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Inland Transport Committee

Working Party on Customs Questions affecting Transport

**Group of Experts on Conceptual and
Technical Aspects of Computerization of the TIR Procedure**

Second session
Geneva, 25–28 May 2021
Item 6 (c) of the provisional agenda
eTIR conceptual, functional and technical documentation version 4.3:
eTIR functional specifications

Sequence of messages, functional fallbacks and extentions*, **

Note by the secretariat

I. Mandate

1.   The Inland Transport Committee during its eighty-second session (23–28 February 2020) approved (ECE/TRANS/294, para. 84[1]) the establishment of the Group of Experts on Conceptual and Technical Aspects of Computerization of the TIR Procedure (WP.30/GE.1) and endorsed its ToR[2] (ECE/TRANS/WP30/2019/9 and ECE/TRANS/WP.30/2019/9/Corr.1) pending approval by UNECE Executive Committee (EXCOM). EXCOM during its Remote informal meeting of members of the Executive Committee (20 May 2020) approved the establishment of the Group of Experts on Conceptual and Technical Aspects of Computerization of the TIR Procedure (WP.30/GE.1) until 2022, based on the terms of reference included in document ECE/TRANS/WP.30/2019/9 and Corr.1, as contained in document ECE/TRANS/294 (ECE/EX/2020/L.2, para. 5(b)).[3]

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  * This document was submitted late for processing since clearance in finalizing this document took longer than anticipated.

 ** The numbering of the chapters in this document is aligned with numbering of the chapters in former versions of the eTIR specifications (e.g. ECE/TRANS/WP.30/2011/4/Rev.1).

[1] Decision of the Inland Transport Committee para. 84 / ECE/TRANS/294 (www.unece.org/fileadmin/DAM/trans/doc/2020/itc/ECE-TRANS-294e.pdf).

[2] Terms of reference of the newly established Group approved by the Inland Transport Committee and the Executive Committee (EXCOM) of UNECE (www.unece.org/fileadmin/DAM/trans/bcf/wp30/documents/2019/ECE-TRANS-WP30-2019-09e.pdf and corrigendum www.unece.org/fileadmin/DAM/trans/bcf/wp30/documents/2019/ECE-TRANS-WP30-2019-09c1e.pdf).

[3] Decision of EXCOM, ECE/EX/2020/L.2 / para. 5(b) (www.unece.org/fileadmin/DAM/commission/EXCOM/Agenda/2020/Remote_informal_mtg_20_05_2020/Item_4_ECE_EX_2020_L.2_ITC_Sub_bodies_E.pdf).

2.   The terms of reference of the Group stipulate that the Group should focus its work on preparing a new version of the eTIR specifications, pending the formal establishment of TIB. More specifically the Group should (a) prepare a new version of the technical specifications of the eTIR procedure, and amendments thereto, ensuring their alignment with the functional specifications of the eTIR procedure; (b) prepare a new version of the functional specifications of the eTIR procedure, and amendments thereto, ensuring their alignment with the conceptual specifications of the eTIR procedure; (c) prepare amendments to the conceptual specifications of the eTIR procedure, upon requests by WP.30.

3.   This document presents the sequence of messages, the functional fallbacks and the and the extentions to the WCO data model version 3.10. The the sequence of messages, the functional fallbacks and the and the extentions to the WCO data model version 3.10 will be part of the eTIR functional specifications document.
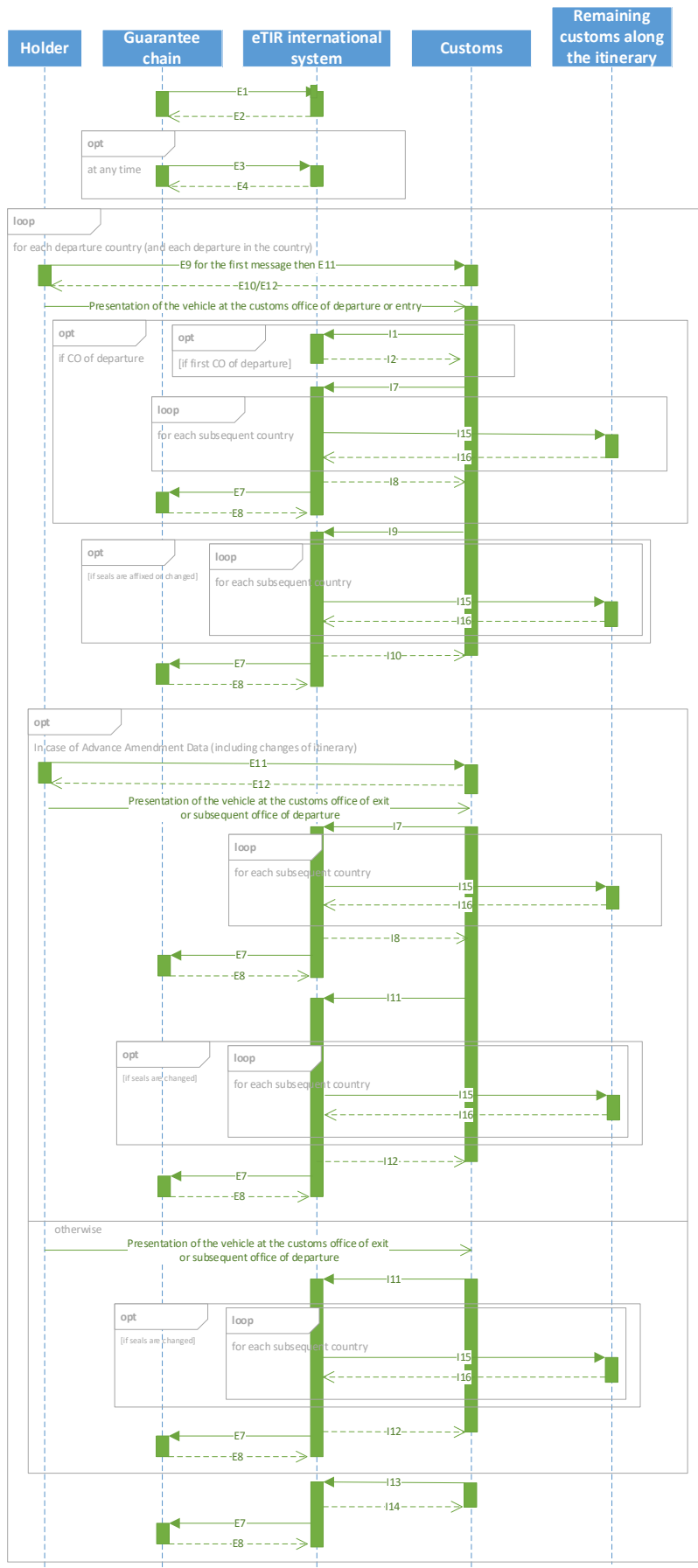
Annex I[1]

