

WORLD CUSTOMS ORGANIZATION CUSTOMS DATA MODEL:

IMPLICATIONS FOR THE DATA EXCHANGE INITIATIVE

OF THE

THE REGIONAL TRADE FACILITATION AND CUSTOMS COOPERATION PROGRAM¹

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I. INTRODUCTION

1. Promotion of customs information exchanges is a priority area of the Regional Trade Facilitation and Customs Cooperation Program (RTFCCP). Standardization of data requirements for goods clearance and establishing electronic means for their exchanges are at the heart of trade facilitation. Data exchanges are also essential for regional transit arrangements and adoption of modern customs practices such as joint customs control and risk management.

2. However, data exchanges for trade facilitation requires a combination of country-specific and regional efforts to minimize and standardize data requirements by customs and trade-related agencies (e.g., health). At the country level, the member countries need to reform the customs code and simplify customs procedures according to the Revised Kyoto Convention and customs-related WTO Agreements. At the regional level, customs procedures and documentation need to be harmonized as the first step to standardize the data requirements. Both are challenging in view of the varied stages of customs reforms and modernization and different levels of commitment to regional customs cooperation among the member countries.

3. Among the RTFCCP member countries, only three countries have recently completed the revision of the Customs Codes (KAZ, KGZ, and TAJ). AZE and UZB are planning to bring out their revised Customs Codes soon. Four member countries are planning to reengineer the customs business process with technical assistance from ADB (AZE, KGZ, MON, TAJ). PRC is the only signatory of the Revised Kyoto Convention. KAZ is striving to become a signatory of the Revised Kyoto Convention soon.

4. Development of unified automated information systems (UAIS) for customs services (UAIS) are the essential building-blocs for information exchanges in an interconnected environment, or single information space. KGZ and TAJ have recently embarked on the development of their UAIS through assistance from ADB's regional project. Azerbaijan and Mongolia will soon launch comprehensive needs assessment and project design to expand and upgrade their systems. KAZ and UZB developed their systems toward interoperability and recognition of common electronic message standards (e.g., XML).

5. The purpose of this paper is to review the World Customs Organization's (WCO) data exchange initiative, known as the WCO Customs Data Model, and draw implications for the RTFCCP's data exchange initiative taking into account the difference in customs reforms and ICT capacity among the member countries. The paper starts with a brief summary of the progress in RTFCCP's data exchange initiative

II. PROGRESS

6. A phased approach has been adopted to promote the initiative in view of the complexity of the initiative and difference in customs reforms and ICT capacity. The initiatives cover three aspects of information exchanges among the member countries' customs administrations: (i) customs laws, regulations and procedures, (ii) trade statistics and methodologies, and (iii) customs data requirements for goods clearance. Initial focus has been on promotion of (i) bilateral agreement on mutual administrative assistance to provide a legal foundation for cooperation and exchanges of customs regulation and trade statistics, and (ii) support for pilot-testing and bilateral initiatives for data exchanges. Several agreements on mutual administrative assistance and cooperation were signed among the member countries including agreements

between AZE-KGZ and AZE-PRC. PRC and UZB will soon enter into the same agreement. KGZ and PRC signed an agreement specifically for exchanges of customs statistics. KAZ and UZB held consultation on comparison of customs statistics and underlying methodologies.

7. A website is being developed by the Secretariat at the request of the AZE delegation at the recent Senior Officials' Meeting in Manila on 14-15 April 2005. The website will be formally launched at the 4th CCC Meeting on 14-16 September in Ulaanbaatar. The website will serve as a gateway for access to the member countries' customs websites, and therefore could be a platform for information exchanges if the member countries make effort to publish information in English in their websites. So far only KGZ and AZE have websites in English.

8. KAZ and PRC maintain an active program of discussions and consultation regarding exchange of customs information. The two countries' customs administrations entered into an agreement to share information on customs laws and regulations and exchange trade statistics once every quarter. Under the auspices of the two countries' Ministries of Foreign Affairs, a Subcommittee on Cooperation Between Check Posts and Customs Bureaus was established and held a meeting on 17-19 November 2004 to agree on speeding up the establishment of a "data bank" to monitor the movement of goods across borders and to assist in the creation of an International logistics center at the Khorgos-Xorgos "land port".

