



Economic Commission for Europe**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 (e) of the provisional agenda

**eTIR conceptual, functional and technical documentation version 4.3:
Amendments****Amendments to the eTIR conceptual, functional and
technical documentation - v.4.2 and draft 4.3****Note by the secretariat****I. Introduction**

1. At its 140th session (June 2015), the Working Party on Customs Questions affecting Transport (WP.30) considered and supported document ECE/TRANS/WP.30/2011/4/Rev.1, containing version 4.1 of the eTIR Reference Model, as a basis for future work of the Group of Experts on Legal Aspects of Computerization of the TIR Procedure (GE.2) as well as for pilot projects. At the same time, WP.30 recalled that the eTIR Reference Model is not “carved in stone”. WP.30 agreed that the eTIR Reference Model might require further improvements, in particular as a follow-up to pilot projects and the outcome of the work of GE.2.

2. Further to the elaboration of the eTIR specifications v.4.2, the Informal Ad hoc Expert Group on Conceptual and Technical Aspects of Computerization of the TIR Procedure (GE.1), at its twenty-seventh, twenty-eighth, twenty-ninth, thirtieth and thirty-first sessions, decided on a number of amendments as contained in document ECE/TRANS/WP.30/2020/7. Those amendments, as well as those resulting from the decisions taken by the Group of Experts on Conceptual and Technical Aspects of Computerization of the TIR Procedure (hereafter called “the Group of Experts”) at its first session, have already been included in the draft of the eTIR specifications v.4.3. However, further questions/issues raised by Contracting Parties that have started projects to connect their systems to the eTIR international system and the ongoing work to improve the eTIR international system, the secretariat prepared this document, containing a list of potential issues for consideration by the Group of Experts and possible amendments to the eTIR specifications.



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 prepared draft activity diagrams in documents ECE/TRANS/WP.30/GE.1/2021/29.

B. Minor corrections

6. 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
Minor corrections

<i>ID</i>	<i>Issue</i>	<i>Correction</i>
1	The “Seal type code” attribute in Guarantee/TIROperation/Termination/TransportEquipment/Seal is missing in message I15 whereas it is available as an optional attribute in other related TIR operation messages (E6, I6 and I11).	The “Seal type code” will be added as an optional attribute in Guarantee/TIROperation/Termination/Consignmen t/TransportEquipment/Seal in message I15.
2	The “Customs office, coded” attribute available in message E6 in LPCO/Guarantee/TIROperation/Start/NationalItinerary/NationalItineraryCustomsOffice and in message I6 in Guarantee/TIROperation/Start/CustomsOffice have a wrong cardinality of 0..1 (optional).	As for the other instances of this attribute in all other messages, its cardinality will be set to 1..1 (required).
3	The “Amendment” class in message I15 in AdvanceTIRData has a wrong cardinality of 1..unbounded.	As for the other instances of this class in messages E6, I6 and I7, its cardinality will be set to 0..unbounded.
4	There is a typographic mistake in message I6 where an attribute is named “Validity”.	This attribute will be renamed “Validity” to correct the mistake.
5	Following the adoption of Annex 11 of the TIR Convention and the adoption of the workplan of the Group of Experts which stipulates that it should prepare and agree on a new version of the eTIR specifications that are fully aligned with Annex 11, several classes in the eTIR messages have to be renamed to be aligned with the new terms defined in Article 2 of Annex 11.	In message E6, I6, I7, I8, I15 and I16, the “AdvancedCargoInformation” class is renamed to “DeclarationData”. In message E10, the “AdvanceTIRData” class keeps this name. In message E12, the “AdvanceTIRData” class is renamed “AdvanceAmendmentData”. In message E14, the “AdvanceTIRData” class is renamed “AdvanceData”.

C. Issues related to cardinalities

7. During the development and improvement of the eTIR international system, the secretariat has highlighted a number of possible discrepancies regarding the cardinality of the relationships between classes and attributes as well as those in the definitions of messages.

8. The Group of Experts might wish to guide the secretariat on how to resolve the following discrepancies:

1. Consignment Item – Delivery Destination

9. Except in message I6 and I15, all messages show that the “Delivery Destination” class is optional (cardinality 0..1). In messages I6 and I15, the cardinality 1..1 appears to be an error that needs to be corrected.

2. Holder – Code

10. Except in message E3, all messages show that the “Code” attribute of the “Holder” class is required (cardinality 1..1). In message E3, the cardinality 0..1 appears to be an error that needs to be corrected.

3. Seal – Seal number

11. Except in message E9, all messages show that the “Seal number” attribute of the “Seal” class is required (cardinality 1..1). In message E9, the cardinality 0..1 appears to be an error that needs to be corrected.

4. Guarantee – Guarantee status

12. Except in message I6, all messages show that the “Guarantee status” attribute of the “Guarantee” class is required (cardinality 1..1). In message I6, the cardinality 0..1 appears to be an error that needs to be corrected.