Sequence of messages

III.1. Message sequence for countries of departure

Figure III.1 presents the sequence of messages for countries of departure. For the sake of readability of the diagram, it does not show that, before the guarantee has been accepted, the holder also has the possibility to send an E13 message to cancel its E9 or E11 messages. Futhermore, it also does not show that different declaration mechanisms can be used to send E9, E11 and E13 messages (see chapters 1.1.2.9, 1.1.2.10 and 1.1.2.11 for more details).
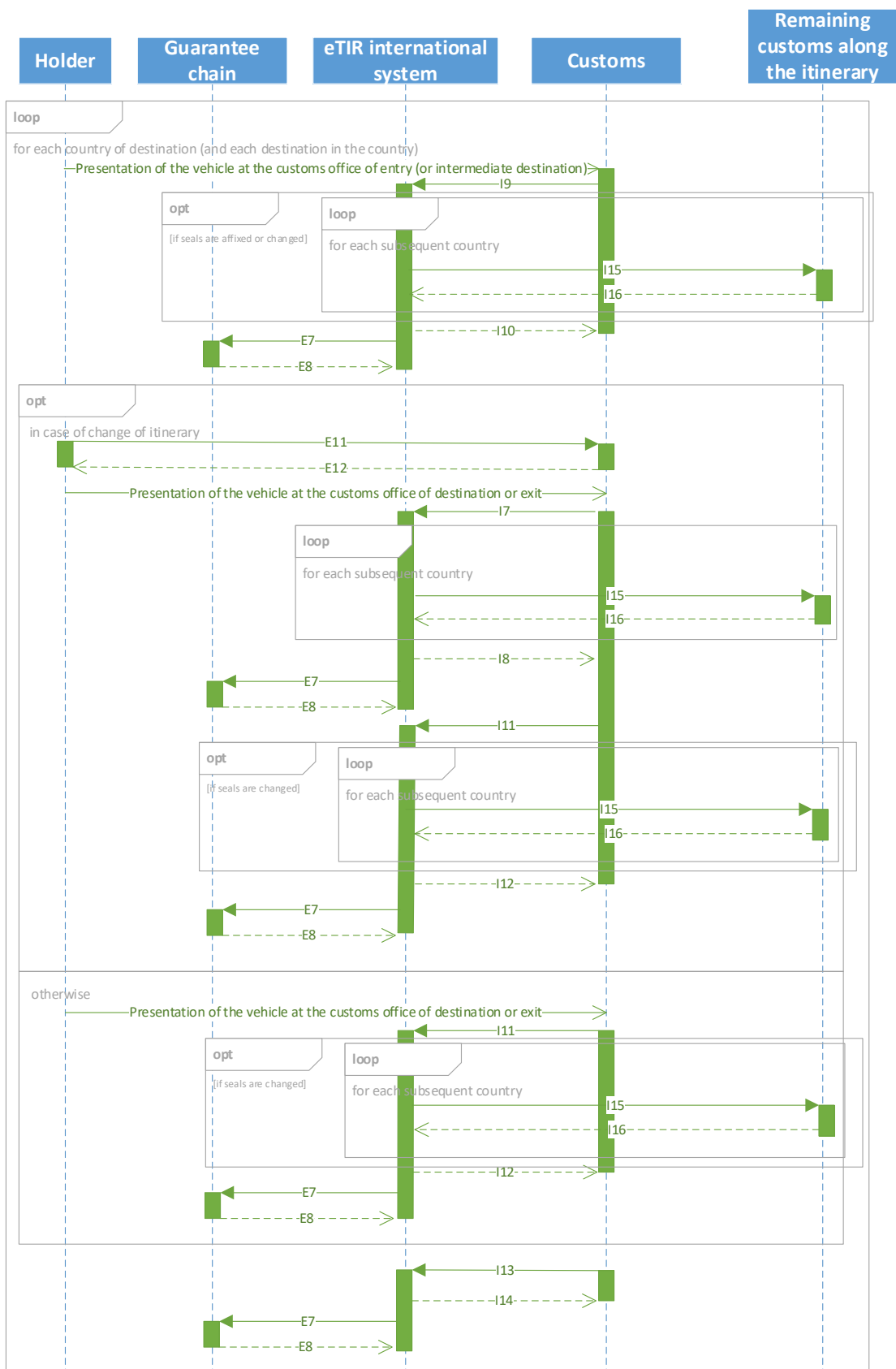
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[1] Corresponds to annex III in the former versions of the eTIR specifications (e.g. ECE/TRANS/WP.30/2011/4/Rev.1).

