems to existing legacy systems for the proposed scenarios;
- Determine if existing systems will be able to handle (likely) increases in the volume and flow of data;
- Examine issues related to the verification and authentication of data;

Note: The development of a Single Window presents an ideal opportunity to consider the benefit of implementing related changes in the collection of information, such as those related to web-based technology.

Information and Documentation

- Review the existing set of trade documents in use and determine whether these need to be aligned, harmonised and/or simplified (preferably according to the UN Layout Key). Determine what data will be required; how it will be submitted; and in what format (electronic (EDI? XML? Other?) or paper);
- Determine who can submit the data or documents (Importers/Exporters, Customs Brokers, Agents);
- Determine how the data should be shared amongst participating governmental authorities and agencies and where it should be stored, etc.
- Consider how the data could be exchanged with administrations in other countries;
- Consider how the data could be used for risk analysis and other related purposes;
- Quantify the potential benefits of making better use of data held in commercial systems and records in meeting government requirements and helping to reduce business compliance costs in the transmission of information.

Note: A minimum data set must be agreed upon amongst all parties, including the format, data fields and data elements. These should be in conformity with international standards (e.g. UNECE/ISO UNTDED and the World Customs Organisation data model).

Impact assessment

- Examine the potential impact of the project on existing systems, procedures, employment, job descriptions, etc;
- Consider potential social and cultural issues that may arise in connection with the establishment of the Single Window;
- Consider the potential response of groups or organisations that may perceive the Single Window as a threat (groups or organisations that may have a vested interest in maintaining the status quo);
- Consider the possible impact of the Single Window on reducing corruption and the effect this may have;
- Recommend an appropriate change management strategy for the project.

Implementation Options

- Develop implementation options, specifying proposed operational models, relevant governmental authorities and agencies that would be involved, suggested lead governmental authority or agency, or private organisation, services to be provided, potential costs and benefits, and time frames for implementation;
- Suggest whether a full or partial implementation process should be undertaken. Factors to be considered relate to the availability (or lack thereof) of resources for full project implementation (financial, human, technical, etc), different levels of need of the relevant governmental authorities and agencies and the significant difference in time and or resources required by different agencies to:
    - Achieve the required legislative changes to operate a Single Window;
    - Develop interfaces to, or modify where necessary, existing legacy systems;
    - Generate the required level of commitment for project implementation;
    - Make recommendations regarding a pilot implementation for the project.

Note: In some cases, it may be worthwhile to opt for 'staggered' implementation, with short-term enhancements that still deliver adequate benefits to make the project attractive to the trade, while moving closer to the desired (electronic) 'joined up' government/trade system in the longer term. However, when implementing an approach in stages, it is essential that initial infrastructural changes support the long-term solution identified in the needs analysis and feasibility study. Also, short- or medium-term solutions must be properly costed and assessed against strategic criteria before any decision is taken regarding implementation.

Business Model

- Develop a business case for the establishment of a Single Window under each proposed scenario, including an estimate of the initial and operating costs, value of the benefits, sustainability, possible mechanisms for revenue collection and sources of project financing;
- Determine the resources needed to complete the project from research to implementation;
- Assess the extent to which resources from governmental authorities and agencies, including central funding, would be required to develop a full project plan, the timescales needed to develop that plan and to implement the project;
- Examine the potential for a public-private partnership approach to the implementation of the project, including revenue streams;

- Identify the key risks that the Single Window project may face. In particular, operational, legal, and infrastructural issues that could make it extremely difficult to deliver a solution at both a reasonable cost and a sufficiently attractive service level to encourage trade take-up should be identified.

Promotion and Communications

- Recommend a promotion and communications strategy for the development and operation of the Single Window. This is essential to keep all stakeholders informed and "on-board" throughout the project.

ANNEX D - Tools available to assist in implementing a Single Window

When implementing a Single Window, governments and trade are strongly encouraged to consider the use of relevant recommendations, standards and existing tools that have been developed over the past number of years by intergovernmental agencies and international organisations such as UNECE, UNCTAD, WCO, IMO, ICAO and the ICC. Some of the instruments in this category are described below, listed by the organisations in charge of their use.

United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), UNECE

In its capacity as the international focal point for trade facilitation standards and recommendations, UNECE, through its Centre for Trade Facilitation and Electronic Business (UN/CEFACT), develops and maintains instruments meant to reduce, simplify, harmonize and automate procedures, information flow and paperwork in international trade. Some of the main Recommendations in this respect are as follows[4]:

Simplification and Harmonisation of Trade Procedures

Recommendation Number 18 - Facilitation Measures related to International Trade Procedures: Contains a series of recommendations regarding the simplification and harmonisation of international trade procedures, including specific recommendations regarding the submission of information to governments in relation to the movement of goods. Each section describes the application area, outlines the procedures and documents covered, and describes the particular problems for which facilitation measures are provided.

