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|  |  | **INF.8** |

**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 30 August 2022**

Geneva, 12-16 September 2022

Item 8 of the provisional agenda:  
**Accidents and risk management**

Contribution to the work of the informal working group on the improvement of TDG occurrence reporting

Submitted by the European Union Agency for Railways (ERA)

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| *Summary* |
| **Executive summary**: Following the progress report of the informal working group on the improvement of the Transport of Dangerous Goods (TDG) occurrence report, the Agency is aiming at contributing to the completion of the work already accomplished by this group in line with its terms of reference.  **Related documents**: See Annex I to this document and informal document 9 |
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Background

1. In the context of the continuing integration and opening of the Single European Rail Area, the Common Safety Methods on the Assessment of Safety Level and Performance of Railway Operators (CSM ASLP) aims to strengthen the management of safety-related information. In this context the collection of safety information on the occurrence of accidents and incidents, their causes, their outcomes and the management of the associated risk control measures play a key role to support an improved risk-based decision-making approach by all railway actors. The process of adoption of the CSM ASLP Regulation by the European Commission is progressing and may occur before the end of year 2022.

2. In relation with the reporting of TDG railway occurrences several legal requirements are to be considered, on the one hand, the reporting of occurrences in accordance with RID section 1.8.5, and on the other hand the reporting of the railway occurrences based on the European Union (EU) Directive 2016/798 (Safety Directive) and the future CSM ASLP Regulation.

3. Both sets of law will be applicable for EU Member States for reporting railway TDG occurrences. A thorough review of the related legislative requirements has been made during the whole development phase of the CSM ASLP and this document aims at highlighting the possible remaining point of discussions for ensuring easy and non-duplicated reporting of information by railway actors while improving the reporting quality as initiated by the UNECE/OTIF working group on the improvement of TDG occurrence reports.

4. This document takes fully into account the work already achieved by the UNECE/OTIF working group set up in 2018 with the following terms of reference (ECE-TRANS-WP15-AC1-2018-GE-INF31r1e):

(a) Clarify the purpose of reporting information on accident, and identify the use of the reported information (1.8.3.6, 1.8.5…);

(b) Clarify the participants responsible for sending the report and/or complementary information;

(c) Examine anonymity issues;

(d) Study the relevant information necessary according to the different possible use, such as: lessons learnt from single occurrences, lessons learnt from repeated occurrences, risk assessment, and propose relevant improvements to RID/ADR/ADN;

(e) Propose measures to facilitate the collection of the report by competent authorities and transmission of relevant information to UN and OTIF secretariats;

(f) Exchange of experience from competent authorities on methods used to ensure the accuracy of accident reporting;

(g) Take into account relevant input including the contributions provided by the transport of dangerous goods workshop for Risk management, in particular the list established by workgroup A and the “input parameter table” for the harmonised risk estimation model;

(h) Take into account the relevant IT tools, including the coordination with the development of common occurrence reporting system” (COR).

Review of work progress per item

5. The above terms of reference request to take into account the coordination of legislative developments with relevant IT tools and the COR projects which have been integrated in the CSM ASLP Regulation under adoption process.

6. Below a review of the legislative coordination is reported, suggesting a few improvements to ensure full consistency and complementarity for the fulfilment of the agreed terms of reference.

**Item a) Clarify the purpose of reporting information on accident, and identify the use of the reported information (1.8.3.6, 1.8.5…)**

The UNECE/OTIF working group generally agreed that the work on improving the report should aim at:

* + learning lessons for single occurrences (especially for very severe and typical accidents);
  + learning lessons for frequently occurring events, even if they do not seem important individually;
  + collecting the relevant data for future risk analysis.

The CSM ASLP, is fully in line with the above aims, it will establish legal requirements to railway operators for sharing information on occurrence and organize collective learning in the following ways:

* In depth learning on serious and significant accident occurrences and on their scenarios and causal factors (structured list of reportable event types);
* Learning on less significant but recurring accident occurrences (report of events less severe than significant or serious events);
* Learning on incidents occurrence having the potential to directly give raise to accidents (accident causes, causal factors…). Learning on the successful and/or failing risk control measures with the aim to improve the prevention or mitigation of incidents and accidents.

