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## **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** 

First session

Geneva, 27–29 January 2021 Item 7 (a) of the provisional agenda eTIR conceptual, functional and technical documentation version 4.3: Introduction

# TIR Carnet life cycle use cases and the elaboration of use cases\*

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 the TIR Procedure (WP.30/GE.1) and endorsed its ToR² (ECE/TRANS/WP30/2019/9 and ECE/TRANS/WP.30/2019/9/Corr.1) pending approval by UNECE Executive Committee (EXCOM). EXCOM during its Remote informal meeting of members of the Executive Committee (20 May 2020) approved the establishment of the Group of Experts on Conceptual and Technical Aspects of Computerization of the TIR Procedure (WP.30/GE.1) until 2022, based on the terms of reference included in document ECE/TRANS/WP.30/2019/9 and Corr.1, as contained in document ECE/TRANS/294 (ECE/EX/2020/L.2, para. 5(b)).³

<sup>\*</sup> This document was submitted late for processing since clearance in finalizing this document took longer than anticipated.

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

<sup>&</sup>lt;sup>2</sup> 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

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

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

This document presents the TIR Carnet life cycle use cases and the elaboration of use cases.

## 3. TIR Carnet life cycle use cases

Now that we have described the domain, we can concentrate on the scope of the eTIR Project, the TIR Carnet system.

#### 3.1 Actors of the TIR Carnet life cycle

Before describing the use cases of the TIR Carnet life cycle, we will identify all the actors who play a role in the course of the TIR Carnet life cycle. By definition, any person, entity or system playing a role in the TIR Carnet life cycle is an actor. The actors have already been identified when setting the boundaries of the project and they are:

- International organization,
- · National association,
- Competent authorities (customs and other),
- · TIR Carnet holder,
- Administrative Committee of the TIR Convention (AC.2).

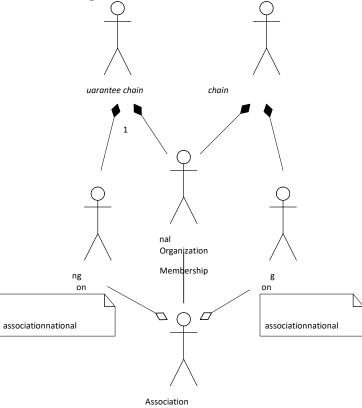
Each actor plays one or more roles in the course of the TIR Carnet life cycle. Therefore, the actors are often considered and defined according to one of the roles they play. For example, the actor "customs authority" can play the role of customs office of entry (en route) for incoming TIR transports but it can also play the role of customs office of exit (en route) for outgoing TIR transports.

As a consequence, we will identify all aspects of each actor through the roles he performs within the context of the TIR Convention. The following description of the actors by means of the role they play is essential for understanding the rest of the chapter.

#### 3.1.1 International organizations and national associations

International organizations and national associations can be described according to their two main roles in the TIR Carnet life cycle: the guaranteeing role and the issuing role. Figure 1.3 shows the relation between the international organizations and national associations, taking account of these roles.

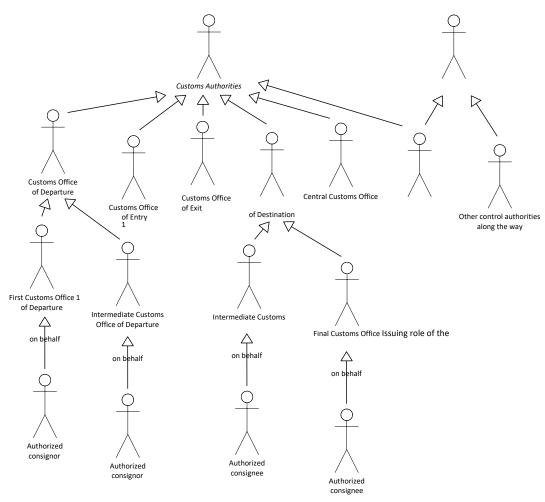
Figure 1.3 **International organizations and national associations** 



## 3.1.2 Competent authorities

The various competent authorities (customs and other) can be structured in such a way that they reflect the generalization of the roles they have in common. Figure 1.4 reflects the various aspects of the competent authorities (mainly customs authorities) in the course of the TIR Carnet life cycle.

Figure 1.4 **Customs authorities and other authorities** 

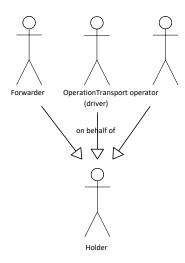


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#### 3.1.3 TIR Carnet holder

The TIR Carnet holder fulfils a central role in the TIR Carnet life cycle. This role is reflected in various use cases, in particular when he/she provides data on the TIR transport and certifies them. It can also happen that other persons, on his behalf, fill-in and certify the information that he must provide. Figure 1.5 shows the TIR Carnet holder and the agents who may provide data on his behalf.

Figure 1.5
TIR Carnet holder and agents

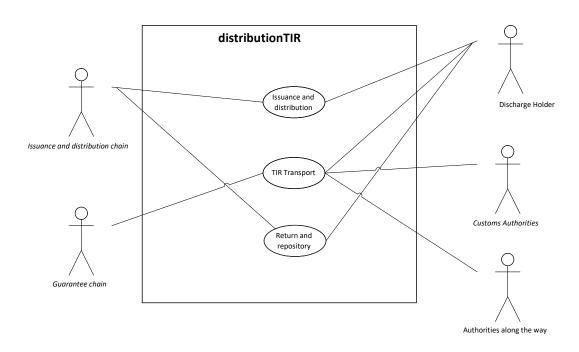


#### 3.1.4 Administrative Committee of the TIR Convention (AC.2)

The AC.2 has a supervisory role with regard to the TIR Carnet life cycle. We will see in the detailed analysis of the use cases that some use cases in connection with that role are performed by TIRExB.