9. As regards data exchanges for imports and exports clearance, the member countries developed a set of data requirements for customs clearance at a meeting in Issyk-kul in August 2003. A total of 25 data elements were proposed (Appendix 1). However, there was no specification as to whether the data set is for exports or imports. The means for such exchanges were also not addressed.

10. As the chair of the working group on ICT and data exchanges, UZB is leading the initiative of developing an electronic option for data exchanges. Two documents were prepared and circulated to the member countries for comments and suggestions: (i) a technical proposal for establishment of a common platform for data exchanges among the member countries, and (ii) draft bilateral agreement for the proposal. The proposed common platform will operate outside of the member countries' UAIS. A host of technical issues were considered in the proposal such as the message standards and inter-operability of the member countries' UAIS so as to create "a single customs space" among the member countries. The chair estimated the cost for setting up the platform at \$1 million. The location for the platform and cost-sharing among the member countries will be discussed in Shenzhen seminar on risk management.

III. WCO CUSTOMS DATA MODEL

11. The WCO Customs Data Model originated from G7 industrialized countries' initiatives during 1996-2001 to (i) standardize and simplify data requirements and the (ii) develop electronic formats for submission by traders for customs clearance and trade regulatory requirements. The WCO has carried on the initiative since 2001 in an effort to promote common understanding and global standards on trade data requirements.

12. The Model rests on two pillars: (i) harmonization of data requirements for imports and exports, and (ii) creation of common definitions and standardization of data content and its electronic format. The Model is designed to operate in an interconnected environment (or a single customs space) in which traders and customs exchange data through common

communication languages (e.g., EDIFACT, or XML). Main features of the Model are the following.

13. **Harmonization of Export and Import Declaration.** A major simplification measure is the alignment of the data requirements for exports and import declaration. This enables importers to utilize the export declaration to prepare import declaration more effectively.

14. **Single Window.** The data requirements also include other governmental regulatory requirements enabling traders to submit all the trade requirements in “one stop”.

15. **Segregation of Data Requirements.** The Model follows the “two-step procedures” in line with the principles of the Revised Kyoto Convention: i.e. data requirements are clearly defined for purposes of goods release (the first step) and for duty collection and trade statistics (the second step).

16. **A Framework of Maximum Data Requirements.** While the spirit of the Model is to minimize data requirements for customs clearance and supporting documents, the Model provides a framework for maximum data requirements for cargo manifests and export/imports declaration. This allows traders to submit the entire requirements for cargo and goods declaration in one electronic form. Customs may use those data that it requires and ignores the remaining data elements.

17. Each data set (for cargo, exports, and imports) is structured into seven categories: general, commodity/shipment identifiers, duty/tax calculation, country/place/location, persons/parties, transportation information, value-commercial transactions information. The data sets consist of 184 data elements for import declaration under the two-step procedures, 119 data elements for export declaration, and 81 data elements for cargo import manifest and 64 data elements for export manifest. (Appendix 2 for definitions of the data elements.)

IV. IMPLICATIONS FOR THE RTFCCP'S DATA EXCHANGE INITIATIVE

18. While significant progress has been made in this initiative particularly in forging bilateral agreements for exchanges of customs statistics, much needs to be done to deepen cooperation and promote data exchanges for goods clearance. At the country level, the revision of the customs codes and business process reengineering need to be accelerated to simplify customs procedures according to international best practices. UAIS should be developed and expanded with a view of compatibility and recognition of common message standards. The private sector must be involved in the development of UAIS to ensure their user-friendliness and compatibility with traders' ICT practices.