In summary, for this item both the proposed improvement of the 1.8.5 reporting and the reporting required by the future CSM ASLP will serve the same collective learning purpose.

Possible further improvements of the current achievement should be to better align reporting criteria which are not completely aligned for the moment, as indicated below:

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| RID section 1.8.5 | CSM ASLP |
| An occurrence subject to report in accordance with 1.8.5.1 has occurred if dangerous goods were released or if there was an imminent risk of loss of product, if personal injury, material or environmental damage occurred, or if the authorities were involved and one or more of the following criteria has/have been met:  Personal injury means an occurrence in which death or injury directly relating to the dangerous goods carried has occurred, and where the injury   * + - 1. requires intensive medical treatment;       2. requires a stay in hospital of at least one day; or       3. results in the inability to work for at least three consecutive days.   Loss of product means the release of dangerous goods   * + - 1. of transport category 0 or 1 in quantities of 50 kg / 50 l or more;       2. of transport category 2 in quantities of 333 kg / 333 l or more; or       3. of transport category 3 or 4 in quantities of 1 000 kg / 1 000 l or more.   The loss of product criterion also applies if there was an imminent risk of loss of product in the above-mentioned quantities. As a rule, this has to be assumed if, owing to structural damage, the means of containment is no longer suitable for further carriage or if, for any other reason, a sufficient level of safety is no longer ensured (e.g. owing to distortion of tanks or containers, overturning of a tank or fire in the immediate vicinity).  If dangerous goods of Class 6.2 are involved, the obligation to report applies without quantity limitation.  In occurrences involving Class 7 material , the criteria for loss of product are:   * + - 1. Any release of radioactive material from the packages;       2. Exposure leading to a breach of the limits set out in the regulations for protection of workers and members of the public against ionizing radiation (Schedule II of IAEA Safety Series No. 115 – "International Basic Safety Standards for Protection Against Ionizing Radiation and for Safety of Radiation Sources"); or       3. Where there is reason to believe that there has been a significant degradation in any package safety function (containment, shielding, thermal protection or criticality) that may have rendered the package unsuitable for continued carriage without additional safety measures.   Material damage or environmental damage means the release of dangerous goods, irrespective of the quantity, where the estimated amount of damage exceeds 50,000 Euros. Damage to any directly involved means of carriage 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. | :  Reporting of a ‘detailed report’ if  >= 1 serious injury, or 150 k€ of damage, independently from the causal factor.  and  Reporting of a ‘simple report’ for any accident in the list (Cat. A event types)  :  :  :  As defined in article 1.19 of the Appendix to Annex I to Directive (EU) 2016/798, ‘serious injury (seriously injured person)’ means any person injured who was hospitalised for more than 24 hours as a result of an accident, excluding any attempted suicide.  :  :  :  :  :  :  :  :  :  :  :  :  :  :  Loss of product is one category of accident subject to reporting, with or without railway accident.  ‘Imminent loss’ is a criteria which is highly subjective for the reporter and limits the comparability of the occurrence reports. It is necessary to know from the occurrence report if there was a loss or not and the type of release involved.  The nature of the loss as been clarified in the improved reporting proposed by the working group.  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  :  Any accident (Cat. A event type) in the list (including DG occurrence) shall be reported with a **simple report**, independently of the damages involved.  :  Any accident type in the list (including DG occurrence) shall be reported with a **detailed report**, if damages of 150 k€ or more.  :  : |

7. Further simplification/improvement may be achieved with:

* the alignment of the reporting threshold concerning the cost of damages,
* the alignment of the definitions used for qualifying injuries.

**Item b) Clarify the participants responsible for sending the report and/or complementary information**

RID is indicating that several participants may be the reporter in accordance with 1.8.5.1 as following “*If a serious accident or incident takes place during loading, filling, carriage or unloading of dangerous goods on the territory of an RID Contracting State, the loader, filler, carrier, unloader, consignee or if the case may be the railway infrastructure manager, respectively, shall ascertain that a report conforming to the model prescribed in 1.8.5.4 is made to the competent authority of the RID Contracting State concerned at the latest one month after the occurrence*.”

In a slightly different manner, the CSM ASLP will systematically require each operator involved in the occurrence to provide an occurrence report, namely the Infrastructure Manager and the Railway Undertaking to report, while RID does not require a report from each of those parties. In addition, any other interested parties will be entitled to provide reports on an occurrence.