## 3.2 TIR Carnet life cycle use case diagram

Figure 1.6 TIR Carnet life cycle use case diagram



## 3.3 TIR Carnet life cycle use case description

Table 1.2 TIR Carnet life cycle use case description

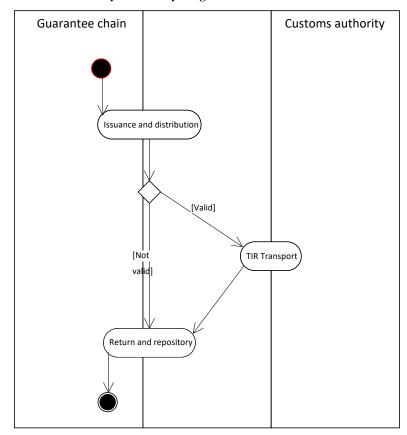
Name	TIR Carnet life cycle use case	
Description	High-level view of all activities related to the paper TIR Carnet and the actors involved.	
Actors	Guarantee chain, Customs authorities, Holder, Authorities along the way	
Performance Goals	Allows the exchange of information between parties involved.	
Preconditions	<ul> <li>Approval of the guarantee chain;</li> </ul>	
	<ul> <li>Approval of the association;</li> </ul>	
	<ul> <li>Approval of transport operators;</li> </ul>	
	<ul> <li>Approval of vehicles;</li> </ul>	
	Management of the guarantee chain;	
	Administration of the TIR Convention.	
Postconditions	<del>-</del>	

Name	TIR Carnet life cycle use case
Scenario	An international organization prints (organizes the printing) of TIR Carnets and distributes them to the authorized national associations. An authorized transport operator (TIR Carnet Holder) can then request a TIR Carnet from his national association. The national association issues the TIR Carnet to the TIR Carnet Holder. The national association may in certain cases return the TIR Carnet to the international organization instead of issuing it to a TIR Carnet holder.
	The TIR Carnet is then presented to the customs office of departure within the limits of its validity by the holder to perform a TIR Transport. The TIR Carnet does not only represent the international customs document, but also the guarantee.
	Once the TIR Transport has ended, the TIR Carnet is returned to the holder, then to the association and finally to the international organization. In case the validity of a TIR Carnet has expired before it is presented to the customs office of departure by the TIR Carnet holder, he must return it unused to the national association, which sends it back to the international organization.
Alternative Scenario	In case of fraud, customs authorities may keep the TIR Carnet until the case is solved.
Special requirements	-
<b>Extension Points</b>	-

## 3.4 High-level activity diagram of the TIR Carnet life cycle

Figure 1.7 TIR Carnet life cycle activity diagram

Requirements Covered



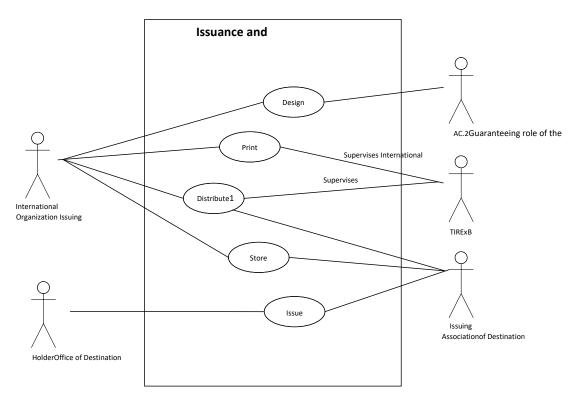
#### 4 Elaboration of use cases

This chapter aims at providing a detailed view of the procedural aspects of the TIR system. It focuses on the most common procedures and does not describe in details occasional procedures. These latter are only identified as alternative scenarios and not dealt with in more details.

#### 4.1 Issuance and distribution use case

#### 4.1.1 Issuance and distribution use case diagram

Figure 1.8 Issuance and distribution use case diagram



#### 4.1.2 Issuance and distribution use case description

Table 1.3 **Issuance and distribution use case description** 

Distribution and issuance use case

Description	In the course of this use case, the TIR Carnet is produced (printed, stored), distributed and issued to authorized transport operators.
Actors	AC.2, international organization, issuing association, holder of TIR Carnet, TIRExB
Performance Goals	To provide authorized TIR Carnet holders with TIR Carnets, the TIR Carnet being a customs declaration to place goods under the TIR procedure (transit procedure) and representing an internationally recognized financial guarantee to customs authorities of Contracting Parties with which a TIR operation can be established, in accordance with the provisions of the TIR Convention.
Preconditions	The international organization is authorized by AC.2 to centrally print and distribute TIR Carnets in accordance with Art. 6.2 <u>bis</u> of the TIR Convention and Annex 8, Article 10 (b) of

Name

Name

Distribution and issuance use case

the TIR Convention under the supervision of the TIR Executive Board.

The national association is authorized by its national customs authorities, according to Art. 6.1 of the TIR Convention and Annex 9, Part I of TIR Convention, to issue TIR Carnets and to act as guarantor. The national association should be affiliated to an international organization.

Transport operators have to be authorized by competent customs authorities, according to Art 6.4 and 6.5 of the TIR Convention and Annex 9, Part II of TIR Convention, in order to obtain TIR Carnets from their issuing association and to utilize TIR Carnets, according to Art. 6.3.

#### Postconditions

In accordance with the TIR Carnet life cycle use case, this use case can be followed by:

- the TIR transport use case;
- the Return and repository use case.

#### Scenario

While respecting the design, elaborated under the auspices of the United Nations Economic Commission for Europe and endorsed by AC.2, the international organization is responsible for printing TIR Carnets. The TIR Carnets are stored temporarily before being distributed by the international organization to its affiliated national issuing associations.

The issuing association, possibly after another storage period, fills-in fields 1 to 4 of the TIR Carnet cover page and issues the TIR Carnet to authorized TIR Carnets holders, according to Art.6.3 of the TIR Convention (to national or, in some situations, to foreign TIR Carnet holders, respecting, in such case, special requirements) within the quota fixed by the association.

The TIRExB supervises the centralized printing and distribution in accordance with Annex 8, Article 10 (b) of the TIR Convention.

#### Alternative Scenario

The main scenario does not take into account that the TIR Carnet may be stolen, lost or not valid. The following scenarios are possible:

- 1. The TIR Carnet is lost/stolen/not valid after printing but before being stored at the premises of the international organization;
- 2. The TIR Carnet is lost/stolen/not valid while still stored at the premises of the international organization;
- 3. The TIR Carnet is lost/stolen/not valid during transport between the international organization and the national association;
- 4. The TIR Carnet is lost/stolen/not valid, while in possession of the national association, before being issued;
- 5. The TIR Carnet is lost/stolen/not valid after having been issued to the authorized TIR Carnet holder;
- 6. The TIR Carnet is returned by the national association to the international organization before being issued.

# Special requirements

Data on authorized TIR Carnet holders are stored in the International TIR Database (ITDB) maintained by the TIR Executive Board and TIR Secretariat.

Data on lost/stolen TIR Carnets is maintained by the international organization in an electronic control system.

#### **Extension Points**

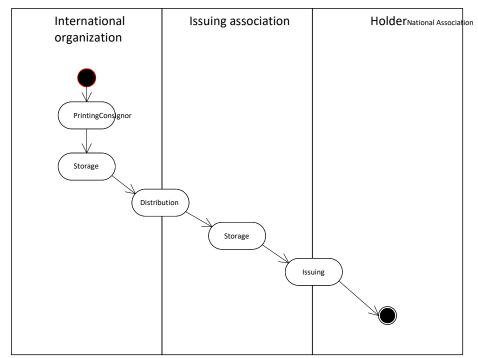
During the distribution and issuance, information will be sent to the electronic control system maintained by the international organization.

