United Nations ECE/TRANS/WP.30/AC.2/TIB/2022/17

Economic and Social Council

Distr.: General
4 November 2022

Original: English

Economic Commission for Europe

Administrative Committee for the TIR Convention, 1975

Technical Implementation Body

Third session
Geneva, 19–20 December 2022
Item 5 (b) (i) of the provisional agenda
eTIR conceptual, functional and technical specifications:
Version 4.4:
Concrete amendment proposals

Concrete amendment proposals*

Note by the secretariat

I. Introduction and mandate

1. At its first session, the Technical Implementation Body (TIB) considered document ECE/TRANS/WP.30/AC.2/TIB/2022/8, containing a list of issues which could not be included in version 4.3 of the eTIR specifications. It requested the secretariat to prepare concrete proposals to resolve those issues for one if its future sessions. At its second session, TIB considered document ECE/TRANS/WP.30/AC.2/TIB/2022/12, containing concrete amendment proposals related to the issues which TIB, at its first session, considered important for inclusion in version 4.4 of the eTIR specifications. This document contains amended and new detailed proposals, in line with the comments made and decisions taken at the second session of TIB.

II. Detailed proposals

A. Prescribed national itinerary

1. Additional data field

2. When starting a TIR operation, customs authorities can prescribe a national itinerary. In the TIR Carnet; this information is written by the customs officer in box 22 of vouchers 1 and 2 as well as in box 5 of the first counterfoil.

3. At its first session. TIB considered the need to allow customs administrations to prescribe a national itinerary, different from indicating a customs office, and mandated the secretariat to prepare a proposal, for one of its future sessions, which would provide flexibility to customs administrations, e.g., by introducing a free text field.

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

4. In the World Customs Organization (WCO) data model, under the class used in eTIR for the national itinerary (Itinerary), while not yet activated, a class AdditionalInformation, with its free text attribute "Statement", could allow, if added to the I9 message, to provide a national itinerary different from indicating a customs office. Considering that customs could either provide an itinerary as a customs office or use the new statement to include free text, the classes AdditionalInformation and NationalItineraryCustomsOffice would be conditional, with a condition ensuring that, one or both of those classes should be present in the message if the class NationalItinerary is present.

5. At its second session. TIB noted the interest to have the possibility for customs unions to indicate the itinerary at the level of countries, e.g., by providing the country codes of the countries that would need to be part of the itinerary. TIB further noted that in the TIR Carnet the prescribed national itinerary is called "route prescribed" and expressed a preference towards this terminology as it would also better apply to customs unions.

6. In the WCO data model, the "Itinerary" class contains an "Address" class which contains a "CountryCode" field. Should TIB agree, the class and attribute could be added as dependent to the I9 message. Considering all the changes above, the I9 message would look as follows (changes are underlined):

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
Guarantee	**1 .. 1**	**R**
Reference	1 .. 1	R
TIROperation	**1 .. 1**	**R**
Sequence number	1 .. 1	R
Registration number	1 .. 1	R
Start	**1 .. 1**	**R**
End date time	1 .. 1	R
Time limit date time	0 .. 1	O
AdditionalInformation	**0 .. 1**	**O**
Remarks	1 .. 1	R
Consignment	**0 .. 1**	**O**
TransportEquipment	**1 .. unbounded**	**R**
Identifier	1 .. 1	R
Seal	**1 .. unbounded**	**R**
Sequence number	1 .. 1	R
Seal number	1 .. 1	R
Seal type, coded	0 .. 1	O
Control	**1 .. 1**	**R**
Type, coded	1 .. 1	R
ControlResult	**1 .. 1**	**R**
Result, coded	1 .. 1	R
PrescribedRoute	**0 .. 1**	**O**
PrescribedRouteCustomsOffice	**0 .. 1**	**D**
Identifier	1 .. 1	R
Address	**0 .. 1**	**D**
CountryCode	1 .. 1	R
AdditionalInformation	**0 .. 1**	**D**
Statement	1 .. 1	R
CustomsOffice	**1 .. 1**	**R**
Identifier	1 .. 1	R

