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Working Party on Customs Questions affecting Transport

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

First session

Geneva, 27–29 January 2021 Item 7 (e) of the provisional agenda eTIR conceptual, functional and technical specifications version 4.3: Amendments

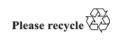
Amendments to the eTIR conceptual, functional and technical documentation - v.4.2a

Note by the secretariat

I. Introduction - Mandate

- The Inland Transport Committee during its eighty-second session (23–28 February 2020) approved (ECE/TRANS/294, para. 841) the establishment of the Group of Experts on Conceptual and Technical Aspects of Computerization of 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 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
- 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

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





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

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. This document presents amendments to the eTIR conceptual, functional and technical documentation -v.4.2a.

II. Considerations and possible amendments

A. Accompanying document and fallback procedure

- 3. At its thirtieth session (September 2019), GE.1 considered the draft accompanying document, the summary description of its usage, the revision of Chapter 1.2 (fallback) of the eTIR functional specifications and Chapter 3 of the eTIR concepts document as well as four amendments proposed under paragraph 5 of Informal documents GE.1 No. 5 (2019).
- 4. With minor editorial changes to the wording of the amendments proposed under paragraph 5 of Informal documents GE.1 No. 5 (2019), GE.1 agreed with the proposed amendments. Further to a presentation by an expert from the European Commission, GE.1 also requested the secretariat to prepare activity diagrams to further clarify the fallback procedures.
- 5. The secretariat will prepare these activity diagrams for the second session of the Group of Experts.

B. Reconciliation procedure

- 6. At its thirtieth session, the GE.1 thanked the experts from the European Commission for sharing the documentation regarding the National Service Desks, an essential element of the reconciliation procedure of the New Computerized Transit System (NCTS) and took note that the experts from the European Commission expressed doubts about the usefulness of a general reconciliation procedure in the framework of eTIR.
- 7. GE.1 also pointed at the lack of legal basis in the TIR Convention (other than Annex 10) and in Annex 11 for setting up a general reconciliation procedure. However, considering the absence of IRU, which had been the main advocate of the introduction of a reconciliation procedure in the eTIR specifications, GE.1 decided to postpone the discussion on this issue to a next session. The Group of Experts might wish to continue these deliberations on the issue and instruct the secretariat on how to proceed further.
- 8. At its thirty-first session, the GE.1 agreed with the proposal of IRU to make a presentation at the next session on how it has set up an electronic reconciliation procedure with some customs administrations connected to the Real Time SafeTIR and TIR-EPD systems. The Group of Expert may wish to listen to the presentation by IRU.

C. Validations performed by the eTIR international system

9. At its thirtieth session, GE.1 took note that, according to the eTIR specifications, the eTIR international system is expected to perform strict validations with regard to the sequence of messages, the status of the holder, the mandatory nature of data elements, etc. While stressing the importance for all stakeholders to comply with standard eTIR messages, GE.1 acknowledged that, during a transitional period, it could be envisaged, on a case by case basis, to accept messages which would not fully comply with the eTIR specifications, e.g. messages that would arrive out of sequence. Bearing that in mind, GE.1 requested the secretariat to prepare a draft table presenting the possible transitional exceptions to the rules contained in the eTIR specification, for consideration at its next session.

10. To date, the secretariat has not yet developed concrete transitional exceptions which would either change the status of data elements (mandatory vs optional vs dependent) or allow rules or conditions contained in the eTIR specification not to apply. However, if concrete situations appear in the course of the connection of customs systems to the eTIR international system, they will be brought to the attentions of the Group of Expert. Finally, the decision of the Group of Experts regarding the inclusion of warnings (see point m) will also impact the way in which the validations performed by the eTIR international system are handled.

D. Minor corrections

11. During the development and improvement of the eTIR international system, the secretariat has identified several minor issues of editorial, consistency or logical nature. For the sake of transparency, the secretariat listed all the required corrections in the table below. The Group of Experts may wish to note that these corrections will be included in version 4.3 of the eTIR functional specifications.

Table 1 List of minor corrections

	of difficulty	
ID	Issue	Correction
1	There is a typographic mistake in messages E6, I4, I6, I10 and I12 where a class is named "ActiveExlusion".	This class will be renamed "ActiveExclusion" to correct the mistake.
2	There is a typographic mistake in the message I6 where an attribute is named "Isuing date".	This attribute will be renamed "Issuing date" to correct the mistake.
3	The name of the new I20 message as written in document ECE/TRANS/WP.30/2020/7 is "Customs offices information".	The name of the new I20 message will be "Customs offices validation" as it better reflects the purpose of this message.
4	The "Functional reference" attribute is missing in the I8 message.	All response messages must have a "Functional reference" attribute so it will be added to the I8 message.
5	A "CustomsOffice" class is present in the E6 message under the path (LPCO)/TIROperation/RefusalToStart whereas is it missing in the same path in messages I6, I15 and I17.	The "CustomsOffice" class will be added in the messages I6, I15 and I17 under the path LPCO/TIROperation/RefusalToStart.
6	The "Consignment" class in the messages E6, I6, I9 and I15 under the path (LPCO)/Guarantee/TIROperation/Start/Consi gnment has a specific cardinality of 01 and therefore does not need have a "Sequence number" attribute.	In these messages, under this specific path, the "Sequence number" attribute will be removed.
7	The "Discharge" class available in message E6 under LPCO/Guarantee/TIROperation has a wrong cardinality 0unbounded.	As for the "Start", "Termination" and "RefusalToStart" classes at the same level, its cardinality will be set to 01.
8	The "Registration number" attribute in message I17 under Guarantee/TIROperation is missing whereas it is a mandatory attribute in other related TIR operation messages (I9, I11 and I13).	The "Registration number" will be added as a mandatory attribute in message I17 under Guarantee/TIROperation.
9	The "Role" attribute in message E9 under AdvanceTIRData/Agent has the following restricted values: "AE", "AG", "CB" and "FW". However, there are no restricted values	For the sake of consistency, the same restricted values will be applied to the "Role" attribute

ID Issue	Correction
applied to the same attribute in messages E6, I6, I7 and I15.	(AdvanceTIRData/Agent/Role) in all messages.