Figure III.1
Message sequence for countries of departure

III.2. Message sequence for countries of transit

Figure III.2 presents the sequence of messages for countries of transit. For the sake of readability of the diagram, it does not show that, before the an amendment has been accepted, the holder also has the possibility to send an E13 message to cancel its E11 messages. Futhermore, it also does not show that different declaration mechanisms can be used to send E11 and E13 messages(see chapters 1.1.2.10 and 1.1.2.11 for more details).

Figure III.2
Message sequence for countries of transit
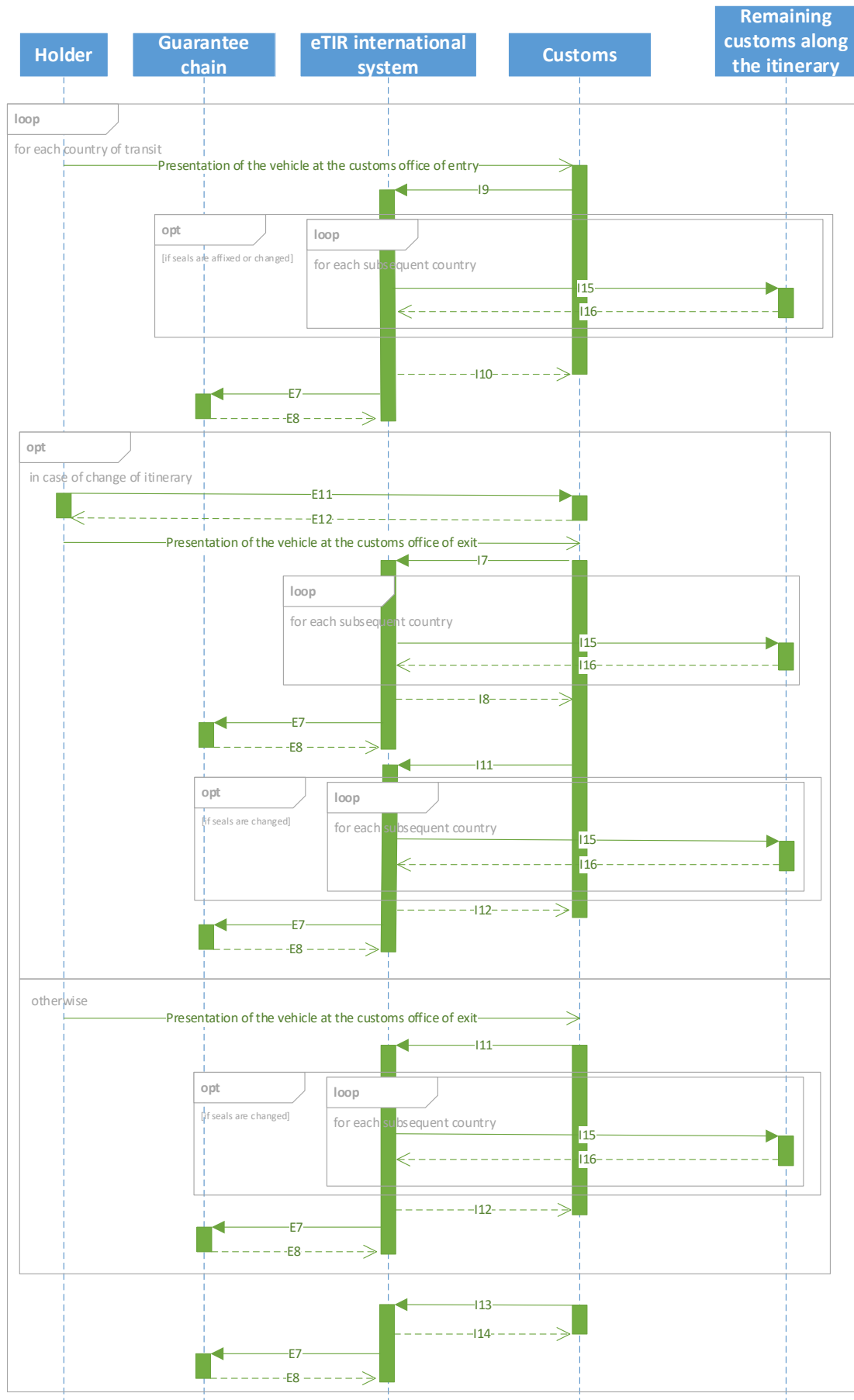
III.3. Message sequence for countries of destination

Figure III.3 presents the sequence of messages for countries of destination. For the sake of readability of the diagram, it does not show that, before amendments have been accepted, the holder also has the possibility to send an E13 message to cancel its E11 messages. Futhermore, it also does not show that different declaration mechanisms can be used to send E11 and E13 messages (see chapters 1.1.2.10 and 1.1.2.11 for more details).

Figure III.3
Message sequence for countries of destination

Annex II[1]

Functional fall-backs

In order to ensure that a TIR transport under the eTIR procedure can continue despite failures in systems or connection between systems, a number of fallback components can be used. The following chapters present the various fallback components and present activity diagrams of their usage.

IV.1. Fallback components

IV.1.1. Accompanying document

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[1] Corresponds to annex IV in the former versions of the eTIR specifications (e.g. ECE/TRANS/WP.30/2011/4/Rev.1).

