

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

6 March 2013

Bern, 18–22 March 2013

Item 8 of the provisional agenda

Any other business

Accidents database

Transmitted by the Governments of France and the UNECE secretariat

Introduction

1. The idea to develop an accident database has been raised at several occasions during working group meetings as well as in the plenary joint meeting. During the different sessions of the BLEVE working group it appeared that working on systematic and exhaustive accident data could be very useful but that, unfortunately, the current situation in accident reporting was still too limited to allow all the benefits deriving from that approach.

2. Following the discussions held at the last session of the joint meeting, the secretariat and the french delegation worked together on the basis of the report, document TRANS/WP.15/AC.1/128 paragraphs:

“64. The Joint Meeting recognized that, the provisions of 1.8.5.2 notwithstanding, the Contracting Parties to RID/ADR/ADN provided only very little information to the secretariat on accidents/incidents arising in the transport of dangerous goods. The number of accidents attributable to the dangerous goods themselves was low, which demonstrated the effectiveness of the regulations, but a more systematic analysis of incidents or accidents would still be beneficial for improving safety.

65. The representative of France presented a database of accidents occurring in France during the transport of dangerous goods and proposed to make it available to the secretariats so that they could fill it in with data from other countries. Several delegations said that they were prepared to provide data. The database could be maintained by the secretariats. A pilot project could be set up in cooperation with France, the secretariats and delegations expressing an interest. The Joint Meeting would raise the matter again at the next session to clarify how such a project for collecting and analyzing data on accidents/incidents should be maintained.

3. The results of that cooperation allowed to achieve the following points:

- (a) It is confirmed that it is easy to consolidate data coming from different origins if they are presented under the same structure of a Microsoft access database;
- (b) The structure of the initial database has been modified to be suitable for use in an international context. It follows the structure of the mandatory accident report in 1.8.5. The language is English;
- (c) To use the database fully it is necessary to get the Microsoft access software, nevertheless the secretariat can provide an “auto-run” software that allows to fill in

the database even without having Microsoft Access. However this auto-run doesn't allow to create queries to get "on demand" information out of the full consolidated database;

(d) Filling in the database is easy (interfaces are presented in the annex). Interrogating the database with queries requires some knowledge and training for the use of Microsoft Access, however pre-established queries may be designed as deemed appropriate;

(e) The minimal computer configuration for this to work is: a PC with Windows XP SP3, 2 GB RAM, 50 MB disk space, Microsoft Access 2000 or Microsoft Access 2010 Runtime.

Proposal

4. It is proposed to launch a pilot experiment under the following conditions:
 - (a) The database uses Microsoft Access which is a standard software suitable for the intended use, and can be found easily at a reasonable price;
 - (b) The charge of getting Microsoft Access stay with each competent authority;
 - (c) The structure of the database would be given to any competent authority willing to cooperate. Ideally we hope for the largest participation;
 - (d) If one doesn't have Microsoft Access immediately it is still possible to start participating by using Microsoft Access 2010 Runtime, an application distributed free of charge by Microsoft, keeping in mind that it doesn't allow full access to the data;
 - (e) Each competent authority participating in the project commits to fill the database with the accidents happening on its territory, as comprehensively as possible;
 - (f) The working language should be English (in principle at this stage language should not be a big issue as most of the fields other than the commentaries are already numbered or codified);
 - (g) At a defined date the completed database files are sent by each participating competent authority to the UNECE secretariat. The secretariat will consolidate all the files into one global database that will be given back to each of the participants in the experiment.
5. As this is only a first experiment we think that it may not be important to stick precisely to one calendar year. We propose to start as soon as possible after this session of the joint meeting.
6. The lessons learned from the experiment shall be presented to the joint meeting in march 2014. Therefore the different national databases shall be sent to the secretariat for consolidation at the end of January 2014 even if reports concerning some events from 2013 are missing.
7. If this is helpful an intermediate evaluation could be made at the September session of the Joint Meeting. This could help to identify possible difficulties and decide upon appropriate corrective actions if necessary.
8. Based on the conclusion of the experiment the joint Meeting will be able to decide on the best way to go on with it.

9. Some thoughts should be given in the interim period on how the data base could be made available on the UNECE and OTIF secretariats websites. In particular this needs to address issues related to data protection, access control, general computer security ...

ANNEX

1. Start screen (main menu)



2. View existing accident: accident selection

UNECE Dangerous Goods Accidents Database

Select the accident to view Back to menu

Accident ID	Date	Time	Transport	Location	
1	29/12/2009	15:15	road	CARRIERES-SOUS-POISSY	View accident
2	28/12/2009	15:30	road	BOURG-DES-COMPTES	View accident
3	23/12/2009	09:20	road	BEAUMONT	View accident

3. View existing accident: accident view (no edition possible)

UNECE Dangerous Goods Accidents Database

View accident

Accident ID

Date Time Transport mode

Location	Topography	Weather	Description	Dangerous Goods	Cause	Consequences	Contact	Notes
Zipcode <input type="text" value="78300"/> City <input type="text"/> Location <input type="text" value="CARRIERES-SOUS-POISSY"/>								

Built-up area
 Loading/unloading/transshipment site
 Open road

Close

Add a new accident: tab "Location"

UNECE Dangerous Goods Accidents Database

Add a new accident

Accident ID Date Time Transport mode

Location | Topography | Weather | Description | Dangerous Goods | Cause | Consequences | Contact | Notes

City Zipcode

Station

Shunting/marshalling yard

Loading/unloading/transshipment site

Open line

Location

Description of railway line

Kilometer

Save and close

Add a new accident: tab "Topography"