E. Message Identifier

- 12. At its thirty-first session, GE.1 agreed to rename the Message Reference Number attribute of all eTIR messages into "Message Identifier" which also better reflects its purpose. GE.1 also agreed with the proposal to use unique values in the Message Identifier attribute when sending a message request and mapping the same value in the Functional Reference attribute of the message response. GE.1 further agreed with the proposal that the unique value should be the concatenation of a unique value identifying the sending entity with a Globally Unique Identifier (GUID).
- 13. However, after having considered that the probability of generating two identical GUID (v4) is extremely low⁴, that adding the sender information could yield in a value that exceeds the maximum number of characters allowed for the field and that it would add complexity to all systems involved, the secretariat proposes that the value should only consist in a GUID (v4).
- 14. The Group of Experts may wish to consider this new proposal and instruct the secretariat on the final specifications regarding the value of the Message Identifier attribute.

F. Functional Reference

- 15. In order to better reflect its purpose, the secretariat proposes to rename the "Functional Reference" attribute in eTIR messages as "Original Message Identifier". This attribute is used, in response and update messages, to refer to the request or original message. Changing the attribute name to "Original Message Identifier" would make it self-explanatory and would be consistent with the previous decision related to the "Message Identifier" attribute.
- 16. The Group of Experts might wish to consider this proposal and instruct the secretariat on the final name of the Functional Reference attribute.

G. Cancel advance data and Advance amendment data

17. At its thirty-first session, GE.1 agreed that the current E9 message should only be used to send advance TIR data and that two separate messages should be created to cancel advance data and send advance amendment data. The secretariat has prepared two new message pairs. The descriptions of all six messages are contained in the table below and will be used in Table 1.1 of the eTIR functional specifications document. Their internal structures, presented in in Annex I, will be included in Chapter 2.5 of the same document.

Table 2
Names and descriptions of messages E9 to E14

No.	Message name and description	Response to
E9	Advance TIR Data	-
	This message allows the holder to provide Customs authorities of departure with all information required to begin a TIR transport.	
E10	Advance TIR Data Results	E9

Extract from en.wikipedia.org/wiki/Universally_unique_identifier: « the number of random version-4 UUIDs which need to be generated in order to have a 50% probability of at least one collision is 2.71x1018 ». Accessed 08 October 2020.

No.	Message name and description	Response to
	This message is a response to message E9. It confirms the reception of the advance TIR data or indicates the errors in the advance TIR data.	
E11	Advance Amendment Data	-
	This message allows the holder to send a request to customs authorities to amend the information and complement it in case of multiple loading and unloading places.	
E12	Advance Amendment Data Results	E11
	This message is a response to message E11. It confirms the reception of the advance amendment data or indicates the errors in the amendment request.	
E13	Cancel Advance Data	-
	This message allows the holder to send a request to customs authorities to cancel a previously sent message E9 or E11.	
E14	Cancel Advance Data Results	E13
	This message is a response to message E13. It confirms the reception of the request to cancel advance data or indicates the errors in the cancellation request.	

18. The Group of Experts might wish to consider the descriptions and the internal structure of these new messages and confirm their inclusion in the eTIR specifications. Furthermore, the Group of Expert may wish to take into consideration the advice of the Experts, which discussed the issue in the course of the informal preparatory meeting held on 3–4 November 2020. They proposed to look into the possibility of introducing a rule for message E11, ensuring that information related to the goods already forming part of the declaration data should, in general, not be changed. This question could also be dealt with in the course of the discussion on chapter (U) (Advance TIR data for multiple loading places).

H. Add a new rule to the Version attribute

- 19. In the eTIR functional specifications document v4.2, there is the following remark on the Version attribute present in messages E9, I7 and I15: "The version number of the original version (Function 9) is always '1'. Subsequent Update or Cancellation messages are numbered incrementally". In the light of the creation of the new E11 message, the secretariat proposes the following changes:
 - The "Version" attribute of the declaration would be removed from the E9 message (since it is now only used to send the advance TIR data);
 - The following rule would be added on the "Version" attribute of the declaration in the E11 message: "The number of the version of the first amendment to the declaration should be 1 and sequentially incremented for every additional amendment proposal".
- 20. The Group of Experts might wish to consider this proposal and instruct the secretariat on how to proceed.

I. Review of the conditions and rules

21. The secretariat performed a review of the rules and conditions used in version 4.2 of the eTIR specifications and proposed a few amendments. The Experts, which discussed the proposal during the informal preparatory meeting, welcomed the proposal of the secretariat to add clear definitions for the notions of conditions and rules, and to review the existing conditions and rules with these new definitions. However, the Experts suggested, inter alia,

to consider the definitions of the rules and conditions in the NCTS documentation. Consequently, the secretariat will review its proposals and present it at the second session of the Group of Experts.