5. Consignment Item – Packaging

13. The current cardinality of this relation is 1..1. However, eTIR stakeholders may wish to list more than one package in a consignment item, especially since the attribute “Marks and number” is mentioned in the “Packaging” class. As a result, the cardinality of this relation should be changed to 1..unbounded and a new required “Sequence number” attribute should be added in the “Packaging” class as it becomes a list.

D. Validity of the guarantee

14. While working with the European Commission on the Proof of Concept to interconnect the New Computerized Transit System (NCTS) and the eTIR international system, a discrepancy has been identified with the I7 message (Record Declaration Data) where the sender (the customs authorities) would have to send the “Validity” (date) attribute qualifying the Guarantee class.

15. Since this information is already recorded in the eTIR international system by the International Road Transport Union (IRU) using the E1 message (Register Guarantee), and customs receive the validity date upon accepting the guarantee, it does not seem to make sense to send back the validity date while recording the declaration data. Therefore, the secretariat proposes to remove the “Validity” attribute from message I7 and only keep the “Reference” attribute which allows to uniquely identify the guarantee to be used for the TIR transport.

16. The Group of Experts may wish to consider this proposal and instruct the secretariat on whether the “Validity” attribute should be removed from the Guarantee class in the I7 message.

E. Status of the Postcode identification

17. While working with the European Commission on the Proof of Concept to interconnect NCTS and the eTIR international system, it has been proposed to change the status of the “Postcode identification” from Required to Optional, in all instances of the “Address” class. The rationale was that not all countries use postcodes in addresses.

18. The Group of Experts may wish to consider this proposal and instruct the secretariat on whether the status of the “Postcode identification” attribute should be updated to optional in all messages.

F. Type of the Binary File

19. During the development and improvement of the eTIR international system, the secretariat has identified an attribute which is not useful nor completely described in the eTIR functional specifications: the “Type” attribute of the “Binary File” class.

20. This attribute does not have a code list associated with it and there are already three other attributes which characterize various aspects of the file: “MIME”, “Encoding” and “Character set”. The secretariat proposes to remove the “Type” attribute from the “Binary File” class in all messages.

21. The Group of Experts may wish to consider this proposal and instruct the secretariat on whether the “Type” attribute should be removed from the “Binary File” class.

G. Type of the Classification

22. During the development and improvement of the eTIR international system, the secretariat has identified a problem with v4.2 of the eTIR functional specifications: the “Type” attribute of the “Classification” class had disappeared. The secretariat proposes to re-instate the “Type” attribute as it was defined in v4.1 of the eTIR functional specifications. Moreover, in order to make it clear that this attribute depends on a code list (CL03), the secretariat proposes to rename it “Type, coded”

23. The Group of Experts may wish to consider this proposal and instruct the secretariat on how to proceed with the improvement of the “Classification” class.

H. Renaming codes and identifiers

24. During the development and improvement of the eTIR international system, the secretariat has identified several inconsistencies in the naming convention of attributes that are representing codes (therefore linked to a code list) and identifiers (that are linked to an external master reference database).

25. In order to improve the consistency of the eTIR specifications, the secretariat proposes to add the suffix “, coded” to all names of attributes representing codes and to name “Identifier” all attributes that represent identifiers. The proposals for renaming are listed in the following table. The attributes that are already following this naming convention are not listed in the table.

Table 2

Attributes to rename

<i>ID</i>	<i>Parent class</i>	<i>Old name</i>	<i>New name</i>
1	TransportEquipment	Size and type identification	Size and type, coded
2	Classification	Type	Type, coded

<i>ID</i>	<i>Parent class</i>	<i>Old name</i>	<i>New name</i>
3	TransportMeans	Nationality	Nationality, coded
4	Seal	Seal type code	Seal type, coded
5	CustomsOfficeOfDestination	Code	Identifier
6	NationalItineraryCustomsOffice	Customs office, coded	Identifier
7	CustomsOffice	Customs office, coded	Identifier
8	CustomsOfficeOfDeparture	Code	Identifier
9	CustomsOfficeOfDestination	Code	Identifier
10	Holder	Code	Identifier
11	Subcontractor	Code	Identifier
12	Amendment	Amendment code	Type, coded
13	N/A	Language. Identifier	Language, coded
14	N/A	Measure Unit. Code	Unit, coded
15	Guarantee	Guarantee status	Status, coded
16	Authorization	Current status	Current status, coded
17	Control result	Code	Result, coded

26. The Group of Experts may wish to consider this proposal and instruct the secretariat on how these attributes should be renamed.

I. Rename date attributes

27. During its first session (January 2021), the Group of Experts agreed with the proposal to change the dates and date/time formats. For the sake of consistency, the secretariat proposes an additional improvement by renaming the date attributes as follows:

- All attributes that follow format 208 (CCYYMMDDHHMMSSZHHMM), therefore featuring date and time information, should have their name finishing with “date time”.
- All attributes that follow format 102 (CCYYMMDD), therefore featuring a date only information, should have their name finishing with “date”.
- All attributes that may either follow format 102 (CCYYMMDD) or format 208 (CCYYMMDDHHMMSSZHHMM) should have their name finishing with “date time”.

