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
Bern, 10-11 September and Geneva, 14-18 September 2020
Item 7 of the provisional agenda
Accidents and risk management

27 August 2020

Information concerning the informal working group on the improvement of the Report on occurrences - Additional information to document ECE/TRANS/WP.15/AC.1/2020/55

Submitted by the Government of France on behalf of the working group

1. As mentioned in paragraph 7 of document ECE/TRANS/WP.15/AC.1/2020/55, the Working Group (WG) has looked at three drafts reports to be included in RID/ADR/ADN 1.8.5. as decided in previous meetings there are three drafts on for each mode.

2. The draft reports contain all information necessary to understand the way the accident happens and to describe its consequences. It leads to require more information than the current report does. It was agreed that it is more realistic not to require all the information in a short time (such as the current one-month delay).

3. The WG identified the information that could be sent in the short time and information that could be sent at a later time. In the draft reports attached in the annexes, short term information appear in red italic.

4. This would lead to a different management of accident reporting. Some information would be sent immediately to declare the accident, and complementary most substantial data would be gathered through an inquiry process that would take longer, until the report will be considered as complete.

5. The WG noted that it would be necessary to redefine the data collection process. Some experts thought that some parts of this procedure would be better drafted as a guidance material than in a regulatory text. In February, the WG decided to meet again in June in order to work on this matter. Because of the Covid crisis, this meeting could not take place and the Guidance material could not be produced on time for the Joint meeting. However, we believe it is useful to produce the material produced by the WG so far such as the drafts attached in the annexes

6. Concerning the report and its goal, it was generally agreed that the report should be kept simple. The stepped approach making a distinction between the data needed initially and those needed later in the process would make the reporting easier.

However, the WG discussed that the main goal should be gathering as much information as necessary for possible investigations in order to learn from accidents, so that safety of transport of dangerous goods can be further improved.

Therefore, not only (serious) accidents should be reported but also near accidents should be reported as they could deliver equal important information.

7. As the work could not be completed in June, some additional work is necessary:

- Consider drafting of relevant guidance material.

- Consider a revised scope for the accident reporting and declaration criteria as relevant.

8. The Joint Meeting is invited to comment as appropriate.

Annex

Draft for RID

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

Company reference number:

Reporter reference number:

Date of the report:

Company: .....

Address:
.....

Contact name: ..... Telephone: ..... Fax: .....

Email address: ……..

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

Operation of the interested party:

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

Identification number

Date and location of occurrence

Year : ***month :*** ***day :*** ***Local Time :***

- ***Country:***
- ***region:***
- ***Town:***
- ***Department***

Geographical coordinates:

- ***Latitude:***
- ***Longitude:***

Context

Nature of operation:

- Carrying
  - Moving
  - Stationary
- Shunting
- Loading/Filling
- Unloading/emptying
- 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:

Line category:

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

Railway segments/Environment:

- Country Side/Rural
- Urban area
- Industrial area

Specific structures:

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

Gradient (if known the estimate value) :

Vehicle and dangerous good contained
Total number of wagons involved
(For each wagon/container involved, indicate information about the DG contained and the vehicle)

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

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

UN Number (1)	*Class*	Label(s) (Col. 5)	*Packing group if known (if relevant)*	Estimated quantity of loss of products (kg or l) (2)	*Means of containment* (3)	Means of containment material (4)	Type of failure of means of containment (5)

(1) For dangerous goods assigned to collective entries to which special provision 274 applies, also the technical name shall be indicated.

(2) For class 7, indicate values according to the criteria in 1.8.5.3.