J. Review of the code lists

22. The secretariat has performed a comprehensive review of all code lists used in version 4.2 of the eTIR specifications. From this analysis, the secretariat has prepared a list of amendment proposals that the Group of Experts may wish to consider.

1. Use of code list 21

- 23. Code list 21 lists the "Measurement unit code" from the ECE Recommendation 20. This code list is used for several kinds of sub-attributes to describe the unit of a value contained in the parent attribute. Regarding the attribute "Size" contained in the class "BinaryFile" which is available in messages E6, E9, I6, I7 and I15, the secretariat proposes to restrict the use of this code list to the following values:
 - 2P: kilobytes
 - 4L: megabytes
 - · AD: byte

2. Removal of code lists 13 and 15

24. As part of the approved amendments, GE.1 agreed to use the ITDB as a source for both code list 13 and 15 (see chapter L. of document ECE/TRANS/WP.30/2020/7). However, from a conceptual perspective, the references to Customs offices and TIR Carnet Holder should rather be done by means of identifiers. For that matter, the core data type of the WCO attributes used for holding these values is already an "identifier" and not a "code". With that in mind, the secretariat proposes to delete the references to both code lists and instead replace them with an identifier.

K. Change in the metadata information

- 25. In the eTIR functional specifications document v4.2, the notion of MetaData information was introduced. The eTIR metadata class contains five attributes that are used at the beginning of all eTIR messages and provide basic information about the type of message, the sender and the receiver (see chapters 2.5.1.1, 2.5.2.1 and 2.5.3.1 of the eTIR functional specifications document for details). In order to further tailor the use of the metadata to the eTIR international system, the secretariat proposes the following changes:
 - The attribute "Responsible Agency, coded" will be added to the metadata class. This code identifies the agency responsible for the specifications, their maintenance and publication. A request will be made to UN/CEFACT to add the code "UN/ECE/TRANS" to the EDIFACT code list 0051, which is the code list associated with the attribute "Responsible Agency, coded";
 - The eTIR name of the attribute "Agency Assigned Customization" will be changed to "Specifications, coded". This attribute will indicate the specifications which have been used to generate the message. A new code list CL28 will be created and assigned to the attribute. At this stage, the code list would only contain the code: "1 eTIR";
 - The eTIR name of the "Agency Assigned Customization Version" will be changed to "Specifications version, coded". A new code list CL29 will be created and assigned to the attribute. This attribute indicates the version of the eTIR specifications used to generate the message and will possibly allow the eTIR international system to handle multiple versions of the eTIR messages. At this stage, the code list would only contain the code "1 4.3.0".

26. The Group of Experts might wish to consider this proposal and instruct the secretariat on how to proceed.

L. Change in the date formats

- 27. In the eTIR functional specifications document v4.2, there are two types of date formats, both present in UN/EDIFACT list 2379 Date or time or period format code. Format 304 (CCYYMMDDHHMMSSZZZ) is used when date and time are required and format 102 (CCYYMMDD) when only the data is necessary. In order to align the date-time format with current standards the secretariat proposes to replace format 304 with format 208 (CCYYMMDDHHMMSSZHHMM), which has a clearer and more intuitive representation of time zones, i.e. Z = leading plus/minus sign, HHMM = difference to UTC in hours and minutes.
- 28. Taking into consideration that most dates in the eTIR messages will be generated by computers and to further increase the accuracy and reliability of the eTIR system as a whole, the secretariat proposes to use the date-time format 208 for the dates attributes in all messages, excepts in the cases where the time information is not available. After a preliminary study, the secretariat recommends using the format 208 for all date/time attributes except in the following cases:

Table 3 **Exceptions to format 208 for date fields**

Attribute Name	Format(s)	Reason	Message/XPath
ExpirationDateTime Which should be renamed to "ExpirationDate"	102	IRU cannot provide anything else than a date. Also in Article 9 of the TIR Convention, only the date is mentioned.	E1/Guarantee E6/LPCO/Guarantee E6/LPCO/Guarantee/AdvanceTIRDa ta/Guarantee I6/Guarantee I6/Guarantee/AdvanceTIRData/Guar antee I7/AdvanceTIRData/Guarantee
IssueDateTime	102 or 208	Depending on the origin of the document, only a date is available.	E6/LPCO/Guarantee/AdvanceTIRDa ta/Consignment/AttachedDocuments E6/LPCO/Guarantee/AdvanceTIRDa ta/Consignment/TransportEquipment /CertificateOfApproval
LimitDateTime	102 or 208	The best practices indicate "date according to the format dd/mm/yyyy and time, if appropriate".	E6/LPCO/Guarantee/TIROperation/ Start I6/Guarantee/TIROperation/Start I9/Guarantee/TIROperation/Start

29. The Group of Experts might wish to consider this proposal and instruct the secretariat on how to proceed.

M. Introduction of Warnings

30. In the course of the informal preparatory meeting, the Experts considered options proposed by the secretariat to introduce the notion of "warnings" in the eTIR response messages. In the light of the concerns expressed by the Experts, the secretariat will revisit the

⁵ www.unece.org/fileadmin/DAM/trade/untdid/d17a/tred/tred2379.htm

question and might come back with a new proposal at a subsequent session of the Group of Experts.