## Requirements Covered

-

## 4.1.3 Activity diagram of the issuance and distribution use case

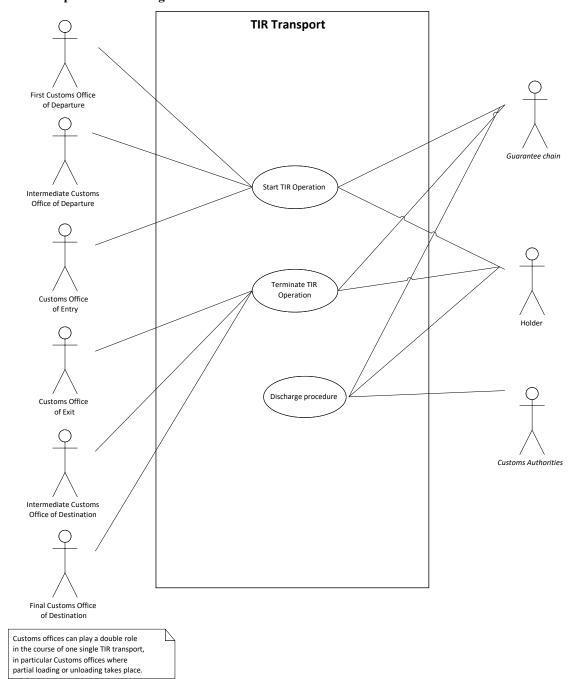
Figure 1.9 **Issuance and distribution activity diagram** 



## 4.2 TIR transport use case

## 4.2.1 TIR transport use case diagram

Figure 1.10 TIR transport use case diagram



#### 4.2.2 TIR transport use case description

Table 1.4

#### TIR transport use case description

TIR tr	TIR transport use case description	
Name	TIR Transport Use Case	
Description	This use case describes the transport of goods from the first customs office of departure to the final customs office of destination under the TIR procedure, where borders between countries (customs territories) are crossed.	
Actors	Customs authorities, Guarantee chain, TIR Carnet holder	
Performance Goals	Reduce the time spent at all concerned customs offices during international transport of goods performed under cover of a TIR Carnet in accordance with the provisions of the TIR Convention,	
Preconditions	The authorized TIR Carnet holder must be issued with a valid TIR Carnet to begin the transport. The applicability of the TIR Carnet may depend on the type of the goods to be shipped (e.g. tobacco and alcohol require "Tobacco and Alcohol" TIR Carnets). For the transport of heavy or bulky goods, the TIR Carnet should bear the relevant inscription.	
	The TIR transport has to be performed with an approved vehicle and/or container unless heavy or bulky goods are transported.	
	The TIR transport must be guaranteed by associations approved in accordance with the provisions of Article 6 of the TIR Convention.	
Postconditions	In accordance with the TIR Carnet life cycle use case, this use case shall be followed by:	
	The Return and repository use case	
	After the TIR transport, the goods shall be placed under another customs regime.	
Scenario	Because the TIR transport is a sequence of TIR operations, the scenario of a TIR transport is	

Scenario

Because the TIR transport is a sequence of TIR operations, the scenario of a TIR transport is represented here as a succession of TIR operations, each one being described in two steps. Each step 1-step 2 sequence constitutes a single TIR operation.

Step 1: Start of the TIR operation at the first customs office of departure. The customs officers check the conformity of the TIR Carnet, the goods, the loading compartment, as well as the approval certificates for vehicle and/or container and the commercial and transport documents. Seals are affixed to the loading compartment. The customs officer fills-in and stamps all the relevant parts of the TIR Carnet pages including counterfoil No. 1. Upon acceptance of the TIR Carnet by the first customs office of departure, the guarantee is activated (Art. 8, 4).

Step 2: Termination of the TIR operation at the customs office of exit en route. The customs officer stamps counterfoil No. 2, takes out voucher No. 2 and sends it to the customs office of departure.

Steps 1 and 2 are repeated if there are several customs offices of departure (maximum 3 in one or several countries (customs territories). In such case, in every consecutive Contracting Party en route transited by the TIR transport, steps 1 and 2 are repeated with the following differences: the customs office which carries out step 1 is called customs office of entry en route. It checks the seals, the loading compartment and fills-in the relevant fields of vouchers 1 and 2 and counterfoil No. 1.

Step 2 is equal to the previous step 2 at the customs office of exit en route.

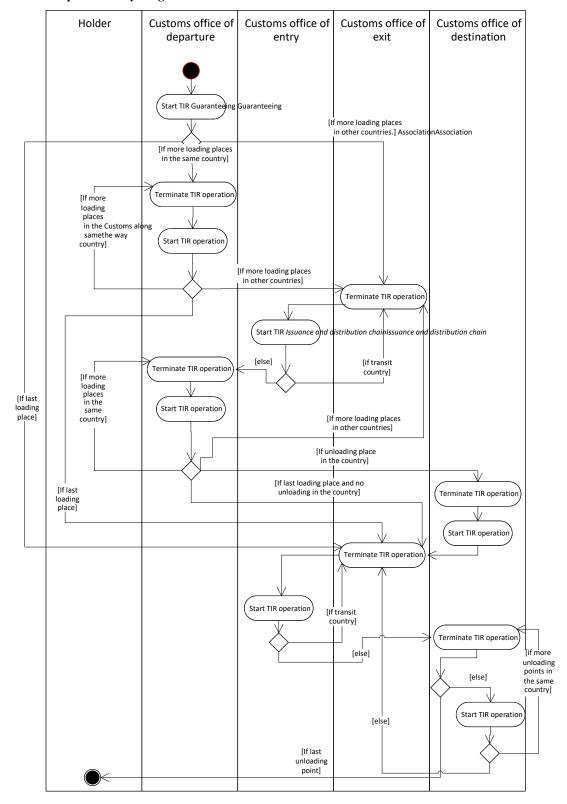
In the country (customs territory) of destination, step 1 is identical to the previous step 1 at the customs office of entry en route. The customs office which carries out step 2 is called the customs office of destination. In step 2, customs officers take off the seals, stamp counterfoil No. 2, take out voucher No. 2 and send it to the customs office of entry en route. Step 2 encompasses the termination of the TIR operation for this country (customs territory) as well as the certification of termination for the goods arrived at the customs office of destination.