7. The following condition should also be added :

IF NOT EMPTY(NATIONALITINERARY)
THEN NOT EMPTY (NATIONALITINERARYCUSTOMSOFFICE)
OR NOT EMPTY (ADDITIONALINFORMATION)
OR NOT EMPTY (ADDRESS)

2. Notification regarding a forced change in the itinerary

8. At its first session, TIB agreed that when customs administrations use the national itinerary to prescribe a different customs office of exit in order not to have to force the holder to amend the declaration data to indicate a new customs office of entry in the next country,

the eTIR international system could make use of the information provided in the start TIR operation message (I9) to inform the following countries of the change of itinerary. TIB mandated the secretariat to present a detailed proposal, e.g., making use of the information about adjacent border customs offices in the International TIR Data Bank (ITDB).

9. The first prerequisite to allow such notification mechanism is to ensure that the information on adjacent border crossing points is adequately registered in ITDB for all countries having enabled the eTIR procedure on their territory.

10. In practice, on the basis of the NationalItineraryCustomsOffice sent by a country by means of an I9 message, the eTIR international system, using data contained in ITDB, would first check if the customs office is on the border with the next country of the itinerary. If so, it would amend, in the declaration data, the customs office of exit of the current country and the customs office of entry of the next country, as contained in ITDB, and inform the following countries along the route by means of an I15 message that would contain the revised declaration data (with the new itinerary). The relevant new code would also have to be added to the code list CL16 (Message function code) which is used by the attribute Message function, coded in the I15 message.

11. At its second session, TIB welcomed the proposal regarding the notification mechanism, in case of a forced change in the itinerary. It also clarified that notifications would not be required when the change in customs office of exit would coincide with a change of mode of transport, e.g., at a port or intermodal terminal.

B. Requirements of the Eurasian Customs Union

1. Languages for text fields

12. At its first session, TIB mandated the secretariat to present a detailed proposal, at one of its future sessions, on possible technical solutions which would allow the submission by holders of text fields in more than one language.

13. From a technical perspective, the most straightforward option to allow for the provision of the text fields in multiple languages would be to transform text fields from attributes to classes with an unbounded maximum cardinality (*). However, in many cases this would first require significant changes in the WCO data model as well as in all customs systems designed on the basis of the WCO data model.

14. Therefore, and considering that translations are currently not written directly on the TIR Carnet, the Remarks class in the AdditionalInformation class, at the level of the declaration, could be used to provide translations if:

(a) The maximum cardinality of the AdditionalInformation class would be set at unbounded.

(b) The attribute statementType,coded would be included and a new type (translation) would be added to the UN/EDIFACT code list 4451 (e.g. TRN).

(c) The class Pointer would be included (with cardinality 0..1) to allow the translation to point as the element which is translated. Its status would be dependant (D) and the following condition should be added:

IF statementType,coded =”TRN
THEN NOT EMPTY (POINTER)

15. As an example, if the description of the goods of the first consignment item of the first consignment is provided in English as “Apples”, its translation in French could be provided as follows:

AditionalInformation
Sequence = 1
Remark
Text.Content = “Pommes”
Language identifier = “FR”
statementType,coded = “TRN”

Pointer

Location = “Message/Consignement[1]/ConsignementItem[1]/Goods/Description

16. Such mechanism would allow the provision by the holder of the required translations along the itinerary (for any text field of the advance TIR data), while ensuring that they could easily be identified as translation by the country of departure, which does not need them.

17. At its second session, at the request of a member of the Eurasian Customs Union present at the session, TIB decided to continue the discussion on this issue at its next session.

C. Distribution of eTIR code lists

18. At its first session, TIB mandated the secretariat to prepare, for one of its future sessions, a document presenting a concrete proposal aimed at ensuring that, for each update cycle of the eTIR specifications, code lists are automatically disseminated to all stakeholders. At its second session, TIB was of the view that, if handled properly, both push and pull options would not pose significant security concerns and stressed that, regardless of the option chosen, a repository of code lists should be available and kept up to date at all times. TIB further decided to continue its discussions on the distribution of code lists to all stakeholders at its next session, on the basis of more detailed information about both options (push and pull) as well as possible hybrid solutions.

