

SCOPE based on the WCO-WBG PROPOSED TRS SOFTWARE SOLUTION UPGRADE DOCUMENT (DRAFT)

8 Future System Context

Through a partnership between the WCO and the WBG, the desired future state is to develop an enhanced online system based on business processes mapping technology to standardise and simplify the collection and analysis of data over that can be compared over time at national and global levels.

The deployment of the TRS Online System is global and will span the breadth of least developed to developed nations. 'The modern era of international trade is one of increasingly complex interactions between people, firms, and organizations. Having inefficient or inadequate systems of transportation, logistics, and trade-related infrastructure can severely impede a country's ability to compete on a global scale.'¹ It is envisaged both the WCO and WBG will be able to share the data and analysis to assist member and client countries to improve their trade facilitation environment.

Within this environment the TRS Online System must enable the capture of the business process/es at a high level with enough detail so the TRS Working Group (or other users) can understand how the processes work and how such processes align to the purpose of the measurement exercise.

The high level scope table, see below, describes the capabilities being sought in the proposed future system.

8.1. Scope

It is proposed the TRS Online System is based on a standardised business process mapping framework that presents a visual representation of national (at times extended into regional or cross-boundary) border processes. It is further proposed the TRS Online System has functionality that enables users, where desired, to also focus on analyzing and optimizing mapped processes.

By their very nature, border processes often involve multiple actors with information flowing in various systems and directions (see Figure 1)

For the proposed TRS Online System to be effective in this environment the system must

- a. Support a horizontal approach across the span of organisations, actors, processes and systems in the border community
- b. Support a vertical approach to target specific organisations, types of processes, multiple work locations, and
- c. Support a hybrid approach with both the abovementioned horizontal and vertical elements

Countries who will use the online system have varying and differing degrees of investment in technology, therefore the system must cater for

- a. Human-centric processes requiring manual collection of survey data,
- b. Single system-centric processes where survey data can be extracted, and
- c. Integration-centric processes where different processes come together (e.g. single window)

¹ World Bank Group worldbank.org/en/topic/trade-facilitation-and-logistics (last accessed July 2020)

It is expected a good proportion of TRS surveys will require survey data to be both collected manually and extracted from systems.

8.1.1. Events-Based Approach

The TRS Guide (2018) recommends Time Release Study ' *should include a comprehensive description of all the events in the clearance chain.*'² The 'events' in the clearance chain, as can be seen in the example below, may be a single process step or more likely the event is made up of a series of process steps or activities

The core events listed, as an example, in the TRS Guide (2018) include³

- Arrival
- Lodgement/registration of required documents
- Examination and drawing of sample
- Discharge
- Border release given
- Border clearance given
- Removal from border control, received at owners premises

The proposed TRS Online System must be configured to allow for an important environmental characteristic of a border clearance process, that being, is there is no universally accepted order in which the core events may occur.

Examples of the order of events for a time release study undertaken on imported sea cargo at a port

Example A

Arrival – lodgement/registration of required documents – border clearance given – removal from border control

Example B

Lodgement/registration of required documents – border clearance given – arrival – removal from border control

To enable both adaptability and standardised measurement it is proposed the TRS Online System adopt an events-based approach. An events-based approach for the proposed TRS Online System, means;