Recommendation Number 4 - National Trade Facilitation Bodies: Emphasises the need for a strong government-trade partnership in trade facilitation matters and recommends that Governments establish and support national trade facilitation bodies with balanced private and public sector participation in order to identify issues affecting the cost and efficiency of their country's international trade.

[4] Please refer to http://www.unece.org/cefact/trafix/bdy_recs.htm for a full list of UN/CEFACT recommendations.

Trade Documents

Recommendation Number 1 - United Nations Layout Key for Trade Documents: Provides an international basis for the standardization of documents used in international trade and transport, including the visual representation of such documents. The UN Layout Key is intended particularly to serve as a basis for designing aligned series of forms employing a master document in a reprographic one-run method of document preparation; it can also be used to develop screen layouts for the visual display of computerized information.

UN/CEFACT has also developed a range of other Recommendations related to Trade Documents, such as Recommendation Number 6 - Aligned Invoice Layout Key, and Recommendation Number 22 - Layout Key for Standard Consignment Instructions.

Codes for International Trade

Recommendation Number 16: UN/LOCODE - Code for Ports and other Locations: Recommends a five-letter alphabetic code for abbreviating the names of locations of interest to international trade, such as ports, airports, inland freight terminals, and other locations where Customs clearance of goods can take place, and whose names need to be represented unambiguously in data interchange between participants in international trade. The UN/LOCODE's code list currently contains 60,000 codes for locations around the world.

UN/CEFACT has also developed a range of other recommendations related to codes for international trade transactions, such as Recommendation Number 19 - Codes for Modes of Transport; Recommendation Number 20 - Codes for Units of Measurement used in International Trade.

Recommendations for Information and Communications Technology (ICT)

Recommendation Number 25 - Use of the UN/EDIFACT Standard: Recommends coordinated action by Governments to promote UN/EDIFACT as the single international standard for electronic interchange of data (EDI) between public administrations and private companies of all economic sectors world-wide. There are currently over 200 UN/EDIFACT messages available for the exchange of data between organizations.

UN/CEFACT has also developed a range of other Recommendations related to ICT for international trade including:

- Recommendation Number 14 - Authentication of Trade Documents by means other than signature;
- Recommendation Number 26 - Commercial Use of Interchange Agreements for Electronic Data Interchange;
- Recommendation Number 31 - Electronic Commerce Agreement;
- Recommendation Number 32 - Recommendation on E-Commerce Self-Regulatory Instruments.

Trade Data Element Directory (UNTDED, ISO 7372) contains the standard data elements, which can be used with any method for data interchange on paper documents as well as with other

means of data communication. They can be selected for transmission one by one, or used within a particular system of interchange rules, e.g. UN/EDIFACT. The Directory provides a common language for terms used in international trade and facilitates the interchange of data. UNTDED is a component of aligned, UNLK conformant trade documents. The directory has been the basis for the first UN/EDIFACT releases and will be integrated in the future UN/CEFACT core component directory. The WCO data harmonization initiative is based on UNTDED definitions.

Other Tools for Implementation

United Nations electronic Trade Documents (UNeDocs): is a tool based on the UN Layout Key to provide standard based trade documents in paper and electronic format. Traders and administrators can use the documents either in paper or electronic format depending on their needs. UNeDocs provides precise specifications for the form layout and the data requirements. The resulting, increased precision facilitates the implementation of efficient and automated procedures. The documents facilitate the transition from paper-based information processing to electronic document exchange. UNeDocs mitigates the digital divide by providing low cost solutions for digital documents.

Modelling: UN/CEFACT Modelling Methodology (UMM): It is often useful at the development stage of a project to develop a model of the processes involved in submitting import and export information to government. This model can be very useful in understanding the processes and information flows and will assist in the further analysis and development and automation of the project.

WORLD CUSTOMS ORGANISATION

For many years, the WCO has been making progress on the simplification and harmonization of international Customs instruments and procedures. The WCO developed and introduced the Harmonized Commodity Description and Coding System, which is used world-wide as the basis for classifying goods and for the collection of duties and taxes. The WCO is administering the WTO Valuation Agreement and has developed harmonized non-preferential rules of origin under the WTO Agreement on Rules of Origin. The WCO has also revised the International Convention on the Simplification and Harmonization of Customs Procedures (the Revised Kyoto Convention).

WCO Revised Kyoto Convention: The Revised Kyoto Convention contains a binding provision for Customs to ensure that where goods must be inspected by Customs and other competent authorities that these inspections are co-ordinated and where possible carried out at the same time. In addition, the Convention also addresses the operation of joint controls at common border crossings, the establishment of juxtaposed customs offices and the sharing of information with other bodies.

WCO Customs Data Model: The WCO Customs Data Model is a harmonized and standardized maximum framework for data requirements for Customs and other official cross-border related purposes. The Customs Data Model supports the operation of single window systems and allows the sharing of information nationally and internationally. The Customs Data Model is based on the UNTDED, applies UN/CEFACT's Modelling Methodology (UMM) and refers to a range of UN, ISO and other international code standards such

as the UN/LOCODE. The Customs Data Model currently contains message implementation guidelines only for UN/EDIFACT but will offer XML specifications in future versions.