19. In order to push the code lists to customs administrations after each update cycle, dedicated webservices would be deployed by customs administrations. The messages exchanged on those webservices would be based on the update cycles and code lists class diagram presented in Figure 29 of the eTIR technical specifications.

20. The pull mechanism could be based either on webservices calls from customs administrations to the eTIR international system, or on a file repository. Customs administrations would then, at scheduled intervals (e.g. once a week), call the webservice or download the code lists from a file repository.

21. In order to avoid regular unnecessary downloads of the code lists, a hybrid approach, which would work on the basis of notifications sent to customs administrations’ ICT systems (e.g., a call to a web service or an email to a dedicated email address) could allow customs administrations to only obtain the new code lists when they are changed. The notification would contain the date and time by which the customs system would have to obtain the new code lists from a repository or by means of a webservice call and have them deployed in production.

D. Generation of the accompanying document

22. At its second session, TIB noted that the TIR secretariat was working on the generation of accompanying documents and would present a concrete proposal at a future session.

23. The secretariat will present the work it has already performed regarding the generation of the accompanying documents to obtain feedback from TIB and provide its finding with regard to possible discrepancies in terminology.

E. Exchanging attached documents

24. The secretariat will present a detailed proposal at one of the future sessions of TIB.

F. Notifications to countries when the transport will not reach a country

25. The eTIR international system already notifies customs administrations by means of the I15 message that a transport will not reach their country. The message function code contained in the message allows customs administrations to know what kind of information

to expect in the I15 message, i.e., Amended declaration data, Refusal to start operation guarantee, Seals information (Start) or Seals information (Terminate).

26. An easy notification mechanism in case a transport will not reach a country could be implemented on the basis of an I15 message by including two additional message function codes, i.e., “transport interrupted due to an accident or incident” and “transport rerouted through other countries”. The I15 message would in that case only need to contain a reference to the guarantee or the declaration data, in order to allow customs to identify the TIR transport.

27. At its second session, TIB considered and agreed on the inclusion of the above-described mechanism to notify countries when a TIR transport will not reach a country, pending the inclusion of the cancellation of the guarantee as a third reason for a transport not to reach a country.

G. Access to TIR transport data by holders

28. In order to obtain feedback from TIB prior to presenting a concrete proposal, the secretariat will present a a proof of concept on the possible access of TIR transport data by holders via the mobile application dedicated to holders.

H. Overview of changes

29. At its second session, TIB agreed that the tables presenting the overview of changes for all eTIR messages could be kept on the eTIR website and removed from the eTIR functional specifications.

I. Modelling diagrams

30. At its second session, TIB welcomed the proposals related to the usage of modeling diagrams to be used in the framework of the eTIR specifications, presented in chapter II.B of document ECE/TRANS/WP.30/AC.2/TIB/2022/13 and requested the secretariat to present an example comparing the existing diagrams (in Unified Modelling Methodology – UML) with the proposed new diagrams (in Business Process Model and Notation – BPMN) as well as simplified class diagrams. TIB also encouraged delegations to enquire about national practices/preferences with their relevant services before the next session.

1. Class diagrams

31. UML Class diagrams used in version 4.3 of the eTIR functional specifications contain not only classes, their relationships and their attributes, but also a set of methods that were aimed at facilitating the development of the eTIR international system. As such, these methods have little to no use for the countries that wish to amend their customs system to implement the eTIR procedure. Figures I and II below show the difference between the current and the simplified version of the customs management of guarantees class diagram (Figure 1.19 of the eTIR functional specifications).