(3) Indicate the appropriate number:

1 Packaging
2 Large packaging
3 Intermediate packaging container (IBC)
4 Pressure receptacle
5 BK 1
6 BK 2
7 BK3
8 VC1
9 VC2
10 VC3
11 vacuum-operated waste tanks
12 MGEC
13 Fixed Tank
14 Portable tank
15 Demountable tank
16 Tank container
17 Tank swap bodies
18 Wagon
19 Tank wagon
20 Battery wagon
21 Closed wagon
22 Open Wagon
23 Sheeted wagon

(4) Indicate the appropriate number:

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

(5) Indicate the appropriate number:

1 Loss
2 Fire
3 Explosion
4 Structural failure

Description of the occurrence	
□ Rolling over □ on the track □ outside the track □ Drop from a height □ Derailment □ 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:* □ Train/railway vehicle □ Track maintenance equipment □ Road vehicle □ Moving □ Stationary	*Collision against fixed obstacle:* □ Bridge pillars □ Obstacles outside clearance gauge □ Other permanent object □ submerged in water □ Buffer-stop □ Overhead cont act lines *Collision with objects temporarily present on and near track:* - Rocks/landslides/trees - Lost parts of (railway) vehicles - Lost or displaced loads - Other
<u>Damage type (imminent risk of loss of product):</u> □ bent □ gouged or cut □ ripped or torn □ torn off or damaged □ vented **<u>Leakage:</u>** □ Yes □ No □ *Small Release* □ *Limited Release* □ *Continuous Release* □ *Full Release* **Place of leakage:** □ cylinder valve □ flange □ gauging device □ hose adaptor or coupling □ inlet (loading) valve □ inner packaging □ inner receptacle	□ loading/ unloading lines □ piping or fittings □ pressure relief valve □ sample line □ tank shell □ vacuum relief valve □ vent □ weld or seam □ bursting disk

Dangerous phenomena

□ absence of dangerous phenomena

□ Fire
- □ Vapour cloud explosion
- □ Gascloud Fire
- □ Jet Fire
- □ Bleve

Location of fire:
- □ Locomotive
- □ 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):

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 (Abbreviated Injury Scale >3) □ Minor injury (Abbreviated Injury Scale <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): ... **Involvement of authorities:** □ No □ Yes (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:

Reporter reference number:

Date of the report:

Company: .....

Address:
.....

Contact name: ..... Telephone: ..... Fax: .....

Email address: ……..

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

Operation of the interested party:

□ *Consignor*
□ *Packer*
□ *Carrier*
□ *Consignee*
□ *Loader*
□ *Filler*
□ *Tank-container/portable tank operator*
□ *Unloader*
□ *Other (precise):*

Identification number

Date and location of occurrence

Year : *month :* *day :* *Local Time :*

□ *Country:*
□ *region:*
□ *Town:*
□ *Department:*

Geographical coordinates:
□ *Latitude:*
□ *Longitude:*
Alternatively road : number and kilometric point

Context

Nature of operation:
Carrying :
- □ Moving
- □ Stationary
- □ Parked

□ transshipment
□ Loading/Filling
□ Unloading/emptying
□ 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:

Description of the road:
□ Country Side/Rural
□ Urban area
□ Industrial area
□ Multimodal Logistical
□ Parking road infrastructure (precise number of places):

Type of road:
□ Highway □ Unidirectional road □ Bidirectional road

□ Number of lanes (if known) :

□ Gradient (if known) : □ Speed limit (if known) : □ Width (if known) : Topographical: □ Straight road □ Curve road □ S – curve road □ Level crossing □ Roundabout Specific structures: □ Tunnel Category: □ entry area □ on/inside □ exit area Bridge: □ bridge (on a) □ under the bridge	

Vehicle and dangerous good contained

Total number of vehicles involved

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

□ Register Number:

UN Number *(1)*	***Class***	Label(s) (Col. 5)	***Packing group (if relevant)***	Estimated quantity of loss of products (kg or l)(2)	***Means of containment*** *(3)*	Means of containment material (4)	Type of failure of means of containment (5)

(1) For dangerous goods assigned to collective entries to which special provision 274 applies, also the technical name shall be indicated.

