Activities of the Informal ad hoc Expert Group

Issue 64

E-Business Requirements - Chapter 2 of The Reference Model

Transmitted by the IRU

A. INTRODUCTION

The secretariat proposed document ExG/COMP/2004/23 as an appropriate introduction to Chapter 2, E-Business Requirements, of the Reference Model. The IRU voiced the opinion that this document, no matter how useful and interesting, was inappropriate as an introduction to the Chapter. In the transparent spirit of the ExG and the directive to submit suggestions in writing, the IRU and its members Associations participating to the eTIR Expert Group would like to propose how we see best the elaboration of this critical chapter of the Reference Model.

B. PRE-REQUISITES

Chapter 1, Business Domain Modeling, must be completed. This means that the current system must be fully defined, including the needs, constraints, and priorities of the
contracting parties. (The ExG has agreed that a full survey (census) of the Contracting Parties may contribute to meeting this important pre-requisite.)

C. CHAPTER 2, E-BUSINESS REQUIREMENTS

The e-business requirements must be defined in detail, in fact in more detail than the description of the current environment, because there should be no ambiguity about what is being proposed. As the title of the chapter indicates, the focus must be on the requirements of the stakeholders. The requirements, in addition to being listed in any requirements appendix, should stand out for the reader in every section of the chapter. To be credible, how these requirements will be met (which data, where and when) must be documented.

Chapter 1, Business Domain Modelling, should be used as much as possible to illuminate Chapter 2, E-Business Requirements. This should be achieved by reusing the structure of Chapter 1, as well as the elements described in Chapter 1, so that the reader is able to easily compare the differences between the current state and the proposed future state. Naturally, some additional sections will need to be added for Chapter 2. The current structure of the Reference Model is discussed below as applicable to Chapter 2. While the contents of Chapter 1 may change based upon the results of the survey of the Contracting Parties, the structure should not.

We also noted, while reviewing the Reference Model, that the set of questions related to the time criticality of the data (who needs/provides what data, when?) originally addressed by the ExG (see document EXG/COMP/2002/10) does not appear in the current reference model. We would ask the Secretariat to include this information in Chapter 2, if not also in Chapter 1. A possible solution to this problem may be the inclusion of Sequence Diagrams in Chapter 2, with an emphasis on the details of the “messages” exchanged.

1. 0. Introduction

The reader could benefit from a (perhaps repetitious) statement of the direction given by the WP30—Elimination of the paper TIR Carnet, Centralized DB, Step-by-step approach. While this direction does not exclude the possibility of a “portable file” in the implementation, it does clearly differentiate the alternates presented in paragraph 3 of section 0.1 of the Reference Model.

Otherwise, nothing should change.

2. 1. Business Domain Modelling

Provide a brief introduction of the purpose and deliverables of the E-Business Requirements chapter, as is provided for the Business Domain modelling Chapter.
3.  **1.1 Vision**

This section can be augmented with a statement of design principles based upon the direction given by the WP30 and the nature of the TIR System. While it is too early to define these now because we must wait for the survey results, some examples based upon an analysis of the document ExG/COMP/2004/23, which the Secretariat proposed as an introduction to Chapter 2 during the ExG meetings in Geneva, October 26-27, 2004, are provided to clarify what we mean by “design principles” in this case. Please note that when “Contracting Parties” are referred to, this means existing as well as new authorities.

The IRU does NOT endorse the following design principles, but they appear to be integral to the document “23”.

- **ALL Contracting Parties comply in full with eTIR automation requirements.**
  - **Rationale:** Because the long term vision is the full replacement of the paper TIR Carnet, it is impossible for a Contracting Party to be an active member of the TIR Convention with which a TIR transit operation can be established without fully automating the TIR Procedure as determined by the WP30/AC2.

- **ALL Contracting Parties provide all authorized TIR Transport operators with the ability to submit electronic goods declarations, either directly or through the “central database”.

