ECONOMIC COMMISSION FOR EUROPE
INLAND TRANSPORT COMMITTEE
Working Party on Customs Questions affecting Transport

Informal Ad hoc Expert Group on Conceptual and Technical aspects of Computerization of the TIR Procedure
(1-2 September 2003)

PROVISIONAL AGENDA FOR THE THIRD SESSION OF THE INFORMAL AD HOC EXPERT GROUP ON CONCEPTUAL AND TECHNICAL ASPECTS OF COMPUTERIZATION OF THE TIR PROCEDURE

to be held in Budapest, Hungary,
starting at 09.00 hours on Monday, 1 September 2003
1. Adoption of the agenda

2. Activities of the informal ad hoc Expert Group

   (a) Report of the special working session of the IT Experts (3 July 2003)

   (b) The introduction of the UN/CEFACT Modelling Methodology (UMM) into the work of the Expert Group

   (c) Reference Model of the TIR procedure

      (i) Business Domain Modelling

         (a) Introduction
         (b) TIR procedure Use Cases
         (c) Elaboration of Use Cases
         (d) Entity Classes
         (e) Class Diagram

      (ii) Annexes

         (a) Glossaries
         (b) Requirements list

   (d) Future projects for the Reference Model of the TIR Procedure

3. Other activities of interest to the Expert Group

4. Other business

5. Date and place of next session

6. Report

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1. **ADOPTION OF THE AGENDA**

   The informal ad hoc Expert Group on Conceptual and Technical Aspects of Computerization of the TIR Procedure (hereafter referred to as: ‘Expert Group’) may wish to adopt its agenda (ExG/COMP/2003/3).

2. **ACTIVITIES OF THE EXPERT GROUP**

   (A) **Report of the special session of the IT specialists (3 July 2003)**

   At its second session (14-15 November 2002) the Expert Group discussed at length the conceptual and hierarchical data models, contained in document (ExG/COMP/2002/7), but felt it could not yet reach agreement on any of them. Some experts questioned the usefulness of such complex models, whereas others expressed the view that they were not in a position to judge to what extent the models actually represented the structure of information in the current TIR Carnet. For these reasons, the Expert Group decided to revert to this matter at a later stage and mandated the secretariat to organize a meeting with some IT specialists to study which model is best suited for the purposes of the Expert Group. The Expert Group pointed out that it only expected the IT specialists to comment on the suitability of the models, knowing that they would not be in a position to judge to what extent the models accurately reflected the structure of information in the TIR Carnet. The Expert Group further welcomed the secretariat’s proposal to use in the future the Unified Modelling Language-standard (UML) (ExG/COMP/2002/10, paras. 11-12).

   Document ExG/COMP/2003/2 contains a summary report of the meeting of IT specialists, which took place on 3 July 2003 in Geneva, for adoption by the Expert Group.

   (B) **The Introduction of the UN/CEFACT Modelling Methodology (UMM) into the work of the Expert Group**

   The IT specialists have discussed at length the proposal by the secretariat to use a standard methodology and recognised major advantages of such an approach, which would address the issue raised by the Expert Group at its second meeting when inviting the secretariat to prepare a document on the methodological background of the data models, commenting on the use and scope of the models for the work of the Expert Group (ExG/COMP/2002/10, paragraph 11). In this context the UML based UN/CEFACT Modelling Methodology (UMM) brings not only a framework to the modelling work but also provides reasons for and explanations of its use.

   The Expert Group will be informed by Mr. Jean Kubler of the UNECE Trade Division of
the UMM, a methodology, devised under the auspices of the United Nations. The UMM has been designed to meet specific demands of environments, such as trade and Customs.

(C) Reference Model of the TIR procedure

The IT specialists held an extensive exchange of views on the suitability of the UMM as a methodology to model business processes like the TIR Procedure. As such, UMM provides a procedure for specifying, in an implementation independent manner, business processes involving information exchange. Although the IT specialists pointed out that other types of methodologies might be around, which could be worth studying, they all agreed that the process of selecting a methodology is very complex and very time consuming, that this work had already been done by the UN/CEFACT team in the elaboration of UMM and that UMM offered a complete set of efficient tools to describe the TIR business process, a uniform approach for the scope of work of the Expert group and a valuable base for future improvements in the TIR procedure. Seeing that the activities, undertaken by the Expert Group so far, fitted well into UMM, and that the approach endorsed by the Expert Group in the project overview was inline with the UMM, they invited the secretariat to prepare a first draft document for discussion by the Expert Group at its forthcoming meeting (ExG/COMP/2003/2, paragraph 6).