The CSM ASLP will be applicable to a slightly different scope of operation. An occurrence report will be applicable when it is concerning a type of railway operations defined by the EU Railway Safety Directive in accordance with the definition of the railway system, mainly meaning occurrence on railway lines, on station lines, sidings, and shunting areas. RID reporting scope is broader and includes also, for example, loading/unloading sites.

The respective contents of the CSM ASLP and RID occurrence reports can be made fully consistent and complementary offering an easier reporting framework for railway operators, avoiding duplicated reports to authorities (see also point g). The draft proposal for amendments in Annex II aims at achieving this consistency and complementarity, indicating the parts of the report that is covered by the reporting in accordance with the CSM ASLP.

In this approach RID may allow operators to fill-in the railway report parts in accordance with the CSM ASLP as a sub-part of the RID occurrence report.

The CSM ASLP will allow operators to supplement their CSM ASLP reports with the RID occurrence report in accordance with RID 1.8.5.

As further improvement, it is suggested to provide RID reports in two steps:

* Within 72 hours, the ‘simple report’ part
* Within 2 months, the ‘detailed report’ part

as the CSM ASLP will require.

The above improvement proposals should be discussed and finalized by the UNECE/OTIF working group, using the Annex II as a basis.

**8. Item c) Examine anonymity issues**

In the course of the CSM ASLP developments the data protection applicable within the EU has been thoroughly applied. As a result, the CSM ASLP will establish clear and strict ‘sharing rules’ for each data item required for reporting. Those rules are fully consistent with the treatment of personal data as indicated in the cover sheet of the occurrence reporting in accordance with RID which reads: “(The competent authority shall remove this cover sheet before forwarding the report)”.

TDG Competent Authorities are clearly identified by the CSM ASLP and within the EU they are also required to protect personal and specific interest data in accordance with the General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679).

No further improvement needs were identified in this area.

**9. Item (d) Study the relevant information necessary according to the different possible use, such as: lessons learnt from single occurrences, lessons learnt from repeated occurrences, risk assessment, and propose relevant improvements to RID/ADR/ADN**

This point has been fully taken into account from the starting development of the CSM ASLP. The different type of reports and the supporting processes, including the setting of the Group of Analysts aims at totally fulfilling point (d). It integrates the required information and involve the necessary actors in the field of dangerous goods, as follows:

* The RID occurrence report is supplementing the information needed for learning on railway occurrences in general;
* The TDG Competent Authorities are given a clear role by the CSM ASLP allowing them to request a review of the information reported by operators when needed;
* As any other parties, the TDG CA will be entitled to report their own report, if needed, in addition to the ones required to the railway operators involved in an occurrence;
* Other interested parties will be entitled to provide reports on voluntary basis.

As further improvement, it is advised that RID requires the sharing of RID occurrence reports (to the exclusion of GDPR data) with the other parties to effectively support collective learning, as it will be required by the CSM ASLP information sharing rules.

Within the EU sharing of information will be systematically between the relevant parties, in accordance with the sharing rules established by the CSM ASLP Regulation, including information related to TDG occurrences.

The sharing of information will be protected and secured by the ‘Information Sharing System’ (ISS) also established in accordance with the CSM ASLP Regulation.

**10. Item (e) Propose measures to facilitate the collection of the report by competent authorities and transmission of relevant information to UN and OTIF secretariats**

The CSM ASLP will require the setting of the Information Sharing System by the Agency who will be required to manage this system and will provide access to the information shared with it, including for TDG competent authorities, in accordance with the CSM ASLP rules for sharing safety information.

Access may also be given to non-EU parties, as it was established in the past for other information systems managed by the Agency.

Further development towards a multimodal tool may also be feasible in the context of RID/ADR/ADN, as the TDG reports should be harmonized and could also use an adapted – multimodal-ISS, offering the same level of functionalities and data protection.

The possibility to give access to non-EU parties, and /or to develop a multimodal-ISS, based on the rail-ISS, may be further investigated by DG MOVE and the Agency, also in cooperation with the UNECE and OTIF.

