

OTIF



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Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods
(Bern, 7 - 11. March 2005, agenda item 8)

RID Committee of Experts Working Group on standardized risk analysis

At the request of the RID Committee of Experts, the Secretariat of OTIF has put together below the report of the second meeting of the working group on standardized risk analysis and an abstract on it from the report of the RID Committee of Experts, which also looks in particular at the position of WP.15 with regard to changing this working group into a joint working group of the land transport modes in the context of the RID/ADR/ADN Joint Meeting.

Agenda

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- ITEM 5: Preparing Chapter 1.9/Alignment of ADR/RID text
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ITEM 1: Welcome

1. **Mr. Hundhausen** (Chairman) welcomed the participants (for list of participants, see Annex 1).

ITEM 2: Report on activities since the 1st meeting on 22/23 April 2004

2. **Mr. Hundhausen** (Chairman) gave a report on the unsuccessful efforts to organize co-funding for the EU research project (see informal document INF.7 of the last Joint Meeting). At the RID/ADR Joint Meeting, Germany had submitted a proposal to obtain for the working group a mandate from the Joint Meeting (see informal document INF.8 of the last Joint Meeting, see also documents OCTI/RID/CE/41/5a) and TRANS/WP.15/2004/CRP.5/Add.2 dated 26.10.2004).

For reasons of cost, only a limited number of copies of this document have been made. Delegates are asked to bring their own copies of documents to meetings. The Central Office only has a small number of copies available.

3. **Mr. Visser** (UIC) referred to a remark by the UN/ECE Secretariat at the Joint Meeting, according to which the German proposal would entail amendment of the WP.15 work programme. This would have to be checked by the Inland Transport Committee and consequently by the UN's legal service ^{*/}. **Mr. Rein** (Germany) did not share these concerns, because with regard to restrictions on carriage, ADR and RID contained virtually the same text. The difference, which was to demonstrate the necessity of measures, had been recorded in the report of the Joint Meeting, but the requirement for the proposal to be checked from the legal point of view was no longer referred to in the report. It was therefore to be assumed that the UN/ECE itself did not wish to maintain this requirement.

ITEM 3: Guidelines and research project

4. **Messrs. Le Fort** (Switzerland), **Rein** (Germany) and **van den Brand** (Netherlands) and **Mrs. Salander-Ludwig** (UIC) noted in their contributions to the discussion that guidelines should include the following:
 - Minimum standards for risk analysis,
 - Circumstances/situations which are important for accidents to be considered in risk analysis and
 - Description of cases of application in accordance with Chapter 1.9.
5. It was emphasized by all speakers that risk assessment was the exclusive competence of the Member States ("competent authority").
6. In reply to a question from **Mr. Le Fort** (Switzerland), **Mr. Rein** (Germany) said in relation to Chapter 1.9 that the competent authority was an authority of each of the Member States and was also appointed by the latter. Demonstrating the need for measures in accordance with section 1.9.3 was not aimed at any other authority or at anybody else, and not at a (superordinate) international body either. RID did not prescribe that evidence for measures had to be checked by a higher authority.
7. **Mr. Visser** (UIC) asked whether measures had to be carried out in accordance with domestic law and whether this would be the respective transport law. **Mr. van den Brand** (Netherlands) emphasized that other legal branches also had to be taken into account, e.g. land use planning, construction law or similar laws. **Mr. Rein** (Germany) explained that the measures in accordance with Chapter 1.9 were indeed to be established in transport law as so-called traffic regulation measures, but irrespective of this, in relation to section 1.9.2, all the other legal branches had to be embraced, e.g. environmental legislation when designating a water pollution control zone.
8. With regard to the legal link between guidelines and RID, **Mr. Rein** (Germany) said that from a law-making point of view, he saw two possibilities. The first was that the guidelines could be made part of the informal part of RID (by publication) and the second, which was usual practice these days, would be to include the guidelines in Chapter 1.9 by citing them. This would make them mandatory.
9. **Mr. Le Fort** (Switzerland) and **Mr. Tiemersma** (Netherlands) thought the guidelines should be a tool with a supporting role for the competent authority, but this did not mean that they should lead to a mandatory, uniform procedure for carrying out risk analysis.

^{*/} Note by the UNECE secretariat: This statement cannot be attributed to the UNECE secretariat. The work programme adopted by the Inland Transport Committee does not need to be checked by the UN legal service.