19. At the regional level, the member countries need to carry out the harmonization/simplification initiatives under the chairpersonship of PRC and UZB to prepare the conditions for regular exchanges of data for customs clearance as envisaged in the UZB proposal. These initiatives may include:

- (i) harmonization of the data requirements for exports/imports clearance;
- (ii) agreement on the maximum data requirements for cargo manifest, export declaration, and import declaration;

- (iii) development of a common electronic format containing the agreed data elements for cargo manifests and exports/imports clearance;
- (iv) consideration of introducing data elements capturing the trade regulatory requirements by other agencies (e.g., health) so as to move toward “single window” practices in trade facilitation;
- (v) bilateral agreement to accept electronic messages/forms submitted by traders and joint pilot test the initiative in consultation with traders and their representatives, and
- (vi) review of the experiences of the member countries/economies of the G8 and APEC agreeing to implement the WCO Data Model by 2005 where possible. (Canada has implemented a number of initiatives based on the WCO Customs Data Model including a pilot test with the United Kingdom designed to allow traders to send electronic messages/forms for export and import declarations.)

Data Element in Customs to Customs Messages	SAD Equivalent Field No.
Customs Cargo Declaration Number	7
Consignor	2
Consignee	8
Country of Destination Code	17
Country of Departure Country	15
Code of Country of Origin	34
Number of Vehicles at Border	21
Vehicle Identifier at Border	21
Code of Transport Means at Border	25
Commodity Code	33
Net Mass	38
Supplementary Units	41
Number of Items	31
Goods Description	31
Marks and Numbers	31
Customs Procedure Code	37
Statistical Value	46
Code for Foreign Currency	22
Contract Invoice Value	42
Contract Number and Date	44
Weighbill Number	44
Carrier	50
TIR Carnet Number	53
CMR Number	44
Container Number	31

Source: CCC Regional Workshop Minutes of the Working Group on Trade Facilitation and Customs Modernization Data and Information Sharing and ICT Development Issyk-Kul, Kyrgyz, 4-8 August 2003

Table 1: General Information

Document/message name, coded	Nature of transaction,coded (IM,EX)
Document/message number, coded	Previous Customs procedure,coded (IM, EX)
Message function,code	Date of departure from place of loading, coded (EX)
Goods declaration number (Customs)	Export classification control number (EX)
Unique consignment reference number	Goods declaration acceptance date (Customs), coded (IM,EX)
Trader reference	Departure date, coded
Authentication	Exit date, coded (IM, EX, CRE)
Customs procedure, coded	Additional document type, coded
Previous Customs document (type), coded	Additional document type (IM, EX)
Previous Customs document number	Additional document type reference number (IM, EX, CRE)
Declaration line number previously recorded (IM22)	Date of previous Customs document, coded (IM, EX)
Birth date of Master/operator, coded (CRI,CRE)	Date and time of arrival at first port of arrival in Customs territory, coded (IM, CRI)
Arrival confirmation indicator (ARI)	Date of arrival at place of discharge, coded (IM, CRI)
Error condition override, coded (IM, EX)	Date of vanning, coded (EX)
Reservation No. of shipment (EX)	

Table 2: Commodity Shipment/Identifiers Information

Consignment sequential number (CRI, CRE)	Description of Goods
Goods item number	Brief cargo description (CRI, CRE)
Tariff quantity/supplementary quantity	Tariff code number (Customs)
Total gross weight	Tariff code extensions
Gross weight item level	Type of packages identification
Cube (CRI)	Number of packages
Measure unit qualifier	Total number of packages
UNDG Number (Dangerous Goods Code)	Number of packages per commodity (CRI, CRE)
Shipping Marks	Customs status of goods, coded (CRI, CRE)
Identity Number (EX, CRI, CRE)	

Table 3: Duty/tax Calculation

Duty/Tax/fee type, coded (IM, EX)	Duty/tax/fee assessed (IM, EX)
Duty/tax/fee rate (IM, EX)	Duty/tax payment method, coded (IM, EX)
Duty/tax/fee assessment basis in value (IM, EX)	Payment reference (IM, EX)
Duty/tax/fee assessment basis in quantity (IM, EX)	Security details, coded (IM, EX)
Type of duty regime, coded (IM, EX)	Deducted quantity (IM)
Duty/tax/fee reduced assessed (IM)	