**11. Item (f) Exchange of experience from competent authorities on methods used to ensure the accuracy of accident reporting**

The CSM ASLP will set up the Group of Analysts and will request this group to propose any efficient safety-related improvements, including on the quality of shared safety data and information, based on an analysis of the collected data and CSM ASLP review process. As a result, the Group of Analysts may propose harmonized improvement of the CSM ASLP requirements, including the improvement of the reporting content.

When concerning TDG carriage, such Group of Analysts proposals may also be discussed with the Joint Coordination Expert Group of DG MOVE/OTIF and with UNECE/OTIF Joint Meeting to ensure full multimodal consistency of the proposed improvements.

**12. Item (g) Take into account relevant input including the contributions provided by the transport of dangerous goods workshop for risk management, in particular the list established by workgroup A and the “input parameter table” for the harmonized risk estimation model**

During the process of development of the CSM ASLP the Agency took a particular attention on the definition of the occurrence reporting information to be collected in order to enable the setting of useful correlations and statistical inference that could feed the risk management framework. A full railway taxonomy has been developed that will be used in the CSM ALSP Regulation.

The working group on the improvement of occurrence report also developed a harmonized multimodal RID/ADR/ADN report that could be adopted for biennium 2025.

To ensure full consistency with the railway taxonomy of the CSM ASLP, several (minor) improvements of the railway dataset have been identified and are proposed in annex II of this document. Basically, the content remains similar to the harmonization proposed by the UNECE/OTIF working group, however it is organized in a slightly different manner and railway terms are fully aligned where needed.

Those improvements will ensure a full consistency with the CSM ASLP taxonomy for the general railway terms and a full complementarity of the CSM ASLP with RID updated reports, as suggested in item b).

As a further improvement, and in addition to the reporting of operation volumes (train.km ; ton.km…) required by the CSM ASLP, it would be useful that RID requires the reporting of DG volume of transport per class of DG and per type of containment (small/medium/large). It would support an easier implementation of the Risk Management Framework with the future risk management platform (see March 2022-INF 22). For a single operator, those type of data are classified by the CSM ASLP, as protected commercial data, and the ISS will apply specific – protected- sharing rules.

**13. Item (h) Take into account the relevant IT tools, including the coordination with the development of “common occurrence reporting system” (COR)**

With the improvements suggested in points a) to g) the point h) would be fully implemented and would ensure an efficient and well-managed reporting system, implementing the CSM ASLP and RID in a non-duplicated, complementary, and consistent manner.

Annex II to this document suggest a draft RID occurrence report including the necessary amendments capturing all the work developed by the UNECE/OTIF work group and the CSM ASLP working party.

The Information Sharing System will be able to support the implementation of both reporting CSM ASLP Regulation and RID occurrence report, facilitating the implementation of the reporting obligations by the requested actors.

Proposed way forward

The Agency will be happy to supplement or amend this document with any clarification the UNECE/OTIF working group would need.

The Agency volunteers to continue the development of a fully consistent proposal to implement improvements on TDG occurrence reporting in the 2025 versions of RID/ADR/ADN, starting from the draft Annex II to this document, in cooperation with the informal working group on the improvement of RID/ADR/ADN occurrence report.

Depending on the progress of future work, including the adoption of the CSM ASLP Regulation, a first formal proposal for amending RID and the harmonized reports for ADR/ADN may be presented at the Joint Meeting Spring 2023 session.

Annex I

List of meetings and reports analysed for preparing this document

September 2019

Progress report of the UNECE/OTIF Informal working group on the improvement of occurrence report

See Joint Meeting/September 2019/INF.11

December 2019

Coordination meeting of the CSM ALSP working party and of the UNECE/OTIF Informal working group on the improvement of occurrence report

see Joint Meeting/September 2022/INF.9

September 2020

Progress report of the UNECE/OTIF Informal working group on the improvement of occurrence report

See ECE/TRANS/WP.15/AC.1/2020/55 and September 2020/INF.47

May 2021

CSM ASLP ERA Recommendation, Impact Assessment and Consultation report

see:

[Recommendation adopted by ERA Executive Director](https://www.era.europa.eu/sites/default/files/library/docs/era1219-rec-1_-_recommendation_adopted_by_era_executive_director.pdf) (151.27 KB)