N. Cardinality on subcontractors

- 31. The secretariat has identified discrepancies in the current version of the eTIR specifications related to the cardinality on the Subcontractor class. This class has a cardinality of (0..1) in messages E6, E9, I6 and I7 while it has a cardinality of (0..unbounded) in message I15. Furthermore, its Address class has a cardinality of (0..unbounded) in messages E6, I6 and I7 and has a cardinality of (0..1) in messages E9 and I15.
- 32. A TIR Carnet holder could need multiple subcontractors, e.g. a transport during which a container would be loaded on a vessel (subcontractor 1) and later on a train (subcontractor 2) before finishing its journey on a truck. Consequently, it seems appropriate the set the cardinality of the Subcontractor class to (0..unbounded). Furthermore, it is unlikely that the subcontractor class would need multiple addresses and therefore the Address class could have a cardinality of (0..1).
- 33. The Group of Experts might wish to guide the secretariat on how proceed further with this issue.

O. Description of the messages E1, E3, E5, E7 and I5

34. The description of the messages E1, E3, E5, E7 and I5 in Table 1.1 of the eTIR functional specifications document is not aligned with their message structures. Indeed, the formulation "one or multiple guarantees" or "one or many of the guarantees" is used in the definitions whereas those messages deal with one guarantee at the time (cardinality of 1..1). In order to align the definitions with the message structures, the secretariat proposes the following revised descriptions for these messages:

Table 4
New descriptions for messages E1, E3, E5, E7 and I5

No.	Message name and description	Response to
E1	Register guarantee	-
	This message allows the Guarantee chain to register a guarantee in the eTIR international system.	
E3	Cancel guarantee	-
	This message allows the Guarantee chain to cancel a guarantee it had previously registered in the eTIR international system.	
E5	Query guarantee	-
	This message allows the Guarantee chain to query the eTIR international system to obtain information on a guarantee it had previously registered.	
E7	Notify guarantee chain	-
	This message informs the Guarantee chain of the availability of new information concerning a guarantee it has issued.	
15	Query guarantee	-
	This message allows customs authorities to query the eTIR international system to obtain information on a guarantee.	

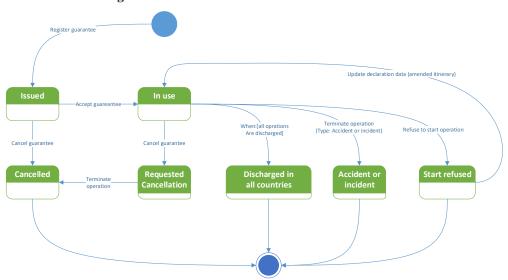
35. The Group of Experts might wish to consider these revised descriptions and instruct the secretariat on how to proceed.

P. Status of the guarantee after a Refusal to start a TIR operation

- 36. Figure 1.12 (Refusal to start TIR operation sequence diagram) in the eTIR functional specifications document shows that after the reception of a refusal to start message (I17), the eTIR international system cancels the guarantee. However, when revising Figure 3 (Guarantee status chart diagram) of the eTIR concepts document, GE.1 agreed to the additions of a new "final" status (start refused) for the guarantee should be used following the reception of a refusal to start message (see ECE/TRANS/WP.30/2020/7, para .7).
- 37. In the course of the informal preparatory meeting, the Experts were of the view that the "start refused" status should be kept and, also, should not be a terminal status, but instead, if the transport is in a position to return to the departure under the cover of the same guarantee, the status of the guarantee could return to "in use" after the first operation of the return trip had started. Would the Group of Experts agree with this view, Figure 3 (Guarantee status chart diagram) of the eTIR concepts document should be changed in line with the picture below and the descriptions, activity diagrams and sequence diagrams related to the Refusal to Start and Update declaration data use cases amended accordingly.

Figure I

Guarantee state diagram



38. The Group of Experts might wish to consider this discrepancy and instruct the secretariat on how to resolve it.

Q. Notifications to customs related to TIR operations

- 39. According to the data exchange use case diagram (contained in Figure 10 of the eTIR concepts document v.4.2a), information about TIR operations is notified to the guarantee chain but not to customs administrations. The sequence diagrams contained in Annex I of Informal document GE.1 No.5 (2020) follows the same logic. However, the I15 message (notification to customs) contains sections dedicated to the notification of the start, refusal to start and termination of TIR operations.
- 40. GE.1 considered this issue at its thirty-first session and decided that further analysis was required before reverting to it (ECE/TRANS/WP.30/2020/5, paras. 32 and 33).
- 41. Message E9 and I7 have a section in which the holder can insert seals that would be applied to the transport equipment. While this section can of use if an authorized consignor would send the E9 message, at the time of sending the E9 message, the TIR Carnet holder cannot know which seals will be applied by customs. Instead, information about the seals applied by customs to transport equipment is sent to the eTIR international system by means of the I9 (start TIR operation) and I11 (termination of TIR operation) messages, regardless if

we talk about the seals applied at the customs office of departure or anywhere along the itinerary when the seals are changed, following a control, an additional loading or an intermediate unloading.

- 42. Consequently, in the absence of notifications to customs about TIR operations, customs administration along the itinerary have to query the eTIR international system using the I5 message to obtain information on the seals applied by customs to the transport equipment as well as any information about previous TIR operations if they are of use in their risk analysis. Information about the seals applied to the transport equipment by the office of departure, or any later change, is essential for customs officers to check that the seals have remained intact (a check that has to be performed in the process of starting and terminating a TIR operation).
- 43. In order to circumvent this issue, notifications to customs administrations along the remaining itinerary could be sent by the eTIR international system, either each time I9 and I11 (possibly also I13) messages are received or, alternatively, each time I9 and I11 messages would contain information about seals applied or changed. This latter option would at least ensure that customs administration would have information about the seals applied to the transport equipment in advance without having to query the eTIR international system upon arrival of the vehicle at the customs office.
- 44. On the basis of the information presented above, the Group of Experts may wish to reconsider the need for the notification of TIR operations-related information to customs administrations and instruct the secretariat on how to proceed further.