Table 4: Country/Place/Location

Customs office of entry, coded (IM)	First port of arrival, coded (IM, CRI)
Customs office of exit, coded	Country of origin, coded (IM, EX, CRI)
Customs office of transit, coded (CRI)	Country (ies) of routing, coded (CRI, CRE)
Customs office of declaration, coded	Country whence consigned, coded (IM, EX, CRI)
Customs office of duty/tax payment declaration, coded (IM)	Region of origin, coded (IM, EX)
Place of vaning (EX) Vanning address, coded (EX)	Region of export, coded (EX)
Place of loading (IM, CRI)	Goods receipt place (CRI, CRE)
Place of loading, coded	Goods receipt place, coded (CRI, CRE)
Place of discharge (CRE)	Place of physical examination, coded (IM, CRI, CRE)
Place of discharge, coded	Delivery destination (IM, EX, CRI)
Warehouse, coded (IM, EX)	Place of destination of the transit, coded (CRI)
Location of goods	Place of destination of the transit (CRI)
Location of goods, coded	

Table 5: Persons/Parties

Buyer (IM)	Consignee
Buyer, coded (IM)	Consignee, coded
Seller (IM, EX)	Consignor (IM, CRI, CRE)
Seller, coded (IM)	Consignor, coded (IM, CRI, CRE)
Manufacturer, coded (IM)	Agent (IM, EX)
Carrier identification	Agent, coded
Carrier name	Agent, status, coded (IM, EX)
Importer (IM)	Notify party, coded
Importer, coded (IM)	Container operator, coded (CRI)
Exporter (IM, EX)	Master/operator (EX, CRI, CRE)
Exporter, coded (IM, EX)	Party responsible for proof vanning (EX)

Table 6: Transportation

Equipment identification number	Ships stay reference (CRI, CRE)
Equipment size and type identification (CRI, CRE)	Carrier split consignment indicator (CRI, CRE)
Equipment supplier, coded (CRI)	Mode/type of means of transport at departure, coded (EX)
Container identifier qualifier	Nationality of means of transport at departure, coded (EX)
Container transport indicator (IM, EX)	Identification of means of transport at departure, (EX)
Container status (CRI, CRE)	Type of means of transport identification (CRI)
Container legal status, coded (CRI, CRE)	Mode/type of means of transport at arrival, coded (IM)
Conveyance reference number	Nationality of means of transport at arrival, coded (IM)
Transport document number	Identification of means of transport at arrival, (IM)
Associated transport document number (CRI, CRE)	Mode/type of means of transport crossing the border of the Customs territory, coded
Associated transport document type, coded (CRI, CRE)	Identification of means of transport crossing the border of Customs territory
Contract and carriage condition, coded (CRI)	Identification of means of transport crossing the border of the Customs territory, coded
Seal number	Nationality of means of transport crossing the border of Customs territory, coded

Table 7: Value/Commercial Transaction Data

Invoice number (IM, EX)	Incoterm (IM, EX)
Invoice line number (IM, EX)	Parties' relationship[, coded (IM, EX)
Type of invoice, coded (IM, EX)	Statistical value (IM, EX)
Invoice date, coded (IM, EX)	Charges (IM)
Total invoice amount (IM, EX)	Valuation adjustment (IM)
Item amount (IM, EX)	Valuation additions indicator (IM)
Rate of exchange (IM, EX)	Valuation method, coded (IM)
Freight costs (IM, EX)	Vvaluation adjustment percentage (IM)
Incoterms place (IM, EX)	Customs value (IM, CRI)
Incoterms place, coded (IM, EX)	Currency, coded (IM, EX, CRI)
Incoterms code (IM, EX)	Consignment value (CRI)

Source: D. Jost, 7-8 November 2002, "WCO Customs Data Model", powerpoint presentation, Second WCO Task Force Meeting, Brussels.