28. The Group of Experts may wish to consider this proposal and instruct the secretariat on how these attributes should be renamed.

J. Updated list of error codes

29. 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.

30. During the development and improvement of the eTIR international system, the secretariat has identified a new family of error codes while clarifying the technical details related to the various use cases detailed in the eTIR concept and functional specifications that

involve messages E9 to E14 sent by the holder to customs. In these use cases, customs authorities can send back response messages featuring specific error codes signifying non acceptance of advance TIR data or advance amendment data.

31. The secretariat has produced a revised version of the code list for errors (CL99) which is available in Annex I. The Group of Experts may wish to consider and take note of this revised code list.

K. Add a Sequence number in the Transport Means class

32. The “Transport Means” class, which is present in messages E6, E9, I6, I7 and I15, is used to list the means of transport used in the course of the TIR transport. However, it does not have a “Sequence number” attribute which would allow to order the means of transport from departure to destination. While the use of complex rules attached to the “Countries Of Routing” class in the “Transport Means” class could allow to identify the order in which the transport means are used, the addition of a “Sequence number” attribute would greatly simplify this task. A new rule should also be added to ensure that the means of transport are given a sequential number ordered from departure to destination (see the amended rule R002 in section T).

33. The Group of Experts may wish to consider this proposal and instruct the secretariat on whether the “Sequence number” attribute should be added in the “Transport Means” class in all relevant messages.

L. Add a Sequence number in the Subcontractor class

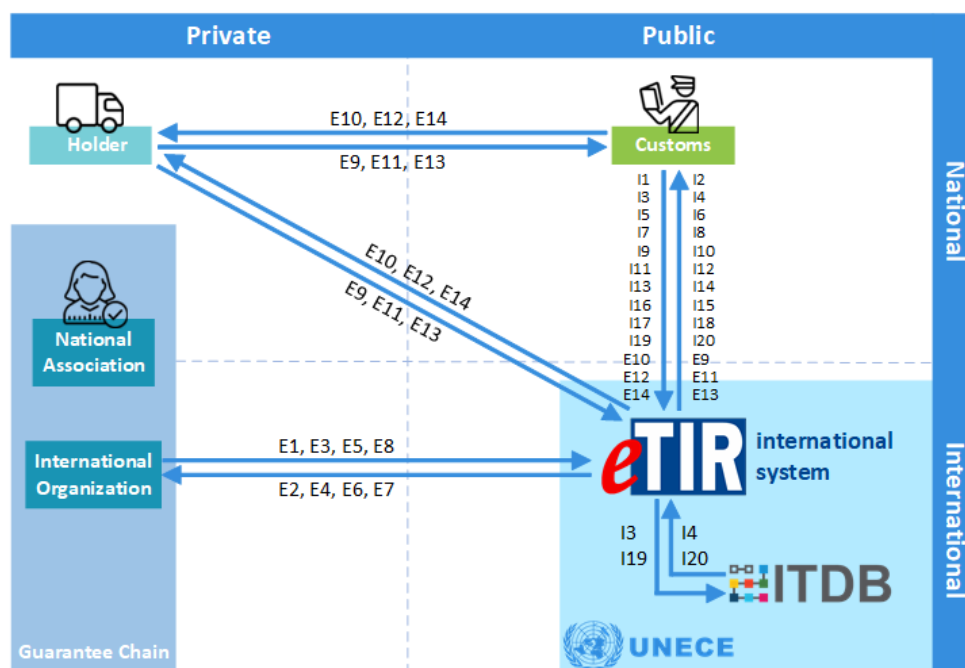
34. At its first session (January 2021), the Group of Experts agreed to change the cardinality of the “Subcontractor” class to 0..unbounded and the cardinality of its “Address” class to 0..1. In addition, as for other lists, the secretariat proposes to add a new required “Sequence number” attribute in the subcontractor class to be able to order them in the list. Indeed, the sequence number is required, inter alia, to identify the correct subcontractor in case there would be an amendment to one of them.

35. The Group of Experts may wish to consider this proposal and instruct the secretariat on whether the “Sequence number” attribute should be added in the “Subcontractor” class in all relevant messages.

M. Extending the usage of messages I3/I4 and I19/I20 to customs authorities

36. Currently in the eTIR specifications, the eTIR international system uses the message pair I3/I4 to get information on the holder and the message pair I19/I20 to get information on customs offices from ITDB. While customs authorities could access this information directly from ITDB (using communication protocols established by TIRExB), they may also wish to be able to get this information by querying the eTIR international system (using the communication protocols established in the eTIR specifications), thus acting as a bridge between them and ITDB. The following figure presents this new architecture in which messages I3/I4 and I19/I20 have been added between customs authorities and the eTIR international system.