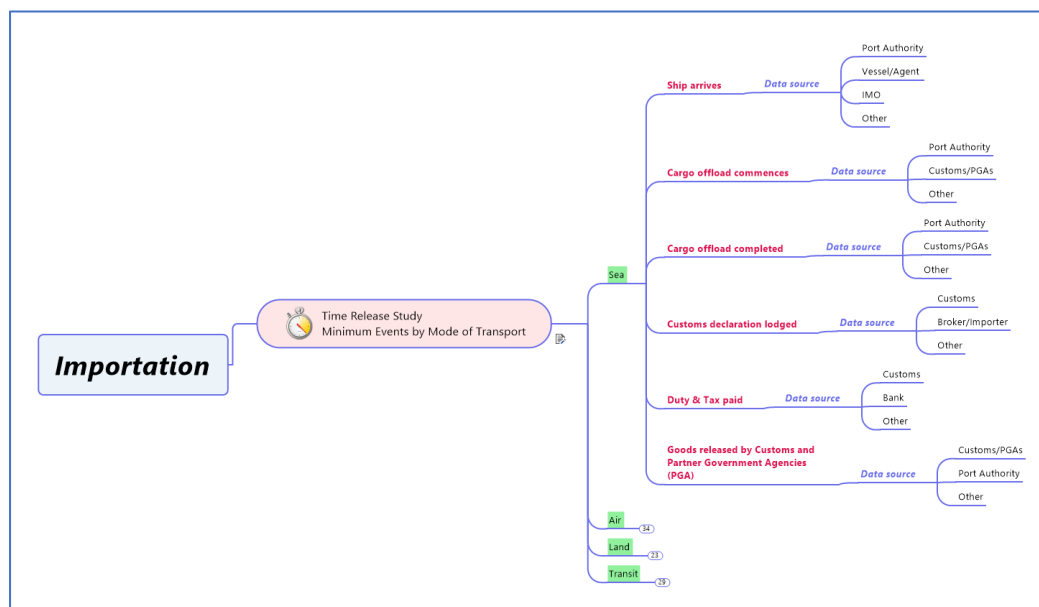
- Key agencies at the border are defined in the system with associated (and linked) core border events
- Core events are defined for both a horizontal approach and vertical approach
- Core events under the vertical approach are agency specific for key agencies
- Minimum core events for each category of TRS are defined within the system
- Core events are selected from a menu
- Core events are associated with 1-3 mandatory data points particular to the specific event
- Within each core events there may be priority decision points and/or priority intermediate events that will be identified through a series of system prompted questions and responses e.g. Does the agency have an AEO programme? Yes or No

To maintain the proposed standardised approach it is proposed the TRS Online System Operator will oversee and manage the schedule of core events, priority events and mandatory data points.

² Time Release Study Guide 2018, World Customs Organisation, p16

³ Time Release Study Guide 2018, World Customs Organisation, p30

Figure 1: Minimum Events for Importation of Goods by Sea (Example)



8.1.2. Supporting Assessment of the Impact of Trade Facilitation Reforms

Like the current WCO Online TRS system, the proposed TRS System will support users to gather valid data to inform publication of average release times (as illustrated in Article 7.6 WTO Trade Facilitation Agreement). However, the proposed TRS system will introduce enhanced capability to support countries (and their National Trade Facilitation Committee's) to measure the impact of identified border reforms and the WCO or other agreed party to publish global statistics.

The proposed TRS Online System will support assessment of the impact of trade facilitation reforms by

- Establishing a list of key border agencies e.g. key agencies may include Cargo terminal operator, Customs, Standards Bureau, Plant and Animal health protection agencies, food safety agency
- Enabling the WCO/WBG or other agreed party to produce aggregated data e.g.
 - Global average release time,
 - Global average release time for AEO traders
 - Average impact on release times by the implementation of TFA articles e.g. Art. 7.3 Separation of Release from Final Determination of Customs Duties, Taxes, Fees and Charges,
 - Global change in average release time between manual key agency processes and the introduction of automation
- Enabling the national authority to analyse and present data on the change in time (and cost where cost data is collected) from reforms and benchmark these changes against the global averages within the system