R. New messages I19/I20 to validate customs offices with ITDB

- 45. At its thirtieth session, GE.1 decided to use the ITDB customs office database instead of developing a customs office code list as part of the eTIR specifications and requested the secretariat to propose an interface between the eTIR international system and ITDB to extract information on customs offices approved for eTIR.
- 46. At its thirty-first session, GE.1 welcomed a presentation by the secretariat on the new ITDB web service for the validation of eTIR customs offices. GE.1 was informed about the workflows, content, technologies and error codes related to the new I19/I20 messages. GE.1 requested the inclusion of the new I19/I20 messages in the next version of the eTIR specifications.
- 47. The secretariat submitted a Data Maintenance Request (DMR) to the World Customs Organization (WCO) Data Model Project Team (DMPT) session of September 2020 in order to add to the WCO Data Model the classes and attributes needed to model the messages I19 and I20. The DMR was accepted by DMPT and the classes and attributes needed should be added to the next version of the WCO Data Model (3.11.0), to be released at the end of the year 2021. In the meantime, the messages I19 and I20 can use these classes as attributes as extensions to the WCO Data Model. The internal structure of the two new messages is available in Annex II.
- 48. The Group of Experts may wish to consider the internal structure of these new messages and confirm their inclusion in the eTIR specifications.

S. Updated list of error codes

- 49. During its thirty-first session, GE.1 welcomed a presentation by the secretariat on a proposal for a new code list for errors (CL99) and agreed with it. GE.1 noted that this list was a living document and that, whenever necessary, the secretariat would propose revisions of the code list to the Group of Experts.
- 50. The secretariat has produced a revised version of the code list for errors (CL99) which is available in Annex III. The Group of Experts may wish to consider and take note of this revised code list.

T. Guarantee types

- 51. Version 4.1 and 4.2 of the eTIR specifications indicate that the code list 12, the code list containing guarantee types, will be developed in the future. In the absence of a specific eTIR code list 12, the XML "SecurityDetailsCode" attribute (which is the XML tag of the "Guarantee type, coded" attribute) inherited of a generic WCO code list, which is only visible in the eTIR XML schemas.
- 52. Since the eTIR specific code list 12 had not yet been developed, the generic WCO code list has been used in the eTIR pilot projects. However, in order to prepare for the proper implementation of the eTIR specifications, it is proposed to temporarily populate the code list 12 with the types of guarantees that are currently in use in the eTIR pilot project and to start using them. The final version of code list 12 will be devised after the entry into force of Annex 11.
- 53. At this stage, in the framework of the eTIR pilot project the following eGuarantees can be used by transport operators:

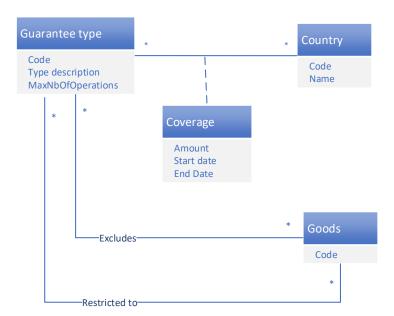
Table 5
Code list 12

Code	Description	Maximum number of operations
X02	eTIR guarantee valid for 2 operations	2
X03	eTIR guarantee valid for 3 operations	3
X04	eTIR guarantee valid for 4 operations	4
X07	eTIR guarantee valid for 7 operations	7
X10	eTIR guarantee valid for 10 operations	10

- 54. Figure 1.16 of the eTIR functional specifications document version 4.2, clearly shows that the guarantee type shall also be defined with respect to their geographical coverage as well as with regard to the limitations or exclusions about goods. With regard to the geographical coverage, the eGuarantees types above will be restricted to the eTIR pilot project countries. Regarding the exclusion of goods, they should exclude tobacco and the relevant alcohol products.
- 55. Figure 1.16 also shows that currently the "guarantee type" table also includes an "amount" attribute. However, in view of the current application of the TIR procedure, moving the "amount" attribute to the "coverage" association between "guarantee type" and "country" will allow to record that the maximum amount covered by the guarantee chain can vary between countries. Moreover, including a start and end dates to that association class would also allow to record that the maximum amount covered can vary over time. Finally, replacing the goods description by the goods code would model more precisely which goods are excluded from a guarantee type or the goods that a guarantee type is restricted to. The class diagram below shows how these changes could be reflected in Figure 1.16:

Figure II

Code list 12



U. Advance TIR data for multiple loading places

- 56. The TIR and eTIR procedure allow for multiple loading and unloading places. The eTIR data model (see Figure 1.17 of the eTIR functional specifications document) shows that a consignment is defined by a single customs office of departure and a single customs office of destination and all eTIR messages are defined accordingly. If message E11 allows holder to request the addition of a loading or unloading place after the eTIR transport has started, the eTIR specifications do not clearly explain how the holder should submit his/her advance TIR data in case he/she knows that the transport will have multiple loading places before the start of the eTIR transport.
- 57. The first option would be that the holder includes in the advance TIR data the information for all consignments. This would mean that the first customs office of departure would use the I7 message to also register, as part of the declaration data, information about consignments which will be loaded afterwards and which it therefore could not check.
- 58. A second option would be that the holder would be required to send an E11 message (Advance amendment data) to the country(ies) where the following loading places would take place and that (those) country(ies) would have to wait to receive the first part of the declaration data (by means of the I15 message) which will only be sent after the eTIR transport has started.
- 59. The Group of Expert may wish to consider these two options and ask the secretariat to prepare the required clarification to be included in the eTIR specifications.