10. **Mr. Le Fort** (Switzerland) and **Mr. van den Brand** (Netherlands) pointed out that it was not possible to set out in detail in guidelines how a risk analysis was to be carried out; it would have to be left up to the Member States to decide which scenarios, models etc. were appropriate. The scientific state of affairs did not allow detailed harmonization; the process of research was largely constituted by compromises and decisions by experts. Of necessity, these were decisions which might turn out so with good reasons, but which might also turn out otherwise.
11. **Mrs. Bailleux** (Belgium) and **Mr. Visser** (UIC) considered that it was desirable in the guidelines to standardize risk analysis to the greatest extent possible.
12. **Mrs. Bailleux** (Belgium) and **Mr. Rein** (Germany) were of the view that where scientific analysis (e.g. of the behaviour of materials) was based on the same ancillary conditions in all countries, uniform procedures should be possible. This also applied to the choice of accident scenarios or the selection of materials.
13. **Mrs. Salander-Ludwig** (UIC) saw areas for achieving a consensus in the definition and description of a system and in identifying risks. She pointed out that work on standardization was also already underway in this area. Ensuring quality in the provision of data should also be covered in guidelines. She referred in particular to the EU Safety Directive in the so-called 2nd rail package. Apart from network-specific features, the railways/Member States should in the long term harmonize their safety provisions. In the context of safety management, risk analysis was to be carried out which should have supranational validity in relation to transport chains. The consequence of this requirement of the Directive, which implied both rationalisation and safety effects, would be guidelines which ensured a uniform procedure. It was then logical that guidelines for Chapter 1.9 should also be developed in line with the procedure and methods of risk analysis in other areas of the railways. Thus standard EN 50126 should be taken into account in preparing guidelines. This agreed and harmonized approach would increase efficiency and was conducive to safety.
14. **Mr. Ludwig** (Germany) and **Mr. Rein** (Germany) suggested that in the parts of a risk analysis which were largely constituted by decisions directing research, such as risk scenarios, model-based assessments concerning propagation behaviour and damage processes, the experiences of countries with risk analysis practice should be used, their results should be compared and thus the range of conclusions concerning the results could be kept in check.
15. Along the same lines was a more wide-ranging proposal from France (**Mr. Cailleton**, **Mrs. Keravel** and **Mr. Ruffin**) to carry out benchmarking analysis and to derive best practice from it. A detailed proposal should be submitted to the next meeting (May 2005).
16. **Mr. Brücher** (GRS) made clear that the issue of "ambiguous results" was not a marginal issue, but a key methodological problem in risk analysis. It had crucial effects on the outcome and the interpretation thereof (risk assessment). This problem would have to be confronted when preparing guidelines. Ambiguities in the results were often of various orders of magnitude. The political assessment of results was then no longer clear even if fixed acceptance criteria existed, but was to a large extent highly complex. **Mr. Brücher** (GRS) and **Mr. Rein** (Germany) deduced from this the requirement that the process of analysis of a risk analysis should be formulated transparently and that recommendations should be prepared in guidelines on this. This was a prerequisite for achieving acceptance among those subject to the law for decisions made concerning measures, and also among the bodies dealing with the development of regulations. The need for extensive communication of risks during the analytical and decision-making phases was acknowledged. In this case, the function of guidelines could be to find clear, common language to contribute to effective communication of risks.

17. **Mr. van den Brand** (Netherlands) and **Mr. Brücher** (GRS) introduced their papers on guidelines (meeting document INF.1 Netherlands¹) and on the research project (meeting document INF.1 Germany).
18. **Mr. van den Brand** (Netherlands) explained the problems in respect of the detail in which guidelines should be produced: was every stage of the work a risk analysis and must the model used for each stage be established, or was it only necessary to describe general principles and the components of a risk analysis (ensuring a minimum standard)? As set out in INF.Netherlands¹, **Mr. van den Brand** recommended that a minimum standard be ensured.
19. **Mr. Le Fort** (Switzerland) described the preparation of a risk analysis as a process of agreement and consensus on the part of those involved. The situation with regard to the construction models allowed of no other procedure. He also linked this to the recommendation only to describe in guidelines a general framework for preparing risk analysis.
20. **Mr. Brücher** (GRS) considered the proposals of the Netherlands to be a necessary but insufficient basis for standardizing the requirement to demonstrate the need for measures in accordance with section 1.9.2. He thought it essential to elaborate the uncertainties in analysis and its results as quantitatively as possible. In addition, in order to reduce uncertainties, it was essential to provide a database that was as reliable and complete as possible (set up a pan-European accident database). It was necessary to undertake a quantitative comparison of the models in order to define uncertainties and the "state of the art" (see also paragraph 15 for more on this). These additional components of guidelines required research work, funding resources and co-operation (technical support, provision of data).
21. **Mr. Laakso** (European Commission) provided information on the changes in the European Commission and the amended basic conditions for the promotion of research. The subject of "dangerous goods" had now been assigned to the newly set up Directorate General for Security. For the end of October 2004, bids would be invited for a research project which could cover the working group's proposed project. A new feature was that more than 50% of the total cost could be requested. However, the focus of the tender would be on the problem of "security". The amount of finance available would be 3.5 million Euro. Only a complete package would be awarded. The European Commission would no longer co-ordinate the research; this would be the task of the project leader. Integrating the safety management of the railways could be considered as an important component of a project proposal (see paragraph 13).
22. **Mr. Goldin** (Russian Federation) explained how Russia dealt with risks in transport (see Annex 2). He thought the working group's work was also important for Russia. He would very much welcome continued contact.

