

# AID-FOR-TRADE CASE STORY

## THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

### The role of Technical Assistance in supporting use of the WCO Data Model and WCO Single Window Data Harmonization Guidelines<sup>1</sup> in promoting the development of Single Window solutions and makes the case for such programs in 'Aid for Trade' initiatives

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#### EXECUTIVE SUMMARY

- (1) Developments in Information Technology (IT) have enabled governments to make dramatic improvements in the delivery of services. Each new development in IT brought with it a new set of possibilities that would help bring transformational changes to the regulatory environment for international trade. These developments have enhanced the trading community's convenience and efficiency and can potentially help developing & less developed countries (LDCs) in participating in trade more effectively. The emergence of the 'Single Window' concept is one such development.
- (2) Single Window is a facility that receives all regulatory information at a single point and prevents duplication for trade as regards information submission requirements, saving transactional costs on multiple counts viz (i) preparation of information & documentation (ii) interactions with multiple regulatory agencies for cargo clearance and (iii) time spent on meeting procedural requirements.
- (3) Single Window projects have figured as part of the flow of development finance from donor countries and international organizations to developing and less developed countries for the purpose of enhancing the latter's capacity to participate in the world's trading system. Single Window projects address different areas of trade facilitation and are particularly helpful in the lowering trading costs. Therefore, these initiatives can play a key part in the design of 'Aid for Trade'. However, donor organizations face critical choices in relation to activities that they can fund and support in relation to the development of a Single Window environment.
- (4) A range of possibilities for financial and technical assistance exist in relation to Single Window projects. The typical Single Window project involves activities with multiple dependencies and long gestation periods. The investment IT infrastructure and the software development is substantial. Projects require a

<sup>1</sup> WCO Single window Data Harmonization Guidelines was published by the World Customs Organization in February 2007 and can be found at [http://www.wcoomd.org/files/6.SW\\_Files/Data\\_Harmonisation.pdf](http://www.wcoomd.org/files/6.SW_Files/Data_Harmonisation.pdf)

high-degree of interagency co-operation and therefore substantial investment of 'political capital'. Progress is gradual, as the projects grow with incremental development of facilities for trade. While each new step has a corresponding benefit to trade, it is not always easy to relate these developments directly to the assistance provided.

- (5) In this background, the assistance provided to a project that helps create government-wide harmonized regulatory data requirements for international trade can serve several important purposes.
  - a) It brings all regulatory agencies into one discussion table on a sustained basis, promoting the spirit of co-operation in supporting the common objective of trade facilitation.
  - b) It helps every agency focus on the real issues of information & documentation for international trade.
  - c) It helps establish a common understanding on the need for simplification of trade procedures.
  - d) It helps produce common data and business process specification for a Single Window solution.
- (6) In the area of data harmonization and national data standards development, technical assistance typically involves skilled resource persons who provide both on-site and off-line technical support and documentation to facilitate national inter-agency groups and taskforces to iteratively produce the required national data standards and subsequently the common national regulatory specifications.
- (7) The material used in these initiatives is based on international standards such as WCO Single Data Harmonization Guidelines and the WCO Data Model (along with the relevant instruments produced by the United Nations) and the results achieved include comprehensive national data standards that are agreed to by all participating regulatory agencies concerned with international trade. These standard data sets help eliminate unnecessary forms and removed redundancies in data and procedures.
- (8) This Case Story illustrates how technical assistance in the area of data harmonization can be an example of 'Aid for Trade' that brings benefits to recipient countries. Developments in the Former Yugoslav Republic of Macedonia illustrate how the country developed strong internal capacities and responded effectively to technical assistance in this area and produced tangible results by implementing a Single Window solution. The WCO recognizes that this process is repeatable in other geographies as is being done in different regions around the world. There are several examples on how technical assistance of the kind seen in the case stories has facilitated countries in producing harmonized national specifications on electronic data and documents, which then became or will become the basis for Single Window implementations.

## ISSUES ADDRESSED

- (9) Delay in the release of goods is often attributed to the procedural and documentary requirements of Customs. In particular, the following issues have a high impact :
  - a) As was seen in the Former Yugoslav Republic of Macedonia with the different license issuing agencies, use of non-standard, country-specific, and / or agency-specific data is highly inefficient in terms of cost and accuracy for both government and trade.
  - b) Several of the Participating Government Institutions (PGIs) followed manual processes for issuing licenses and design and development of automated systems and the establishment of information and data requirements was being with little co-ordination among regulatory agencies.
  - c) Trader had to comply with a variety of forms for application of licenses resulting in

increased costs and in many cases inaccurate data.