The validity of the TIR Carnet can be checked by any customs office of departure, exit en

Name	TIR Transport Use Case
	route, entry en route and of destination, using, for example, CUTE-Wise. All customs offices have the right to remove the seals and to check the goods (see Article 5). In such case, new seals have to be affixed and the appropriate fields of the TIR Carnet have to be filled-in accordingly (box 16, box 3 of counterfoil 1 or box 4 of counterfoil 2).
Alternative Scenario	The main scenario does not take account of the following scenarios:
	1. Falsified acceptance of a TIR Carnet: fraudsters may attempt to falsify the acceptance of a genuine TIR Carnet by using false customs stamps and seals;
	2. Incident or accident <u>en route:</u> in such case, the so-called "certified report" should be filled-in by the competent authorities. In case the vehicle can no longer be used, the goods may be reloaded on a different truck and a new TIR Carnet is opened. If the goods are destroyed, competent authorities should state this fact. In this case, the TIR transport cannot be terminated at the intended customs office(s) of destination but has to be terminated at the nearest customs office <u>en route</u> . The TIR Carnet may also be amended by competent authorities so that the TIR Transport can continue with the same TIR Carnet;
	3. Under some conditions, the TIR Transport can be suspended (Art. 26).
Special requirements	-
Extension Points	
Requirements Covered	-

### 4.2.3 Activity diagram of the TIR transport use case

Figure 1.11 TIR transport activity diagram



#### 4.2.4 Structured description of activity diagrams of the TIR transport use case

The TIR transport is a sequence of TIR operations that shall start at the first customs office of departure and terminate at the final customs office of destination.

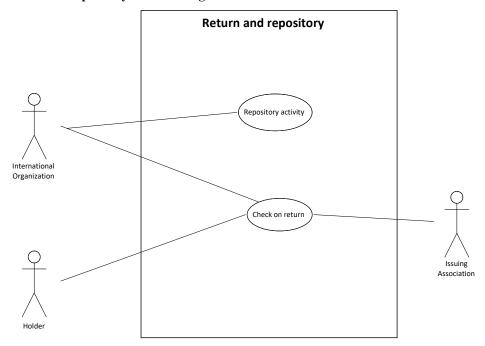
The TIR Transport BEGINS when the first customs office of departure starts the first TIR operation.

- If other loading point in the same country (customs territory): go to 1;
- If additional loading will take place in other countries (customs territories): go to 2;
- If the loading phase is terminated: go to 3;
- 1. At the next loading point, the intermediate customs office of departure will terminate the current TIR operation (acting as customs office of destination) before starting a new TIR operation.
- If there is another loading point in the same country (customs territory) and if the number of loading points is still inferior to 3: repeat 1;
- If additional loading will take place in other countries (customs territories) and if the number of loading points is still inferior to 3: go to 2.
- If the loading phase is terminated: go to 3.
- 2. The customs office of exit (<u>en route</u>) of the country (customs territory) will terminate the current TIR operation and the customs office of entry (<u>en route</u>) of the following country (customs territory) will start a new TIR operation.
- If it is a transit country (customs territory): repeat 2.
- If it is a country (customs territory) where a loading will take place if the number of loading points is still inferior to 3: **go to 2.1**.
- 2.1. At the next loading point, the intermediate customs office of departure will terminate the current TIR operation (acting as customs office of destination) before starting a new TIR operation.
- If there is another loading place in the same country (customs territory) and if the number of loading points is still inferior to 3: repeat 2.1;
- If additional loading will take place in other countries (customs territories) and if the number of loading points is still inferior to 3: **go to 2**;
- If the loading phase is terminated and there is no unloading in the current country (customs territory): go to 3;
- If the loading phase is terminated and there is an unloading point in the current country (customs territory) and if the number of loading points is still inferior to 3: go to 2.1.1.
- 2.1.1. At the first unloading point, the intermediate customs office of destination will terminate the current TIR operation before starting a new TIR operation (acting as customs office of departure).
- The maximum number of loading and unloading places is limited to 4 and when reaching 2.1.1 the number of loading and unloading is already 3. Thus, only one more unloading point is possible. The goods loaded in one country (customs territory) cannot be unloaded in the same country (customs territory). Therefore, the next step has to be the border: **go to 3**.
- 3. The customs office of exit (<u>en route</u>) of the country (customs territory) will terminate the current TIR operation and the customs office of entry (<u>en route</u>) of the following country (customs territory) will start a new TIR operation.
- If it is a transit country (customs territory): repeat 3.
- If it is a country (customs territory) where an unloading will take place if the number of loading + the number of unloading points is still inferior to 4: go to 3.1.
- 3.1. At the unloading point, the ustoms office of destination will terminate the current TIR operation.
- If it is the last unloading point: **END**.
- If there are other unloading points: go to 3.1.1.
- 3.1.1. At the unloading point, the Intermediate customs office of destination will start a new TIR operation (acting as customs office of departure).
- If there are other unloading points in other countries (customs territories) and if the number of loading + the number of unloading points is still inferior to 4: **go to 3**.
- If there are other unloading points in the same country (customs territory) and if the number of loading + the number of unloading points is still inferior to 4: go to 3.1.

#### 4.3 Return and repository use case

## 4.3.1 Return and repository use case diagram

Figure 1.12 **Return and repository use case diagram** 



### 4.3.2 Return and repository use case description

organization.

Table 1.5 **Return and repository use case description** 

Return and repository use case

Description	The TIR Carnet is sent back by the TIR Carnet holder to the international organization, via his national association, to centrally store the used or unused TIR Carnets.
Actors	TIR Carnet holder, National association, International organization.
Performance Goals	Store at a central point the evidence of the termination for the duration of the liability of the international guaranteeing chain.
Preconditions	In accordance with the TIR Carnet life cycle use case, this use case can be launched in two cases:
	<ul> <li>The TIR Carnet was issued to a TIR Carnet holder, who used it for a TIR Transport;</li> </ul>
	<ul> <li>The TIR Carnet was issued to but not used by a TIR Carnet holder (usually because the TIR Carnet expired)</li> </ul>
Postconditions	-
Scenario	After having checked the TIR Carnet, the TIR Carnet holder returns it to the national association that issued him the TIR Carnet (within the deadline fixed by the association).
	The national association checks whether the TIR Carnet was used properly and whether it was terminated (check of stamps against the electronic control system maintained by the international organization). The national association returns the TIR Carnets to the international

The international organization checks the TIR Carnets and archives them. All returned TIR Carnets are physically stored at the international organization for at least the period during

Name

Name	Return and repository use case

which its liability can be invoked according to the TIR Convention.