[CSM Regulation recommended for adoption](https://www.era.europa.eu/sites/default/files/library/docs/era1219-rec-1_-_csm_regulation_recommended_for_adoption.pdf) (1.46 MB)  
[Impact Assessment](https://www.era.europa.eu/sites/default/files/library/docs/era1219-rec-1_-_impact_assessment_report.pdf) (674.97 KB)  
[Accompanying report](https://www.era.europa.eu/sites/default/files/library/docs/era1219-rec-1_-_accompanying_report.pdf) (632.78 KB)

May 2022

Progress reports on CSM ASLP developments at RID Standing Group

See paragraphs 3 to 13 of RID\_CE\_GTP\_2022-INF\_08 ([**INF.8**](http://otif.org/fileadmin/new/2-Activities/2D-Dangerous-Goods/2Dc2_infdoc_StandingWG/2022/RID_CE_GTP_2022-INF_08_e_information_from_ERA.pdf))

2022

European Commission draft delegated act of the CSM ASLP Regulation

(will be published under a new informal document as soon as it is available)

Annex II

Proposal for alignment of RID with consideration of the harmonized TDG multimodal proposal of the UNECE/OTIF Informal working group on the improvement of occurrence report (amendments to September 2020/INF.47 – RID part)

The amendments to the proposal reported in INF.47 of September 2020 Joint Meeting in addition with the newly proposed amendments are highlighted in red.

**Draft for RID**

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

**Simple report (shall be submitted within 72 hours after the time of occurrence)**

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| **Simple report – Cover sheet**  Note: Within the EU, this part of the report in accordance with RID 1.8.5 is considered fulfilled if a simple report in accordance with Regulation (EU) 2022/XXXX has already been submitted to the Information Sharing System (ISS). |
| *Company reference number:*  *Reporter reference number:*  *Date of the report:* |
| Company: ..............................................................................................……………………………………….  Address:  ............................................................................................................................................................….………  Contact name: .................................. Telephone: ............................ Fax: ................................…….….  Email address: ……………………. |

*(The competent authority shall remove the above cover sheet before forwarding the report to another entitled party)*

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| **Simple report – Railway common part**  Note: Within the EU, this part of the report in accordance with RID 1.8.5 is considered fulfilled if a simple report in accordance with Regulation (EU) 2022/XXXX has already been submitted to the ISS. | |
| **Occurrence Identification Numbers**  Information Sharing System ID : \_\_\_\_\_\_\_\_\_\_\_\_\_(ISS OCC ID)  Occurrence ID in Reporter’s system ID (if applicable) : \_\_\_\_\_\_\_\_\_\_\_\_\_  **Report ID**  ID in the Information Sharing System : \_\_\_\_\_\_\_\_\_\_\_\_\_(ISS Report ID)  Report ID in Reporter’s system (if applicable) : \_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| 1. **Date and location of occurrence** | |
| ***Year : month : day : Local Time :*** | |
| ***□ Country:***  ***□ Region:***  ***□ Department:***  ***□ Town:***  **Location name*:***  **Location code*:***  ***Geographical coordinates*** ***(Default norm EPSG:3857):***  ***□ Latitude:***  ***□ Longitude:***  **Nature of operation performed at the time of the occurrence:**  □ Carrying  □ Moving  □ Stationary  □ Shunting  □ Loading/Filling  □ Unloading/emptying  □ Other (explain):  **Accident involving dangerous goods unit/cargo in combination with a railway accident (with or without loss)**  □ Yes  □ No | |
| 1. **Reporter’s company category** | |
| *□ Report on behalf of a company*  *□ Carrier*  *□ Railway undertaking*  *□ Railway infrastructure manager*  *□ Entity in Charge of Maintenance*  *□ Tank-wagon operator*  *□ Railway undertaking*  *□ Keeper*  *□ Other*  *□ Consignor*  *□ Packer*  *□ Consignee*  *□ Loader*  *□ Filler*  *□ Tank-container/portable tank operator*  *□ Unloader*  *□ Other company type (free text input)*  *□ Report on personal behalf (not on behalf a company/legal entity)* | |
| 1. **Description of the occurrence** | |
| □ Collision (train or wagon(s)):  □ Front to front collision  □ Front to end (rear end collision)  □ Side collision  □ right side  □ left side  Other:  □ Collision with obstacle within the clearance gauge  □ with object fixed on or near the track  □ with buffer stops  □ with part of infrastructure (equipment)  □ with overhead contact lines  □ with bridge pillars  □ with other fixed object  □ with object temporarily present on or near the track  □ with animals  □ with rocks  □ with landslides  □ with trees  □ with lost parts of railway vehicles  □ with lost or displaced loads  □ with vehicles and machines or equipment for track maintenance  □ Moving  □ Stationary  □ with road vehicles (not at level crossing)  □ Moving  □ Stationary  □ with other temporary objects | □ Derailment  □ on a continuous track  □ on a switch  □ on a crossing (other than level-crossing)  □ Level-crossing accident  □ with one or more crossing vehicles  □ with crossing users (e.g. pedestrians)  □ with objects temporarily present on or near the track, if lost by a crossing vehicle or a user  □ Accidents to persons involving rolling stock in motion (not at level-crossing)  □ Fire or explosion  □ in rolling stock  □ in fixed installations  □ Suicides and attempted suicides  □ suicide  □ attempted suicide  □ Other accident  □ Electric shock  □ Cargo falling from a height  □ Dangerous goods occurrence not related to another type A event  □ Other |