- d) Systems for border processing have been developed in isolation by different government departments leading to redundant procedures.
- (10) These issues needed to be addressed, initially at a technical level, through a process of data harmonization and the use of international standards such as the WCO Data Model provided a set of data and data structures that can be used to support data exchange between business and government. The provision of data structures encourages the administration to adopt common reporting requirements, which in turn will simplify reporting for the private sector. This will also make it easier for the Customs administration to exchange data and encourage interoperability.
- (11) Subsequently, IT systems, such as Single Window solutions or enhancements in IT systems for customs or regulatory agencies can help tackle the issues listed in the preceding paragraph 9. Through the process of harmonization with the WCO Data Model, the reporting data sets, standards and processes will naturally converge, thus reducing the cost of regulatory reporting and at the same time increasing the quality of data reported to regulators. In other words, it is a win-win situation for the Trade and regulators alike.

## OBJECTIVES PURSUED

- (12) In the Former Yugoslav Republic of Macedonia, the Project Team for the establishment of the country's single window for export/import licenses and quotas – "EXIM" started their effort with the process of Single Window Data Harmonization and Standardization. The first stage in the process of implementation of EXIM was the preparation of a Feasibility Study – a document aimed at capturing the current structure of the processes of issuing of licenses in all Participating Government Institutions (PGIs). A significant part of the Study was devoted to emphasizing the need for harmonization and standardization of data and processes and to recommending the basic steps that should be undertaken in this regard by each individual PGI.
- (13) The overall objective of the initiated process of data harmonization was to eliminate the unnecessary overlapping of data that are being exchanged in the licensing process and the cross border trade. The ultimate goal of the process was to define a standardized data set that would in the future be submitted by the businesses to PGIs and that would subsequently be subject to the Business to Government and Government to Government data exchange.
- (14) A Single Window environment would provide a solution to the problem of different regulatory forms and electronic messages and would improve the accuracy of the use of data if internationally agreed standards, such as the WCO Data Model, are being used.

## DESIGN AND IMPLEMENTATION

- (15) With the ultimate objective of achieving a Single Window, the harmonization was carried out by a working group established by the Customs Administration in close cooperation with the coordinators appointed by all PGIs. Expert advice was used by the World Customs Organization and UN/CEFACT. The program was supported by the development assistance provided by USAID, a development support agency of the United States Government.
- (16) The process of data harmonization and standardization in the Former Yugoslav Republic of Macedonia went through the following stages:

### a) Identification of data from each PGI

The working group prepared a questionnaire in a spreadsheet with around 20 questions aimed at collecting the following information from the PGIs: number of different licenses issued by the respective PGI, type and name of each license, form of the license, legal grounds for the issuing of the license, cross-

border procedure in which the license is used (import/export/transit), manner of applying for and issuing of the license, who applies for the license, the amount of applicable administrative taxes, etc. Data was collected through several sessions of interviews with representatives of PGIs. In addition, the working group sought and collected paper copies of all applications for licenses and the actual licenses.

**b) Creation of a PGI Data File**

All data identified by studying the applications for licenses and the actual licenses were gathered and displayed in a separate spreadsheets in an organized and structured order that clearly indicated which data corresponds to which license and PGI.

**c) First-stage harmonization**

Next step was the creation of a Draft Data Set based on the data contained in licenses issued by four 'pilot' PGIs that have offices at the border. The pilot PGIs were the agencies chosen for the pilot implementation. This set included groups of identified data elements mapped according to the names, description and format provided in the WCO Data Model (Version 2). In cases of data elements that were matched with more than one term (synonyms), all synonyms were listed and one of them was extracted as an ultimate name for each respective datum. Once completed, this first harmonized data set included 36 harmonized data.

**d) Government approval and inclusion of PGIs in the process**

The concept followed by the working group during the first-stage harmonization and its results were presented to the Government of the Former Yugoslav Republic of Macedonia in the Feasibility Study. The Study also contained a recommendation to proceed with the harmonization process for the remaining PGIs, as well as the steps that should be undertaken in this regard by each PGI. The Government endorsed the continuation of the process.

**e) Data harmonization in all PGIs**

Harmonization was carried out individually for every PGI following the concept applied for the first four PGIs. Data were mostly collected analyzing the license applications and the actual licenses. The final list of data elements for every PGI was finally agreed by the working group and the PGI representatives after a series of consultation meetings. During the process, some data were added and some were eliminated.

**f) Standardization**

Concurrently to the process of harmonization, all harmonized data elements were mapped in terms of name, description and format with the corresponding standard data in the WCO Data Model as well as UNTDED.

Although the process of standardization of data had a technical focus, it also helped uncover key procedural problems and identified the way forward in procedural simplification. The project required PGIs to sit around the table and work on a collective problem-solving approach, which not only helped in arriving at collective agreement on the solution but fostered a spirit of co-operation.

## PROBLEMS ENCOUNTERED

- (17) Data Harmonization has to be followed by the implementation of necessary procedural, organizational and legal changes. The Former Yugoslav Republic of Macedonia followed this with a detailed programme on legislative changes. These changes related to both customs legislation and also general legislation on electronic signatures and validity of electronic records.
- (18) There was reluctance to the proposed changes for Single Window at some lower level officials. These problems were overcome thanks to change management programs and extensive training provided by different government department.