(3) Indicate the appropriate number:

1 Packaging
2 Large packaging
3 Intermediate packaging container (IBC)
4 Pressure receptacle
5 BK 1
6 BK 2
7 BK3
8 VC1
9 VC2
10 VC3
11 vacuum-operated waste tanks
12 MGEC
13 Fixed Tank
14 Portable tank
15 Demountable tank
16 Tank container
17 Tank swap bodies
18 Tank compartments

(2) For class 7, indicate values according to the criteria in 1.8.5.3.

(4) Indicate the appropriate number:

1 Steel
2 Aluminum
3 wood
4 *Fiberboard*
5 Plywood
6 Plastic film
7 Metal
8 Paper
9 Plastic
10 Textile
11 glass
12 combination
13 FRP
14 Other

(5) Indicate the appropriate number:

1 Loss
2 Fire
3 Explosion
4 Structural failure

Description of the occurrence	
□ rolling over: □ on the road □ outside the road □ drop from a height □ Leaving the road □ Lane departure □ jack-knifing □ submerged in water □ 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 □ Parking **<u>Damage type (imminent risk of loss of product):</u>** □ bent □ gouged or cut □ ripped or torn □ torn off or damaged □ vented **<u>Leakage</u>** □ Yes □ No □ *Small Release* □ *Limited Release* □ *Continuous Release* □ *Full Release* **Place of leakage** □ cylinder valve □ flange □ gauging device □ hose adaptor or coupling □ inlet (loading) valve □ inner packaging □ inner receptacle	*Collision against fix obstacle:* □ Bridge pillars □ Obstacles outside clearance gauge □ Other permanent object □ 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 □ piping or fittings □ pressure relief valve □ sample line □ tank shell □ vacuum relief valve □ vent □ weld or seam □ bursting disk □ Other

Dangerous phenomena

□ Absence of dangerous phenomena

□ Fire
- □ Vapour cloud explosion
- □ Gascloud Fire
- □ Jet Fire
- □ Bleve

Location of fire:
- □ Tractor Cab
- □ Road tractor
- □ Tyres
- □ 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:

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

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

Technical failure on vehicle:

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

Human causes:

□ Driver □ Other participants □ Third party

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

Consequences	
Death and injury in DG company personal: □ Injured (total number): Days of hospitalization: □ Serious injury (Abbreviated Injury Scale > 3) □ Minor injury (Abbreviated Injury Scale < 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 and environment damages:** □ Air pollution □ Water pollution □ Soil pollution □ Estimated quantity of loss products (kg/l): ... **Involvement of authorities:** □ No □ *Yes (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 ADN

Report on occurrences during the carriage of dangerous goods

Company reference number:

Reporter reference number:

Company: .....

Address:
.....

Contact name: ..... Telephone: ..... Fax: .....

Email address: ……..

Official number (ENI) of the vessel……

Dry cargo vessel (single hull, double hull ……

Tank vessel (type)…….

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

Operation of the interested party:

[□ Consignor]

□ *Packer*

□ *Carrier*

□ *Consignee*

□ *Loader*

□ *Filler*

□ *Tank-container/portable tank operator*

□ *Unloader*

□ *Waterway infrastructure manager*

(comment : The IM has no offial satus in AND however some part of the infrastructure may have an active part in the accident)

□ *Reception facility operator*

Date and location of occurrence:
Year : ***month :*** ***day :*** ***Local Time :***

- ***Country***
- ***Inland waterway (name): ……***
  - ***Free sector (name):***
  - ***KM point:***
- ***Port: ……***

Geographical coordinates:
- ***Latitude:***
- ***Longitude:***

Context :

Nature of operation:
- underway
- loading/filling
- unloading
- degassing
- berthed
- anchored
- shifting
- maintenance/repairs
- other (explain):