In line with the request from the IT specialists, the secretariat has started to draft the first part of the Reference Model for the Computerization of the TIR Procedure project (ExG/COMP/2003/1) for consideration by the Expert Group and to serve as a basis for its future work. The final aim of the work is to obtain the Reference Model describing the TIR procedure and its future computerization through the full application of the UMM. Therefore, in the course of this and future sessions, the Expert Group will be asked to complement and finalize the TIR Reference Model. At the proposal of the IT specialists, the first draft focuses on the business domain modelling and certain annexes, in continuation of the work started by the Expert Group at its previous sessions.

Following the recommendation by the IT specialists, the secretariat proposes to drop the outstanding issues, contained in documents ExG/COMP/2002/6 and ExG/COMP/2002/7, knowing that these issues are up for discussion as part of the Reference Model.
(i) Business Domain modelling

The main purpose of the business domain modelling is to:

(1) understand the structure and dynamics of the processes within the TIR procedure;
(2) ensure that all stakeholders involved have a common understanding of the TIR procedure;
(3) understand the daily business in the TIR procedure, without reference to an electronic solution (in order to ensure full compatibility with the provisions of the TIR Convention);
(4) formulate the high level business requirements which will serve as a basis for a subsequent detailed analysis leading to standards and an electronic solution.

(a) Introduction

As a first step, it is important to obtain common understanding of the process to computerize the TIR procedure, by defining its vision, by which its objectives, scope, constraints and boundaries are meant. To a large extent, this part of the TIR Reference Model has already been identified by the Working Party at an earlier stage in the computerization process. For reasons of clarity, the secretariat has reproduced in the first chapter of the TIR Reference Model all relevant statements by the Working Party (and its Expert Groups) in the structure prescribed by UMM.

The Expert Group is requested to take note of and to amend, when required, the first part of the Reference Model, as prepared by the secretariat.

(b) TIR Procedure Use Cases

Use Cases represent the first step in modelling the requirements of the TIR computerization process by creating a:

(1) Business domain use case diagram, describing the static relationships between actors involved in the TIR procedure;
(2) Business domain activity diagram, describing dynamic interactions of the use cases.

The Expert Group will be asked to discuss, and complement the Use Case diagram as well as the Use Case description and the general TIR Activity Diagram.
(c) **Elaboration of Use Cases**

As the UMM analytical process is, to a certain extent, a repetitious process, the elaboration of the Use Cases is similar to the previous step. In fact, during this phase of work the aim is to detail the Use Cases identified at the previous stage by using the same methods. This means that each general Use Case identified under agenda item (b) will be further detailed under item (c). To undertake this part of the modelling process, the assistance of the Expert Group is requested. In the course of the meeting, the Expert Group will be asked to form sub-groups, each of which will be made responsible for the elaboration of one or more Use Cases.

(d) **Entity classes**

Entity classes are used to capture the vocabulary of the project. An entity class is a description of a set of objects sharing the same attributes, operations, relationships and semantics; Persons, locations, concepts or situations are typical examples of classes. At this stage, the attributes of the classes will also have to be documented.

On the basis of a first draft, prepared by the secretariat, the Expert group may wish to develop the list of Entity Classes.

(e) **Class Diagram**

After all Entity Classes have been identified, the purpose of the Class Diagram is to display the relationships between all the classes. In line with the request of the Expert Group at its second session, the secretariat has complemented the Class Diagram with a detailed textual description in order to allow non-UML literate Experts to understand, comment and amend the diagram. Time permitting, the Expert Group may wish to review a draft proposal by the secretariat.

(ii) **Annexes**

(a) **Glossaries**

A vital aspect of the modelling process of the TIR procedure is the capturing of any term and acronym used, together with a description, in a glossary. In addition, at the recommendation of the IT specialists, a technical glossary of UML symbols with their significance will be added as an Annex to the TIR Reference Model.
(b) Requirements list

Equally important is the listing of any measurable requirement or constraint, registered during the modelling process.

The Glossary and Requirement list will by maintained as running lists by the secretariat throughout the process and will have to be validated at various stages by the Expert Groups as well as by the Working Party. As part of its work, the secretariat has made first drafts of the glossary and requirements lists, for analysis and amendment by the Expert Group in the course of its work.

(D) FUTURE STEPS

The Expert Group will be informed of future steps to be undertaken in order to complete the Reference Model of the TIR Procedure.

3. OTHER ACTIVITIES OF INTEREST TO THE EXPERT GROUP

The Expert Group will be informed of activities undertaken by the secretariat to get the TIR data elements introduced into the UN Trade Data Elements Directories (TDED), contained in document ExG/COMP/2003/4.

4. DATE AND PLACE OF NEXT SESSION

On the basis of a proposal by the secretariat, the Expert Group may decide on date and place of its next session.

5. REPORT

Following the session, the secretariat will prepare a short report, summarizing the main results of the work of and the decisions taken by the Expert Group, for endorsement by the Working Party at its forthcoming meeting.