#### **Economic Commission for Europe**

**Inland Transport Committee** 

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

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# Preliminary review of the survey concerning 1.8.5. accident reports

#### Transmitted by the Government of France

#### Introduction

- 1. At the 2015 spring session, the Joint meeting accepted the offer by France and Germany to conduct a brief review on 1.8.5. accident reports, aimed to gather more information about the way each government currently handles the data collected in those accident reports and more insight about additional detailed informations that should be collected so that the 1.8.5. reports could be used for risk management (see ECE/TRANS/WP.15/AC.1/2018/138/Para. 60).
- 2. France accepted to manage the survey and sent a questionnaire to the Contracting Parties. The present paper is a preliminary review of the answers. The results presented here are necessarily general and could be refined in a further work, depending on the position of the Joint Meeting
- 3. The main results presented here are summarized in the following table.and commented in the rest of the paper.

| SUMMARY TABLE OF THE MAIN RESULTS                   |      |  |      |  |  |
|---|------|--|------|--|--|
| Competent authorities or Reporting systems :        |      |  |      |  |  |
| Specific to each transport mode                     | 67 % | Common to all transport mode                         | 33 % |  |  |
| 1.8.5 reporting based on :                          |      |  |      |  |  |
| Voluntary notification by the transport operator    | 39 % | Early notification (authorities, emergency services) | 69 % |  |  |
| If 1.8.5 report is not sent to Competent Authority: |      |  |      |  |  |
| Legal sanction provided by national regulation      | 47 % | No such sanction:                                    | 53 % |  |  |
| Storage of 1.8.5 reports :                          |      |  |      |  |  |
| In digital form                                     | 60 % | In paper form only                                   | 40 % |  |  |

| Amongst the 60 % of   | 1.8.5 repo | orts stored in digital form :              |              |  |  |
|---|------------|--|--------------|--|--|
| Not saved in a structured database  | 52 %       | Saved in a structured database             | 48 %         |  |  |
| Processing of the 1.8.5 reports by the Competent Authorities :            |            |  |              |  |  |
| Systematic processing of all the reports                                  | 76 %       | Screening of the reports before processing | 30 %         |  |  |
| Additional information asked by Competent Authorities :                   |            |  |              |  |  |
| Yes   | 85 %       | No   | 12 %         |  |  |
| - additional information needed in spite of 1.8.5 report beeng complete : | 61 %       |  |              |  |  |
| Is the 1.8.5.4. model report sufficient fo                                | or a prope | r understanding of the accidents/incid     | ents:        |  |  |
| Yes   | 61 %       | No   | 39 %         |  |  |
| Present use of 1.8.5 r  | eports (m  | ultiple answers possible) :                |              |  |  |
| Single case studies :   | 82 %       | Statistical studies : Other studies :      | 33 %<br>18 % |  |  |
| Possibility to link 1.8.5 repor   | t data wit | h traffic data of accident statistics      | 1            |  |  |
| Yes (estimated by difference)   | 45 %       | No   | 55 %         |  |  |

#### Competent Authorities and their 1.8.5. reporting systems

- 4. France wish to thank all the persons, representing 21 states, that is roughly the half of the contacted Contracting Parties, for their answer to the survey. National definitions of the competent authorities or reporting systems have led in some case to multiple answers for some of the states. A total of 33 answers have therefore been received,. All these answers are available on request. The questionnaire (in English version) is attached as Annex I to this paper.
- 5. For 67 % of the answers, the Competent Authorities or their reporting systems are specific to the considered transport modes, and for the remaining 33 % they are common to all transport modes. The collected answers concern for 58 % road transport, for 36 % rail transport and for the remaining 27 % fluvial transport (multiple answers possible)
- 6. The 1.8.5. reporting systems are either based for 31 % of the answers on voluntary notifications only, or rely for the remaining 69 % on an early notification of incidents/accidents. This early notification can be done by the infrastructure manager (typically for rail accidents/incidents), by the police or emergency services (mainly in case of road accidents), or even by the transport operators themselves (see Germany's answer for instance) or the license holders (in particular in case of class 7 goods transport). Some Competent Authorities also use media monitoring (television, internet ...) for such early notification. In Sweden, the accidents and crises are monitored by the Civil Contingencies Agency (MSB) which also performs the 1.8.5. accident reporting.
- 7. National regulation provides for a legal sanction if the 1.8.5. reports are not sent to the competent authority in roughly the half of the cases (47 % of answers), which normally ensures that the Competent Authority receives the totality of the 1.8.5. reports. In some cases, a warning letter is sent to the transport operator before legal action is taken. If there is no legal sanction provided for, the Competent Authorities however send in most of cases warning letters to the concerned transport operators.