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| 1. **Deemed cause of the occurrence** | | |
| **Operation failures:**  □ Failure to operate the infrastructure  □ Improper routing  □ On track plant incorrectly outside possession  □ Pushed switch  □ Other failure to operate the infrastructure  □ Failure to operate a train or rail vehicle(s)  □ Signal passed at danger when passing a danger point  □ Signal passed at danger without passing a danger point  □ Runaway  □ Over-speeding  □ Loading irregularity  □ Improper securing arrangement  □ Inadequate blocking and bracing  □ Other loading irregularity  □ Train composition Failure  □ Train available for boarding or alignment outside platform  □ Passenger entrapment in door  □ Train departure with open door  □ Long stop in tunnel  □ Severe brake/snatch  □ Brake not correctly set for load  □ Brake not checked  □ Other failure to operate a train or rail vehicle(s)  □ Other un-coded operation failure  **Technical failure of the infrastructure:**  □ Failure of the track  □ Broken rail  □ Track buckle and other track misalignment  □ Gauge spread  □ Track twist  □ Improper rail fastening and joints  □ Other track buckle and other track misalignment  □ Wrong-side signalling (infrastructure) failure  □ Switch and crossing failure  □ Failure of the level crossing equipment  □ Disorder of earthworks/embankment failure  □ Other failure of the track  □ Structures failure  □ Tunnel failure  □ Viaduct failure  □ Culvert failures  □ Rail bridge structural failure  □ Over line bridge (e.g. pedestrian) failure  □ Station structure failure  □ Platform failure  □ Other structures failure  □ Other failures of the infrastructure  □ Power supply equipment failure  □ Train detection equipment failure  □ Overhead contact line failure  □ Loss of ventilation  □ Other  □ Other un-coded technical failure of the infrastructure | **Technical failure of the vehicles:**  □ Failure of the wheelset  □ Broken wheel on rolling stock in service  □ Broken axle on rolling stock in service  □ Hot axle box  □ Suspension system failure  □ Other failure of the wheelset  □ Failure of the braking system  □ Brake not operating with the expected performance  □ Other failure of the braking system  □ Other failures of the vehicle  □ Wrong side signalling (vehicle) failure  □ Losing of vehicle parts  □ Traction motor failure (electrical)  □ Diesel engine failure  □ Coupling failure  □ Doors failure  □ Loss of ventilation  □ ERTMS/ATP/APC odometry error  □ Twisted underframe  □ Train detection equipment failure  □ Other  □ Other un-coded technical failure of the vehicles  **Other:**  □ Fire external to railway system in proximity of rail infrastructure,  □ Unauthorised presence of staff/employees on railway system  □ Unauthorised presence of other third parties on the railway system  **External direct or indirect causes:**  □ Landslides  □ Rock/stone fall  □ Earthquake  □ Vegetation  □ Flooding  □ Other  *□ Environmental relevant factors*  *□ Fog*  *□ Frost*  *□ Ice*  *□ High winds*  *□ Storm*  *□ Snow*  *□ Heat*  □ Other (explain): (text) |
| **Simple report – TDG specific part**  **Note: Within EU, this part of the report in accordance with RID 1.8.5 shall be submitted to the ISS as a supplement to a simple report in accordance with Regulation (EU) 2022/XXXX.** | | |
| 1. **Deemed cause of the occurrence – TDG specific part** | | |
| **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  **Human performance (causal factor):**  □ External events - Security  □ deliberate action  □ Other – External events - Security  □ Dynamic staff factors  □ Intention: Expectation / Intention while acting /Decision model / Error type  □ deliberate action  □ Other – Intention  □ Attention / Vigilance/ Concentration  □ inattention  □ carelessness (driving, shunting)  □ Other – Attention / Vigilance/ Concentration  □ Fatigue  □ sleepiness  □ Other – fatigue  □ Stress (incl. emotions & psychosocial factors)  □ Situational awareness (incl. self-awareness - situational self-knowledge)  □ effect of alcohol  □ effect of narcotic drugs  □ Other – situational awareness  □ Static Staff Factors  □ Experience: Familiarity / Individual experiences - job history  □ lack of experience  □ inadequate training  □ Other – experience  □ Fit to work (matching to the requirements of the tasks/activities, health)  □ medical treatment  □ medical emergency  □ Other – fit to work  □ Static Task Factors  □ Task instructions - Quality of procedures and rules  □ non compliance with procedures  □ Other - task instructions, quality of procedures and rules  □ Other | **Related to TDG procedure:**  □ improper preparation for transport  □ inadequate maintenance  □ inadequate procedures  □ overfilled  □ over pressurized  □ valve open  **Failure of the DG containment or its equipment:**  □ 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  □ Other failure of the DG containment or its equipment |

