



UNION INTERNATIONALE DES CHEMINS DE FER  
INTERNATIONALER EISENBahnVERBAND  
INTERNATIONAL UNION OF RAILWAYS

## **UIC SAFETY DATABASE**

### **DEFINITIONS**

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Author: Olivier Georger

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# 1 Definitions of the terms used in the Safety Database

## Accident

Unexpected event that causes harm to people and/or property and/or environment.

## Significant accident

“significant accident” means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded.

## Accidents to be recorded in the UIC Safety Database

- All significant accidents
- Accidents involving dangerous goods when in accordance with RID/ADR section 1.8.5 (see point 4)

Suicides and suicide attempts are no railway accidents. Fires in rolling stock and accidents involving dangerous goods without railway vehicle in motion are also considered as significant.

## Fatality

"Person killed" means any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides. (European Regulation N° 1192/2003 amending Regulation N° 91/2003)

## Serious injury

"Person seriously injured" means any person injured who was hospitalized for more than 24 hours as a result of an accident, excluding attempted suicides. (European Regulation N° 1192/2003)

## Railway vehicle

"Railway vehicle" means mobile equipment running exclusively on rails, moving either under its own power (tractive vehicles) or hauled by another vehicle (coaches, railcar trailers, vans and wagons).

## Damages

Damages are considered as significant when exceeding 150 000 euros. Damage costs include the rolling stock and the entire infrastructure damage costs (tracks, fixed installations, buildings etc..)

## **Traffic disruption**

An interruption of traffic on a section of line for more than 6 hours is considered as extensive. It is up to each infrastructure manager to evaluate the real importance of this interruption, according to the volume or the concentration of traffic on each section of line concerned for example, interruptions of traffic which have occurred on less important lines where it is not estimated urgent to carry out a quick reestablishment of circulation.

## **Train**

"Train" means one or more railway vehicles hauled by one or more locomotives or railcars, or one railcar travelling alone, running under a given number or specific designation from an initial point to a terminal fixed point. By "train" we mean not only trains that are used in revenue service, but also emergency units, trains that are used for maintenance of infrastructure, including motorized trucks, motorized wagons, etc. For statistical purposes, "Train" also covers shunting operations and runaway vehicles.

## **Passenger**

Any person, excluding members of the train crew, who makes a trip by rail. For accident statistics, passengers trying to embark/disembark a moving train are included.

## **Staff**

Any person whose employment is in connection with a railway and is at work at the moment of the accident. It includes the train crew and persons handling rolling stock and infrastructure installations. Staff of contractors and self-employed contractors are included.

## **Level crossing user**

Any person using a level crossing to cross a railway line by any mean of transport or walking.

## **Unauthorized person**

Any person present on railway premises where such presence is forbidden, with the exception of level crossing users.

## **Other person**

Any person not defined in the above categories.

## 2 Fulfilling the database fields

<b>EVT_ID</b>	<b>UIC event reference number</b>	It is automatically given by the application.
<b>EXT_EVT_ID</b>	<b>Company event reference number</b>	
<b>ST_ID</b>	<b>Status</b>	Field no more in use. Automatical value =1
<b>USR_ID</b>	<b>Declarant reference number</b>	Given by the UIC SDB manager
<b>LO_LA_ID</b>	<b>Local language</b>	Code ISO 639-1 (alpha-2) of the local language used
<b>MT_LA_ID</b>	<b>Main translation language</b>	<p>Texts should be translated in one of the three UIC languages : English, French or German. Code ISO 639-1 (alpha-2) of the translation language used in the declaration: EN, FR or DE</p>
<b>CO_ID</b>	<b>Country reference number</b>	Given by the UIC SDB manager
<b>TM_ID</b>	<b>Transport mode</b>	Field no more in use. Automatical value =1
<b>IM_ID</b>	<b>Infrastructure manager</b>	<p>“Any entity or company that is responsible in particular for establishing and maintaining railway infrastructure, or part of the railway infrastructure, which may also include the management of infrastructure control and safety systems. The functions of the infrastructure manager on a network or part of a network may be allocated to different bodies or undertakings.” (Directive 2001/12/EC amending Directive 91/440/EC)</p> <p>The IM code is given by the UIC SDB manager</p>
<b>RU_ID_1</b>	<b>Railway undertaking</b>	<p>Any public or private undertaking, the activity of which is to provide transport of goods and/or passenger by rail with a requirement that the undertaking must ensure traction; this also includes undertakings which provide traction only. (Directive 2001/12/EC amending Directive 91/440/EC). AND “Railway undertaking”, means any public or private undertaking, which provides services for the transport of goods and/or passengers by rail. Undertakings whose only business is to provide services for the transport of passengers by metro, tram and/or light rail are excluded. (European Regulation N° 1192/2003 amending Regulation N° 91/2003).</p> <p>The UIC SDB manager creates codes for any railway undertaking involved in an accident.</p> <p>The declarant gets the possibility to inscribe up to three railway undertakings when more than one train are involved in the accident (fields RU_ID_2, RU_ID_3)</p>