III. Next steps

60. The Group of Experts is invited to discuss the considerations and amendments presented in this document and provide the secretariat with detailed instructions on how to further proceed.

Annex I

Structure of messages E9, E10, E11, E12, E13 and E14

A. Structure of message "E9 – Advance TIR Data"

eTIR class and data element name	Min / Max occurrence	Status
Message		
Message function, coded	1 1	R
Message identifier	1 1	R
—Issuing date	1 1	R
Type, coded	1 1	R
—Total gross weight	0 1	0
AdditionalInformation	1 1	R
Remarks	0 1	0
Heavy and bulky goods indicator	1 1	R
Agent	0 1	0
Name	0 1	D
—Code	0 1	D
Role, coded	1 1	R
Address	0 1	D
—City name	1 1	R
—Country, coded	1 1	R
Street and number/P.O. Box	1 1	R
Postcode identification	1 1	R
SubContractor	0 1	0
Name	0 1	D
—Code	0 1	D
Address	0 1	D
—City name	1 1	R
—Country, coded	1 1	R
Street and number/P.O. Box	1 1	R
Postcode identification	1 1	R
Consignment	1 unbounded	R
Sequence number	1 1	R
AttachedDocuments	0 unbounded	0
—Number	1 1	R
ssuing date	1 1	R
Type, coded	1 1	R
BinaryFile	0 1	0
Identification	1 1	R
Title	1 1	R
Author name	0 1	0
—Version	0 1	0
File name	0 1	0
│	0 1	0
│	0 1	0
—Encoding	0 1	0
—Character set	0 1	0
Include binary object	0 1	0
Access	0 1	0
—Description	0 1	0
Size	0 1	0
Туре	0 1	Ö
Hash code	0 1	Ö
Hash code algorithm id	0 1	Ö
ConsignmentItem	1 unbounded	R
Sequence number	1 1	R
AdditionalInformation	0 unbounded	0
Remarks	1 1	R
Goods	1 1	R
Description	0 1	D
Classification	0 unbounded	0
—Code	1 1	R
Type	1 1	R
Consignee	0 1	0

eTIR <u>c</u>	lass and data element name	Min / Max occurrence	Status
	—Name	0 1	D
	—Code	0 1	D
	Address	0 1	D
	—City name	1 1	R
	—Country, coded	1 1	R
	—Street and number/P.O. Box	1 1	R
	Postcode identification	1 1	R
	Consignor	0 1	0
	Name	0 1	D
	—Code	0 1	D
	Address	0 1	D
	—City name	1 1	R
	—Country, coded	1 1	R
	Street and number/P.O. Box	1 1	R
	Postcode identification	1 1	R
	DeliveryDestination	0 1	0
	Name	1 1	R
	Address	1 1	R
	City name	1 1	R
	Country, coded	1 1	R
	Street and number/P.O. Box	1 1	R
	Postcode identification	1 1	R
	GoodsMeasure	1 1	R
	Gross weight	1 1	R
	Packaging Made and purchase	1 1	R
	Marks and numbers	0 1	0
	—Number of packages	0 1	D
	Type, coded	1 1 0 1	R D
	TransportEquipment dentification	1 1	R
		0 1	0
	dentifier	0 1	0
	LoadingLocation	0 1	0
	—Name	0 1	0
	-NotifyParty	0 1	0
	—Name	0 1	D
	—Code	0 1	D
		0 1	D
	—City name	1 1	R
	—Country, coded	1 1	R
	Street and number/P.O. Box	1 1	R
	Postcode identification	1 1	R
	-CustomsOfficeOfDeparture	1 1	R
	—Code	1 1	R
	-CustomsOfficeOfDestination	1 1	R
	—Code	1 1	R
	-TransportMeans	1 unbounded	R
	Identification	1 1	R
	Type, coded	1 1	R
	—Nationality	1 1	R
	Conveyance reference number	1 1	Ö
	CountryOfRouting	1 unbounded	R
	Sequence number	1 1	R
	Country, coded	1 1	R
	-TransportEquipment	0 unbounded	D
	Sequence number	1 1	R
	Size and type identification	1 1	R
	—Identification	1 1	R
	CertificateOfApproval	0 1	D
	Number	1 1	R
	—Issuing date	1 1	R
	Type, coded	1 1	R
	BinaryFile	0 1	0
	Identification	1 1	R
	—Title	1 1	R

eTIR class and data element name	Min / Max occurrence	Status
—Author name	0 1	0
—-Version	0 1	0
File name	0 1	0
URI —URI	0 1	0
MIME	0 1	0
Encoding	0 1	0
—Character set	0 1	0
Include binary object	0 1	0
—Access	0 1	0
——Description	0 1	0
Size	0 1	0
Туре	0 1	0
Hash code	0 1	0
Hash code algorithm id	0 1	0
Seal	0 unbounded	0
Sequence number	1 1	R
—Seal number	1 1	R
Seal type code	0 1	0
Guarantee	1 1	R
Reference	1 1	R
Holder	1 1	R
Name	0 1	O
—Code	1 1	R
Address	0 1	0
—City name	1 1	R
Country, coded	1 1	R
Street and number/P.O. Box	1 1	R
Postcode identification	1 1	R