UNECE Dangerous Goods Accidents Database

Add a new accident

Accident ID Date Time Transport mode

Location **Topography** **Weather** **Description** **Dangerous Goods** **Cause** **Consequences** **Contact** **Notes**

- Gradient/incline
- Tunnel
- Bridge/Underpass
- Crossing

Save and close

Cancel

Add a new accident: tab "Weather"

UNECE Dangerous Goods Accidents Database

Add a new accident

Accident ID Date Time Transport mode

Location **Topography** **Weather** **Description** **Dangerous Goods** **Cause** **Consequences** **Contact** **Notes**

Particular weather conditions:

- Rain
- Snow
- Ice
- Fog
- Thunderstorm
- Storm

Temperature (degrees Celsius):

Save and close

Add a new accident: tab "Description"

UNECE Dangerous Goods Accidents Database

Add a new accident

Accident ID Date Time Transport mode

Location **Topography** **Weather** **Description** **Dangerous Goods** **Cause** **Consequences** **Contact** **Notes**

Description of the accident occurrence:

- Derailment/Leaving the road
- Collision
- Overturning/Rolling over
- Fire
- Explosion
- Loss
- Technical fault

Additional description:

Add a new accident: tab "Dangerous Goods"

UNECE Dangerous Goods Accidents Database

Add a new accident Cancel

Accident ID Date Time Transport mode

Location | Topography | Weather | Description | **Dangerous Goods** | Cause | Consequences | Contact | Notes

Good: ▼

Failure type ▼ Quantity (kg or l)

Containment ▼ Containment material Delete

Save and close

Add a new accident: tab "Cause"

UNECE Dangerous Goods Accidents Database

Add a new accident

Accident ID Date Time Transport mode

Location **Topography** **Weather** **Description** **Dangerous Goods** **Cause** **Consequences** **Contact** **Notes**

Cause of occurrence (if clearly known):

- Technical fault
- Faulty load securing
- Operational cause (rail operation)
- Unknown

Save and close

Add a new accident: tab "Consequences"

UNECE Dangerous Goods Accidents Database

Add a new accident
Cancel

Accident ID
Date
Time
Transport mode

Location
Topography
Weather
Description
Dangerous Goods
Cause
Consequences
Contact
Notes

Loss of product

Material/Environmental estimated damage

none

injured

injured by dangerous goods

death

death by dangerous goods

Involvement of authorities

No

Yes

Yes, evacuation of persons for a duration of at least three hours caused by the dangerous goods involved

Yes, closure of public traffic routes for a duration of at least three hours caused by the dangerous goods involved

Save and close

Add a new accident: tab "Contact"

UNECE Dangerous Goods Accidents Database

Add a new accident

Accident ID Date Time Transport mode

Location | Topography | Weather | Description | Dangerous Goods | Cause | Consequences | **Contact** | Notes

Create or edit contacts

<input type="checkbox"/> Select	Operator	<input type="text" value="op3"/>	Company name	<input type="text" value="company3"/>	Operator type	<input type="text" value="carrier"/>
	Address	<input type="text" value="adr3"/>	Contact name	<input type="text"/>	Information	
Code	email	<input type="text"/>	Phone	<input type="text"/>	<input type="text"/>	
SIREN3		<input type="text"/>	Fax	<input type="text"/>		
<input type="checkbox"/> Select	Operator	<input type="text" value="op2"/>	Company name	<input type="text" value="company2"/>	Operator type	<input type="text" value="consignee"/>
	Address	<input type="text" value="adr2"/>	Contact name	<input type="text"/>	Information	
Code	email	<input type="text"/>	Phone	<input type="text"/>	<input type="text"/>	
SIREN2		<input type="text"/>	Fax	<input type="text"/>		
<input type="checkbox"/> Select	Operator	<input type="text" value="op1"/>	Company name	<input type="text" value="company1"/>	Operator type	<input type="text" value="consignor"/>

Record: 1 of 4 No Filter Search

Save and close

Cancel

Add a new accident: tab "Notes"

The screenshot shows a web form titled "UNECE Dangerous Goods Accidents Database" with a sub-header "Add a new accident". The form includes several input fields: "Accident ID" with the value "268", "Date" with "01/01/2013", "Time" with "10:10", and "Transport mode" with a dropdown menu showing "rail". Below these fields is a tabbed interface with tabs for "Location", "Topography", "Weather", "Description", "Dangerous Goods", "Cause", "Consequences", "Contact", and "Notes". The "Notes" tab is currently selected and active. The text area under the "Notes" tab contains the following text: "Notes 1", "notes 2", "notes 3", and "...". At the bottom right of the form, there is a "Save and close" button. A "Cancel" button is located at the top right of the form area.

Select exiting accident for editing or suppression

UNECE Dangerous Goods Accidents Database					
Select the accident to edit or delete					Back to menu
Accident ID	Date	Time	Transport	Location	
<input type="text" value="1"/>	<input type="text" value="29/12/2009"/>	<input type="text" value="15:15"/>	<input type="text" value="road"/>	<input type="text" value="CARRIERES-SOUS-POISSY"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="text" value="2"/>	<input type="text" value="28/12/2009"/>	<input type="text" value="15:30"/>	<input type="text" value="road"/>	<input type="text" value="BOURG-DES-COMPTES"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="text" value="3"/>	<input type="text" value="23/12/2009"/>	<input type="text" value="09:20"/>	<input type="text" value="road"/>	<input type="text" value="BEAUMONT"/>	<input type="button" value="Edit"/> <input type="button" value="Delete"/>