8.1.3. High Level Scope

Area	In Scope	Out of Scope
User Management	On-board, manage and off-board users within the scope of the identified policy	
Sample size calculator	Identify a statistically valid TRS sample size based on the population, probability or percentage of expected responses, confidence level needed and the margin of error or confidence level	
Develop TRS survey	<p><u>Events – Core & Minimum</u> Identify core border events with mandatory data collection points Identify the minimum events by TRS type</p> <p><u>Events - Specific</u> User defined events are created for specific TRS</p> <p><u>Actors</u> Identify core actors linked to the in-scope events with the ability to create user identified actors</p> <p><u>Costs</u> Record direct costs - actual and estimated e.g. fees, charges, demurrage,</p> <p><u>Location</u> <i>Single Survey</i> Points of location for the survey are created by the user <i>Multiple Surveys</i> Surveys may be duplicated and amended by the user for specific location conditions</p> <p><u>Mode of Transport</u> Standard modes of transport are available for selection by the users e.g. air, sea, land, mail</p> <p><u>Type of Commodities/Goods</u> Identify which goods should be included e.g. all, by packaging unit (FCL, LCL, conventional), by value criteria (high, medium, low, non-dutiable), etc.</p> <p><u>Procedure/Treatment</u> Identify the types of treatments, releases and procedures</p>	

Area	In Scope	Out of Scope
	<p><u>Priority Commodities /Categories</u> Identify priority commodities for tagging survey data Identify priority categories or characteristics for tagging survey data e.g. Authorized Economic Operator</p> <p><u>Sources of Data</u> Sources of data for survey data points are identified along with the method the data will be collected</p> <p><u>Reusing Surveys</u> Surveys may be reused and duplicated</p>	
Create business process map	<p><u>Standardised business process maps</u> Standard process maps are generated based on the selected events (core and priority), actors, locations, mode of transport and systems</p> <p><u>Customised business process maps</u> Additional elements can be added to the standardised business process maps by the user</p>	
Create survey	<p><u>Manual TRS Survey</u> Based on the business process map create a TRS survey questionnaire/form</p>	
Collect survey data	<p><u>Manual entry</u> Approved User/s enter data into the survey (either sections or the full survey) Quick data entry screen</p> <p><u>Mobile entry</u> Approved person/s enter data into a mobile application at survey sites</p> <p><u>Upload data</u> Approved person/s upload data into the TRS Online System either from designated tracking technology or as timestamps from other systems</p> <p><u>Unique Identifiers</u> Establish unique identifiers for survey traceability and data verification</p>	Data not related to the survey

Area	In Scope	Out of Scope
Analyse survey data	<p><u>Calculating times (standard)</u> A standard set of calculations are automated User-defined calculations for ad-hoc or specific process event measurements</p> <p><u>Exporting data</u> Data can be exported into formats suitable for uploading into other analysis tools</p>	
Benchmark survey data	<p><u>Established Benchmark</u> Known benchmarks are set within the system System generated benchmarks Survey results are presented against system generated benchmarks</p>	
Dashboard	<p>TRS results are viewed in a dashboard that includes</p> <ul style="list-style-type: none"> • Survey specific dashboard • National dashboard based on multi-year TRS results • Aggregated benchmark dashboard • User defined national monitoring measures 	
Store national data	Secure storage of national data in accordance with agreed legal and policy	
Business Process Event Modelling	Future process proposals (or changes to existing processes) may be modelled based on survey results to identify possible future bottlenecks, constraints, points of stress and failures	
Language	English, French, Spanish and other identified languages	
Policy/Legal	<p><u>Ensure legal/policy issues resolved</u> Identify any policy/legal issues with need to be resolved for system governance and operation</p> <p>Establish a statistical sampling methodology applicable to TRS</p> <p><u>Ensure minimum events and mandatory data points are agreed</u> Identify any policy issues to establish minimum events and mandatory data points to be measured for global statistics</p>	

Area	In Scope	Out of Scope
	<u>Ensure data ownership is clarified</u> Ensure that data ownership, access and use are addressed <u>Data Archiving</u> Clarify data archiving standards	
Security Matrix	<u>Security</u> Inclusion of roles/responsibilities within the system security matrix	
Database (Miscellaneous)	System generated aggregation Version management Trial/Test TRS database Transfer Trial/Test survey into the 'live' system 24 hour clock	
Interfaces	Establish prepared interfaces with international systems for ease of receipt of data points e.g. Asycuda, E-phyto Establish an interface with existing WCO systems	
Training and User Documentation	The system will be deployed in multiple countries and at multiple national locations In-built training database	
Support and Collaboration Model	Establish governance and finance model Establish operator model	

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