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## **Economic Commission for Europe**

### **Inland Transport Committee**

#### **Working Party on the Transport of Dangerous Goods**

**Joint Meeting of the RID Committee of Experts and the**

**Working Party on the Transport of Dangerous Goods**

Geneva, 17-27 September 2019

Item 8 of the provisional agenda

**Accidents and risk management**

**12 September 2019**

### **Working Group Report on the Improvement of the Accident Report**

#### **Transmitted by the Government of France**

In paragraph 19 of informal document INF.11, it has been announced that a revised version of the draft reports will be provided later for the September Joint Meeting. This new draft include comment from the working group that could not be formally drafted because of lack of time. Furthermore the working group suggested that a draft report for each mode should be established

As agreed France has done this exercise. Therefore two drafts reports one for RID and one for ADR are provided hereafter. They take into account the comments that the working group could not draft in a precise text:

- Modified parts are in italic red.
- Comments are in italic with gray highlight.

A report for ADN will be considered during the working group in Brussels mentioned at the end of informal document INF.11

The Joint Meeting is invited to give some advice on the way these drafts should be considered during further sessions of the working group.

**DRAFT FOR RID**

Report on occurrences during the carriage of dangerous goods  
in accordance with RID section 1.8.5

Company reference number: *According to Cor System*

Reporter reference number: *According to Cor System*

Company: .....		
Address: .....		
Contact name: .....	Telephone: .....	Fax: .....

*(The competent authority shall remove this cover sheet before forwarding the report)*

*Operation of the interested party:*

- Consignor*
- Carrier*
- Consignee*
- Loader*
- Filler*
- Tank-container/portable tank operator*
- Tank-wagon operator*
- Railway infrastructure manager*
- Unloader*

**Location accident**

- Country:  Local Time:
- region:
- Town:
- Department

Geographical coordinates:

*According to Cor System*

- Latitude:
- Longitude:

**Context :**

**Nature of operation:**

- Carrying
- Shunting
- Loading
- Unloading
- Other (explain):

**Weather conditions**

Temperature: °C

- Dry, clear
- rain
- snow
- fog, mist, smoke
- sleet, hail
- Thunder storm
- High winds
- unknown
- other

**Surface conditions**

- Dry
- snow, frost, ice, slush
- slippery
- wet, damp
- flood
- unknown
- other

**Light conditions**

- Daylight
- Twilight
- darkness street light lit
- darkness street light unlit

**Infrastructure**

Gradient (if known the estimate value):

**Railway segments/Environment:**

- Urban
- Suburban *According to Risk Management framework*
- Country Side with 1 line
- Country side with 2 line

**Line category:**

- Open line
- Station/Terminal
  - Station or siding
  - Marshalling yard [shunting]
- Single track
- Multiple Track (more than 1)

- Tunnel
- entry area
- on/inside
- exit area
  
- Level crossing

**Vehicle and dangerous good contained****Total number of vehicles/wagons involved**

(For each vehicle/wagon/container involved, indicate information about the DG contained and the vehicle)

Total number of involved containments:

- UN number(s):
- Name of the dangerous good(s):
- Class:
- Packaging group:
- Total quantity of dangerous good carried (estimated) per UN number:
- Particular arrangements:..

- Register Number/ Unique vehicle number:
- Train Number:

**Involved wagons :**

- Position of involved vehicle(s) in the train :
- Of those, total number of DG transport unit(s) :
- Locomotive Register Number:

**Wagon type**

- Wagon
- Tank wagon
- Battery wagon
- Closed wagon
- Open Wagon
- Sheeted wagon

**Tank type:****Tank Code:**

- vacuum-operated waste tanks
- MGEC
- Fixed Tank
- Portable tank
- Demountable tank
- Tank container
- Tank swap bodies

**Involved packaging type:****code (if given):**

- Packaging
- Large packaging
- Intermediate packaging container (IBC)
- Pressure receptacle

**Bulk type:**

- BK 1
- BK 2
- BK3
- VC1
- VC2
- VC3

**Means of containment material:**

- Steel
- Aluminum
- wood
- Fiberboard*
- Plywood
- Plastic film
- Metal
- Paper
- Plastic
- Textile
- glass