B. Structure of message "E10 – Advance TIR Data Results"

eTIR class and data element name	Min / Max occurrence	Status
Message		
—Message function, coded	1 1	R
—Functional Reference	1 1	R
—Message identifier	1 1	R
Type, coded	1 1	R
	1 1	R
Acceptance date	0 1	D
—Message Identifier	1 1	R
Rejection date	0 1	D
Error	0 unbounded	D
—Error, coded	1 1	R
□ Pointer	1 unbounded	R
—Sequence number	0 1	R
Location Location	1 1	R

C. Structure of message "E11 – Advance Amendment Data"

eTIR class and data element name	Min / Max occurrence	Status
Message		
Message function, coded	1 1	R
Functional reference	1 1	R
Message identifier	1 1	R
—Issuing date	1 1	R
Type, coded	1 1	R
	1 1	R
—Total gross weight	0 1	0
	1 1	R
Remarks	0 1	0
Heavy and bulky goods indicator	1 1	R
Agent	0 1	0
—Name	0 1	D
—Code	0 1	D
eTIR class and data element name	Min / Max occurrence	Status
Role, coded	1 1	R
Address	0 1	D
—City name	1 1	R

Country, coded	1 1	I
Street and number/P.O. Box	1 1	I
Postcode identification	1 1	ı
- A mendment	1 unbounded	
—Amendment code	1 1	
Pointer	1 unbounded	
—Sequence number	1 1	ı
Location	1 1	Ī
-SubContractor	0 unbounded	
-Name	0 1	Ì
	* · ·	
—Code	0 1	
Address	0 1	
—City name	1 1	1
Country, coded	1 1	ı
Street and number/P.O. Box	1 1	
Postcode identification	1 1	I
-Consignment	1 unbounded	
—Sequence number	1 1	
	0 unbounded	
Number	1 1	
ssuing date	1 1	
	1 1	
Type, coded BinaryFile	0 1	
	• •	
Identification	1 1	ı
Title	1 1	I
—Author name	0 1	(
—-Version	0 1	(
—File name	0 1	(
I ⊢URI	0 1	(
MIME	0 1	(
—Encoding	0 1	Ò
—Character set	0 1	(
	·	
Include binary object	0 1	(
Access	0 1	(
—Description	0 1	(
—Size	0 1	(
—_Type	0 1	(
—Hash code	0 1	(
Hash code algorithm id	0 1	(
ConsignmentItem	1 unbounded	
Sequence number	1 1	Ī
AdditionalInformation	0 unbounded	
Remarks	1 1	
Goods	1 1	
—Description	0 1	
☐ ☐ Classification	0 unbounded	(
—Code	1 1	
Туре	1 1	Ī
Consignee	0 1	
Name	0 1	
—Code	0 1	,
Address	0 1	
City name	1 1	
—Country, coded	1 1	
Street and number/P.O. Box	1 1	I
Postcode identification	1 1	
Consignor	0 1	(
Name	0 1	
Code	0 1	
Address	0 1	
Audicaa	U I	

aTIP class and data element name	Min / Max accurrence	Status
eTIR class and data element name —Country, coded	Min / Max occurrence	Status R
Street and number/P.O. Box	1 1 1 1	R R
Postcode identification	1 1	R
Consignor	0 1	0
Name	0 1 0 1	D
—Code	0 1 0 1	D
Address	0 1	D
—City name	1 1	R
—Country, coded	1 1	R
Street and number/P.O. Box	1 1	R
Postcode identification	1 1	R
DeliveryDestination	0 1	O
Name	1 1	R
Address	1 1	R
—City name	1 1	R
—Country, coded	1 1	R
Street and number/P.O. Box	1 1	R
Postcode identification	1 1	R
GoodsMeasure	1 1	R
Gross weight	1 1	R
Packaging	1 1	R
Marks and numbers	0 1	0
—Number of packages	0 1	D
Type, coded	1 1	R
TransportEquipment	0 1	D
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	1 1	R
Lucr	0 1	0
Identifier	0 1	0
LoadingLocation	0 1	0
☐ ☐ Name	0 1	0
NotifyParty	0 1	0
Name	0 1	D
—Code	0 1	D
Address	0 1	D
—City name	1 1	R
Country, coded	1 1	R
Street and number/P.O. Box	1 1	R
Postcode identification	1 1	R
Code Code	1 1	R R
CustomsOfficeOfDestination	1 1	R
Code	1 1	R
TransportMeans	1 unbounded	R
	1 1	R
Type, coded	1 1	R
Nationality	1 1	R
—Conveyance reference number	1 1	Ö
CountryOfRouting	1 unbounded	R
—Sequence number	1 1	R
Country, coded	1 1	R
TransportEquipment	0 unbounded	D
—Sequence number	1 1	R
Size and type identification	1 1	R
Identification	1 1	R
CertificateOfApproval	0 1	D
Number	1 1	R
—Issuing date	1 1	R
—Type, coded	1 1	R
BinaryFile	0 1	0
dentification	1 1	R
—Title	1 1	R
Author name	0 1	0
—-Version	0 1	0
File name	0 1	0
	0 1	0

eTIR class and data element name	Min / Max occurrence	Status
│	0 1	0
Encoding	0 1	0
—Character set	0 1	0
Include binary object	0 1	0
Access	0 1	0
——Description	0 1	0
Size	0 1	0
Туре	0 1	0
Hash code	0 1	0
Hash code algorithm id	0 1	0
_ Seal	0 unbounded	0
—Sequence number	1 1	R
—Seal number	1 1	R
Seal type code	0 1	0
Guarantee	1 1	R
Reference	1 1	R
Holder	1 1	R
Name	0 1	Ο
—Code	1 1	R
Address	0 1	0
—City name	1 1	R
Country, coded	1 1	R
—Street and number/P.O. Box	1 1	R
Postcode identification	1 1	R