<b>DATE</b>	<b>Date of the event</b>	YYYY-MM-DD
<b>TIME</b>	<b>Time of the event</b>	HH:MM
<b>LOC</b>	<b>Location of the event</b>	Text field to resume where the event occurred
<b>LT_ID</b>	<b>Type of location</b>	
	<ul style="list-style-type: none"> <li>➤ <b>Open line (=1)</b></li> </ul>	Track which is usually used for train running traffic (passenger and freight) outside of the station area.
	<ul style="list-style-type: none"> <li>➤ <b>Station (=2)</b></li> </ul>	Point where tracks in addition to the running trains, are generally used for boarding (disembarking) passengers and/or for loading (unloading) goods. The stations are generally defined as a part of the infrastructure (tracks, switches, fixed installation, platform etc..) located between entry signals in each direction.
	<ul style="list-style-type: none"> <li>➤ <b>Other type of location (=3)</b></li> </ul>	This item may be selected if the accident occurs other than on open line or in a station, for example, service track or marshalling yard track particularly for the following accidents: electrocution and accidents involving dangerous goods.
<b>LD_ID</b>	<b>Location details</b>	
	<ul style="list-style-type: none"> <li>➤ <b>Switches and Crossings (=1)</b></li> </ul>	Switches are constructions that connect tracks and permit railway vehicles to pass from one track to another. Crossings are locations where several tracks cross each other at the same level.
	<ul style="list-style-type: none"> <li>➤ <b>Level Crossing (=2)</b></li> </ul>	Level crossing means any level intersection between a road and a railway, where "road" means any highway or other road open to public vehicular traffic. The following are considered as components of level crossings: roadways, paths for pedestrians, verges and drainage ditches.
	<ul style="list-style-type: none"> <li>➤ <b>Bridge / Viaduct (=3)</b></li> </ul>	Bridges are structures generally used for crossing an obstacle, particularly a water course, a road. Viaducts are multi-span bridge structures (e.g. for crossing a valley).
	<ul style="list-style-type: none"> <li>➤ <b>Tunnel (=4)</b></li> </ul>	Large section underground gallery excavated or constructed through which a railway line runs (except for an underground station).
	<ul style="list-style-type: none"> <li>➤ <b>Other type of location (=5)</b></li> </ul>	Other type of very specific location not listed above.

## **ALOMTI**

### **“At least one train in movement”**

The value =1 indicates that one train in movement is involved in the event. The value = 0 indicates that there is no train in movement. Only fires and accidents involving dangerous goods might be considered as significant when ALOMTI = 0. For the other types of accidents, ALOMTI = 1 is a necessary condition to be significant.

## **TLC\_ID**

### **Type of level crossing**

#### ➤ **Active level crossing (=1)**

Level crossing where the crossing users are protected from or warned of the approaching train by the activation of devices when it is unsafe for the user to traverse the crossing.

#### ➤ **Passive level crossing (=2)**

Level crossing without any form of warning system and/or protection activated when it is unsafe for the user to traverse the crossing.

## **TT\_ID\_1**

### **Type of train involved in the accident**

#### ➤ **Freight combined transport (=1)**

Transport of containers, swap bodies, vehicles and road trailers conveyed by rail from or to intermodal transshipment sites, and by road to the final destination .

#### ➤ **Freight block train (=2)**

Train conveying freight between two defined points without separating the load.

#### ➤ **Freight HS train (=3)**

Freight trains designed to operate at high speed, over 160 km/h.