Figure I

Current customs management of guarantees class diagram

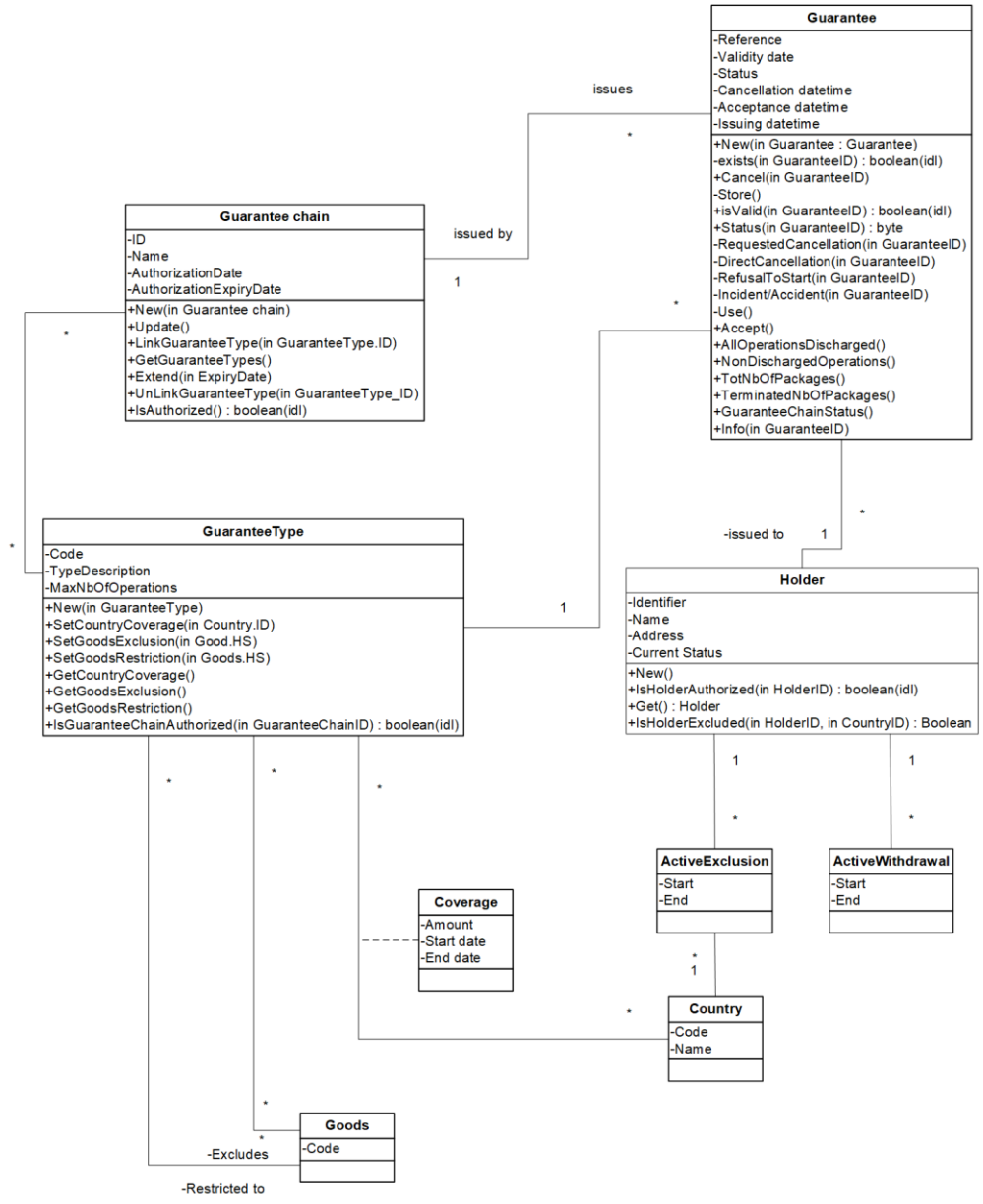
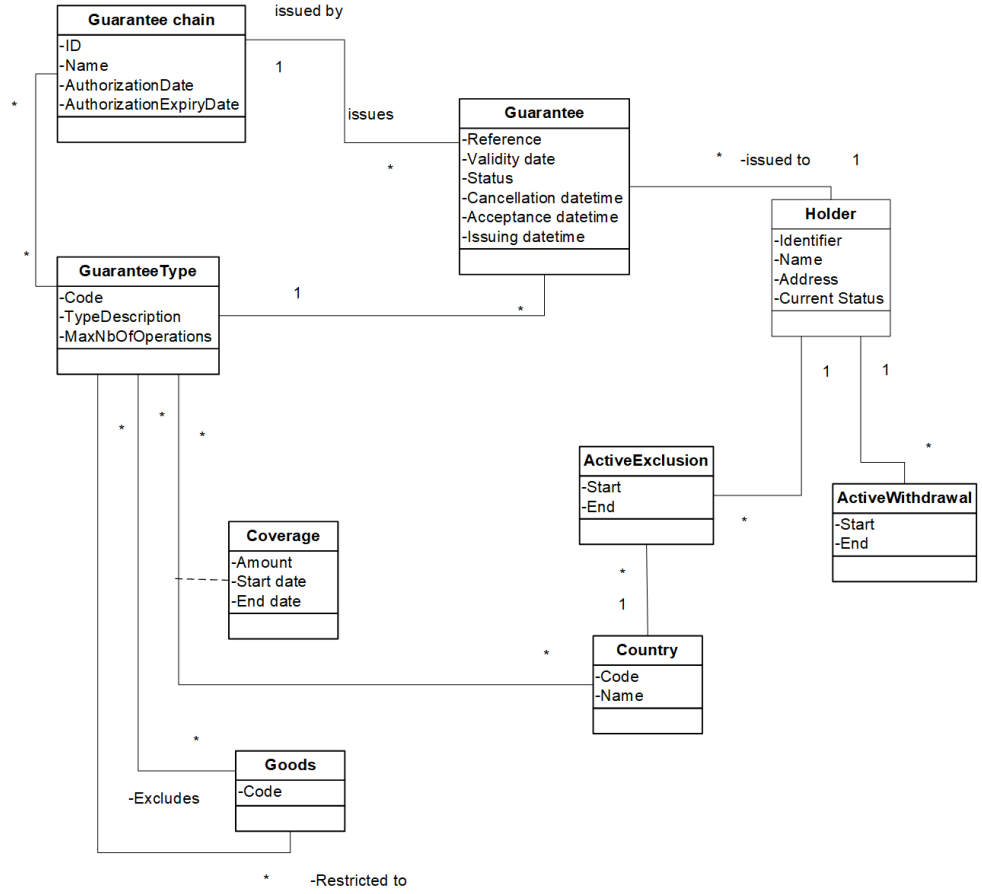