Figure IV.1
Accompanying document – Recto
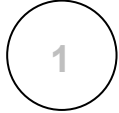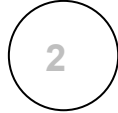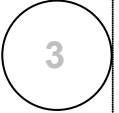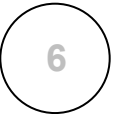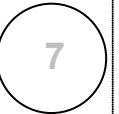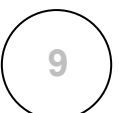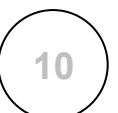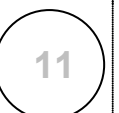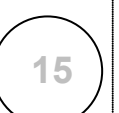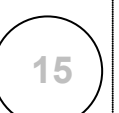
	1. eTIR guarantee number and	MX51000000
2. Customs office(s) of departure	3.(a) Name of the international organization 3.(b) Name of the issuing association	

Itinerary and national references	4. Holder identification number	
	5. Country/Countries of departure	6. Country/Countries of destination

7. Registration No(s). of road vehicle(s)	8. Documents attached to the manifest

GOODS MANIFEST

9. (a) Load compartment(s) or container(s) (b) Marks and Nos. of packages or articles	10.(a) Number and type of packages or articles; description of goods, customs office(s) of destination	10.(b) HS Code	11. Gross weight in kg	16. Seals or identification marks applied, (number, identification)

FOR FALLBACK PROCEDURE

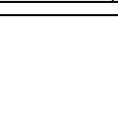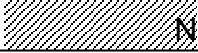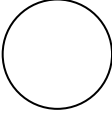| Officer's signature and customs office date stamp: New seals:	1	Officer's signature and customs office date stamp: New seals:	2	Officer's signature and customs office date stamp: New seals:	3	Officer's signature and customs office date stamp: New seals:	4
Officer's signature and customs office date stamp: New seals:	5	Officer's signature and customs office date stamp: New seals:	6	Officer's signature and customs office date stamp New seals:	7	Officer's signature and customs office date stamp: New seals:	8
Officer's signature and customs office date stamp: New seals:	9	Officer's signature and customs office date stamp: New seals:	10	Officer's signature and customs office date stamp: New seals:	11	Officer's signature and customs office date stamp: New seals:	12
Officer's signature and customs office date stamp: New seals:	13	Officer's signature and customs office date stamp: New seals:	14	Officer's signature and customs office date stamp: New seals:	15	Officer's signature and customs office date stamp: New seals:	16

Figure IV.2
Accompanying document - Verso

Certified report

Drawn up in accordance with Article 25 of the TIR Convention
(See also Rules 13 to 17 regarding the use of the TIR Carnet)

1. Customs office(s) of departure	2. **TIR CARNET** N
	3. Name of the international organization
4. Registration No(s). of road vehicle(s) Identification No(s). of container(s)	5. Holder (identification number, name, address and country)

6. The customs seal(s) is/are	intact ☐ not intact ☐	8. Remarks
7. The load compartment(s) or	intact ☐ not intact ☐	

9. ☐ No goods appeared to be missing   ☐ The goods indicated in items 10 to 13 are missing (M) or have been destroyed (D) as indicated in column 12

10. (a) Load compartment(s) or container(s) (b) Marks and Nos. of packages or articles	11. Number and type of packages or articles; description of goods	12. M or D	13. Remarks (give particulars of quantities missing or destroyed)

14. Date, place and circumstances of the accident

15. Measures taken to enable the TIR operation to continue
☐ affixing of new seals: number _____ description _____
☐ transfer of load (see item 16 below)
☐ other

16. If the goods have been transferred: description of road vehicle(s)/container(s) substituted

	Registration No.	Approved Yes No	No. of certificate of approval	Number and particulars of seals affixed
(a) vehicle	_____	☐ ☐ / ☐ ☐	_____	____ / _____
	Identification No.			
(b) container	_____	☐ ☐ / ☐ ☐	____ / _____

17. Authority which drew up this certified report	18. Endorsement of next Customs office reached by the TIR transport
Place/Date/Stamp Signature	Signature

☐ Mark the appropriate boxes with a cross

IV.1.1.1. **Summary description of the usage of the accompanying document**

IV.1.1.1.1. **At the customs office of departure (first)**

As the final step of the procedure to start the first TIR operation at the first customs office of departure, the customs system will print the accompanying document in line with the model above. The customs officer will provide the transport operator with the accompanying document (without stamping it).

IV.1.1.1.2. **At the customs office of departure (intermediate)**

As the final step of the procedure to start a TIR operation at an intermediate customs office of departure, the customs system will print the accompanying document in line with the model above. The customs officer will provide the transport operator with the new accompanying document containing an updated version of the goods manifest (without stamping it).

In case the customs officer cannot complete the termination of the TIR operation or the start of the next TIR operation electronically, he or she will date, stamp and sign the first available box on the "FOR FALLBACK PROCEDURE" part of the accompanying document (and indicate the newly affixed seals, if an inspection took place).

IV.1.1.1.3. **At the customs office of exit**

At the customs office of exit, the customs officer will scan the bar code on the accompanying document (or enter manually the TIR guarantee reference in the customs system) to identify the eTIR transport and access the related information from the national system.

In case of inspection, the customs officer will print a new accompanying document containing a reference to the newly affixed seals.

In case the customs officer cannot complete the termination of the TIR electronically, he or she will date, stamp and sign the first available box on the "FOR FALLBACK PROCEDURE" part of the accompanying document (and indicate the new seals affixed if an inspection took place).

IV.1.1.1.4. **At the customs office of entry**

At the customs office of entry, the customs officer will scan the bar code on the accompanying document (or enter manually the TIR guarantee reference in the customs system) to identify the eTIR transport and access the related information from the national system.