**Detailed report (shall be submitted within 2 months after the time of occurrence)**

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| **Detailed report – Railway common part**  **Note: Within the EU, this part of the report in accordance with RID 1.8.5 is considered fulfilled if a detailed report in accordance with Regulation (EU) 2022/XXXX has already been submitted to the Information Sharing System (ISS).** | | | |
| 1. **Railway operation context** | | | |
| **Speed (or impact speed) of train/wagon at the moment of the occurrence (estimated): (km/h)** | | | |
| **(if carriage operation)** Train number:  Locomotive/Wagon Register Number:  Total number of wagons involved in the occurrence: | | | |
| **Weather conditions:**  Temperature: °C  □ Dry  □ Clear  □ Rain  □ Snow  □ Fog, mist, smoke  □ Sleet, hail  □ Storm  □ Lightnings  □ High winds  □ Unknown  □ Other: | **Surface conditions:**  □ Dry  □ Slippery  □ Leaves  □ Snow  □ Frost  □ Ice  □ Slush  □ Wet, Damp  □ Flooded  □ Unknown  □ Other: | | **Light conditions:**  □ Daylight  □ Twilight sunrise  □ Twilight sunset  □ Darkness ~~street~~ light lit  □ Darkness ~~street~~ light unlit  □ Other: |
| **Infrastructure:**  **Line category:**  □ Open line  □ Station/Terminal  □ Station  □ Siding  □ Marshalling yard [shunting]  □ Other:  □ Single track  □ Double track  □ Multiple Track (more than 2) | | **Specific structures:**  □ In Tunnel (Y/N) ; □ On a Bridge (Y/N)  □ entry area  □ on/inside  □ exit area  □ At a level crossing  Level crossing type: | |
| 1. **Consequences – Railway common part** | | | |
| Death and injury of passengers ~~in DG company personal~~:  □ Death: (total number of persons)  □ Serious Injuries: (total number of persons)  □ Minor Injuries: (total number of persons) | | Severity of injuries in Abbreviated Injury Scale (optional):  AIS >=3: (total number of persons)  AIS <3 : (total number of persons) | |
| Death and injury of employees ~~in DG company personal~~:  □ Death: (total number of persons)  □ Serious Injuries: (total number of persons)  □ Minor Injuries: (total number of persons) | | Severity of injuries in Abbreviated Injury Scale (optional):  AIS >=3: (total number of persons)  AIS <3 : (total number of persons) | |
| Death and injury of trespassers ~~in DG company personal~~:  □ Death: (total number of persons)  □ Serious Injuries: (total number of persons)  □ Minor Injuries: (total number of persons) | | Severity of injuries in Abbreviated Injury Scale (optional):  AIS >=3: (total number of persons)  AIS <3 : (total number of persons) | |
| Death and injury of other persons ~~in DG company personal~~:  □ Death: (total number of persons)  □ Serious Injuries: (total number of persons)  □ Minor Injuries: (total number of persons) | | Severity of injuries in Abbreviated Injury Scale (optional):  AIS >=3: (total number of persons)  AIS <3 : (total number of persons) | |
| **Detailed report – TDG specific part**  **Note: Within EU, those parts of the report in accordance with RID 1.8.5 shall be submitted to the ISS as a supplement to a detailed report in accordance with Regulation (EU) 2022/XXXX.** | | | |
| 1. **Context of occurrence - TDG specific information** | | | |
| **Infrastructure: *Railway segments/Environment:***  Gradient (if known the average value for the line section): (%)  □ Countryside/Rural  □ Urban area  □ Industrial area | |  | |