#### ➤ **Other freight train (=4)**

For example, a train that conveys freight between two marshalling yards, feeder train, etc.

#### ➤ **Regional passenger train (=5)**

Passenger train providing local rail transport. The local nature of the train service is left to the discretion of each railway.

#### ➤ **Long distance passenger train (=6)**

Passenger train providing national rail transport between large cities or international transport.

#### ➤ **High speed passenger train (=7)**

Passenger train designed to run on a high speed line at the speed of 250 km/h or more.

#### ➤ **Other passenger train (=8)**

All other types of train, for example, tourist trains or trains chartered by a company.

#### ➤ **Shunting operation (=9)**

Movement guided by shunting signals or by radio of motive power units which may be hauling one or more vehicles or non-trailing vehicles. Also denotes all moving vehicles.

#### ➤ **Locomotive running light (=10)**

Locomotive that is running isolated or coupled with other locomotives.

➤ **Infrastructure works train (=11)**

Train used to build, modify or maintain infrastructure.

➤ **Other train (infrastructure) (=12)**

Example: relief train, rolling stock test train.

➤ **Runaway vehicle (=14)**

Uncontrolled movement of a railway vehicle: untimely movement, impossibility of stopping the vehicle.

➤ **Non identified train (=13)**

The declarant gets the possibility to inscribe up to five types of train when more than one train are involved in the accident (fields TT\_ID\_2, TT\_ID\_3, TT\_ID\_4, TT\_ID\_5)

**TA\_ID**

**Type of accident**

➤ **Train collision with an obstacle (=1)**

This type of accident corresponds to the crash of a railway vehicle into an obstacle. Obstacle means everything inside the gauge excluding people (cf. individual accidents), it could be:

- animals,
- fixed objects ( e.g. buffers)
- objects on the gauge like trees, rocks, stone thrown from outside, etc.,
- road vehicles at level crossings or in any other location

Cyclists are considered as pedestrians.

➤ **Train collision with another train (=2)**

Crash of a railway vehicle into another railway vehicle. It might be lateral as well as frontal.

➤ **Derailment (=3)**

Effect resulting from at least one axle of a moving train running off the rails accidentally.

➤ **Individual hit by a train (excluding suicides) (=4)**

It includes in particular individuals hit by a moving train:

- when walking alongside a track
- when crossing the track in stations or on open line, on authorized or unauthorized pathways
- when boarding or alighting from the wrong side of a stationary train

Cyclists are considered as pedestrians

➤ **Individual falling from a train (excluding suicides) (=5)**

It includes in particular individuals falling:

- from a moving train on open line
- when getting on or off a moving train

➤ **Electrocution by overhead line or third rail (excluding suicides) (=6)**

Pathological consequences caused in a human body by the passage of an electric current.

➤ **Fire in rolling stock (=7)**

'Fires in rolling stock' means fires and explosions that occur in railway vehicles (including their load) when they are running between the departure station and the destination, including when stopped at the departure station, the destination or intermediate stops, as well as during re-marshalling operations.

- Fires in marshalling yards or in stabling yards are excluded
- Re-marshalling operations are operations carried out between the departure station and the destination
- Smoke, heat or blast resulting from fire or explosions leading to a significant accident should also be included

➤ **Accident involving dangerous goods (no release) (=8)**

Accident involving the transport of dangerous goods" means any accident or incident that is subject to reporting in accordance with RID/ADR section 1.8.5. This type of accident is registered when it is evident that dangerous goods have not been released into the environment (ground, air or water). No movement of rolling stock is required for this declaration.

➤ **Accident involving dangerous goods (with release) (=9)**

Same type of accident as the previous one but is selected when dangerous goods have been released into the environment (ground, air or water). No movement of rolling stock is required for this declaration.