In case of inspection, the customs officer will print a new accompanying document containing the reference to the newly affixed seals.

In case the customs officer cannot complete the start of the TIR operation electronically, he or she will date, stamp and sign the first available box on the "FOR FALLBACK PROCEDURE" part of the accompanying document (and indicate the newly affixed seals, if an inspection took place).

IV.1.1.1.5. **At the customs office of destination (intermediate)**

At the customs office of intermediate destination, the customs officer will scan the bar code on the accompanying document (or enter manually the TIR guarantee reference in the customs system) to identify the eTIR transport and access the related information from the national system.

In case of inspection, the customs officer will print a new accompanying document containing a reference to the newly affixed seals.

In case the customs officer cannot complete the termination of the TIR operation or the start of the next TIR operation electronically, he or she will date, stamp and sign the first available box on the "FOR FALLBACK PROCEDURE" part of the accompanying document (and indicate the newly affixed seals, if an inspection took place).

IV.1.1.1.6.   At the customs office of destination (final)

At the customs office of final destination, the customs officer will scan the bar code on the accompanying document (or enter manually the TIR guarantee reference in the customs system) to identify the eTIR transport and access the related information from the national system.

In case the customs officer cannot complete the termination of TIR operation electronically, he or she will date, stamp and sign the first available box on the "FOR FALLBACK PROCEDURE" part of the accompanying document and return the document to the transport operator (and indicate the newly affixed seals if an inspection took place).

IV.1.1.1.7.   En route (e.g. police)

Authorities en route can request the accompanying document from the transport operator. In case of doubts, authorities en route should contact the customs administration in their country to verify the authenticity of the document provided on the basis of the data contained in the customs system.

IV.1.1.1.8.   In case of accident or incident

In case of accident or incident, authorities en route will fill in the certified report at the back of the accompanying document.

Upon reception of the certified report, in case the TIR transport cannot continue, customs authorities shall terminate the TIR operation indicating the termination type "Accident or incident". If the TIR transport can continue, customs will amend the TIR transport/operation data in line with the measures taken by the authorities present at the accident or incident (in line with boxes 15 and 16 of the certified report).

IV.1.2.   eTIR queue mechanism

Whenever the eTIR international system is not in a position to send messages (either because the system of the addressee is not functioning or because there is a problem with the connection) the messages will be placed in a queue so that the can be sent once the system of the addressee or the connection is restored.

IV.1.3.   eTIR service desk

During its opening hours, the eTIR service desk will assist the guarantee chain to cancel a guarantee in the eTIR international system if the guarantee chain system or its connection with the eTIR international system is not functioning.

IV.1.4.   Web application and web services developed by the guarantee chain

When they cannot acess the eTIR international system, customs administration may use the web application and the web services developed by the guarantee chain to obtain information on the guarantee and on the TIR transport.

IV.1.5.   ITDB replica

When the eTIR international system cannot access the International TIR Data Bank (ITDB), it will use the local replica of the ITDB stored withing the eTIR international system.

IV.2.   Activity diagrams

This chapter provides activity diagrams for the usage of the various fallback components.

