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Working Party on Customs Questions affecting Transport

Informal Ad hoc Expert Group on Conceptual and
Technical Aspects of Computerization of the TIR Procedure

Sixteenth session
Geneva, 28-29 April 2009
Item 3 (b) of the provisional agenda

REFERENCE MODEL OF THE TIR PROCEDURE

Chapter 3 - Analysis

Note by the secretariat

I. BACKGROUND

1.   At its fifteenth session, the Expert Group reviewed, inter alia, the fall-back scenarios
contained in Chapter 3 of the eTIR Reference Model, as described in document
ECE/TRANS/WP.30/GE.1/2007/13/Rev.2. The Expert Group stressed that the decision to start
a fall-back procedure should be a joint decision of holder and Customs authorities and that this
decision should only be taken after some time has elapsed, which would allow in most cases
for the problem to be solved or for technical fall-backs to be activated. It also underlined the
necessity for Customs to monitor the use of the fall-back procedures in order to prevent any
misuse.

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2.   In order to review this issue as well as other outstanding issues, the Expert Group mandated the secretariat to organize a drafting group whose task would be to finalize the draft of Chapter 3 (messages, fall-backs and code lists), taking into account the findings of the Expert Group (see ECE/TRANS/WP.30/GE.1/2008/5, paras 10-11).

3.   This drafting group, consisting of experts from the European Community (EC), the IRU, the Netherlands, Serbia and the UNECE TIR secretariat met in Belgrade on 28 and 29 January 2009. The drafting group extensively discussed the fall-backs contained in draft Chapter 3 of the eTIR Reference Model and highlighted that, at this stage, the fall-backs to be take into consideration should not be of technical nature[1] (e.g. duplication of IT systems). In order to further the matter, the drafting group requested the secretariat, based on a preliminary assessment by the IRU, to prepare a document providing a systematic and realistic proposal for the functional fall-backs in draft Chapter 3 and referred the issue back to the Expert Group.

II.   CATEGORIZATION OF USE CASES

4.   Prior to evaluating if fall back scenarios are adequate or in which order they should be applied, it is useful to categorize each use case in the eTIR system[2] in relation to a set of qualifying characteristics. Without being exhaustive, the secretariat has identified the following characteristics:

(a)   Vitality: the importance of the data in relation to the functioning of the eTIR system (high or low);
(b)   Timeliness: moment at which the data need to be available (in advance, on time, at a later stage, not relevant);
(c)   Security sensitivity: the extent to which Customs can rely on the correctness of the data provided (high, medium, low);
(d)   Range: number of addressees (eTIR international system, national Customs systems, international guarantee chain) for whom the data are of importance (all, two, one, not at all).

III.   CATEGORIZATION OF FALL-BACKS

5.   Based on the assessment of the amount of financial and human resources involved, the following functional fall-back components have been identified for the eTIR system and are used in fall-back procedure:

(a)   National helpdesks providing information by fax upon request;
(b)   An international helpdesk providing information by fax upon request;

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[1] The use of technical fall-backs, being the result of the use of alternative IT infrastructures, remains unnoticed by the final user.

[2] Use cases in the eTIR system: register guarantee, cancel guarantee, accept guarantee, get holder information, query guarantee, record consignment, update consignment information, start of a TIR operation, termination of a TIR operation, notify guarantee chain, notify subsequent countries.

(c)   A website providing the latest information duplicated from the eTIR international system;

(d)   Locally available electronic information, potentially not up-to-date;

(e)   The paper accompanying document;

(f)   No fall-back.

IV.   CONSIDERATIONS BY THE EXPERT GROUP

6.   The Expert Group may wish to discuss or amend the proposed categorization of use cases and consider the feasibility of the establishment of each fall-back component. On the basis of the outcome of this discussion, the Expert Group will be invited to review the text of revised Chapter 3.1.3 of the eTIR Reference Model, as contained in annex to this document.

<u>**ANNEX**</u>

FALL-BACK SCENARIOS

The secretariat proposes that the following text, a slightly amended version of Chapter 3.1.4. as contained in document ECE/TRANS/WP.30/GE.1/2007/13/REV.2, will be reintroduced as new Chapter 3.1.3. of the eTIR Reference Model.

3.1.3.   *Fall-back scenarios*

The aim of this chapter is to provide specific fallback for every use case involving the eTIR international system. The fall-back scenarios are based on four major elements:

- Accompanying document;

- Local information;

- eTIR website;

- International and national helpdesks.

The accompanying document is a piece of paper provided by the Customs office of departure after the declaration has been accepted. It contains all relevant information regarding the TIR transport.