Figure I
Proposed new high-level architecture of the eTIR system



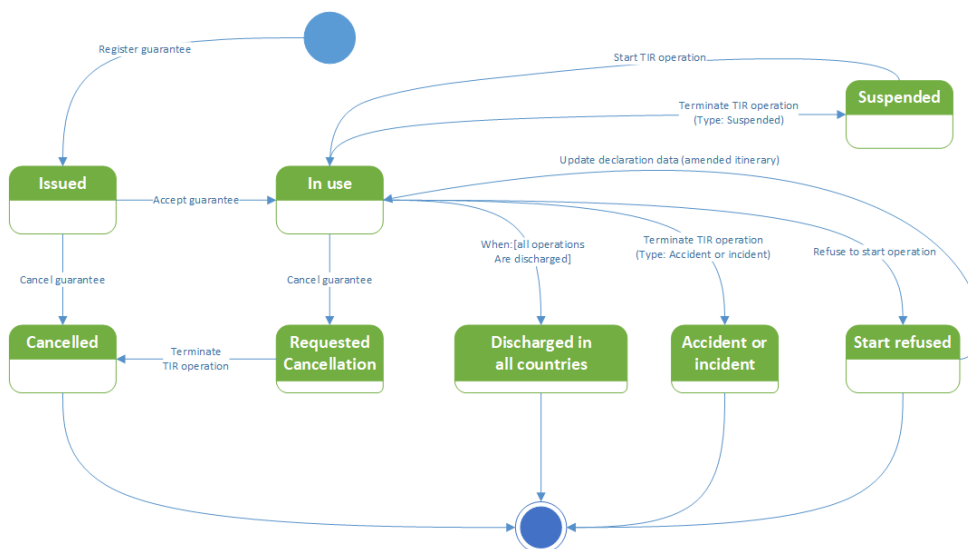
37. The Group of Experts may wish to consider this proposal and instruct the secretariat to include in the eTIR specifications, this optional possibility for customs authorities to be able to use messages I3/I4 and I19/I20.

N. Suspension of an eTIR intermodal transport

38. At its first session (January 2021), the Group of Experts agreed that the suspension of the eTIR procedure for legs of an intermodal transport would start once a terminate TIR operation message (I11) would be sent with a “suspension” termination code. The eTIR procedure would then be restored at the end of the leg during which the eTIR procedure would have been suspended, when customs would start TIR operation message (I9), and the transport could then continue normally.

39. The secretariat therefore proposes to the Group of Experts to create a new guarantee status called “Suspended” to adequately record this suspension. The following figure shows an updated state diagram of the guarantee including this new state as well as the relevant transitions.

Figure II
Guarantee state diagram



40. The Group of Experts may wish to consider this proposal and instruct the secretariat on whether this new status should be included in the case of suspension of the eTIR procedure.

O. New descriptions for the classes and attributes

41. The secretariat is currently working on writing new descriptions for the classes and attributes of all messages to ease their understanding by the eTIR stakeholders and, therefore, facilitate the interconnection projects. As these descriptions explain the functional aspects and the objectives of the classes and attributes, they should be presented in the detailed view of messages (chapter 2.5.3) contained in the eTIR functional specifications document. However, in order to ensure their translation and in view of the limitations on the documentation that can be submitted for every session of the Group of Experts, these eTIR descriptions will be submitted along with technical details on how to use these classes and attributes, i.e. as part of the documents composing the eTIR technical specifications, for the third session of the Group of Experts. The eTIR description will however be included in the consolidated documents of the eTIR functional specifications, which will be prepared by the secretariat for the same session.

42. The Group of Experts may wish to consider this proposal and instruct the secretariat to include the new descriptions of the classes and attributes in the eTIR functional specifications.

P. Revised modelling of the “heavy or bulky” goods

43. During the development and improvement of the eTIR international system, the secretariat has identified a better way to model the need to indicate if TIR transports contain heavy or bulky goods, as defined in Article 29 of the TIR Convention.

44. Currently, a “Heavy and bulky goods indicator” attribute is available in the “Additional Information” class at the declaration level in messages E6, E9, E11, I6, I7 and I15. This attribute is linked to code list 14 which has only two codes: “Yes” and “No”. Furthermore, it is located at the declaration level which means that either the whole declaration is flagged as containing heavy and bulky goods or not.

45. During the fifty-eighth session of the data model project team (DMPT) of the World Customs Organization (WCO) in September 2020, the secretariat presented a data maintenance request (DMR) to revise the way this information was modelled. Thanks to the feedback from the customs experts attending the DMPT, the DMR was finally approved

during the fifty-ninth session of the DMPT (January 2021) with the final proposal to add an indicator attribute (which can take values 1 or 0 for true or false) at the consignment level of the WCO data model (DM).

46. Therefore, the secretariat proposes to replace the “Heavy and bulky goods indicator” attribute in the “Additional Information” at the declaration level by this new “Heavy or bulky goods indicator” attribute in the “Consignment” class in all relevant messages. As a result, the code list 14 is no longer used and should be removed. Finally, conditions C003 and C005 should be modified to indicate this change.

47. The Group of Experts may wish to consider this proposal and instruct the secretariat to make all the required changes.

Q. Clarifications related to messages E9/E10, E11/E12 and E13/E14

48. During the development and improvement of the eTIR international system, the secretariat has clarified the technical details related to the various use cases described in the eTIR concept and functional specifications which involve messages E9 to E14, sent by the holder to customs. In the eTIR technical specifications, the secretariat gives a set of examples (including associated messages sent and received) of the different scenarios related to advance TIR data, advance amendment data and cancel advance data.