Weather conditions
Temperature: °C
- Dry, clear
- rain
- snow
- fog, mist, smoke
- sleet, hail
- Thunder storm
- High winds
- unknown
- other

conditions of inland waterway
- water level (reference gauge)
- estimated speed through water
- high water
- low water
- ice condition

light conditions
- daylight
- twilight
- darkness
- artificial light
  - lit
  - unlit

Infrastructure
- Lock
- Bridge
  - Movable
  - fixed
- Dam
- Aquaduct
- Lift
- Tunnel
- other……

Waterway segment/Environment:
- CEMT class: …….
- urban [to be defined]: yes/no
- industrial area: yes/no

Vessel/containers and dangerous good contained

Total number of vessels/containers involved

(For each vessel/container involved, indicate information about the DG contained)

UN Number*[(1)] *or Identification number	***Class***	***Packing group if relevant***	Estimated quantity of loss of products (kg or l)[(2)]	***Means of containment in accordance with ADN, 1.2.1*[(3)]**	Means of containment material	Type of occurrence [(5)]	Type of failure of means of containment[(4)]

(1) For dangerous goods assigned to collective entries to which special provision 274 applies, also the technical name shall be indicated.

(2) For class 7, indicate values according to the criteria in 1.8.5.3.

(3) Indicate the appropriate number:
1 Packaging
2 IBC
3 Large packaging
4 Small container
5 Wagon
6 Vehicle
7 Tank-wagon
8 Tank-vehicle
9 Battery-wagon
10 Battery-vehicle
11 Wagon with demountable tanks
12 Demountable tank
13 Large container
14 Tank container
15 MEGC
16 Portable tank
17 Dry cargo vessel (single-hull, double-hull)
18 Tank vessel (type)

(4) Indicate the appropriate number:
1 Loss
2 Fire
3 Explosion
4 Structural failure

(5) Indicate the appropriate number:
1 Collision with bank, structure or berthing installation
2 Collision with another cargo vessel (collision/impact)
3 Collision with a passenger vessel (collision/impact)
4 Contact with the waterway bed, whether or not vessel has run aground
5 Fire
5.1 Vapour cloud explosion
5.2 Gascloud Fire
5.3 Jet Fire
5.4 Bleve
6 Explosion
7 Leak/Location and extent of damage (with additional description)
8 Shipwreck
9 Capsizing
10 Technical fault (optional)
11 Human error (optional)
Additional description of occurrence:

causes of occurrence	
External causes: □ *Environmental relevant factors* □ *Fog* □ *High water* □ *Low water* □ *Frost* □ *Ice* □ *High winds* □ *Storm* □ *Snow* □ *Heat* □ Recreational traffic □ Other(explain): **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	**Technical failure vehicle:** □ Electrical system failure □ mechanical system failure □ broken component or device □ defective component or device □ missing component or device □ abrasion □ exterior corrosion □ interior corrosion □ Damaged lining □ Coupling failure □ Engine failure □ Steering installation failure □ Other [relative to: carriage, loading, unloading, degassing] **Human causes:** □ deliberate action □ effect of alcohol □ effect of narcotic drugs □ medical treatment □ medical emergency □ excessive speed □ lack of experience □ inattention □ fatigue □ carelessness □ loss of control □ non-compliance with procedures □ inadequate training □ language, communication □ other

Consequences	
Death and injury in DG company personal: □ Injured (total number): *Days of hospitalization:* □ Serious injury (Abbreviated Injury Scale >3) □ Minor injury (Abbreviated Injury Scale < 3) Nature of injury: □ Traumatic □ Intoxicated □ Burned □ Radiation □ Drowned □ 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 total quantity of loss products (kg/l): ... □ Estimated total quantity of financial loss (euro): ... □ destruction of buildings, etc… **Involvement of authorities:** □ No □ *Yes (explain which authority*): □ Evacuation of persons for a duration of at least 3 hours □ Estimated time of closure of waterway: ….. Comment: to be refined, CEMT class of the waterway, tonnes blocked, ….