WCO Unique Consignment Reference (UCR): The WCO UCR is a concept using ISO 15459 (ISO License Plate) compliant numbering systems or equivalent industry solutions such as those applied, for example, in the express carrier industry to uniquely identify consignments in international trade from origin to destination. The UCR establishes an information and documentation link between the supplier and the customer in an international trade transaction and requires this reference to be used throughout the entire supply chain. The UCR has to be linked with the transport references, where the UCR is not already serving also as the transport reference. The UCR can be used as the common access key for national and international data sharing.

United Nations Conference on Trade and Development (UNCTAD)

The Automated System for Customs Data (ASYCUDA)[5]

ASYCUDA is a computerized customs management system that covers most foreign trade procedures. The system handles manifests and customs declarations, accounting procedures, and transit and suspense procedures. It generates trade data that can be used for statistical economic analysis. The ASYCUDA software is developed in Geneva by UNCTAD and operates on microcomputers in a client server environment. ASYCUDA is fully compliant with international codes and standards developed by ISO (International Organisation for Standardisation), WCO (World Customs Organization) and the United Nations. ASYCUDA can be configured to suit the national characteristics of individual Customs regimes, national tariffs and legislation. The system also provides for electronic data interchange (EDI) between traders and Customs using UN/EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) rules.

The most recent Web-based version of ASYCUDA will allow Customs administrators and traders to handle most of their transactions via the Internet. The new e-Customs platform, dubbed AsycudaWorld, will be particularly useful to developing countries, where poor fixed-line telecommunications are a major problem for e-government applications. It is also powerful enough to accommodate the operational and managerial needs of Customs operations in any developed country as well. AsycudaWorld will mean even greater tax revenue collection and lower transaction costs than are already provided by the current version of the system, ASYCUDA++, making it a showcase for e-government. A secondary benefit is the provision of information to facilitate measures to combat fraud, corruption and illicit trafficking, as it gives Customs authorities in different countries a tool for working together online.

International Maritime Organization (IMO)

IMO addresses the issues related to the facilitation of international maritime traffic, through its Facilitation Committee (FAL Committee). These issues include, e.g. simplification of formalities, documentary requirements and procedures on the arrival and departure of ships and harmonization of documents required by the public authorities (standardized IMO FAL Forms). Electronic business in the area of maritime traffic is one of the most important issues, which are currently under discussion in the FAL Committee. IMO has also recognized the pressing need for “a single window concept” and “pre-arrival information” to allow all the information required to be provided for and by a visiting ship to a port, including that required by the public

[5] For more information on ASYCUDA, visit the web-site: www.asycuda.org.

authorities, through one point of entry. Proposed amendments to the Annex to the FAL Convention to specifically address the single window concept, together with other proposed amendments, are under consideration by the FAL Committee.

The Convention on Facilitation of International Maritime Traffic, 1965 (FAL Convention): The Convention on Facilitation of International Maritime Traffic is an international convention that has addressed:

- facilitation of international maritime traffic;
- prevention of unnecessary delays to ships, their crews, passengers and cargoes; and
- unification and simplification of formalities, documentary requirements and procedures.

Amongst other issues, Section 1, C of the Annex deals with electronic data-processing techniques for the exchange of information.

The IMO Compendium on Facilitation and Electronic Business (FAL.5/Circ.15, dated 19 February 2001 and FAL.5/Circ.15/Corr.1): International guidance that has been developed for the exchange of information electronically and electronic means for the clearance of ships.

International Chamber of Commerce (ICC)

ICC creates rules, norms, standards and tools for international trade. Though voluntary, ICC rules carry the force of law when incorporated into contracts and countries throughout the world abide by them because they have become indispensable in facilitating and harmonising international trade procedures and contracts across borders.

ICC/UNCTAD Rules for Multimodal Transport Documents: ICC/UNCTAD Rules set the only globally accepted standard for multimodal transport documents and frequently provide a basis for national legislation. Intended to avoid the problems that would arise for transporters from having to cope with a multiplicity of different regimes when drawing up contracts, the rules offer a uniform legal regime for private transport contracts and simplified documentation and practice.

ANNEX E - Signposts for further information:

Sweden	http://www.tullverket.se/TargetGroups/General_English/frameset.htm
United States	http://www.itds.treas.gov
Singapore	http://www.tradenet.gov.sg/
Mauritius	http://ncb.intnet.mu/mof/department/customs/services.htm
Australia	www.bep.gov.au
WCO	www.wcoomd.org
UNECE	http://www.unece.org/trade
UN/CEFACT	http://www.unece.org/cefact/
UNCTAD	http://www.unctad.org/
IMO	http://www.imo.org/
ICAO	http://www.icao.int/
ICC	http://www.iccwbo.org/

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