It is important to note that the underlying fall-backs are of a functional nature. The systems at stake (i.e. the eTIR international system, national systems and guarantee chain systems) should also be equipped with technical fall-backs which allow systems to run smoothly in case of failure. Functional fall-backs have to be used only when all technical fall-backs have failed.

The use of functional fall-backs may not provide the same level of facilitation to both the holder and Customs. As a consequence, their use should not be mandatory for the holder, who should always have the possibility to wait for the systems to be restored. Similarly, Customs may establish delays before starting functional fall-backs, allowing for the technical fall-back to be started or for the systems to be repaired.

3.1.3.1.   Management by Customs of data on guarantees

Guarantee related information is crucial for the well-functioning of the eTIR system. Therefore, particular emphasis is put on the analysis of use cases where the eTIR international system is not in a position to provide the required exchange of guarantee information. The helpdesks will ensure that guarantee information can be provided to Customs administrations in case the eTIR international system, the guarantee chain system or Customs systems are not available.

The helpdesks should fulfill their fall-back role within a deadline to be specified.

3.1.3.1.1.   Register guarantee

Potential problems:

1. The guarantee chain system is not functioning.

2. The connection between the guarantee chain system and the eTIR international system is broken.

3. The eTIR international system is not functioning.

Fall-backs:

1. The guarantee chain transmits the information to the eTIR international system through the eTIR website or by fax via the eTIR helpdesk, in which case the eTIR helpdesk keys-in the data in the eTIR international system. The guarantee chain will update its system as soon as it is again functioning, keeping in mind that the guarantees have already been entered in the eTIR international system. The eTIR international system will inform the guarantee chain accordingly in case it would try to register a guarantee already registered.

2. The guarantee chain transmits the information to the eTIR international system through the eTIR helpdesk by fax via the eTIR website, in which case the eTIR helpdesk keys-in the data in the eTIR international system. The eTIR international system will inform the guarantee chain accordingly in case it would try to register a guarantee already registered.

3. The guarantee chain transmits the information to the eTIR helpdesk by fax. The eTIR helpdesk keeps the information available, in case Customs would query the guarantee before the eTIR international system is updated. The guarantee chain system will update the eTIR international system as soon as it is functioning again.

3.1.3.1.2.   Cancel guarantee

Potential problems:

1.   The guarantee chain system is not functioning.

2.   The connection between the guarantee chain system and the eTIR international system is broken.

3.   The eTIR international system is not functioning.

Fall-backs:

1. The guarantee chain transmits the information to the eTIR international system through the eTIR website or by fax via the eTIR helpdesk, in which case the eTIR helpdesk keys-in the data in the eTIR international system. The guarantee chain will update its system as soon as it is again functioning, keeping in mind that the guarantees concerned have already been entered in the eTIR international system. The eTIR international system will inform the guarantee chain accordingly in case it would try to cancel a guarantee already cancelled or not registered.

2. The guarantee chain transmits the information to the eTIR international system through the eTIR website or by fax via the eTIR helpdesk, in which case the eTIR helpdesk keys-in the data in the eTIR international system. The eTIR international system will inform the guarantee chain accordingly in case it would try to cancel a guarantee already cancelled or not yet registered

3. The guarantee chain transmits the information to the eTIR helpdesk by fax. The eTIR helpdesk keeps the information available, in case Customs would query the guarantee before the eTIR international system is updated. The guarantee chain system will update the eTIR international system as soon as it is functioning again.

3.1.3.1.3. Accept guarantee

Potential problems:

1. The Customs system is not functioning.

2. The connection between the Customs system and the eTIR international system is broken.

3. The eTIR international system is not functioning.

Fall-backs:

1. Customs authorities transmit the information to their national helpdesk by fax. The national helpdesk keys-in the data using the eTIR website. Customs authorities will update their system as soon as it is again functioning, keeping in mind that the guarantee acceptance has already been registered in the eTIR international system. The eTIR website will provide the necessary information to Customs authorities in case they would try to accept guarantees which have already been accepted.

2. Customs authorities transmit the information to their national helpdesk by fax. The national helpdesk keys-in the data using the eTIR website. The eTIR website will

provide the necessary information to Customs authorities in case they would try to accept guarantees which have already been accepted.

3. Customs authorities transmit the information to their national helpdesk by fax. The national helpdesk forwards per fax the information to the eTIR helpdesk which keeps it available in case other Customs would query the guarantee before the information is recorded in the eTIR international system. The Customs system will update the eTIR international system as soon as it is functioning again.