Alternative Scenario The main scenario does not take account of the following scenarios:

- The TIR Carnet is lost/stolen after the TIR Transport has ended; at the premises of the holder, the national association or the international organization;
- It may happen that the TIR Carnet is kept by customs authorities and not returned to the TIR Carnet holder. In such case, customs are encouraged to provide the TIR Carnet holder with the return slip which he should return to the national association.

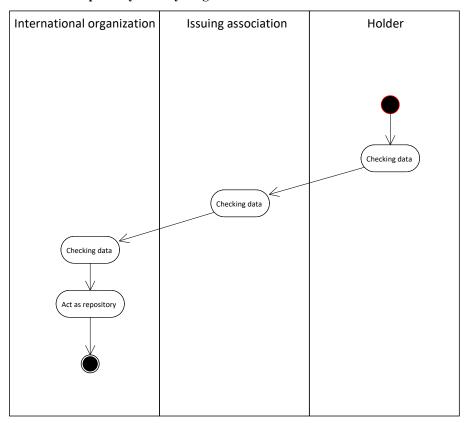
Special requirements

**Extension Points** 

Requirements Covered

4.3.3 Activity diagram of the return and repository use case

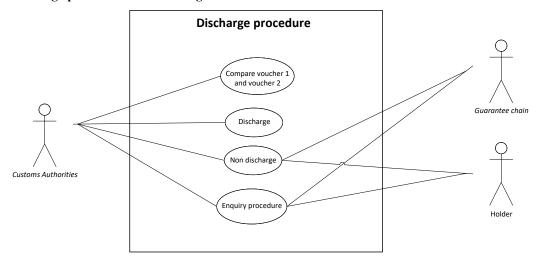
Figure 1.13 Return and repository activity diagram



## 4.4 Discharge procedure use case

## 4.4.1 Discharge procedure use case diagram

Figure 1.14 **Discharge procedure use case diagram** 



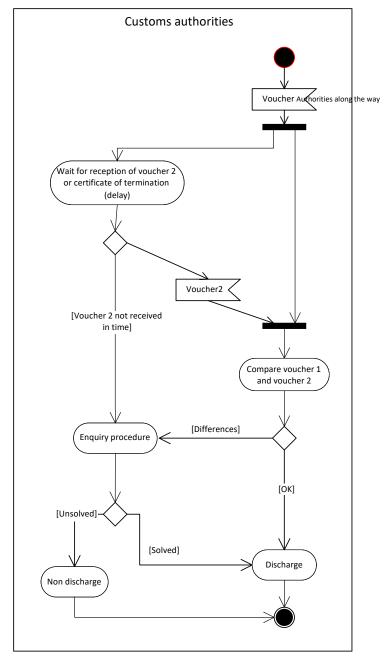
## 4.4.2 Discharge procedure use case description

Table 1.6 **Discharge procedure use case description** 

Name	The discharge procedure for a TIR operation
Description	Evaluation of the data or information available at the customs office of destination or exit (en route) and those available at the customs office of departure or entry (en route).
Actors	Customs authorities, Holder, Guarantee Chain
Performance Goals	Determine whether a TIR operation has been terminated correctly, in order to release the holder of his responsibilities and the national association of its guarantee.
Preconditions	This use case is launched after the start of a TIR operation.
Postconditions	-
Scenario	Once the TIR operation has been terminated, the customs office of destination or exit (en route) sends back voucher No. 2 to the customs office of departure or entry (en route) or to a centralized customs office. Customs authorities compare vouchers No. 1 and No. 2 in order to establish the discharge.
Alternative Scenario	The main scenario does not take account of the following scenarios:
	1. Instead of sending vouchers by post, an exchange of electronic messages between different customs offices may take place;
	2. In case the certificate of termination of the TIR operation has been obtained in an improper or fraudulent manner or in case no termination has taken place, neither the holder would be released of his responsibilities nor the national association of its guarantee;
Special requirements	-
Extension Points	
Requirements Covered	-

## 4.4.3 Activity diagram of the discharge procedure use case

Figure 1.15 **Discharge procedure activity diagram** 



#### 4.4.4 Structured description of the activity diagram of the discharge use case

Two major scenarios can be envisaged depending on the national practice:

- a) The discharge procedure is performed by the customs office that has started the TIR operation; in that case the customs office that has terminated the TIR operation sends either voucher No. 2 or the certificate of termination to the customs office having started the TIR operation.
- b) The discharge procedure is performed by a central customs office; in that case both the customs office that has started the TIR operation and the customs office that has terminated the TIR operation send respectively voucher No. 1 and voucher No. 2 or the certificate of termination to a central customs office.

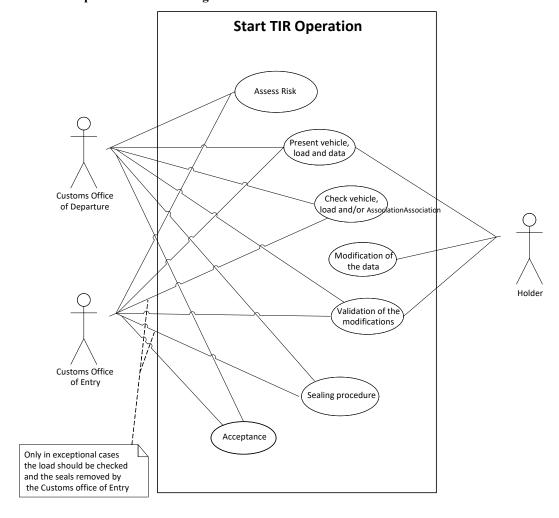
Except from these differences all three scenarios are mainly similar.

- 1. The discharge procedure **BEGINS** when the customs office responsible for the discharge receives voucher no. 1 duly filled-in. A deadline for the reception of voucher No. 2 is then fixed.
- If voucher No. 2 <u>arrives</u> before the deadline: **go to 2**
- If voucher No. 2 <u>does not arrive</u> before the deadline: **go to 3**
- 2. The information between voucher No. 1 and voucher No. 2 (or the certificate of termination) is compared.
- If the comparison <u>leads</u> customs to the assumption that a customs infringement has taken place and taxes and duties are due: **go to 3**
- If the comparison <u>does not lead</u> customs to the conclusion that a customs infringement has taken place and taxes and duties are due: **go to 4**
- 3. Inquiry procedures are launched:
- If the inquiry procedure concludes that a customs infringement <u>has not taken place</u> and taxes and duties <u>are not due</u>: **go to 4**
- 4. The TIR operation is discharged: **END**