Description of the occurrence	
<p> <input type="checkbox"/> Rolling over  <input type="checkbox"/> on the track  <input type="checkbox"/> outside the track </p> <p> <input type="checkbox"/> Drop from a height </p> <p> <input type="checkbox"/> Derailment </p> <p> <input type="checkbox"/> Collision                      Speed (estimated):  <i>Crash type:</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> head on collision</li> <li><input type="checkbox"/> left front</li> <li><input type="checkbox"/> center front</li> <li><input type="checkbox"/> right front</li> <li><input type="checkbox"/> right side</li> <li><input type="checkbox"/> left side</li> <li><input type="checkbox"/> rear end collision</li> <li><input type="checkbox"/> right rear</li> <li><input type="checkbox"/> center rear</li> <li><input type="checkbox"/> left rear</li> </ul> </p> <p> <i>Collision with vehicle:</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> Train/railway vehicle</li> <li><input type="checkbox"/> Track maintenance equipment</li> <li><input type="checkbox"/> Road vehicle <ul style="list-style-type: none"> <li><input type="checkbox"/> Moving</li> <li><input type="checkbox"/> Stationary</li> </ul> </li> </ul> </p>	<p> <i>Collision against fixed obstacle:</i> <ul style="list-style-type: none"> <li><input type="checkbox"/> Bridge pillars</li> <li><input type="checkbox"/> Obstacles outside clearance gauge</li> <li><input type="checkbox"/> Other permanent object</li> <li><input type="checkbox"/> submerged in water</li> <li><input type="checkbox"/> Buffer-stop</li> <li><input type="checkbox"/> Overhead contact lines</li> </ul> </p> <p> <i>Collision with objects temporarily present on and near track:</i> <ul style="list-style-type: none"> <li>- Rocks/landslides/trees</li> <li>- Lost parts of (railway) vehicles</li> <li>- Lost or displaced loads</li> <li>- Other</li> </ul> </p>
<p> <b><u>Damage type (imminent risk of loss of product):</u></b> <ul style="list-style-type: none"> <li><input type="checkbox"/> bent</li> <li><input type="checkbox"/> gouged or cut</li> <li><input type="checkbox"/> ripped or torn</li> <li><input type="checkbox"/> torn off or damaged</li> <li><input type="checkbox"/> vented</li> </ul> </p> <p> <b><u>Leakage</u></b>            <input type="checkbox"/>        Yes        <input type="checkbox"/>        No </p> <p> <input type="checkbox"/> <i>Small Release</i>  <input type="checkbox"/> <i>Limited Release</i>  <input type="checkbox"/> <i>Continuous Release</i>                      <i>Added in conformity with</i>  <input type="checkbox"/> <i>Full Release</i>                                      <i>Risk Management Frame-</i>  <i>work</i> </p> <p> <b>Place of leakage</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> cylinder valve</li> <li><input type="checkbox"/> flange</li> <li><input type="checkbox"/> gauging device</li> <li><input type="checkbox"/> hose adaptor or coupling</li> <li><input type="checkbox"/> inlet (loading) valve</li> <li><input type="checkbox"/> inner packaging</li> <li><input type="checkbox"/> inner receptacle</li> </ul> </p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> loading/ unloading lines</li> <li><input type="checkbox"/> piping or fittings</li> <li><input type="checkbox"/> pressure relief valve</li> <li><input type="checkbox"/> sample line</li> <li><input type="checkbox"/> tank shell</li> <li><input type="checkbox"/> vacuum relief valve</li> <li><input type="checkbox"/> vent</li> <li><input type="checkbox"/> weld or seam</li> <li><input type="checkbox"/> bursting disk</li> </ul>

**Dangerous phenomena/scenario**

absence of dangerous phenomena

Fire

Vapour cloud explosion

Gascloud Fire

Jet Fire

Bleve

Location of fire:

Tractor Cab

Road tractor

Tyres/ trailer axle

Tank – trailer

Trailer – semi trailer

Pressure receptacle

Transport unit

Toxic vapour cloud

explosion without fire

Over pressurized inside the tank / packaging

Other

Pollution of soil

Pollution of water

## Causes of occurrence

### **External causes:**

- Rock/stone fall
- Landslides
- Earthquake
- Vegetation
- Environmental relevant factors*
  - Fog*
  - Flooding*
  - Frost*
  - Ice*
  - High winds*
  - Storm*
  - Snow*
  - Heat*
- Other (explain):

*Added in conformity with  
Cor System*

### **Technical fault on fixed installation:**

- Broken rail
- Track buckle and other track misalignment
- Wrong-side signaling (infrastructure) failure
- Switch and crossing failure
- Failure of the level crossing equipment
  - Disorder of earthworks/embankment failure
  - Power supply equipment failure
  - Train detection equipment failure
  - Overhead contact line failure
- Fire of fixed installation
- Other
- Structures failure
  - Tunnel failure
  - Viaduct failure
  - Culvert failures
  - Rail bridge structural failure Over line bridge
  - Station structure failure
  - Platform failure

### **Technical failure vehicle:**

- Electrical system failure
- mechanical system failure
- broken component or device
- defective component or device
- missing component or device
- Wheel
- braking system failure
- abrasion
- exterior corrosion
- interior corrosion
- Damaged lining
- Coupling failure
- Engine failure
- Axle failure
- Other

### **Related to DG carried**

- incompatible products
- incompatible material of the containment with the product carried
- self-ignition
- polymerization

### **Faulty load securing:**

- improper securing arrangement
- inadequate blocking and bracing

### **Related to procedure**

- improper preparation for transport
- inadequate maintenance
- inadequate procedures
- overfilled
- over pressurized
- valve open

### **Human causes:**

- deliberate action
- effect of alcohol
- effect of narcotic drugs
- medical treatment
- medical emergency
- excessive speed
- lack of experience
- inattention
- sleepiness
- carelessness (driving, shunting)
- loss of control
- non compliance with procedures
- inadequate training
- other

## Consequences

### Death and injury in DG company personal:

Injured (total number):

Days of hospitalization:

- Serious injury (AIS>3)
- Minor injury (AIS<3)

Nature of injury:

- Traumatic
- Intoxicated
- Burned
- Radiation

Death (number):

### Death and injury caused by DG:

Injured (total number):

Days of hospitalization:

- Serious injury (AIS>3)
- Minor injury (AIS<3)

Nature of injury:

- Traumatic
- Intoxicated
- Burned
- Radiation

Death (number):

### Death and injury third party and public:

Injured (number):

Death (number):

### Material/environment damages :

- Air pollution
- Water pollution
- Soil pollution
- Estimated quantity of loss products (kg/l): ...
- Estimated level of damage  $\leq$  50 000
- Estimated level of damage  $\geq$  50 000

*It has been asked why this threshold. Maybe it would be better to specify the amount*

⇒ *France didn't make a decision about this comment. It will be discussed during the next meeting.*

### Involvement of authorities:

- No  Yes (explain which authority):
- Evacuation of persons for a duration of at least 3 hours
- Closure of public traffic routes for a duration of at least 3 hours



**DRAFT FOR ADR**

Report on occurrences during the carriage of dangerous goods  
in accordance with ADR section 1.8.5

Company reference number: *According to Cor System*

Reporter reference number: *According to Cor System*

Company: .....
Address: .....
Contact name: ..... Telephone: ..... Fax: .....