3.1.3.1.4. *Get holder information*

Potential problems:

1. The ITDB is not functioning.

2. The connection between the ITDB and the eTIR international system is broken.

Fall-backs:

1. The eTIR international system will use a local replica of the ITDB and include a warning code, informing that a replica of the ITDB is the source of the information and that the information might not be up to date.

2. Same as 1.

3.1.3.1.5. *Query guarantee*

The query guarantee use case has three functions:

(a) allowing Customs authorities and the guarantee chain to obtain information on a guarantee (e.g. status or type),

(b) allowing Customs authorities and the guarantee chain to obtain information related to TIR transports and

(c) allowing Customs authorities and the guarantee chain to obtain information related to TIR operations.

The first function is of higher importance for the security of the system than the others, therefore, helpdesks will give higher priority to providing guarantee information (a).

Potential problems:

1. The Customs or guarantee chain system is not functioning.

2. The connection between the Customs or guarantee chain system and the eTIR international system is broken.

3. The eTIR international system is not functioning.

Fall-backs:

1. (a) To request the status of a guarantee, Customs authorities fax their national helpdesks, which will extract the required information from the eTIR website. The guarantee chain will extract the information directly from the eTIR website. (b) In order to obtain TIR transport information (mainly the declaration), the Customs office of departure can either use a backup system, if available, or request the holder to provide his declaration in paper format. At other Customs offices, the declaration information in the accompanying document will be used. The guarantee chain will be able to obtain the information related to the TIR transport using the eTIR website or when its system will be functioning again. (c) The information on TIR operations registered electronically before the breakdown will be available for querying once the system is functioning again[3]. For TIR operations taking place while the eTIR system was not functioning, only a copy of the accompanying document can be made available after the TIR transport has ended.

2. (a) To request the status of a guarantee, Customs authorities fax their national helpdesks, which will extract the required information from the eTIR website. The guarantee chain will extract the information directly from the eTIR website. (b) In order to obtain TIR transport information (mainly the declaration), the Customs office of departure can either use a backup system, if available, or request the holder to provide the declaration in paper format. At Customs offices, other than the first Customs office of departure, the TIR transport information in the accompanying document will be used. The guarantee chain will be able to obtain a copy of the accompanying document after the TIR transport has ended (c) The information regarding TIR operations registered electronically before the breakdown will be available for querying once the connection is restored[4]. For TIR operations taking place while the eTIR system was not functioning, only a copy of the accompanying document can be made available after the TIR transport has ended.

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[3] In special cases, Customs authorities can fax their national helpdesk to obtain the information related to previous TIR operations. The national helpdesk will use the eTIR website to get the information.
[4] In special cases, Customs authorities can fax their national helpdesk to obtain the information related to previous TIR operations. The national helpdesk will use the eTIR website to get the information.

3. (a) To request the information about the guarantee, Customs authorities fax their national helpdesks, which will fax the eTIR helpdesk to obtain the required information. The guarantee chain contacts directly the eTIR helpdesk. The helpdesk extracts the information on the guarantee from its backups and other information received during the system failure. (b) In order to obtain TIR transport information (mainly the declaration), the Customs office of departure can either use a backup system, if available, or request the holder to provide the declaration in paper format. At Customs offices, other than the first Customs office of departure, the TIR transport information in the accompanying document will be used. The guarantee chain will be able to obtain a copy of the accompanying document after the TIR transport is finished (c) The information regarding TIR operation registered electronically before the breakdown will be available for querying once the eTIR system is functioning again. For TIR operations taking place while the eTIR system was not functioning, only a copy of the accompanying document can be made available after the TIR transport has ended.

3.1.3.2. Data exchange

The exchange of TIR transport data is a key element of the eTIR system. Customs authorities provide the holder with a paper accompanying document as reference. The paper accompanying document will also be used in case the information cannot be exchanged electronically. The information on TIR operations is also important but is considered of secondary importance and, therefore, will not be subject to fall-back procedures other than stamping the accompanying document.

A TIR transport started under a fall-back procedure will end under a fall-back procedure. If a fall-back procedure is used in a country of pure transit (no loading or unloading of goods), the following countries can still use the standard procedure but information regarding the operation carried out under the fall-back procedure will only be available on the accompanying document.

3.1.3.2.1. *Record consignment*

Potential problems:

1. The Customs system of the country of departure is not functioning.

2. The connection between the Customs system of the country of departure and the eTIR international system is broken.

3. The eTIR international system is not functioning.

Fall-backs:

1. Customs authorities fill-in manually a paper accompanying document that will serve as the primary source of information for the TIR transport. The holder is informed that countries along the itinerary will not receive advance information. The holder remains responsible to comply with advance information requirements in subsequent countries.