49. Having further studied which attributes would be needed in these scenarios, the secretariat proposes the following amendments to these six messages:

- The E11 message allows the holder to send advance amendment data to customs authorities to amend the declaration data. It uses an amendment mechanism which allows sending only the portion of the declaration that would be added, changed or deleted. As a result, all classes in this message should become optional, except the “Guarantee” and the “Holder” classes which are required to identify the declaration through the reference of the guarantee and the identifier of the holder as an additional layer of verification. However, customs authorities will have to perform the necessary checks to ensure that the cardinalities of the declaration data (as described in message I7), as well as the conditions and rules applicable to it, are respected in the course of the process of acceptance of the amended declaration, when the holder, or his/her representative, presents himself/herself, with the goods and the vehicle at the customs office.
- The “Version” attribute of the messages E11, I7 and I15 at the declaration level should be removed. The “Issuing date” of these messages is sufficient to provide reliable information on the chronology of the various messages sent by the holder. Furthermore, given the fact that advance amendment data can be sent to different customs authorities, the information contained in this “Version” attribute could be misleading.
- The attribute “Message identifier” in the class “Advance TIR Data” in message E10 and in the class “Advance Amendment Data” in message E12 should be renamed as “National reference” as these attributes will contain the national reference of the E9 or E11 requests sent by the holder, as stored in the national customs system so that he or she or his/her representative, can present it along with the goods and the vehicle at the customs office.
- The attributes “Message function, coded”, “Original message identifier”, “Message identifier”, “Type, coded” in the “Declaration Data” class in messages I7 and I15 should be removed. Indeed, these attributes had been initially copied from the originating E9 request because of the hash code mechanism which was later on abandoned by the GE.1 at its twenty-eighth session (June 2018).
- The attribute “Message identifier” in the “LPCO/Guarantee/DeclarationData” class in message E6 and the attribute “Reference” in the class “Guarantee/DeclarationData” in message I6 should be removed to be consistent with the previous amendment proposal.

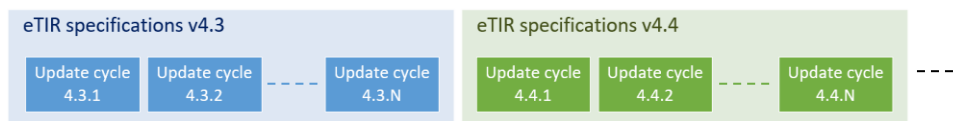
50. The Group of Experts may wish to consider these proposals and instruct the secretariat on the possible amendments to these messages.

R. Versions of external code lists

51. There are currently 10 external code lists (i.e. CL01, CL02, CL03, CL04, CL05, CL06, CL07, CL16, CL20, and CL21) and 13 internal ones (CL08, CL09, CL12, CL17, CL22, CL23, CL24, CL25, CL26, CL27, CL28, CL29 and CL99). Those managed by UN/CEFACT are revised twice a year. This raises the question on how their versions should be managed for a given version of the eTIR specifications. The secretariat proposes a flexible approach which would allow for regular updates of the code lists while using the same principal version of the eTIR specifications. A new “update” version of the eTIR specifications would need to be created (4.3.1, 4.3.2, 4.3.3, etc.) and would be indicated in the metadata information in all messages exchanged between the stakeholders for them to know which versions of the code lists is used.

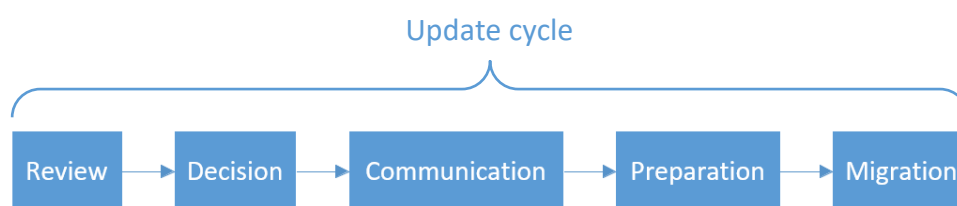
52. The secretariat proposes that the updates of the code lists are managed during so-called “update cycles” within the versions of the eTIR specifications. Depending on the length of validity of a version of the eTIR specifications, there can be zero or more of these update cycles. The following figure show the relationship between both notions.

Figure III
Update cycles in the versions of the eTIR specifications



53. The update cycles would consist of a sequence of processes and the length of each of these processes, as well as the overall length of the cycle, would need to be defined by the Technical Implementation Body (TIB). The following figure shows the processes involved in an update cycle.