## AE\_ID\_1

### Associated events

This field is used to detail the different phases of the accident. For example, a collision with an obstacle (TA\_ID = 1) may be the consequence of a runaway vehicle (AE\_ID = 14) and followed by a derailment (AE\_ID = 3). The type of accident should not be repeated in this field. The declarant may indicate up to 5 associated events (fields AE\_ID\_2, AE\_ID\_3, AE\_ID\_4, AE\_ID\_5)

- **Train collision with an obstacle (=1)**
- **Train collision with another train (=2)**
- **Derailment (=3)**
- **Individual hit by a train (excluding suicides) (=4)**
- **Individual falling from a train (excluding suicides) (=5)**
- **Electrocution by overhead line or third rail (excluding suicides) (=6)**
- **Fire in rolling stock (=7)**
- **Accident involving dangerous goods (no release) (=8)**
- **Accident involving dangerous goods (with release) (=9)**
- **Dangerous over-speeding (=10)**

Exceeding the authorized speed on a section of line.

➤ **Serious braking failure (=11)**

Brake failure jeopardizing braking effectiveness, for example malfunctioning of the brake distributor or compressed air control valve.

➤ **Poor adhesion (=12)**



Failure affecting the quality of rail/wheel contact, for example rail which has become slippery due to the presence of oil or falling leaves, carbon deposits on wheel flanges.

➤ **Overheated axle box (=13)**

Excessive heating of an axle box likely to cause an axle to break.

➤ **Runaway vehicle (=14)**

Uncontrolled movement of a railway vehicle: untimely movement, impossibility of stopping the vehicle.

➤ **Track subsidence / track deformation (=15)**

All events concerning different constituents of track ( structures, earth structure, rails - except broken rails, sleepers, ballast, points and crossings and given rise to stoppage of train running or slaving in order to carry out necessary repair work:

- track subsidence
- fouling of the gauge by falling rocks, track obstruction
- faults related to the continuum and the geometry of track

➤ **Broken rail (=16)**

A broken rail is any rail which has separated in two or more pieces, or any rail from which a piece of metal becomes detached, causing a gap of more than 50 mm in length and more than 10 mm in depth on the running surface. (UIC Leaflet 712)

➤ **Broken wheel or broken axle (=17)**

Break affecting the essential parts of the wheel or axle and creating a risk of accident (derailment or collision).

➤ **SPADs (=18)**

Any occasion where a train passes a signal at danger and runs beyond the danger point (e.g. a train which runs beyond the fouling point of a set of points where routes converge or running beyond facing points).

➤ **(Wrong-side) Signalling failure (=19)**

- Any failure of the signalling system which results in the lack of signal indication presentation or by the presentation of an aspect less restrictive than that which has been demanded, for instance:
  - a green light aspect presented instead of a indication at danger: signal warning to slow down, caution signal announcing a stop signal or a speed restriction signal
  - any signal less restrictive than a stop signal that is presented instead of a stop signal
  - the presentation failure of a distant signal announcing a stop signal or a speed restriction signal
- Serious disturbances of the mechanical or electric installations, for instance:
  - defect of closing of the barriers of a level crossing at the time of the passage of a train
  - malfunction of the electric interlocking, for example malfunction of a track circuit allowing the inopportune maneuver of a switch

➤ **Other type of associated event (=20)**

<b>DESC_FR</b>	<b>Description of the event in french language</b>	(no limit of characters)
<b>DESC_DE</b>	<b>Description of the event in german language</b>	(no limit of characters)
<b>DESC_LL</b>	<b>Description of the event in local language</b>	(no limit of characters)
<b>TN_ID</b>	<b>Number of tracks</b>	
	<ul style="list-style-type: none"> <li>➤ <b>Single track (=1)</b></li> </ul> <p>Section of line consisting of one track only where trains operate indifferently in one direction of traffic or the other.</p> <ul style="list-style-type: none"> <li>➤ <b>Double track (=2)</b></li> </ul> <p>Section of line consisting of two tracks regardless of the train's operation mode.</p> <ul style="list-style-type: none"> <li>➤ <b>Multiple tracks line (=3)</b></li> </ul> <p>Section of line consisting of more than two tracks.</p>	
<b>TC_ID</b>	<b>Type of traffic control</b>	
	<ul style="list-style-type: none"> <li>➤ <b>Centralized control (=1)</b></li> </ul> <p>Central signal box covering a wide area and operating safety installations by remote control.</p> <ul style="list-style-type: none"> <li>➤ <b>In stations (=2)</b></li> </ul> <p>Traffic control covering a narrow area and operating safety installations by station.</p>	
<b>SS_ID</b>	<b>Type of signalling system</b>	
	<ul style="list-style-type: none"> <li>➤ <b>Cab signalling (=1)</b></li> </ul> <p>Signalling system in which the information intended for the driver is displayed continuously inside the driver's cab on the motive power unit.</p> <ul style="list-style-type: none"> <li>➤ <b>Lineside signaling (=2)</b></li> </ul> <p>Signalling system in which the information intended for the driver is provided by signals on the ground alongside or over the track.</p> <ul style="list-style-type: none"> <li>➤ <b>ERTMS (=3)</b></li> </ul> <p>European Rail Traffic Management System</p> <ul style="list-style-type: none"> <li>➤ <b>Simplified or other (=4)</b></li> </ul>	
<b>SWS_ID</b>	<b>Signalling system working status</b>	
	<p>The signalling system might be fully operational (=1), manually operated (=2), defective (=3), or there might be no signaling (=4)</p>	
<b>CA_CB_ID_1</b>	<b>Cause of the accident</b>	
	<p>The causal tree is available in appendix A. It corresponds to the 2013 update, which simplifies the formerly used causal tree.</p> <p>The declarant gets the possibility to add up to 5 causes (fields CA_CB_ID_2, CA_CB_ID_3, CA_CB_ID_4, CA_CB_ID_5)</p>	