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*Operation of the interested party:*

- Consignor*
- Carrier*
- Consignee*
- Loader*
- Filler*
- Tank-container/portable tank operator*
- Tank-wagon operator*
- Railway infrastructure manager*
- Unloader*

**Location accident**

- Country:  Local Time:
- region:
- Town:
- Department

Geographical coordinates: *According to Cor System*

- Latitude:
- Longitude:

**Context :**

<p><b><u>Nature of operation:</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Carrying</li><li><input type="checkbox"/> Shunting</li><li><input type="checkbox"/> Loading</li><li><input type="checkbox"/> Unloading</li><li><input type="checkbox"/> Other (explain):</li></ul> <p><b><u>Weather conditions</u></b></p> <p>Temperature: °C</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Dry, clear</li><li><input type="checkbox"/> rain</li><li><input type="checkbox"/> snow</li><li><input type="checkbox"/> fog, mist, smoke</li><li><input type="checkbox"/> sleet, hail</li><li><input type="checkbox"/> Thunder storm</li><li><input type="checkbox"/> High winds</li><li><input type="checkbox"/> unknown</li><li><input type="checkbox"/> other</li></ul>	<p><b><u>Surface conditions</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Dry</li><li><input type="checkbox"/> snow, frost, ice, slush</li><li><input type="checkbox"/> slippery</li><li><input type="checkbox"/> wet, damp</li><li><input type="checkbox"/> flood</li><li><input type="checkbox"/> unknown</li><li><input type="checkbox"/> other</li></ul>	<p><b><u>Light conditions</u></b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> Daylight</li><li><input type="checkbox"/> Twilight</li><li><input type="checkbox"/> darkness street light lit</li><li><input type="checkbox"/> darkness street light unlit</li></ul>
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**Infrastructure**

Gradient (if known the estimate value):

**Road segments/Environment:**

(according to Risk Management framework)

- Parking road infrastructure (precise number of places):
- Logistical road
- Urban road *According to Risk Management framework*
- Suburban
- Country Side
- other (precise) :

Tunnel Category:

- entry area
- on/inside
- exit area

Bridge:

- bridge (on a)
- under the bridge

**Vehicle and dangerous good contained**

**Total number of vehicles/wagons involved**

(For each vehicle/wagon/container involved, indicate information about the DG contained and the vehicle)

Total number of involved containments:

- UN number(s):
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- Particular arrangements:..

- Register Number/ Unique vehicle number:

**Tank type:**

**Tank Code:**

- vacuum-operated waste tanks
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- Tank swap bodies

**Involved packaging type:**

**code (if given):**

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**Bulk type:**

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- BK3
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**Means of containment material:**

- Steel
- Aluminum
- wood
- Fiberboard*
- Plywood
- Plastic film
- Metal
- Paper
- Plastic
- Textile
- glass

**Description of the occurrence**

- rolling over:
  - on the road
  - outside the road
  
- drop from a height
  
- Leaving the road
- Lane departure
  
- jack-knifing

Collision                      Speed (estimated):

**Crash type:**

- head on collision
- left front
- center front
- right front
- right side
- left side
- rear end collision
- right rear
- center rear
- left rear

**Collision with vehicle:**

- Moving
- Stationary

**Damage type (imminent risk of loss of product):**

- bent
- gouged or cut
- ripped or torn
- torn off or damaged
- vented

**Leakage**                        Yes                        No

- Small Release*
- Limited Release*
- Continuous Release*
- Full Release*

*Added in conformity with  
Risk Management Framework*

**Place of leakage**

- cylinder valve
- flange
- gauging device
- hose adaptor or coupling
- inlet (loading) valve
- inner packaging
- inner receptacle*

**Collision against fixed obstacle:**

- Bridge pillars
- Obstacles outside clearance gauge
- Other permanent object
- submerged in water
- Buffer-stop
- Overhead contact lines

**Collision with objects temporarily present on and near track:**

- Rocks/landslides/trees
- Lost parts of vehicles
- Lost or displaced loads
- Other

- loading/ unloading lines
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- sample line
- tank shell
- vacuum relief valve
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Pollution of soil

Pollution of water

## Causes of occurrence

### **External causes:**

- Slippery/wet road
- Rock/stone fall
- Earthquake
- narrow road
- Environmental relevant factors*
  - Fog*
  - Flooding*
  - Frost*
  - Ice*
  - High winds*
  - Storm*
  - Snow*
  - Heat*
- Other(explain):

Added in conformity with  
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- No
- Yes (explain which authority):*

Evacuation of persons for a duration of at least 3 hours

Closure of public traffic routes for a duration of at least 3 hours