## **Economic Commission for Europe**

**Inland Transport Committee** 

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

17 March 2011

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Bern, 21–25 March 2011 Item 6 of the provisional agenda **Reports of informal working groups** 

## Comments on the report of the informal working group on reduction of the risk of a BLEVE

## Transmitted by the Government of France

- 1. The BLEVE working group that was held from 20 to 22 December 2010 in Paris has raised the high interest of having a standardised database allowing a reliable analysis of accidents happening during the transport of dangerous goods.
- 2. Several examples have pointed out that it could be extremely interesting to analyse accident data, not only on the basis of one single specific accident, but also based upon statistical analysis given a large number of accidents. In particular the working group has been able to assess the efficiency and show the relevance of some safety measures by analysing the statistical data produced.
- 3. Indeed, France has been developing for many years a database reporting accidents that have occurred during the transport of dangerous goods. The existing data were very helpful for the working group, who reckoned that this tool should be spread to all issues dealing with TMD. Members of the working group have encouraged France to submit a proposal for a more general tool.
- 4. Although the idea of accident reporting at European level is already mentioned in 1.8.5, for now it has never led to the reporting of a number of accidents large enough to carry out a statistical analysis at European level. Yet we think the analysis of a large number of recurrent, even if small accidents, would be very helpful.
- 5. France suggests a systematic report of accident data, through a simple tool that would cover thoroughly the sections given in the model report in 1.8.5.4. An extract of the French database spreadsheet is given in Annex 1 by way of an example.
- 6. If the Joint Meeting considers that the idea raised by the working group is interesting, France is willing to produce a more elaborate proposal.



| ACCIDENTS CONCERNING ALL TYPE OF DANGEROUS GOODS TRANSPORT BY ROAD (TANK BULK PACKAGES) ACCORDING TO 1.8.5 IN FRANCE 2003-2007 |  |          |          |           |   |  |  |  |                          |           |     |   |  |                                      |  |  |  |                  |  |  |   |   |   |
|--|--|----------|----------|-----------|---|--|--|--|--------------------------|-----------|-----|---|--|--------------------------------------|--|--|--|------------------|--|--|---|---|---|
| Mo<br>de   |  | Date     | Tim<br>e | Location  | Topogra<br>phy  | Veather<br>conditio<br>ns  | Description  | Additional description of occurrence   | Dangerous goods involved |           |     |   |  |                                      |  | Cause of occurrence  | Consequences of occurrence                   |                  |  |  |   |   |   |
|  |  |          |          |           |   |  |  |  | UN nr                    | Clas<br>s | Ing | estimated<br>quantity of<br>loss of<br>product<br>(kg or l) | Means of<br>containment  | Means of<br>containmen<br>t material | Type of failure<br>of means of<br>containment                      |  | Person<br>in<br>conne<br>with da<br>goods in | ction<br>ngerous | not<br>conne<br>wi<br>dang<br>goods in<br>(addi<br>inform<br>no<br>confo | ection<br>th<br>erous<br>evolved<br>tional<br>eations<br>of<br>exming<br>185 | Loss of<br>product  | Estimated<br>material<br>/Environment<br>damage | Involvement of authorities  |
| Roa<br>d<br>(2)  | Road (1) Built- up area (2) Loading/u nloading/t ranshipm ent site (3) Open road Rail (4) Station (5) Shunting/ marshalli ng yard (6) Loading/t Loading/t ranshipm ent site (7) Open line (8) Descripti on of line |          |          |           | (1)<br>Gradient/in<br>cline<br>(2) Tunnel<br>(3)<br>Bridge/Und<br>erpass<br>(4)<br>Crossing | (1) Rain<br>(2) Snow<br>(3) loe<br>(4) Fog<br>(5)<br>Thunderst<br>orm<br>(6) Storm | (f) Derailment/Leavi ng the road (2) Collision (3) Overturning/Rolli ng over (4) Fire (5) Explosion (6) Loss (7) Technical fault |  |                          |           |     |   | (1) Packaging (2) IBC (3) Large packaging (4) Small container (5) wagon (6) Vehicle (7) Tank-wagon (8) Tank-vehicle (3) Battery-wagon (10) Battery-vehicle (11) Wagon with demountable tanks (12) Demountable tank (13) Large container (14) Tank- container (15) MGEC (16) Portable tank (17) Not available |                                      | (1) Loss<br>(2) Fire<br>(3) Explosion<br>(4) Structural<br>failure | (1) technical fault (2) Faulty load securing (3) Operational cause (rail option) (4) Other (5) to (9) are additionnal information not required by 1.8.5 (5) Caused by another vehicle (6) Driver behavior (7) External causes (3) not defined (3) spontaneous dangerous goods reaction |  | Injured          | Deaths   | Injured  | (1) Yes<br>(2) No<br>(3) Imminent<br>risk of loss of<br>product | (1) < 50,000  <br>(2) > 50,000                  | (1) Yes<br>(2) No<br>(3) Evacuation of<br>persons > 3 hrs<br>(4) Closure of<br>public routes > 3<br>hrs |
| 1  | 3  | 02/01/03 | 15:00    | PONTCARRE |   | 1  | 1  | Sortie de route d'un YTMD. Afin de pouvoir consulter en toute sécurité une carte routière, le conducteur d'un PL chargé de Dioxyde de Carbone Liquide réfrigéré (classe 2) ralentit pour immobiliser son véhicule sur le bas-côté de la RD471. Au cours de la manoeuvre, l'ensemble routier mord le bas-côté détrempé et continue ainsi sa course sur 50 m avant de s'immobiliser dans le fossé. Aucune fuite sur la citerne n'a été relevée.  | 2187                     | 2         | -   | 0   | 8  |                                      | 0  | 7  | 0  | 0                | 0  | 0  |   |   | 1,4   |
| 1  | 3  | 03/01/03 | 10:29    | MENERBES  |   |  | 1,3,6  | Accident matériel survenu sur la P.D.33 mettant en cause un VTMD. Au cours d'une tournée de livraison ches un VTMD. Au cours d'une tournée de livraison ches 2) s'est retrouvé dans le fossé en empruntant un petit chemin de terre. Une tuyauterie secondaire (contenant 300 litres de gas) a été rompue lors du renversement du véhicule entraînant une fuite de gas au niveau des brides. Les gendarmes ont délimité un périmètre de sécurité de 300 mêtres autour du PL accidenté, pendant toute la durée de l'intervention des pompiers (3 heures). | 1978                     | 2         |     | 50  | 8  |                                      | 1  | 6  | 0  | 0                | 0  | 0  | 3   |   | 1,4   |