IV.2.1.   Accompanyting document

Figure IV.3
Activity diagram of the usage of the accompanying document – Data not received and impossibility to query the eTIR international system
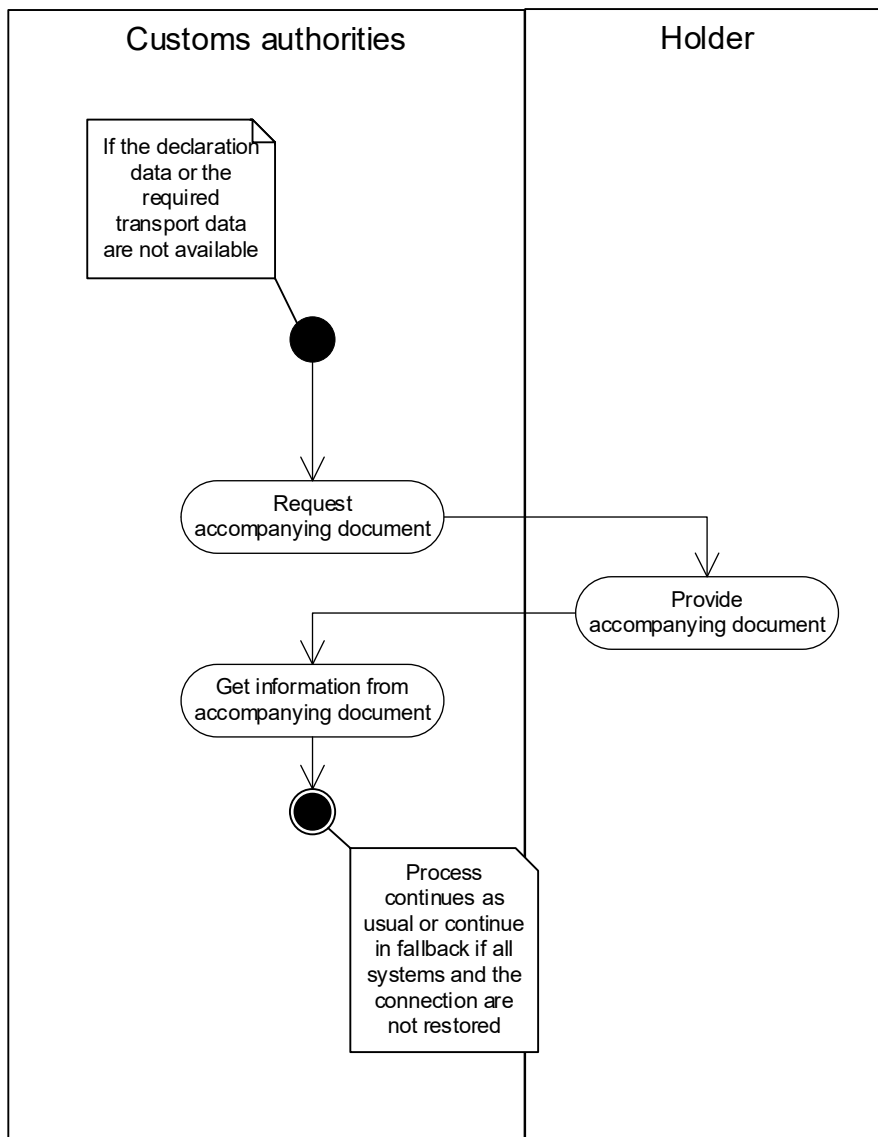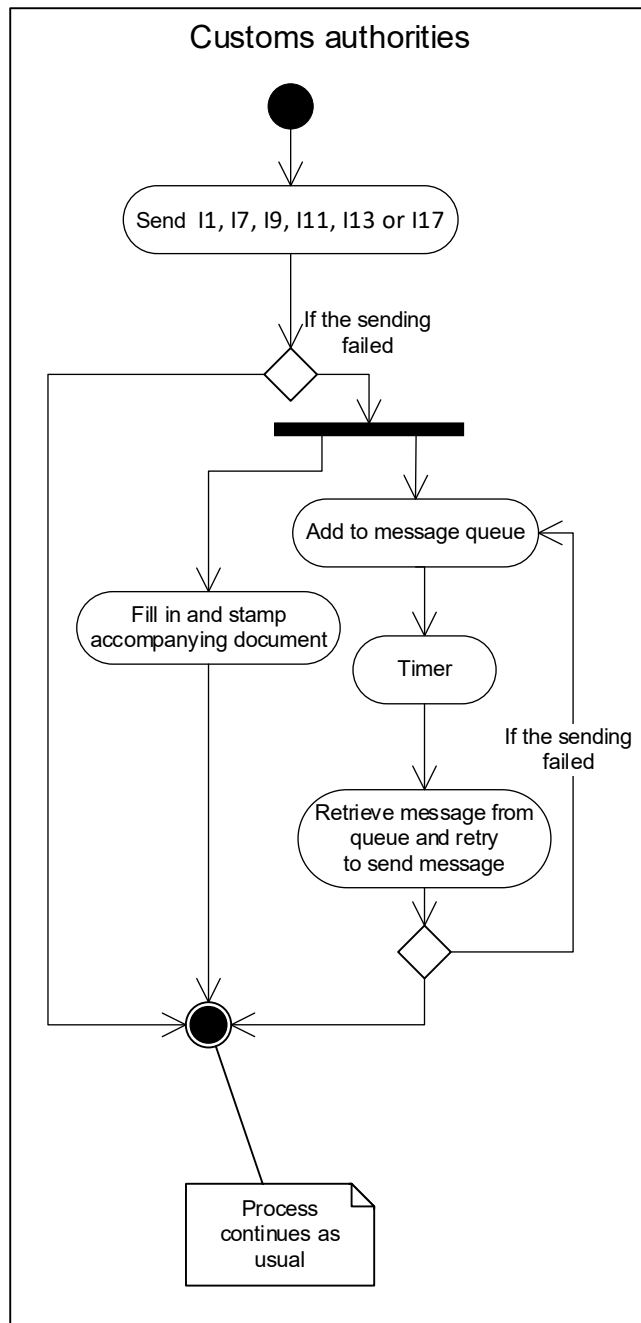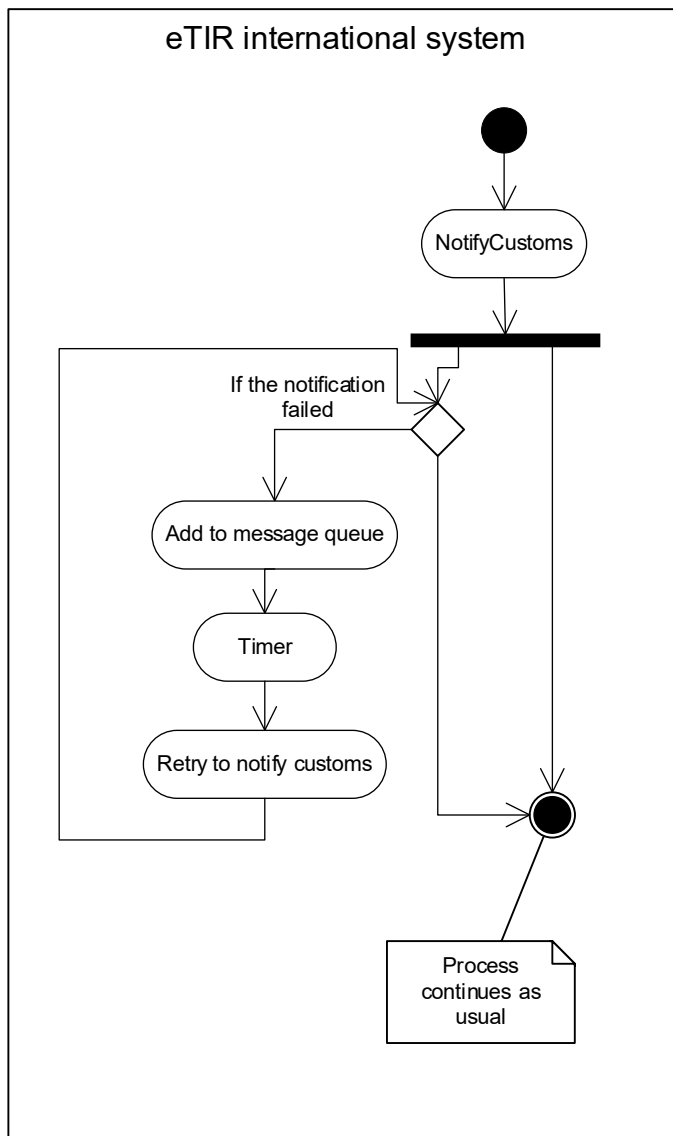
Figure IV.4