#### Storage of 1.8.5 reports and accident data

- 8. 1.8.5. reports can be received either in paper form (88 % of answers) or electronic form (48 % of answers). The reports are stored either in paper form (75% of answers) or electronic form (60 % of answers). In about 40 % of the cases, as deduced from the answers where only one choice is ticked, the report are stored in paper form only.
- 9. When stored in a digital form, in 52 % of those cases the 1.8.5. reports are not saved in a structured database. For the remaining 48 %, either a database specific to dangerous goods accidents/incidents (for 2/3 of those cases) or a general accidents/incidents database (for 1/3 of those cases) is used.

## Processing of 1.8.5 reports by Competent Autorities and need to amend 1.8.5.4. model report

- 10. In the majority of the cases (for 76 % of the answers) the Competent Authorities performs a systematic processing of all the reports, whereas for 30 % of the answers the reports are screened before their processing takes place. When such a screening is done, it concerns usually (for 63 % of those answers) the reports dealing with serious accidents only, and for the remaining 37 %, the use of specific criteria, such as for instance possibility of legal suites for Germany.
- 11. In about 85 % of the cases, the Competent Authorities ask the concerned transport operators for additional information to the 1.8.5. reports, either if the report is not complete (67% of answers) or for further precisions needed for a proper understanding of the incident/accident (61 % of the answers). Some answers mention as examples of such further precisions accident analysis, indirect causes of the accident, danger for environment causes by the concerned Dangerous Goods (DG), pictures of the accident scene, or accident investigation commission reports.
- 12. However, a great majority of the competent authorities (for 61 % of the answers) consider that there is no need to amend the 1.8.5.4. model report for a proper understanding of DG incidents or accidents. This seems to be in contradiction with the fact that over 60 % of the Competent Authorities ask for additional information even if 1.8.5 reports are supposed to be complete, as stated above. It can perhaps indicate that the submitted question was not clear enough to be understood the same way by all the Competent Authorities.
- 13- Those who expressed a need to change the 1.8.5.4. model report (39 % of answers) suggested various amendments, such as :
  - better definition of accident place (GPS coordinate, topography ...)
  - better definition of weather conditions
  - better description of transport accident scenario (type of DG vehicle involved, collision against fixed or moving obstacle, total quantities of DG transported vs lost ...)
  - better description of occurrence causes (technical (failure, in particular due to corrosion caused by DG ...), procedural, human, liquid movements in tank, indirect causes ...)
  - specification of packagings/IBC/LP or pressure vessels and tanks involved in accident/incident (with agreement numbers /certificates ...)
  - better description of accident scenario (UVCE, fire, BLEVE) and its consequences in relation with DG caused deaths/injuries

- future use of the damaged means of containment
- preventive measures to be taken in the future by the transport operator to avoid similar accidents.

One Competent Authority (Portugal) insists on the need to adopt a common digital format of 1.8.5. accident data for easy data manipulation.

#### Present use of 1.8.5. reports by Competent Authorities

- 14. For the vast majority of answers (82 %), the 1.8.5 reports are used for single case studies. Only for 33 % of the answers are they used for statistical studies. In a limited number of cases (18 % of answers), the accident reports are used for specific needs, such as risk analysis studies concerning transport infrastructures, yearly feedback of incidents, trend analysis of incidents, investigations for systematic solutions which will limit the number of accidents/incidents.
- 15. Generally (for 55 % of answers), no link is made by Competent Authorities between accident data mentioned in a 1.8.5. report and either relevant traffic data or general accident statistics of the relevant transport mode. Such a link with relevant traffic data (resp. with general accident statistics) are mentioned in 30 % (resp. 33 %) of the answers.

#### Conclusion

- France would be happy to get comments on unclear results that may be clarified.
- 17. The Joint Meeting is invited to comment on the results and to take actions as appropriate.