### 4.5 Start TIR operation use case

## 4.5.1 Start TIR operation use case diagram

Figure 1.16 Start TIR operation use case diagram



## 4.5.2 Start TIR operation use case description

Table 1.7

## Start TIR operation use case description

Use Case Name	Start TIR operation use case
Use Case Description	The TIR Carnet is filled-in by the TIR Carnet holder and presented with the vehicle and goods to the customs office of departure; in continuation, TIR Carnet, vehicle and goods have to be presented at intermediate customs offices of departure and/or customs offices of entry (en route).
Actors	TIR Carnet holder, Customs authorities.
Performance Goals	Start a transit procedure in a given country (customs territory) for a specific leg of the TIR Transport.
Preconditions	In accordance with the TIR Transport use case, this use case applies in one of the following situations:
	<ul> <li>At the beginning of the TIR transport: The TIR Carnet holder has provided and validated all information for the TIR transport;</li> </ul>
	• In all other cases: The preceding TIR operation has been terminated.
Postconditions	In accordance with the TIR Carnet life cycle use case, this use case is followed by:
	• The termination of the TIR operation.
	In addition, the discharge procedure is launched.
Scenario customs office of Departure	An authorized TIR Carnet holder presents a valid and duly filled-in TIR Carnet, together with the goods and a TIR approved vehicle at the customs office of departure. The customs office of departure checks the data of the TIR Carnet and other accompanying documents with the load. The customs office of departure seals the load compartment and validates the TIR Carnet by inserting the number and identification of the seals in field 16, and by applying the stamp, signature, date and name of the customs office of departure in field 17 of all vouchers No. 1 and No. 2 of the TIR Carnet. The customs officer completes fields 18 and 20 to 23 of the vouchers No. 1 and No. 2 corresponding to the TIR operation, completes counterfoil No. 1, removes voucher No. 1 and returns the TIR Carnet to the holder.
Scenario customs office of entry	Upon presentation of the TIR Carnet by the holder, the customs office of entry checks the seals and carries out a routine check of the truck and accompanying documents and may check the validity of the TIR Carnet in Cute-Wise. In exceptional cases, customs authorities can require examination of road vehicle, combination of vehicles or containers and their load.  The customs officer validates the TIR Carnet by completing fields 18 to 23 of vouchers No. 1 and No. 2 corresponding to the TIR operation, completes counterfoil No. 1, removes
	voucher No. 1 and returns the TIR Carnet to the holder.
Scenario Intermediate customs office of departure	The holder presents the TIR Carnet, together with the goods, already loaded at a previous customs office of departure, at the intermediate customs office(s) of departure which acts in the same way as the customs office of departure: the customs officer checks the data of the TIR Carnet and other accompanying documents with the load. He affixes new seals to the load compartment and validates the TIR Carnet by inscribing the number, identification of the seals in field 16, and by applying the stamp, signature, date and name of the intermediate customs office of departure in field 17 of all vouchers No. 1 and No. 2 remaining in the TIR Carnet. He completes fields 18 and 20 to 23 of vouchers No. 1 and No. 2 corresponding to the TIR operation, completes counterfoil No. 1, removes voucher No. 1 and returns the TIR Carnet to the holder.
A 14	The main geometries do not take account of the following geometries.

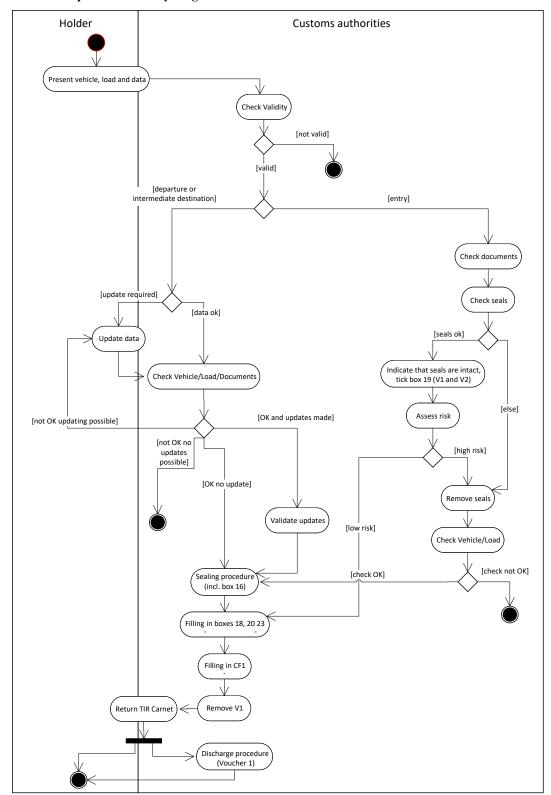
The main scenarios do not take account of the following scenarios:

Alternative Scenario

Use Case Name	Start TIR operation use case
	(a) Nonvalidation of the TIR Carnet by customs;
	(b) Falsified acceptance of the TIR Carnet;
	(c) Use of lost or stolen TIR Carnets.
Special requirements	In case of heavy and bulky goods with own identification marks, neither sealing nor a TIR approved vehicle is required. Specific identification marks will be mentioned in the TIR Carnet.
Extension Points	In the process of checking the validity of the TIR Carnet, customs authorities may make use of information stored in the electronic control system maintained by the international organization.
Requirements Covered	

## 4.5.3 Activity diagram of the start TIR operation use case

Figure 1.17 **Start TIR operation activity diagram** 



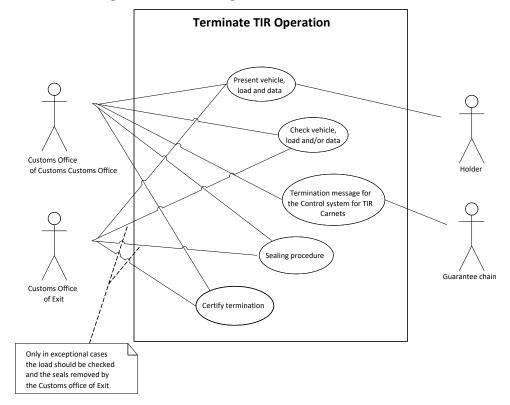
#### 4.5.4 Structured description of the activity diagram of the start TIR operation use case