2. The accompanying document produced by the Customs system becomes the primary source of information for the TIR transport. The holder is informed that countries along the itinerary will not receive advance information. The holder remains responsible to comply with advance information requirements in subsequent countries.

3. Same as 2.

3.1.3.2.2.   *Update consignment information*

The same potential problems and fall-backs as those of the record consignment use case apply. Moreover, if the TIR transport has already begun using a fall-back procedure, fall-back procedure 2 shall be used.

3.1.3.2.3.   *Start of TIR operation*

For the Start of TIR operation use case the following differentiation applies:

(a) Customs office of departure and

(b) Customs office of entry.

Potential problems:

1. The Customs system is not functioning.

2. The connection between the Customs system and the eTIR international system is broken.

3. The eTIR international system is not functioning.

4. The TIR transport has begun using a fall-back scenario.

Fall-backs:

1. (a) Customs authorities amend the accompanying document they have produced with the start operation information. (b) Customs authorities accept the accompanying document as source for the declaration and revert to a paper procedure to start the TIR operation. Customs authorities amend the accompanying document with the start operation information. The start information will be keyed-in and transmitted to the eTIR international system once the system is working.

2. (a) Customs authorities amend the accompanying document they have produced with the start operation information. (b) Customs authorities accept the accompanying document as source for the declaration and manually key-in the information in their system. Customs authorities amend the accompanying document with the start operation information. The start information will be transmitted to the eTIR international system once the connection is re-established.

3. (a) Customs authorities amend the accompanying document they have produced with the start operation information. (b) Customs authorities accept the accompanying document as source for the declaration and manually key-in the information in their system. Customs authorities amend the accompanying document with the start operation information. The start information will be transmitted to the eTIR international system once it is functioning.

4. (a) Not applicable. (b) Customs authorities accept the accompanying document as source for the declaration and, if nationally required, manually key-in the information in their system. The appropriate information is filled-in on the accompanying document. No information is transmitted to the eTIR international system.

3.1.3.2.4.   *Terminate TIR operation*

Potential problems:

1. The Customs system is not functioning.

2. The connection between the Customs system and the eTIR international system is broken.

3. The eTIR international system is not functioning.

4. The TIR transport has begun using a fall-back scenario.

Fall-backs:

1. Customs authorities accept the accompanying document as source for the declaration and revert to a paper procedure to terminate the TIR operation. The appropriate information is filled-in on the accompanying document. The termination information will be keyed-in and transmitted to the eTIR international system once the system is working.

2. Customs authorities accept the accompanying document as source for the declaration and manually key-in the information in their system. The appropriate information is filled-in on the accompanying document. The termination information will be transmitted to the eTIR international system once the connection is re-established.

3. Customs authorities accept the accompanying document as source for the declaration and manually key-in the information in their system. The appropriate information is filled-in on the accompanying document. The termination information will be transmitted to the eTIR international system once it is functioning.

4. Customs authorities accept the accompanying document as source for the declaration and, if nationally required, manually key-in the information in their system. The appropriate information is filled-in on the accompanying document. No information is transmitted to the eTIR international system.

3.1.3.2.5. *Discharge TIR operation*

Potential problems:

1. The Customs system is not functioning.

2. The connection between the Customs system and the eTIR international system is broken.

3. The eTIR international system is not functioning.

4. The TIR transport has begun using a fall-back scenario.

Fall-backs:

1. Customs authorities postpone the transmission of the discharge information until the system is working.

2. Customs authorities postpone the transmission of the discharge information until the connection is re-established.

3. Same as 1.

4. No information is transmitted to the eTIR international system.

3.1.3.2.6. *Notify guarantee chain*

Potential problems:

1. The guarantee chain system is not functioning.

2. The connection between the guarantee chain system and the eTIR international system is broken.

Fall-backs:

1. The eTIR international system ensures that the information will be sent at a later stage.

2. Same as 1.

3.1.3.2.7. *Notify subsequent countries*

Potential problems:

1. The Customs system of one country along the itinerary is not functioning.

2. The connection between the Customs system of one country along the itinerary and the eTIR international system is broken.

Fall-backs:

1. The eTIR international system ensures that the information will be sent at a later stage. If the holder presents himself to a Customs office, whose system is not functioning, the accompanying document will be used as source of information.

2. The eTIR international system ensures that the information will be sent at a later stage. If the holder presents himself to a Customs office, whose system is not linked

to the eTIR system, the accompanying document will be used as source of information.