D. Structure of message "E12 – Advance Amendment Data Results"

eTIR class and data element name	Min / Max occurrence	Status
Message		
Message function, coded	1 1	R
Functional Reference	1 1	R
—Message identifier	1 1	R
Type, coded	1 1	R
	1 1	R
Acceptance date	0 1	D
Message Identifier	1 1	R
Rejection date	0 1	D
Error	0 unbounded	D
Error, coded	1 1	R
└ _ P ointer	1 unbounded	R
Sequence number	0 1	R
Location Location	1 1	R

E. Structure of message "E13 – Cancel Advance Data"

eTIR class and data element name	Min / Max occurrence	Status
Message		
—Message function, coded	1 1	R
—Functional reference	1 1	R
Message identifier	1 1	R
Type, coded	1 1	R

F. Structure of message "E14 – Cancel Advance Data Results"

eTIR class and data element name	Min / Max occurrence	Status
Message		
Message function, coded	1 1	R
—Functional Reference	1 1	R
Message identifier	1 1	R
Type, coded	1 1	R
	1 1	R
Acceptance date	0 1	D
Message Identifier	1 1	R
eTIR class and data element name	Min / Max occurrence	Status
Rejection date	0 1	D
Error	0 unbounded	D
—Error, coded	1 1	R

L	- P ointer	1	unbounded	R
	—Sequence number	0	1	R
	Location	1	1	R

Annex II

Structure of messages I19 and I20

A. Structure of message "I19 – Check Customs Offices"

eTIR class and data element name	Min / Max occurrence	Status
Message		
—Message function, coded	1 1	R
Message identifier	1 1	R
Type, coded	1 1	R
CustomsOffice	1 unbounded	R
Office ID	1 1	R

B. Structure of message "I20 – Customs Offices Validation"

eTIR class and data element name	Min / Max occurrence	Status
Message		
Message function, coded	1 1	R
Functional reference	1 1	R
Message identifier	1 1	R
Type, coded	1 1	R
CustomsOffice	0 unbounded	0
Office ID	1 1	R
Country ISO Code 2	1 1	R
─Validity End Date	0 1	0
Role	0 unbounded	0
Role, coded	1 1	R
Error	0 unbounded	D
Error, coded	1 1	R
Pointer	1 unbounded	R
—Sequence number	0 1	0
Location	1 1	R

Annex III

Revised error code list (CL99)

CL99	Code	Name	Description
	100	Invalid Message	The message is invalid and no additional details are available for this error
	101	Missing Parameter	A required parameter is missing in the message
	102	Invalid Domain Value Parameter	A parameter value is out of a defined list of acceptable values
	103	Malformed Date	A parameter holding a date cannot be properly converted
	151	Condition C001 failure	The condition C001 is not fulfilled
	152	Condition C002 failure	The condition C002 is not fulfilled
	153	Condition C003 failure	The condition C003 is not satisfied
	154	Condition C004 failure	The condition C004 is not fulfilled
	155	Condition C005 failure	The condition C005 is not fulfilled
	158	Condition C008 failure	The condition C008 is not fulfilled
	200	Invalid State	The state of an internal object is invalid and no additional details are available for this error
	201	Guarantee not acceptable	The guarantee is not in a state that allow to accept it
	203	Guarantee not cancellable	The guarantee is not in a state that allow to cancel it
	204	Guarantee already registered	The guarantee has already been registered
	205	Guarantee already cancelled	The guarantee is already cancelled or the request to cancel it has already been sent
	210	Operation already started	The operation is already started
	211	Operation already terminated	The operation has already been completed
	212	Operation already discharged	The operation is already discharged
	213	Operation not yet started	The operation is not yet started
	220	Declaration not yet received	The operation cannot be started because the declaration was not received
	299	Duplicate message	The same message was already received from the same source
	300	Invalid Operation	An invalid operation was performed and no additional details are available for this error
	301	Guarantee not found	The guarantee was not found in the database
	302	Guarantee chain not found	The guarantee chain was not found in the database
	303	Guarantee type not found	The guarantee type was not found in the database
	304	Customs Office not found	The customs office was not found in the database
	305	Country not found	The country was not found in the database
	306	Control type not found	The control type was not found in the database
	320	Holder/Guarantee mismatch	The holder id parameter and the guarantee reference parameter do not match what is recorded in the database
	321	Holder not authorized	The holder is not authorized in the International TIR Data Bank (ITDB)
	322	Holder not found	The holder is not found in the International TIR Data Bank (ITDB)
	330	Guarantee chain not authorized	The guarantee chain is not authorized in the database
	331	Guarantee chain/Guarantee mismatch	The guarantee chain code parameter and the guarantee reference parameter do not match what is recorded in the database
	332	Guarantee type/Guarantee mismatch	The guarantee type parameter and the guarantee reference parameter do not match what is recorded in the database

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CL99	Code	Name	Description	
	340	Multiple operations found	This code is used when operations are duplicated in the database	
	400	eTIR Problem	An internal error in the eTIR international system occurred and no additional details are available for this error	