<b>NB_CST_FATAL</b>	<b>Number of passenger fatalities</b>
<b>NB_CST_S_INJ</b>	<b>Number of serious passenger injuries</b>
<b>NB_STF_FATAL</b>	<b>Number of staff fatalities</b>
<b>NB_STF_S_INJ</b>	<b>Number of serious staff injuries</b>
<b>NB_LCU_FATAL</b>	<b>Number of fatalities of level crossing users</b>
<b>NB_LCU_S_INJ</b>	<b>Number of serious injuries of level crossing users</b>
<b>NB_UAP_FATAL</b>	<b>Number of fatalities of unauthorized persons</b>
<b>NB_UAP_S_INJ</b>	<b>Number of serious injuries of unauthorized persons</b>
<b>NB_OTH_FATAL</b>	<b>Number of fatalities of other persons</b>
<b>NB_OTH_S_INJ</b>	<b>Number of serious injuries of other persons</b>
<b>ENV_CONS_RLV</b>	<b>Environmental consequences</b> <ul style="list-style-type: none"> <li>➤ No significant environmental impact (=0)</li> <li>➤ Significant environmental impact (=1)</li> </ul>
<b>ENV_CONS_EN</b>	<b>Description of environmental consequences in english language</b>
<b>ENV_CONS_FR</b>	<b>Description of environmental consequences in french language</b>
<b>ENV_CONS_DE</b>	<b>Description of environmental consequences in german language</b>
<b>FIN_CONS_LRG</b>	<b>Financial consequences</b> <ul style="list-style-type: none"> <li>➤ Less than 150 000 euros (=0)</li> <li>➤ More than 150 000 euros (=1)</li> </ul>
<b>FIN_CONS</b>	<b>Amount of damage in euros</b> The evaluation of the financial consequences is left to the discretion of each railway. General practice is to consider the cost of the rolling stock and infrastructure repairs.
<b>SIGNIFICANT</b>	<b>Significant accident</b> <ul style="list-style-type: none"> <li>➤ Not significant accident (=0)</li> <li>➤ Significant accident (=1)</li> </ul>

