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, 15–19 September 2014
Item 8 of the provisional agenda
Future work

Accident database: study of the structure

Note by the ECE secretariat and the Government of France¹,²

Summary

Executive summary: In response to the various points covered in paragraphs 49 to 53 of document ECE/TRANS/WP.15/AC.1/134, the secretariat and France have prepared different options for the structure of a database on events involving dangerous materials, to be hosted by ECE.

Action to be taken: Provide guidance to enable the secretariat to work on ideas for the structure of the database and on its development.

¹ In accordance with the programme of work of the Inland Transport Committee for 2014–2015 (ECE/TRANS/240, para. 100, ECE/TRANS/2014/23, cluster 9, para. 9.2.).
² Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2014/52.
1. The Joint Meeting has launched a pilot project on the systematic sharing of all accident data gathered under section 1.8.5 with the aim of building an accident database for the zone covered by RID/ADR.

2. The pilot project uses Microsoft Access software. It has also been agreed that the secretariat of the United Nations Economic Commission for Europe (ECE) could host the database and allow member States to access it through the ECE website.

3. Expanding operations in this manner might exceed the technical capacities of the software currently being used for the pilot.

4. As referred to in paragraph 51 of the report of the last session of the Joint Meeting (ECE/TRANS/WP.15/AC.1/134), various ways of entering data in the database and extracting information are set out in the annex.

5. These are not final proposals for adoption but initial thoughts on which the Joint Meeting is invited to comment so as to guide the secretariat in its future work.

6. Three service levels, diagrams for which can be found in the annex, are suggested. They are not mutually exclusive and could easily be combined.

7. They have been prepared bearing in mind not only that data anonymity is essential, but also that gathering data and managing information systems could involve a heavy workload, which would be a burden on authorities. This could be reduced considerably by the use of automated communication systems.

8. The diagram for service level 1 represents the minimum structure necessary. In this option, the competent national authority is entirely responsible for putting together the file to be sent to ECE with anonymous data. This file would be an Access database, provided blank by ECE, that the authority would complete itself. The authority would assume the burden of managing its database and sending anonymous data to ECE.

9. The diagram for service level 2 includes an additional service to be provided by ECE with a view to reducing the workload for the competent authorities outlined in the previous paragraph. This option requires the introduction of security procedures for a private database accessible only to the competent authority. This database would contain data with identifying information on operators and transporters, but these data would never be included in the publicly accessible shared database. This private area would be available to the Contracting Party, allowing it to collect accident reports and verify their authenticity. A specially designed mechanism would enable the competent authority to transfer data concerning the technical description of an accident into the shared database, after verifying their accuracy and removing any data containing identifying information.

10. The diagram for service level 3 includes the possibility of an additional service enabling the operator involved to file an accident report online, thereby relieving the competent authority of the task. The competent authority would still be responsible for verifying the data submitted by the operator and entering them into the publicly accessible shared database, after removing any data containing identifying information. This service could only be introduced once the previous service is operational.

11. Of course, each option should be studied to ensure it guarantees anonymity, ensures the security both of data and of access to the ECE site, and avoids errors, particularly in managing reports on a single accident from several sources.

12. Another point not yet covered in the diagrams in the annex is the inclusion of links to other accident databases that exist for each mode of transport but are not specific to the transport of dangerous goods, such as the European Railway Agency (ERA) database for rail transport.
13. Finally, there is the question of dissemination of the data held in the shared database. It is clear that the full corpus of data will be made available to experts, who will be able to use it for general or focused research and analysis depending on current research needs. However, some of the statistics could also be published more widely, including on the ECE site. This concerns not only the structure of the database but also its content. However, it would be useful to consider the matter together and bear it in mind when deciding on a structure for the database, as appropriate.
Annex

Workflow of the UNECE Dangerous Goods Events Database
Service level 1

Minimal structure: The competent authority manages the collection process and its maintenance and provides a file.

Workflow of the UNECE Dangerous Goods Events Database
Service level 2

The secretariat provides and maintains a private database to minimize the work of competent authorities.
Workflow of the UNECE Dangerous Goods Events Database

The secretariat provides an additional service including a dematerialized online declaration further facilitating the collection process.

1. Dangerous Goods event
2. Private Company (e.g., loading company A)
   - Fill online form
   - Private online database
   - Report, statistics
   - Accessible only to the Competent Authority from the same country (country A)

3. UNECE
   - Competent Authority (country A)
   - Check and validate data
   - Removal of all private data concerning the company involved

4. UNECE
   - Public online database
   - Data freely available
   - Public visitors
   - To be discussed
   - Competent Authority (country A or B)