### Questionnaire concerning 1.8.5. reports

| RID/ADR/ADN Contracting Party (Country) |                |   |  |  |
|---|----------------|---|--|--|
|   |                |   |  |  |
|   |                |   |  |  |
|   |                |   |  |  |
|   |                |   |  |  |
|   |                | porting system and/or the Competent Authority for reporting specific to each                |  |  |
|   | sport n        | ode?  |  |  |
|   | No             |   |  |  |
|   | Yes            | In this case, please fill as many questionnaires as necessary                               |  |  |
| Tra                                     |                | node concerned :  |  |  |
|   | Road           | Rail  Fluvial   |  |  |
|   |                |   |  |  |
|   |                | bes the Competent Authority check out if the 1.8.5. reports have been                       |  |  |
| effe                                    | ctively        | sent ?  |  |  |
|   | 1              |   |  |  |
|   | -1- a          | System based on the voluntary notifications under 1.8.5                                     |  |  |
|   | -1- b          | Early notification of incident/accident by:   |  |  |
|   |                | Authorities (police) Please specify:  |  |  |
|   |                | Farancia Diagram if a   |  |  |
|   |                | Emergency services Please specify:  |  |  |
|   |                | (fire department)   |  |  |
|   |                | Infrastructure Manager  |  |  |
|   |                | Other (please specify :)  |  |  |
| 2                                       | TC 41 1        | 05  |  |  |
| -2-                                     | II the 1       | 8.5. report is not transmitted, which action is taken ?                                     |  |  |
|   | -2- a          | Warning latter to the concerned transport energies  |  |  |
|   | -2- a<br>-2- b | Warning letter to the concerned transport operator Sanction provided by national regulation |  |  |
|   |                | Not applicable (cf question -1-a)   |  |  |
|   | -2-c           | Not applicable (ci question -1-a)   |  |  |
| 2                                       | In whic        | h form are the 1.8.5. reports sent ?  |  |  |
| -3-                                     | III WIIIC      | ii form are the 1.6.5. reports sent:  |  |  |
|   | -3- a          | In paper form   |  |  |
|   | -3- b          | In electronic form  |  |  |
| _                                       | -3- 0          | In electronic form  |  |  |
| _1_                                     | In whic        | h form are the 1.8.5. reports stored ?  |  |  |
|   | 111 ***111C    | in form are the 1.0.5. reports stored.  |  |  |
|   | -4- a          | In paper form   |  |  |
|   | -4- b          | In electronic form  |  |  |
|   |                | Electronic files are saved but there is no structured database software                     |  |  |
|   |                | Electronic files are saved in a structured database software:                               |  |  |
|   |                | Specific to dangerous goods accidents/incidents   |  |  |
|   |                | ☐ Included in a general accidents/incidents database  |  |  |

| -5-  | What kir                            | nd of processing of the 1.8.5. reports is made?                               |  |  |
|--|-------------------------------------|---|--|--|
|  |                                     |   |  |  |
|  | -5- a                               | Systematic processing of all the reports                                      |  |  |
| <u> </u>   | -5- b                               | Screening of the reports prior to the detailed processing:                    |  |  |
| _  |                                     |   |  |  |
|  |                                     | Only reports concerning "serious" accidents are taken into account            |  |  |
|  |                                     | According to other criteria (please specify):                                 |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
| -6-  | Does t                              | he Competent Authority use the opportunity to request additional              |  |  |
|  |                                     | from the concerned transport operator, as mentioned in the footnote of        |  |  |
|  |                                     | el report ?   |  |  |
| 1.0.   | IIIou                               | creport.  |  |  |
|  | 6 0                                 | No  |  |  |
|  | -6- a                               |   |  |  |
|  | -6- b                               | Yes:  |  |  |
|  |                                     | If the 1.8.5 report is not complete:  |  |  |
|  |                                     |   |  |  |
|  |                                     | The report is complete according 1.8.5.4 but the transmitted informations are |  |  |
|  |                                     | not sufficient for a proper understanding of the incident or accident:        |  |  |
| Plea   | ase specif                          | y which subjects are covered by additional information                        |  |  |
|  | -                                   | mstances of the accident/incident   |  |  |
|  |                                     | instances of the decident merdent   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
| •  | the physi                           | cal state of the packaging  |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  | the causes of the incident/accident |   |  |  |
|  | the cause                           | s of the merdeny accracin   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
| • its consequences (quantity of product discharged, personal injury) |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
| •  | • other:                            |   |  |  |
|  | OMANA .                             |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
|  |                                     |   |  |  |
| 1  |                                     |   |  |  |

| -7- Do the contents of the model report under 1.8.5.4 appear as sufficient for a proper understanding by the Competent Authority of incidents or accidents involving dangerous goods? |           |  |  |
|---|-----------|--|--|
|   | -7- a     | Yes  |  |
|   | -7- b     | No (please give some examples of information which would be desirable to add to the model report, see for instance INF.34/Add.1) |  |
| _Q_ ·   | What kir  | nd of use is made of the 1.8.5. reports :  |  |
| -0-   | vv nat Kn | in of use is made of the 1.6.5. reports.   |  |
|   | -8- a     | Single case studies:   |  |
|   | -8- b     | Comparative statistical studies from consolidated data   |  |
|   | -8-c      | Other (please specify)   |  |
|   |           |  |  |
| <b>-9-</b>  | In your o | country, is it possible to link accident data involving dangerous goods :  |  |
|   | 0         |  |  |
|   | -9- a     | To relevant traffic data   |  |
|   | -9- b     | To general accident statistics for each transport mode   |  |
| u   | -9-c      | No such link is made   |  |