Activity diagram of the usage of the accompanying document – Failed sending I1/I7/I9/I11/I13/I17 messages
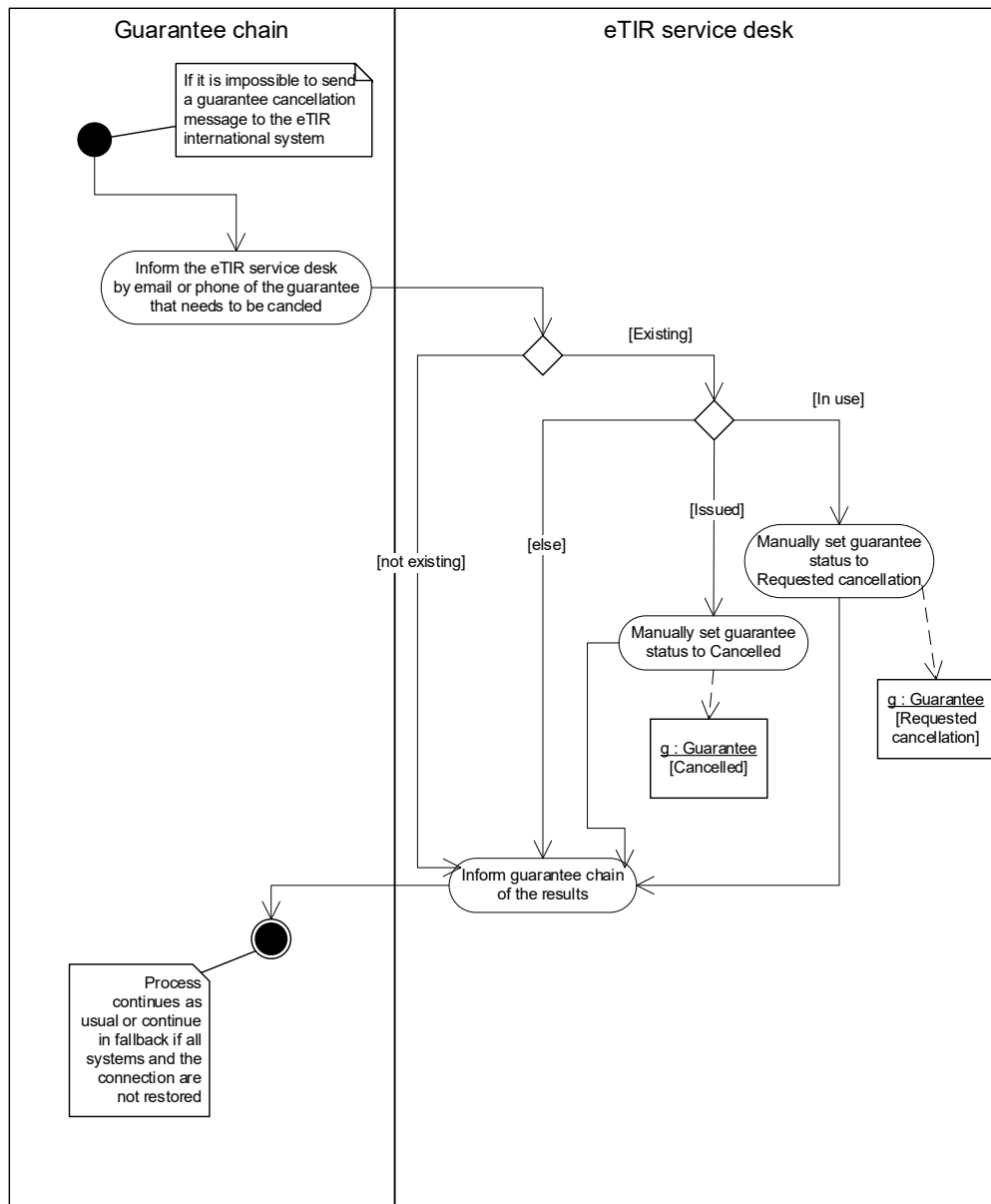
IV.2.2. eTIR queue mechanism