- 1. The start of a TIR operation **BEGINS** when the TIR Carnet holder presents a valid and duly filled-in TIR Carnet, together with the goods and a TIR approved vehicle at a customs office. The customs officer first checks the validity of the TIR Carnet and **ENDS** the procedure if the TIR Carnet is not valid.
- If the vehicle is at a customs office of departure or at an intermediate customs office of destination: **go** to 1.1;
- If the vehicle at a customs office of entry: go to 1.2.
- 1.1. If necessary, the TIR Carnet holder is requested to update the information in the TIR Carnet. The customs office of departure checks the data of the TIR Carnet and other accompanying documents with the load.
- If any problem is encountered: go to 1.1.1;
- If checks are OK: go to 1.1.2.
- 1.1.1. Update the information on the TIR Carnet.
- If updating is possible: go to 1.1.2.
- If no updating is possible: **END**.
- 1.1.2. In case any updating in the TIR Carnet has taken place (goods, itinerary,...) the customs officer validates those changes by applying the stamp, signature, date and name of customs office in field 17 of all vouchers No. 1 and No. 2 remaining in the TIR Carnet. **Go to 1.1.3**.
- 1.1.3. The customs officer affixes (new) seals to the load compartment. He validates the TIR Carnet by inscribing the number and identification of the seals in field 16 of all vouchers No. 1 and No. 2 remaining in the TIR Carnet, **Go to 2**.
- 1.2. The customs officer checks the data of the TIR Carnet and other accompanying documents, as well as the seals and carries out a routine check of the truck.
- If checks are OK: go to 1.2.1;
- If checks are not OK: go to 1.2.2
- 1.2.1. The customs officer ticks box 19 on both vouchers 1 and 2 for the current operation and determines whether or not physical checking of the load is required.
- If NO: go to 2;
- If YES (exceptional cases): go to 1.2.2.
- 1.2.2. The customs officer removes the seals and checks the load and compares it with the data of the TIR Carnet and other accompanying documents.
- If everything is OK: go to 1.1.3;
- If any problem is encountered: **END**.
- 2. The customs officer completes fields 18 and 20 to 23 of both vouchers No. 1 and No. 2 corresponding to the TIR operation,
- he completes counterfoil No. 1,
- he removes voucher No. 1,
- he returns the TIR Carnet to the holder,
- he keeps or transmits the voucher number 1 for the discharge procedure: END.

## 4.6 Terminate TIR operation use case

## 4.6.1 Terminate TIR operation use case diagram

Figure 1.18 **Terminate TIR operation use case diagram** 



#### 4.6.2 Terminate TIR operation use case description

Table 1.8

#### Terminate TIR operation use case description

Name	Terminate TIR operation use case
Description	The road vehicle, the combination of vehicles or the container with the goods and the TIR Carnet are presented for purposes of control to the customs office of exit, destination or to the intermediate customs office of departure (playing the role of a customs office of exit or destination <sup>4</sup> ).
Actors	TIR Carnet holder, Customs authorities, Guarantee chain.
Performance Goals	Terminate the transit procedure in a given country (customs territory) for a specific leg of the TIR Transport.
Preconditions	In accordance with the TIR Transport use case, this use case can be launched only after the start of the TIR operation.
Postconditions	A termination message is sent to the control system for TIR Carnets
	Voucher $N^{\circ}2$ or the certificate of termination is sent to the office in charge of the discharge of the TIR operation
Scenario 1	Terminate TIR operation at the customs office of exit en route:

#### Terminate TIR operation at the customs office of exit en route:

The holder presents the road vehicle, the goods and the TIR Carnet to the customs office of exit (en route) for purposes of control. The customs officer checks the validity of the TIR Carnet, checks the integrity of the sealing devices, seals and their number against the seals' number mentioned in the TIR Carnet.

The customs officer may also examine all parts of the vehicle in addition to the sealed load compartment (Explanatory Note 0.21-1 to Article 21 of the TIR Convention).

The customs officer may exceptionally carry out an examination of the goods, particularly when an irregularity is suspected (Art. 5 par. 2 of the TIR Convention). In case of examination of the load of a road vehicle, combination of vehicles or the container, the customs officer affixes new seals and records on the TIR Carnet vouchers used in that Contracting Party, on the corresponding counterfoils, and on the vouchers remaining in the TIR Carnet, particulars of the new seals affixed and of the controls carried out (Art. 24 of the TIR Convention).

If the checks are not satisfactory to the customs officer, because he notices any irregularity in connection with the TIR operation itself, he may certify the termination of this TIR operation with reservation. In this case, the customs officer completes field 24 of the appropriate detachable green sheet of voucher No. 2 by inscribing the name of the customs office of exit (en route), crosses out box 25 (or does not cross out box 25, if the reason for the reservation is that seals or identification marks were indeed not found to be intact), completes field 27 by placing an "R" and fills-in field 28 by putting a stamp, date and a signature. Then the Customs officer completes accordingly the corresponding green counterfoil namely by inscribing the name of the customs office of exit (en route) in field 1, crossing out box 2 (or does not cross out box 2, if the reason for the reservation is that seals or identification marks were indeed not found to be intact), repeating "R" under item 5 inscribing the reason why the TIR operation is terminated with reservation, and completing field 6 by putting the customs stamp, date and signature.

If the checks are satisfactory to the customs officer, he completes field 24 of the appropriate detachable green sheet of voucher No. 2 of the TIR Carnet by inscribing the name of the customs office of exit (en route), crosses out box 25 and completes field 28 by putting a stamp, date and a signature. Then the customs officer completes accordingly the corresponding green counterfoil namely by inscribing the name of the customs office of exit (en route) in field 1,

<sup>&</sup>lt;sup>4</sup> The procedure to terminate the TIR operation at an intermediate office of departure is slightly different than at Customs offices of exit or destination.

Name

Terminate TIR operation use case

crossing out box 2 and completing field 6 by putting the customs stamp, date and signature.

After completing voucher and counterfoil number 2 with or without reservation, the customs officer removes the green voucher number 2 of the TIR Carnet and returns the TIR Carnet to the holder. The TIR operation is now terminated (Art. 1 lit. d of the TIR Convention). The customs officer further tears off the detachable green sheet of voucher No. 2 of the TIR Carnet.

#### Scenario 2 Terminate TIR operation at the customs office of destination:

The holder presents the road vehicle, the goods and the TIR Carnet to the customs office of destination for purposes of control. The customs officer checks the validity of the TIR Carnet, checks the integrity of the seals and their number against the seals' number mentioned in the TIR Carnet.

The customs officer may also examine all parts of a vehicle in addition to the sealed load compartment (Explanatory Note 0.21-1 to Article 21 of the TIR Convention).

The customs officer takes the seals off and checks the goods.

If the checks are not satisfactory to the customs officer because he noticed some irregularities connected with the TIR operation itself, he may certify the termination of this TIR operation with reservation. In this case, the customs officer completes field 24 of the appropriate detachable green sheet of voucher No. 2 of the TIR Carnet by inscribing the name of the customs office of destination, crosses out box 25 (or does not cross out box 25, if the reason for the reservation is that seals or identification marks were indeed not found to be intact), inscribes the number of packages for which the termination of the TIR operation is certified in field 26, completes field 27 by placing an "R" and fills-in field 28 by putting a stamp, date and a signature. Then the customs officer completes accordingly the corresponding green counterfoil namely by inscribing the name of the customs office of destination in field 1, crossing out box 2 (or does not cross out box 2, if the reason for the reservation is that seals or identification marks were indeed not found to be intact), inscribing the number of packages for which the termination of the TIR operation is certified in field number 3, repeating "R" under item 5 inscribing the reason why the TIR operation is terminated with Reservation, and completing field 6 by putting the customs stamp, date and signature.