Figure IV
Processes in an update cycle

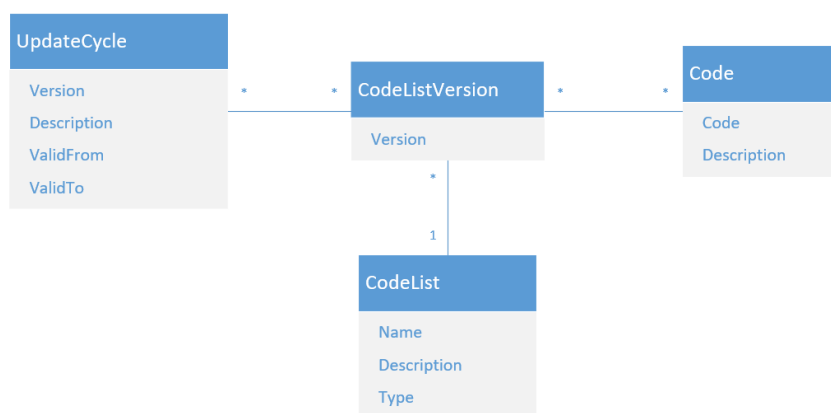


54. Each process would consist of the following activities:
1. **Review:** the secretariat reviews the latest versions available of the external code lists and prepares a proposal to update one or more of these code lists. The secretariat can also use this opportunity to update one or more of the internal code lists.
 2. **Decision:** the secretariat presents the proposal to TIB which decides on the list of code lists to update and assign a new version of the eTIR specifications to it by incrementing its “update” version.
 3. **Communication:** the secretariat informs all eTIR stakeholders about the new versions of the code lists that will start to be valid at the beginning of the migration time window.
 4. **Preparation:** the secretariat upgrades the eTIR international system to include the new version of the code.

5. **Migration:** At the beginning of this period, eTIR stakeholders can start exchanging messages using the new version of the eTIR specifications. Messages can still be exchanged using the current version of the eTIR specifications until the end of the migration period. This period gives the time needed for the eTIR stakeholders to include the new versions of the code lists in their information systems.

55. The update cycles, code lists and their codes should be managed in the eTIR database. An update cycle is linked to specific versions of all code lists. Code lists can be of two types: internal (managed by the secretariat) or external. Most of the time, only a few codes differ from one version of a code list to another. Therefore, the design of the structure should allow to link one code to several versions of the same code list to prevent unnecessary duplication of codes. In the eTIR technical specifications, the secretariat gives a set of examples to further describe how this is implemented with this approach. The following figure shows the class diagram of the structure.

Figure V
Code lists class diagram



56. With such an overall approach using update cycles, users of the eTIR system would get an update of the code lists used by the business community on a regularly and predictable basis. In addition, the design proposed allows for proper management of code lists over time, including being able to query information related to TIR transports that happened in the past with previous versions of code lists.

57. The Group of Experts may wish to consider this proposal and guide the secretariat on whether it should be included into the eTIR specifications.

S. Review of the rules and conditions

58. 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 first proposal during the first informal preparatory meeting (November 2020), welcomed the suggestion 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.

59. Consequently, the secretariat has reviewed its proposal and presents the following new definitions to differentiate rules and conditions:

- A **rule** is an instruction that specifies how attributes must be filled in. It places a constraint on the content. It can sometimes be validated by an information system;
- A **condition** is an instruction that specifies whether a dependent class or attribute becomes required, optional or shall not be used, depending on other information

within the same message. It constrains when the data shall be filled in and not its content. It can always be validated by an information system.

60. Would the Group of Experts agree with these definitions, the secretariat proposes the following changes to the chapter “Conditions and Rules” of the eTIR functional specifications document:

- The **rule R001** (which is applied on the “Country Of Routing” class) should be rephrased to “Each country of transit routing shall have a unique sequence number. They ~~should~~ shall be numbered from 1 to the number of countries through which the means of transport travels involved in the transport and represent the order in which countries are travelled, from departure to destination. ~~In case of multiple means of transport, this will also allow to determine in which order the means of transport are used.~~”;
- The current **rule R002** should become the **new condition C009** which should only be applied to the “Declaration Data” class in message I16 (which status becomes Dependent and the cardinality becomes 0..1). New condition C009 is expressed as follows: IF (EMPTY(ERROR)) THEN NOT EMPTY(DECLARATIONDATA);
- A new **rule R002** should be applied to the “Transport Means” class to ensure the order of the means of transport used in the course of a TIR transport and read as follows: “Each transport means shall have a unique sequence number. They shall be numbered from 1 to the number of transport means involved in the transport and represent the order in which transport means are used, from departure to destination.”;
- The **rule R007** should be rephrased to: “Even in case of multiple consignments in the declaration, only the first consignment is used, and all transport equipment used must be listed only in that the first consignment”;
- The **rule R006** should be rephrased to “Mandatory Required in case ~~the~~ seals have been changed, added or removed.”. It should also only be applied to the “Consignment” class in LPCO/Guarantee/TIROperation/Start and LPCO/Guarantee/TIROperation/Termination in message E6, in Guarantee/TIROperation/Start in messages I6, I9 and I15, in Guarantee/TIROperation/Termination in messages I6 and I11 and I15;
- The **rule R008** should be rephrased to: “The first occurrence of GOODS.CLASSIFICATION must be of type "HS"”;
- The current **condition C009** is currently not used and should become the **new rule R009** which should be applied to the “Consignment” class in Guarantee/TIROperation/Start in message I9 and in Guarantee/TIROperation/Termination in message I11. New rule R009 should read as follows: “The first TIR operation should contain the information about the transport equipment previously transmitted through the declaration, as well as seals used in the transport, when goods transported are not of heavy or bulky nature.”;
- In order to align pseudo code practices, the **condition C002** should be modified to update the ELSE part from “ELSE (PACKAGING.Number of packages) > 0” to “ELSE NOT EMPTY (PACKAGING.Number of packages)”;
- After having discussed the scenarios related to the “Refusal to Start TIR Operation”, the secretariat is of the view that a rule should be added to clarify that this message cannot be sent for the first TIR operation (since in this case, the TIR transport using the eTIR procedure should not begin in the first place). A **new rule R010** should be created and applied to the “Sequence number” attribute in the Guarantee/TIROperation class in the I17 message and read as follows: “The Sequence number cannot be 1.”
- Following the removal of the cancellation scenario on the message I7 (ECE/TRANS/WP.30/2020/5, para. 34) and to the split of the E9 message (ECE/TRANS/WP.30/2020/5, para. 28), the **condition C008** should be rephrased as follows: “IF (MESSAGE.Message function, coded) = '4' THEN NOT EMPTY (AMENDMENT, GUARANTEE, HOLDER) ELSE IF (MESSAGE.Message