Subsequent additional announcement by the Chairman of the working group

23. There was a CEN BT WG 160 on "Risk Assessment". The task of this working group was to achieve harmonization/standardization of the risk analysis procedures in all areas (see Annex 3). There was also an EU research project "MITRA, Monitoring and Intervention for the Transportation of Dangerous Goods" (www.mitraproject.info).

ITEM 4: Participation/co-operation

24. **Mr. Visser** (UIC) presented the UIC document (INF.UIC1), which contained a summary of serious accidents material to risk analysis, and the corresponding transport services in some European rail transport undertakings. He renewed UIC's offer to provide the editorial group (see paragraph 29) with further data on these accidents.

25. **Mr. Le Fort** (Switzerland) pointed out that the data collected by UIC did not contain all the accidents notified in Switzerland. Also, differences in the subgroups of accidents were evident.
26. **Mr. van den Brand** (Netherlands) noted that the UIC data accorded with those of the Netherlands. However, **Mr. Le Fort** (CH) and **Mr. van den Brand** (Netherlands) requested that the data no longer be restricted to severe accidents and that all accidents should be covered.
27. **Mr. Visser** (UIC) replied that other accident data could also be collected, and sources other than rail transport undertakings could also be used. However, experience had shown that only severe accidents involving goods with a high hazard potential were relevant for risk analysis. He noted that UIC had developed a Europe-wide database of railway accidents, which also contained the accident reports in accordance with RID 1.8.5.
28. **Mr. Hundhausen** (Chairman) summed up by saying that there was wide support for the creation of a pan-European database.
29. It was decided that those States which already carried out risk analysis or which had risk analysis carried out (Switzerland, France, Netherlands, United Kingdom) should provide papers describing the procedures for preparing risk analysis in their countries (guidelines or similar), and should give their views on how the guidelines should look. The representatives of the States which were present agreed; the United Kingdom would have to be asked. Papers should be sent to GRS by the middle of December 2004. GRS would invite the representatives of those States which submitted documents to an initial editorial meeting to produce guidelines. This meeting would be held in mid-January 2005.
30. **Mrs. Salander-Ludwig** (UIC) said she was prepared to contribute papers on the safety management of the railways, the EU Directive, the second rail package and EN 50126 and to take part in the editorial meeting of the sub-group.
31. **Mr. Cailleton** (France) wished the results of the sub-group's work to be produced as "public" documents not subject to any copyright or exploitation right restrictions. **Mr. Hundhausen** (Chairman) noted that all the papers of the working group on standardized risk analysis should be freely accessible and that collaborating in the preparation of papers included the willingness not to lay claim to any author's rights or exploitation rights.
32. **Mr. del Rey Llorente** (Spain) confirmed Spain's continued interest in participating in the working group. However, he could not make any definite commitments at present. He asked to be kept informed of the work of the "guidelines" sub-group. **Mr. Hundhausen** (Chairman) explained that as previously, all the working group's papers would be placed on the internet by OTIF for general information as soon as possible.

ITEM 5: Preparing Chapter 1.9/Alignment of ADR/RID text

33. This item related to the report of the last Joint Meeting (document OCTI/RID/GT-III/2004-A, paragraph 17). **Mr. Dénervaud** (OCTI) pointed out that the working group was not responsible for this. The Secretariat of OTIF and the Chairman of WP.15 had already prepared the editorial work for WP.15. The document would be discussed at the next session of WP.15 (end of October 2005).