If the checks are satisfactory to the customs officer, he completes field 24 of the appropriate detachable green sheet of voucher No. 2 of the TIR Carnet by inscribing the name of the customs office of destination, crosses out box 25, inscribes the number of packages for which the termination of the TIR operation is certified in field 26 and completes field 28 by putting a stamp, date and a signature. Then the customs officer completes accordingly the corresponding green counterfoil namely by inscribing the name of the customs office of destination in field 1, crossing out box 2, inscribing the number of packages for which the termination of the TIR operation is certified in field number 3, and completing field 6 by putting the customs stamp, date and signature.

After completing voucher and counterfoil No. 2 with or without reservation, the customs officer removes the green voucher No. 2 of the TIR Carnet and returns the TIR Carnet to the holder. The customs officer further tears off the detachable green sheet of voucher No. 2 of the TIR Carnet, keeps the upper part of the green voucher number 2 at the customs office of destination.

The TIR operation is now terminated (Art. 1(d) of the TIR Convention). The customs office of destination sends the SafeTIR message confirming the correct termination of the TIR operation at the customs office of destination to the competent national guaranteeing association.

The customs officer sends the detachable green sheet to the customs office of entry (en route).

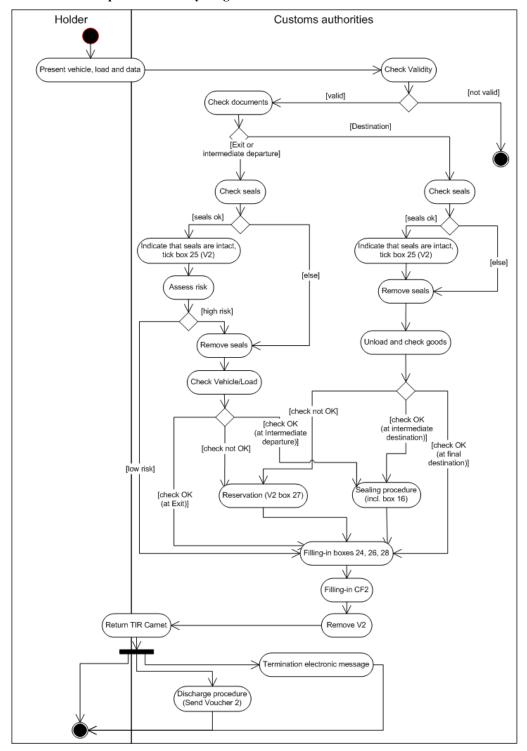
#### Scenario 3 Intermediate customs office of destination

In case a TIR transport consists of various part loads, one or two TIR operations will be terminated at intermediate customs offices of destination. Such customs office will play both the role of customs office of destination (see scenario 2) as well as of customs office of departure (see also: Use Case 4.5)

Name	Terminate TIR operation use case
Alternative	The main scenarios do not take account of the following scenarios:
Scenario	1. Non validation of the TIR Carnet by customs;
	2. Falsified acceptance of the TIR Carnet;
	3. Use of lost or stolen TIR Carnets.
Special requirements	Goods which have arrived at their customs office of destination are no longer under the TIR regime. Therefore, they are put under another customs regime.
Extension Points	In the process of checking the validity of the TIR Carnet, customs authorities may make use of information stored in the electronic control system maintained by the international organization.
Requirements Covered	-

### 4.6.3 Activity diagram of the terminate TIR operation use case

Figure 1.19
Terminate TIR operation activity diagram



#### 4.6.4 Structured description of the activity diagram of the terminate TIR operation use case

1. The termination of a TIR operation **BEGINS** when the TIR Carnet holder presents a valid and duly filled-in TIR Carnet, together with the goods and a TIR approved vehicle at a customs office (exit, destination or intermediate office of departure). The customs officer may first check the validity of the TIR Carnet and **END** the procedure if the TIR Carnet is not valid.

The customs officer may also examine all parts of the vehicle in addition to the sealed load compartment (Explanatory Note 0.21-1 to Article 21 of the TIR Convention).

- Customs of destination: go to 1.1;
- Customs of exit or intermediate departure: go to 1.2;
- 1.1. The customs officer checks the integrity of all seals and their number against the seals' number(s) mentioned in the TIR Carnet
- If seals are OK: go to 1.1.1;
- If seals are <u>not</u> OK: **go to 1.1.2**.
- 1.1.1. Indicate that seals were intact by ticking box 25 in voucher N°2; Go to 1.1.2.
- 1.1.2. The customs officer takes the seals off and checks the goods
- If checks are OK at intermediate customs office of destination: go to 1.2.2.1;
- If checks are OK at final customs office of destination: go to 3;
- If checks are <u>not</u> OK: **go to 2**.
- 1.2. The customs officer checks the integrity of all seals and their number against the seals' number(s) mentioned in the TIR Carnet
- If seals are OK: go to 1.2.1;
- If seals are not OK: go to 1.2.2.
- 1.2.1. The customs officer indicates that seals are intact by ticking box 25 in voucher  $N^{\circ}2$ ; he determines whether or not physical checking of the load is required:
- If YES: **go to 1.2.2**;
- If NO: go to 3.
- 1.2.2. The customs officer removes the seals and checks the load and vehicle.
- If everything is OK at customs office if exit: go to 1.2.2.1;
- If everything is OK at intermediate customs office of departure: **go to 3**;
- If a problem is encountered: go to 2.
- 1.2.2.1. The customs officer affixes new seals and records on the TIR Carnet vouchers used in that Contracting Party, on the corresponding counterfoils, and on the vouchers remaining in the TIR Carnet, particulars of the new seals affixed and of the controls carried out (Art. 24 of the TIR Convention): **go to 3**.
- 2. The customs certifies the termination of the TIR operation with reservation. In this case, the customs officer completes field 27 by placing an "R": go to 3.
- 3. The customs officer completes fields 24, 26 and 28 of voucher No. 2 corresponding to the TIR operation;
- he completes counterfoil No. 2;
- he removes voucher No. 2;
- he returns the TIR Carnet to the holder;
- he also should send and electronic message to the control system for TIR Carnets;
- and finally send a termination message to the discharge office (see discharge use case for details): END.