- **ALL Contracting Parties provide all the information they capture or enter relative to the opening, transit, termination, and discharge of TIR Carnet to the “central database” in real-time, so that it can be shared with other Contracting Parties and international organizations.

- **Communication between contracting parties and the “central database” uses the Internet for physical transport.

- **ALL Contracting Parties keep the “central database” current (real-time) with reference data describing their TIR Customs locations, status of TIR operators, and authorized users.

- Etc…

4.  **1.1.1 Project title and abbreviation.**

This does not need to be repeated in Chapter 2.

5.  **1.1.2 Objectives.**

There should be a matrix representing which objectives are achieved or partially achieved in each step of the step-by-step approach. Each cell in the matrix should be
accompanied by an explanation of how the step helps to achieve the objective in measurable terms. Where measurement is not considered feasible, the reasons should be explained.

6. **1.1.3 Boundary of the eTIR Project.**

   The boundaries of the automation portion of the project should be noted. The scope of the information included in the project has been questioned by the ExG in the past, and this is the time to finalize it.

7. **1.1.4 Business Opportunity and Problem Statement.**

   This section must be forward looking (vs. the historical content of Chapter 1), delimiting what the stakeholders wish to change about the TIR system, what the stakeholders wish to keep, and the impact of full automation. This is also an opportunity to incorporate the steps proposed.

8. **1.1.5 References.**

   Amend if required.

9. **1.1.6 Scope of the project.**

   Amend as required. See point 6 above.

10. **1.1.7 Constraints.**

    The same approach as in point 5 above should be used, explaining how each step “deals” with each constraint.

11. **1.1.8 Stakeholders’ needs.**

    The same approach as in point 5 above should be used, explaining how each step meets each stakeholders’ need.

12. **1.2 TIR procedure domain**

    Amend as required. Perhaps it is no longer limited to the “TIR Carnet”, but includes additional elements from ITDB, CUTEwise, security requirements, etc.

13. **1.2.1, 1.2.2 TIR Procedure package diagram and description**

    This section should be amended to illustrate how the steps will impact the TIR Procedure.

14. **1.3 TIR Carnet life cycle use cases**

    A short introductory paragraph explaining how to read this section should be provided. All subsections (1.3.n) should explain changes from the current situation by step.

15. **1.3.1 Actors of the TIR Carnet life cycle**
All new actors should be included. For example, in document ExG/COMP/2004/23, the Secretariat proposes an “eTIR Systems Administrator”. Any changes in the roles of existing actors should be clearly defined. This may vary from step to step.

16. Guarantee

It should be made absolutely clear how all the various actors will have all the required evidence (in time with assured quality) that all the conditions for a valid guarantee are provided. This must include matching the guarantee to specific drivers with specific vehicles for specific holders for specific movements. This information is highly variable over time and places high levels of service requirements on any eTIR system.

17. 1.3.2, 1.3.3, 1.3.4, and 1.4 Use Cases and Activity Diagrams

Any changes required at the high levels defined in Chapter 1 due to automation or changes in scope need to be made. The use cases and activity diagrams will need to be expanded in detail and include the distinction between automated and manual procedures. The distinction between “local” systems and “eTIR” systems (common?) will also need to be made explicit.

18. 1.5 and 1.6 Entity Classes and the High-level class diagram

Any changes required at the high levels defined in Chapter 1 due to automation or changes in scope need to be made. Additionally, attributes (and perhaps operations) need to be assigned to the classes. The ExG has already done considerable work in this area, but the documentation has not yet been included in the reference model (see document EXG/COMP/2002/10).

19. Additional Sections

There are additional sections required. The list below is not intended to be exhaustive:

- Sequence Diagrams (or equivalent)
- Security: Confidentiality, Integrity, Authentication
- Service Level Requirements, for example:
  - 7 X 24 X 365 availability
  - Near instantaneous response times for the different transactions/queries
  - Real-time data available across varying geographical and political conditions
  - Wide, low cost, availability of access points to the system for customs and industry