ITEM 6: Any other business

34. The next meeting of the working group would be held on 3 and 4 May 2005 at the Federal Ministry for Transport, Construction and Housing in Bonn, unless there were any other suggestions.

Note: The annexes mentioned in the report can be downloaded from the OTIF website (http://www.otif.org/html/e/rid_CExp_RID_gt_analyse_risque_rapport2004.php).

**Abstract of the report of the 41st session of the RID Committee of Experts on the Transport of Dangerous Goods
(Meiningen, 15 - 18 November 2004)**

ITEM 5: Working group on standardized risk analysis

54. The Chairman of the working group (Mr. Hundhausen, Germany) reminded the meeting that at the first meeting of the working group (Bonn, 22 and 23 April 2004), Switzerland, the Netherlands, the United Kingdom and France had presented the risk analysis applied in their States. The working group had thought it useful to have available an accident database and transport data in order to ascertain the frequency of accidents. Criteria for minimum standards and the uncertainty of risk analysis would have to be incorporated into the working group's enquiries (see also the report in A 81-03/504.2004).
55. He then gave a brief report on the second meeting of the working group (Bonn, 21 and 22 October 2004), the report of which would shortly be placed on OTIF's website, document number A 81-03/510.2004 (www.otif.org/html/e/rid_CExp_RID_gt_analyse_risque_rapport2004.php). He highlighted the following main results of the working group:
- By the end of December 2004, France, the Netherlands and Switzerland would produce a condensed version of the risk analysis applied in their States. These documents would then be placed on OTIF's website (www.otif.org/html/e/rid_CExp_RID_gt_analyse_risque_doc2004.php).
 - A small subgroup would meet mid-January to determine the points these different methods have in common and to develop a minimum standard (guide, guidelines).
 - The third meeting of the working group, which will check the consolidated document produced by this subgroup, is planned for 3 and 4 May 2005. It will decide whether guidelines are sufficient or whether the guidelines must be supplemented by a research project.
56. With regard to funding, the Chairman of the working group informed the RID Committee of Experts that the European Commission had put out to public tender a 3.5 million € research project, which was aimed primarily at security, but which could also include a section for safety and risk analysis. The successful tenderer would also have to assume co-ordination of the research project.

Document: OCTI/RID/CE/41/5a) (Secretariat)

57. A representative of the Secretariat introduced this document which, on one hand, reproduced the relevant paragraphs of the report of the last Joint Meeting (Geneva, 13 – 17 September 2004) and on the other, the relevant paragraphs of the report of the last meeting of WP.15 (Geneva, 25 – 28 October 2004). He reminded the meeting that in an indicative vote, the Joint Meeting had voted in favour of setting up a joint informal working group comprised of the different modes (12 votes in favour, 1 vote against) and that the aim of this working group was set out in paragraph 74 of the report of the Joint Meeting.
58. Without closing the door to the setting up of such a working group under the auspices of the Joint Meeting, the Chairman of WP.15 had explained that OTIF should send UN/ECE an official request setting out the aims, the likely points of interest of this work for ADR, the working methods, work programme and expected results (see paragraph 75 of the report of WP.15).

59. The Secretariat was of the view that WP.15's position in the light of the lack of interest evinced by WP.15 and the rejection expressed clearly by various delegations tended to draw a polite, but diplomatic line under the non-adoption.
60. The Chairman summed up the discussion as follows:
- All those delegations which had expressed a view had supported continuing the work, so the working group could hold its next meeting. As a first step, guidelines would be produced containing the main considerations on carrying out risk analysis and based on risk analysis which was already carried out in some States.
 - The secretariat work of the Association for Reactor and Plant Safety (GRS) was ensured for the first half of 2005 by a research project funded by the Federal Ministry of Transport, Construction and Housing (BMVBW).
 - UIC had offered its assistance in completing the statistics on accidents in rail transport.
 - The following steps (scenarios, assessment) were more complex and could only be tackled with additional funding. The working group was therefore asked to investigate other opportunities for funding and to ensure co-operation with the EU (UIC and France have announced that they might be able to consider financial participation under certain conditions). The working group was also asked to submit draft guidelines to the next session of the RID Committee of Experts and to report on which further steps should be aimed at and how this work could be funded.
 - The Secretariat was mandated to inform the Joint Meeting and WP.15 of the progress of the work and the further steps planned.
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