<b>PROT_MEAS_EN</b>	<p><b>Description of protective measures in english language</b></p> <p>This text field may contain a note on provisional action taken following an accident, for example, following a derailment, prohibition of use of a particular type of bogie with cracks, or prohibition of use of a certain type of coach following a fire”.</p>												
<b>PROT_MEAS_FR</b>	<p><b>Description of protective measures in french language</b></p>												
<b>PROT_MEAS_DE</b>	<p><b>Description of protective measures in german language</b></p>												
<b>PROT_MEAS_LL</b>	<p><b>Description of protective measures in local language</b></p>												
<b>LINK</b>	<p><b>Link to a web page</b></p> <p>A website address can be entered in this field, providing further information relating to the accident; a map of the site, photographs, etc.</p>												
<b>TRF_INT</b>	<p><b>Traffic disruption</b></p> <ul style="list-style-type: none"> <li>➤ <b>No traffic disruption (=0)</b></li> <li>➤ <b>Traffic disruption (=1)</b></li> </ul>												
<b>OTHER FIELDS</b>	<p><b>Automatically fulfilled by the application</b></p> <table> <tr> <td>DATE_OF_DECL</td> <td>DEC_USR_ID</td> </tr> <tr> <td>DATE_OF_UPDATE</td> <td>UPD_USR_ID</td> </tr> <tr> <td>DATE_OF_VALIDATION</td> <td>VAL_USR_ID</td> </tr> <tr> <td>DATE_OF_INVALIDATION</td> <td>INV_USR_ID</td> </tr> <tr> <td>DATE_OF_TRANSLATION</td> <td>TRA_USR_ID</td> </tr> <tr> <td>DATE OF FINALIZATION</td> <td>FIN_USR_ID</td> </tr> </table>	DATE_OF_DECL	DEC_USR_ID	DATE_OF_UPDATE	UPD_USR_ID	DATE_OF_VALIDATION	VAL_USR_ID	DATE_OF_INVALIDATION	INV_USR_ID	DATE_OF_TRANSLATION	TRA_USR_ID	DATE OF FINALIZATION	FIN_USR_ID
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DATE_OF_TRANSLATION	TRA_USR_ID												
DATE OF FINALIZATION	FIN_USR_ID												

### 3 EU accident definitions

#### **DIRECTIVE 2004/49/EC**

“Safety Directive” of the European Parliament and of the Council of 29 April 2004

"accident" means an unwanted or unintended sudden event or a specific chain of such events which have harmful consequences; accidents are divided into the following categories: collisions, derailments, level-crossing accidents, accidents to persons caused by rolling stock in motion, fires and others.

"serious accident" means any train collision or derailment of trains, resulting in the death of at least one person or serious injuries to five or more persons or extensive damage to rolling stock, the infrastructure or the environment, and any other similar accident with an obvious impact on railway safety regulation or the management of safety; "extensive damage" means damage that can immediately be assessed by the investigating body to cost at least EUR 2 million in total;

**(EC) NO 1192/2003 OF 3 JULY 2003** amending Regulation (EC) No 91/2003 of the European Parliament and of the Council on rail transport statistics. (EUROSTAT)

“serious injury accident” means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person. Accidents in workshops, warehouses and depots are excluded.

“significant accident” means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded.

## 4 Accidents involving dangerous goods

The RID determines the field covered by accidents/incidents (1.8.5.):

"If an accident or incident takes place .... the carrier and if the case be, the railway infrastructure manager, shall ensure that a report is made to the competent authority of the Member State:

- if dangerous goods were released,
- or if there was:
  - an imminent risk of loss of product,
  - personal injury,
  - material damage,
  - or environmental,
  - or if the authorities were involved,

and one or more of the following criteria has/have been met:

- Personal injury means an occurrence directly relating to the dangerous goods carried and which has resulted in:
  - death
  - or injury which
    - requires intensive medical treatment,
    - requires a stay in hospital of at least one day, or
    - results in the inability to work for at least three consecutive days
- Loss of product means the release of dangerous goods:
  - of transport category 0 or 1 in quantities of 50 kg/50 l or more
  - of transport category 2 in quantities of 333 kg/333 l or more

The loss of product criterion also applies if there was an imminent risk of product released in the above-mentioned quantities.

- of Class 6.2, without quantity limitations
- in occurrences involving Class 7 material, the criteria for loss of product are:
  - any release of radioactive material from the packages
  - exposure leading to a breach of the limits set out in the regulations for protection of workers and members of the public against ionising radiation.
  - or when there is reason to believe that there has been a significant degradation in any package safety function (containment, shielding..... ) which may have rendered the package unsuitable for continued carriage without additional safety measures.

Material damage or environmental damage means the release of dangerous goods, or of the fuel from motive power units, irrespective of the quantity, where the estimated amount of damage exceeds 50 000 Euro.

Damage to any directly involved means of transport containing dangerous goods and to the modal infrastructure shall not be taken into account for this purpose.

Involvement of authorities means the direct involvement of the authorities or emergency services during the occurrence involving dangerous goods and the evacuation of persons or closure of public traffic routes (roads/railways) for at least three hours owing to the danger posed by the dangerous goods."