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| 1. **TDG specific information about DG vehicle and DG contained** | | | | | | | | | | |
| Total number of wagons carrying Dangerous Goods / total number of DG transport unit(s) involved in the occurrence: | | | | | | | | | | |
| **(For each Dangerous Goods carrying wagon/container involved, indicate the following information)** | | | | | | | | | | |
| Register Number/ Unique vehicle number:  **Type of vehicle/cargo involvement**  □ No physical Impact  □ Physical Impact (e.g. during derailment or collision or other…)  Speed of the DG Vehicle/Cargo at the moment of the impact of the DG containment, if applicable, (estimated): (km/h) | | | | | | | | | | |
| □ Cargo falling from a height  □ on the ground  □ submerged in water | | | | | | | □ Not rolling over  □ Rolling over  □ on the track  □ outside the track | | | |
| ***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) |
| Add lines as needed | …… | …… | | | …… | …… | | …… | …… | …… |
| 1. For dangerous goods assigned to collective entries to which special provision 274 applies, also the technical name shall be indicated. | | | | | | 1. For class 7, indicate values according to the criteria in 1.8.5.3. | | | | |
| 1. 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 | | | | |

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| 1. **TDG specific information on containment damages** | | |
| **Damage type (imminent risk of loss of product):**  □ bent  □ gouged or cut  □ ripped or torn  □ torn off or damaged  □ vented  **Leakage (actual loss of product):** □ Yes □ No  Category of actual loss from the containment in accordance with TDG RMF definitions:  *□ Small release*  *□ Limited release*  *□ Continuous release*  *□ Full release*  Estimated quantity of lost products:......................□ kg ; □ l | **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 | |
| 1. **Consequences - TDG specific information on Dangerous phenomena occurred** | | |
| □ absence of dangerous phenomena  □ Fire  □ Vapour cloud explosion  □ Gascloud Fire  □ Jet Fire  □ Bleve  (if fire type applicable) the location of fire:  □ Locomotive  □ Axle  □ Tank – trailer  □ Trailer – semi trailer  □ Pressure receptacle  □ Transport unit | | □ Explosion without fire  □ Over pressurized inside the tank / packaging  □ Other  □ Toxic vapour cloud  □ Pollution of air  □ Pollution of water  □ Pollution of soil |
| 1. **Consequences - Involvement of authorities / evacuations / disruption of service** | | |
| :  □ 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 | | |

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| 1. **Consequences – Death and Injury** | |
| Within DG company personal:  □ Death: (total number of persons)  □ Serious Injuries: (total number of persons)  □ Minor Injuries: (total number of persons) | Severity of injuries in Abbreviated Injury Scale:  AIS >=3: : (total number of persons)  AIS <3: : (total number of persons)  Nature of injury:  □ Traumatic  □ Intoxicated  □ Burned  □ Radiation |
| Caused by the dangerous substances:  □ Death: (total number of persons)  □ Injured (total number):  Days of hospitalization: (total number) | Severity of injuries in Abbreviated Injury Scale:  AIS >=3: : (total number of persons)  AIS <3: : (total number of persons)  Nature of injury:  □ Traumatic  □ Intoxicated  □ Burned  □ Radiation |