Figure IV.5
Activity diagram of the usage of the eTIR queue mechanism
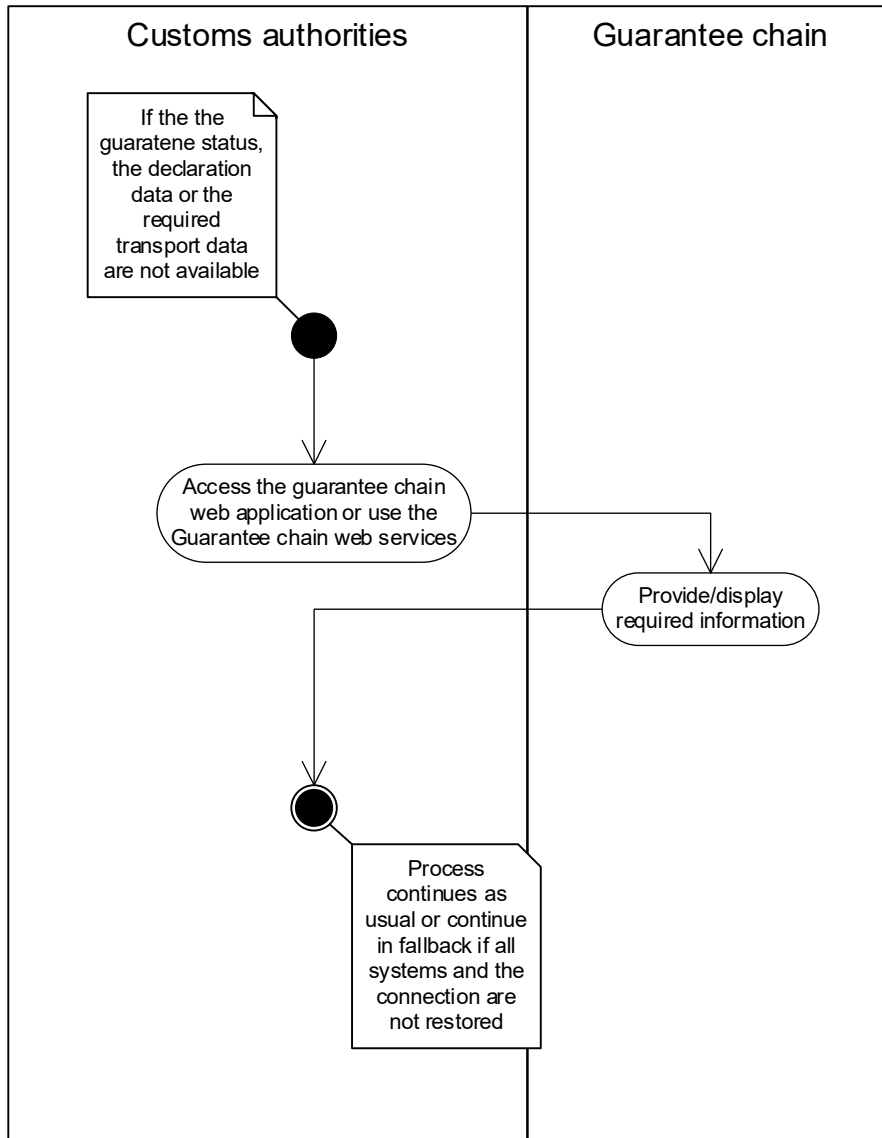
IV.2.2. eTIR service desk

Figure IV.6
Activity diagram of the usage of the eTIR service desk

IV.2.3. **Web application and web service developed by the guarantee chain**
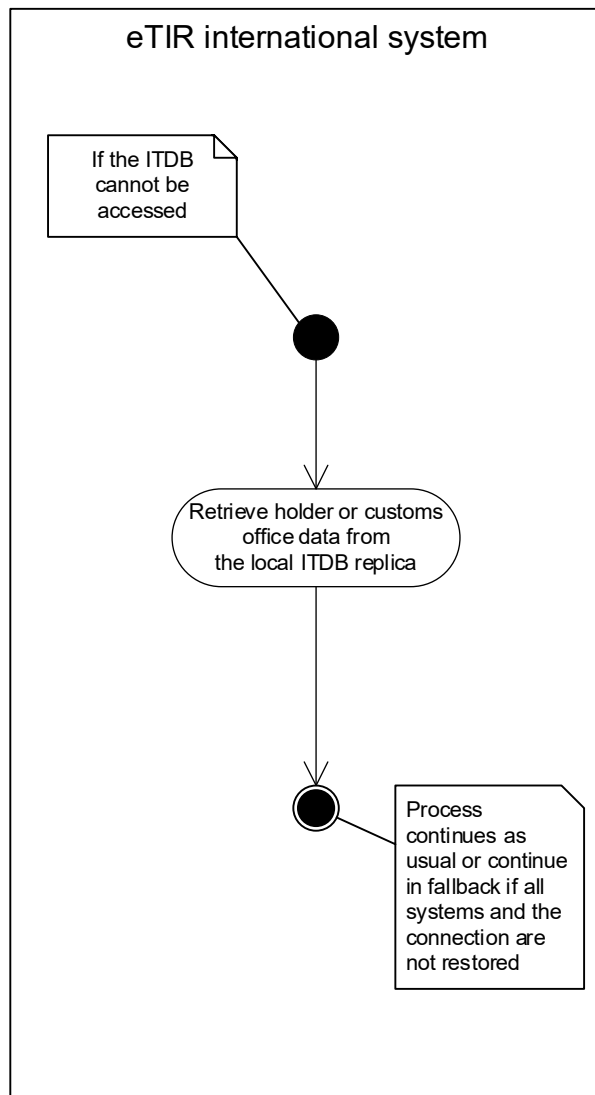
Figure IV.7
Activity diagram of the usage of the web application and web service developed by the guarantee chain

IV.2.4.   ITDB replica

Figure IV.8
Activity diagram of the usage of the ITDB replicad

Annex III[1]

Extentions to the WCO data model version 3.10

Table V.1
Extensions in message I19

eTIR class/attribute name	*Description*	*Version*
CustomsOffice	New class containing the information related to the customs office to query	0.43

Table V.2
Extensions in message I20

eTIR class/attribute name	*Description*	*Version*
CustomsOffice	New class containing the information related to the customs office to query	0.43

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[1] Corresponds to annex V in the former versions of the eTIR specifications (e.g. ECE/TRANS/WP.30/2011/4/Rev.1).