function, coded) = '9' THEN EMPTY (AMENDMENT) AND NOT EMPTY (CONSIGMENT, GUARANTEE, HOLDER)". Furthermore, this condition C008 should now only be applied on the relevant attributes and classes of the I7 message which status are affected by this condition.

- Following the introduction of advance amendment data in Annex 11 and the split of the E9 message, a **new condition C010** should be created and applied to the "Acceptance date" and "Rejection date" attributes of the E12 message. The condition should be the same as C007, except that the name of the class should be "Advance Amendment Data".

61. Would the Group of Experts agree with these changes, the new list of conditions and rules would become the one listed in Annex II. The Group of Experts may wish to consider these proposals and instruct the secretariat on the possible amendments to the rules and conditions.

III. Next steps

62. 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

Revised error code list (CL99)

In order to better spot the changes applied since the first session of the Group of Experts when they took note of this updated list, the following conventions apply:

- New codes are displayed with a grey background (9 occurrences);
- Changes to existing codes (other than editorial changes) are highlighted as follows: additions are underlined and deletions are in ~~strikethrough~~ (2 occurrences).
- Deletions of existing codes are in ~~strikethrough~~ (1 occurrence).

Table 3
Code list 99

<i>Code</i>	<i>Name</i>	<i>Description</i>
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
104	Not an integer	A numeric field is containing data that is not numeric
105	Parameter length exceeded	A String field contains too many characters
106	Invalid pattern	A String field does not match the pattern defined in the XML Schema Definition of the message
107	Invalid element	The specified element is not following the order defined in the schema
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
188	Rule R008 failure	The rule R008 is not satisfied
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 allows to accept it
203	Guarantee not cancellable	The guarantee is not in a state that allows 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

<i>Code</i>	<i>Name</i>	<i>Description</i>
214	Operation ID already registered	The "refusal to start" is an operation on its own and must have a unique operation ID
215	Operation sequence already registered	The "refusal to start" is an operation on its own and must have a unique operation sequence
216	Refusal to start not authorized	The "refusal to start" cannot be performed because of the current guarantee status or because it is the first operation for this transport
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	Country not connected	The country is not yet connected to the eTIR international system and cannot be part of the itinerary of a TIR transport using the eTIR procedure
306	Control type not found	The control type was not found in the database
307		
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
333	Declaration reference not found	The FunctionalReferenceID value do not match to what is already recorded in the database
334	Declaration already cancelled	The declaration could not be modified because it was already cancelled
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
500	Customs declaration processing error	The message was not accepted by customs and no additional details are available for this error
501	Advance TIR data not accepted	Customs did not accept the advance TIR data
502	Advance amendment data not accepted	Customs did not accept the advance amendment data