Figure II
Simplified customs management of guarantees class diagram



2. Business process model and notation

32. In version 4.3 of the eTIR specifications, in line with the Unified Modelling Methodology (UML) chosen originally for the eTIR project, the modelling of processes is done using UML activity and sequence diagrams. In recent years, the business process model and notation (BPMN) has gained in popularity in both the business and Information and Communication Technologies (ICT) communities and is, therefore, better understood by laymen and experts alike. With that in mind, TIB might wish to consider if, in version 4.4 of the eTIR specifications, BPMN should replace the activity and sequence diagrams used in version 4.3. Figures III, IV and V below show the UML activity diagram (Figure 12 of the eTIR concepts), UML sequence diagram (Figure 1.9 of the eTIR functional specifications) and the Business Process Diagram for the Start TIR operation process.

Figure III
UML activity diagram for the Start TIR operation process

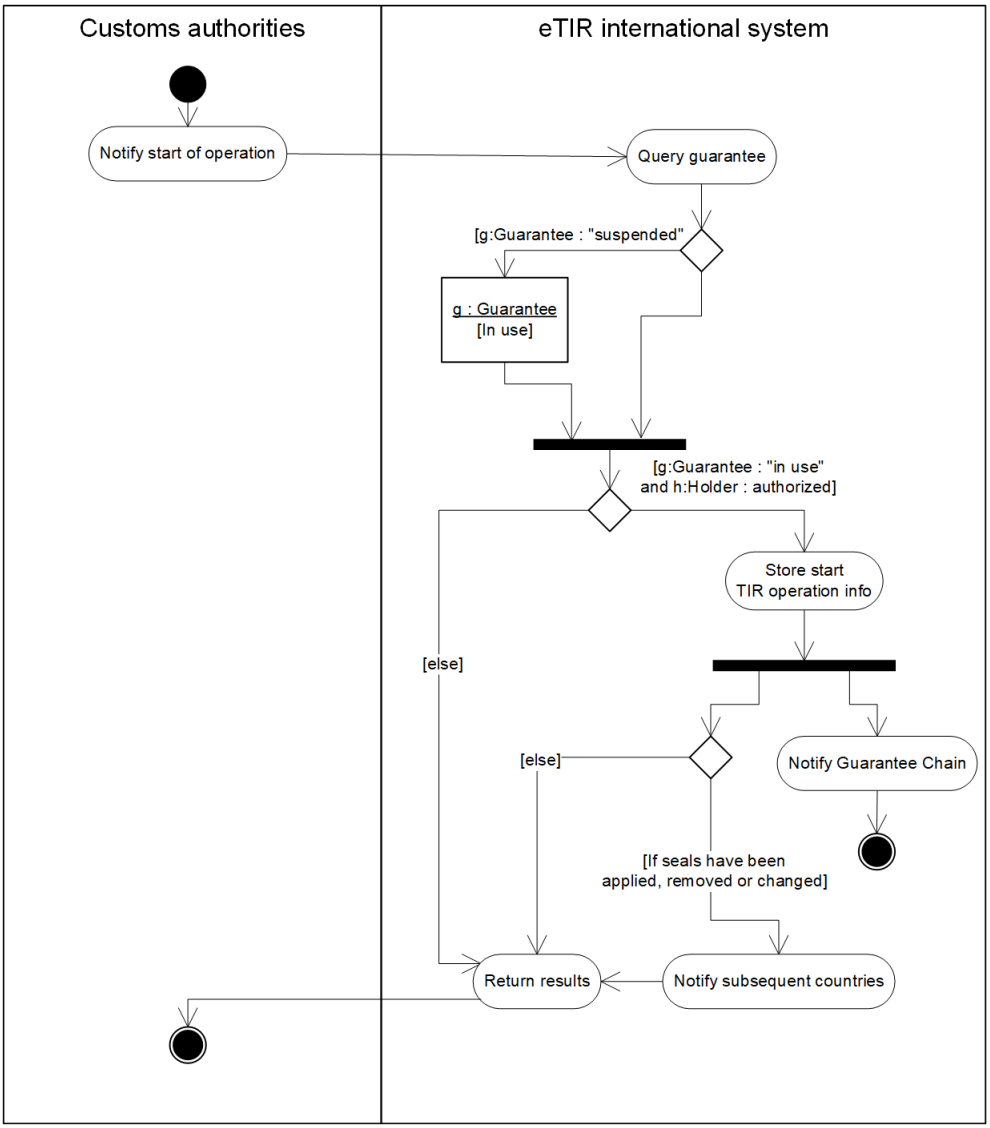


Figure IV
UML sequence diagram for the Start TIR operation process

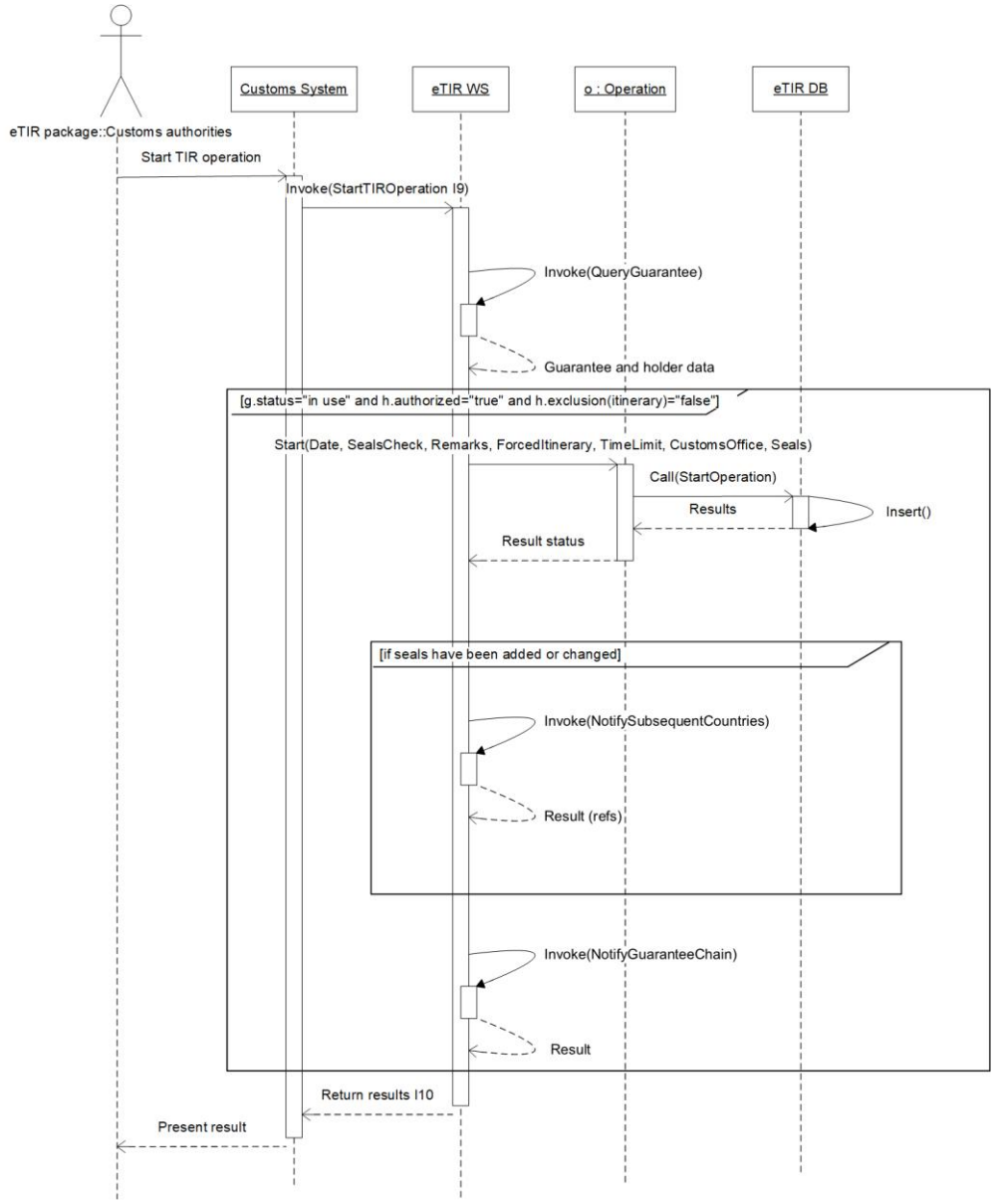
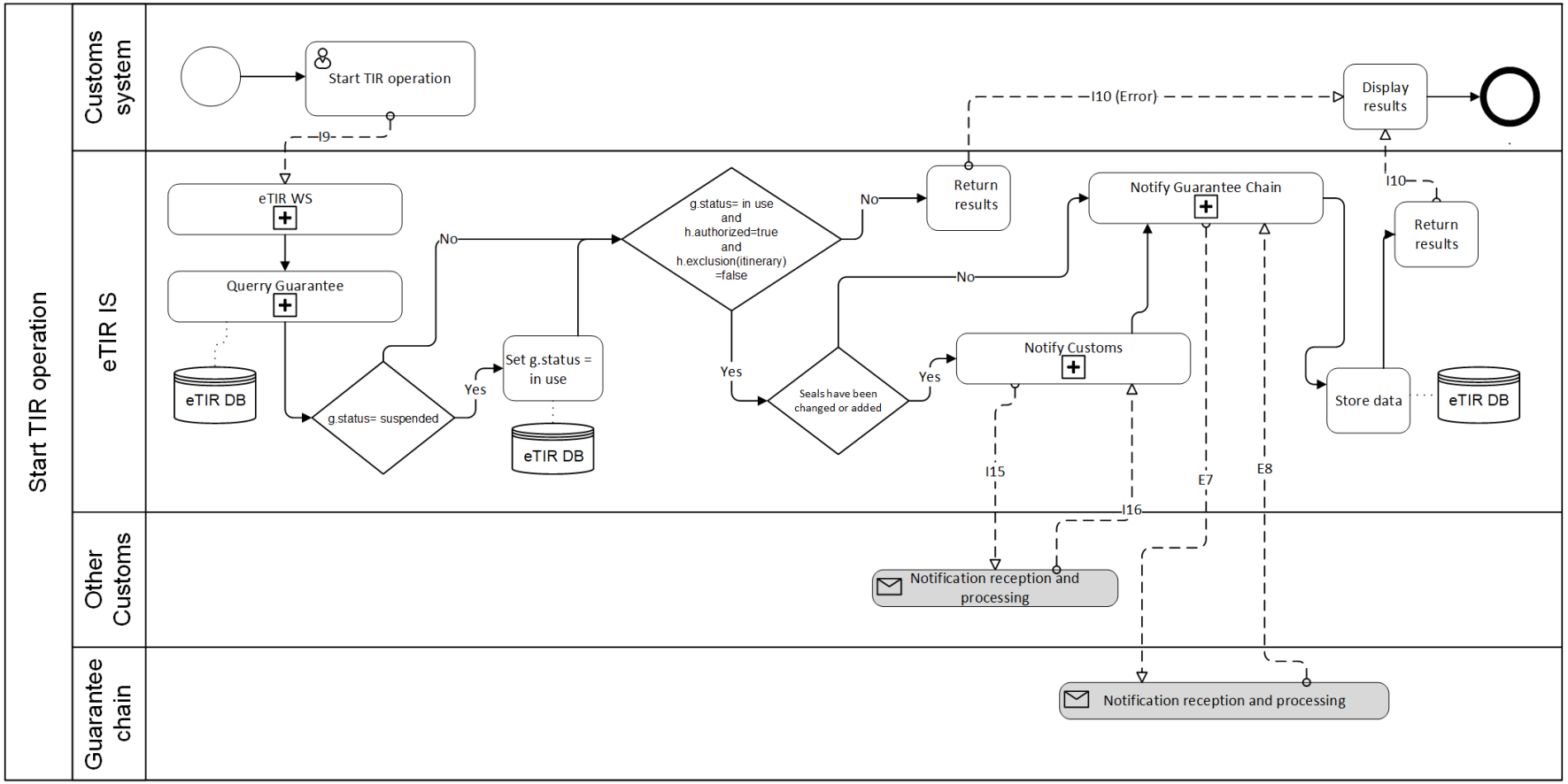


Figure V

Business Process Diagram for the Start TIR operation process



33. TIB might wish to consider the various diagrams and instruct the secretariat where BPMN diagrams should be used. TIB might also wish to consider the need to keep some of the UML diagrams and in which part of the documents composing the eTIR specifications.

J. Structure of the eTIR specifications

34. At its second session, TIB welcomed the proposals related to the structure of the eTIR specifications, presented in chapter II.C of document ECE/TRANS/WP.30/AC.2/TIB/2022/13 and mandated the secretariat to prepare a detailed proposal for one of its next sessions.

35. The secretariat will present a detailed proposal at one of the future sessions of TIB.

III. Considerations by TIB

36. TIB may wish to consider the proposals above and provide guidance to the secretariat on how to proceed.