## FACTORS FOR SUCCESS / FAILURE

- (19) The country was supported by a group of expert facilitators drawn from different international organizations including the WCO. Back-up resources with the right skill sets were available not only to deal with contingency but also to provide quality assurance.
- (20) There was close involvement of the Customs executive management in all change initiatives and that proved to be critical success factor.
- (21) The programme was supported by a mandate of the whole of government. Individual agencies also supported this initiative.
- (22) Key national players acted as facilitators and thought leaders and served as motivators throughout the development work.
- (23) Tools, templates, techniques and know how was provided by a network of experts from international organizations. Competent professionals from the national Customs administration led the effort from the beginning and pursued the program until its conclusion. There was excellent communication between international experts and the national team.

## RESULTS ACHIEVED

- (24) The Former Yugoslav Republic of Macedonia produced its final standardized data set that supports and incorporates 66 export, import and transit licenses issued by 15 PGIs. The final result contains 80 harmonized and standardized data elements that are most frequently used in the Business to Government interaction provided with the currently operative EXIM modules. The Standardized Data Set is expected to enable more comprehensive data exchange in all future stages of development of EXIM and its integration with other systems. Any new data that will be additionally included in EXIM as result of development of new modules will also be harmonized and standardized.
- (25) The project was launched in March 2007 and the modules of the initial modules of the Single Window were rolled out in November 2008, and subsequently in 2009 & 2010, the country reported further expansion of services. The latest release of the EXIM application, which is also based the previous exercise on data harmonization, defines the structure of electronic messages that are exchanged between Customs clearance system and other PGIs systems, (such as the Veterinary Agency).
- (26) After gaining experience from two years of operation, the country is now in the process of replacing the existing regulation for Single Window with a separate national law for Single Window. This confirms that both government and Trade are showing increasing levels of confidence in their capacity to handle both legal and technical issues. It also shows that the Single Window approach is viable in a developing country and can strengthen trade facilitation.
- (27) **Reduction in costs and time:** The Case Story highlights successes achieved in the country, which has reported increased user satisfaction following independent surveys carried out after the implementation of the Single Window solution. The independent survey in 2009 reported a general reduction in costs and time across all procedures.

## LESSONS LEARNED

- (28) Governments considering the development or developing a Single Window environment should initiate the data harmonisation and standardisation process. It is also recommended that countries that have a Single Window in place and not executed a data harmonisation would also conduct such a harmonisation.
- (29) The Former Yugoslav Republic of Macedonia followed the recipe for successful data harmonization

process as set forth in the WCO Single Window Data Harmonization Guidelines (and subsequently in the Draft UN/CEFACT Recommendation 34), the steps governments should implement in the harmonisation process as follows:

- a) Identify the lead agency and dedicating staff to conduct the harmonisation.
- b) Inventory current trade agency data and information requirements from automated systems and forms
- c) Nationally harmonise data and information inventory
- d) Identify redundancies by comparing data definitions
- e) Harmonise the information and data requirements inventory to the international WCO Data Model standards.
- f) In various initiatives on data harmonization for Single Window, it is seen that extensive preparation prior to the launch of the initiative is absolutely vital. Preparatory steps include identification of experts,
- g) Involvement of IT experts.
- h) Involvement of Trade

### CONCLUSION (Applicability to other programmes)

- (30) The WCO Single Window Data Harmonization approach along with the WCO Data Model can serve different objectives:
- a) It brings border regulatory agencies and customs on to a common platform for discussions. The program generates a spirit of co-operation among the participating stakeholders.
  - b) It provides the means to demonstrate the feasibility of 'one time submission' of data, creation of common export and import declaration forms and co-ordinated inspection, which is an important element in the development of a Single Window environment.
  - c) Although begins purely as an intellectual exercise in data standards, it gradually steers the focus on the issues of trade facilitation. Discussion on problems and chokepoints in international trade become inevitable and all parties begin to understand the need to adopt a common approach to border management.
- (31) Technical assistance of the kind provided to the Former Yugoslav Republic of Macedonia and the results achieved from such assistance has been shown to be repeatable in different parts of the world. Dozens of programs and projects have been developed around this theme. The work led to similar activities in South Eastern Europe and the Caucasus. ASEAN member countries produced a harmonized ASEAN data set which will support regional efforts for a Single Window. There are also reports of such studies being carried out by individual Members countries of ASEAN to support efforts on their respective national Single Window solutions. Recently, Jordan successfully concluded a data harmonization initiative based on WCO Data Model Version 3.0. A new program along the lines described in this case story has been launched in Chile and many more such efforts are underway in the South America. Some Customs administrations, such as the Republic of Korea, have developed advanced tools such as 'Electronic Document Management System' that can accelerate the technical processes of data harmonization and alignment of standards.
- (32) The technical assistance component of the data harmonization projects go much beyond issues of data standards and can make a clear impact in national efforts on trade facilitation, besides being an essential part of programs for Single Window development.