Annex II

New lists of conditions and rules

Table 4

List of conditions

<i>Condition ID</i>	<i>Description</i>	<i>Pseudo code</i>
C001	For any party, either its code must be filled in or its name and address.	IF EXIST (PARTY.code) THEN NOT EMPTY (PARTY.code) ELSE NOT EMPTY (PARTY.name, PARTY.ADDRESS)
C002 (Modified)	If the Type of Packaging is a bulk one ("VQ", "VG", "VL", "VY", "VR" or "VO"), then the number of packages should be empty otherwise, it should be filled in.	IF (PACKAGING.Type, coded) = "VQ", "VG", "VL", "VY", "VR" OR "VO" THEN EMPTY (PACKAGING.Number of packages) ELSE NOT EMPTY (PACKAGING.Number of packages)
C003	If the consignment is marked as not containing heavy of bulky goods, then the transport equipment should be filled in, otherwise it should be empty.	IF (CONSIGNMENT.Heavy and bulky goods indicator) = 0 THEN NOT EMPTY (TRANSPORTEQUIPMENT) ELSE EMPTY (TRANSPORTEQUIPMENT)
C004	If the classification of the goods is not filled in or if it is filled in without using the Harmonized System, then the description of the goods should be filled in.	IF EMPTY (GOODS.CLASSIFICATION) OR (GOODS.CLASSIFICATION.Type) <> 'HS' THEN NOT EMPTY (GOODS.Description)
C005	If the consignment is marked as not containing heavy of bulky goods, then the certificate of approval in the transport equipment should be filled in, otherwise it should be empty.	IF (CONSIGNMENT.Heavy and bulky goods indicator) = 0 THEN NOT EMPTY (TRANSPORTEQUIPMENT.CERTIFICATEOFAPPROVAL) ELSE EMPTY (TRANSPORTEQUIPMENT.CERTIFICATEOFAPPROVAL)
C006	If the function of the message does not indicate an error ('6' or '11' or '44' or '45'), then the error class should be empty. If the function of the message indicates an error ('10' or '27'), then the error class should be filled in.	IF (MESSAGE.Message function, coded) = '6' OR '11' OR '44' OR '45' THEN EMPTY (ERROR) ELSE IF (MESSAGE.Message function, coded) = '10' OR '27' THEN NOT EMPTY (ERROR)
C007	If the function of the message indicates an acceptance ('44'), then the date of acceptance of the advance TIR data should be filled in and its date of rejection should be empty. If the function of the message indicates an error ('27'), then the date of rejection advance TIR data should be filled in and its date of acceptance should be empty.	IF (MESSAGE.Message function, coded) = '44' THEN NOT EMPTY (ADVANCETIRDATA.Acceptance date) AND EMPTY (ADVANCETIRDATA.Rejection date) ELSE IF (MESSAGE.Message function, coded) = '27' THEN NOT EMPTY (ADVANCETIRDATA.Rejection date) AND EMPTY (ADVANCETIRDATA.Acceptance date)

<i>Condition ID</i>	<i>Description</i>	<i>Pseudo code</i>
C008	If the function of the message indicates a change ('4'), then the amendment, guarantee and holders classes should be filled in. If the function of the message indicates an original ('9'), then the amendment class should be empty and the consignment, guarantee and holders classes should be filled in.	IF (MESSAGE.Message function, coded) = '4' THEN NOT EMPTY (AMENDMENT, GUARANTEE, HOLDER) ELSE IF (MESSAGE.Message function, coded) = '9' THEN EMPTY (AMENDMENT) AND NOT EMPTY (CONSIGMENT, GUARANTEE, HOLDER)
C009 <i>(Modified)</i>	If there is no error, then the declaration data class should be filled in (which means that a notional reference should be provided).	IF (EMPTY(ERROR)) THEN NOT EMPTY (DECLARATIONDATA)
C010 <i>(Added)</i>	If the function of the message indicates an acceptance ('44'), then the date of acceptance of the advance amendment data should be filled in and its date of rejection should be empty. If the function of the message indicates an error ('27'), then the date of rejection advance amendment data should be filled in and its date of acceptance should be empty.	IF (MESSAGE.Message function, coded) = '44' THEN NOT EMPTY (ADVANCEAMENDMENTDATA.Acceptance date) AND EMPTY (ADVANCEAMENDMENTDATA.Rejection date) ELSE IF (MESSAGE.Message function, coded) = '27' THEN NOT EMPTY (ADVANCEAMENDMENTDATA.Rejection date) AND EMPTY (ADVANCEAMENDMENTDATA.Acceptance date)

Table 5
List of rules

<i>Rule ID</i>	<i>Description</i>	<i>Testable</i>
R001	Each country of routing shall have a unique sequence number. They shall be numbered from 1 to the number of countries through which the means of transport travels and represent the order in which countries are travelled, from departure to destination.	Yes
R002 (<i>Modified</i>)	Each transport means shall have a unique sequence number. They shall be numbered from 1 to the number of transport means involved in the transport and represent the order in which transport means are used, from departure to destination.	Yes
R003	Re-use a sequence number to indicate that a seal has been replaced.	No
R004	Use new sequence number only to mention additional seals.	No
R005	Indicate that a seal has been removed and not replaced with an "X" in the "seals number" field of the transport equipment sequence corresponding to the removed seal.	No
R006 (<i>Modified</i>)	Required in case the seals have been changed, added or removed.	No
R007 (<i>Modified</i>)	Even in case of multiple consignments in the declaration, only the first consignment is listed, and all transport equipment used must be listed only in that consignment.	No
R008 (<i>Modified</i>)	The first occurrence of GOODS.CLASSIFICATION must be of type "HS".	Yes
R009 (<i>Added</i>)	The first TIR operation should contain the information about the transport equipment previously transmitted through the declaration, as well as seals used in the transport, when goods transported are not of heavy or bulky nature.	No
R010 (<i>Added</i>)	The Sequence number cannot be 1.	Yes