

OTIF



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**RID/ADR**

Joint Meeting  
(Geneva, 13 - 17 September 2004)

**Final report of the first meeting of the RID Committee of Experts Working Group on stan-  
dardized risk analysis**

**(Bonn, 22 and 23 April 2004)**

**(OCTI circular A 81-03/504.2004 to the COTIF Member States of 11 June 2004)**

1. At the invitation of the German Federal Ministry of Transport, Construction and Housing (BMVBW), the 1<sup>st</sup> session of the Working Group on standardized risk analysis for RID/ADR Chapter 1.9 was held in Bonn on 22 and 23 April 2004.
2. The following States took part in the session: Belgium, Germany, France, Latvia, Netherlands, Austria, Portugal, Romania, Sweden, Switzerland, Spain, Hungary and the United Kingdom. The following were also represented: the European Commission, the Intergovernmental Organisation for International Carriage by Rail (OTIF), the European Chemical Industry Council (CEFIC), the International Federation of Freight Forwarders Associations (FIATA), the International Road Transport Union (IRU), the International Union of Railways (UIC) and the International Union of Private Wagons (UIP).
3. In the following report of the session, speakers are referred to by name where they are clearly identifiable from the notes.

**Agenda item 1: Welcome**

4. Mr. Rein (D) welcomed participants to the working group session. At his suggestion, Dr. Hundhausen (D) was elected chairman of the working group and Mr. van den Brand (NL) was elected vice-chairman.

Aus Kostengründen wurde dieses Dokument nur in begrenzter Auflage gedruckt. Die Delegierten werden daher gebeten, die ihnen zugesandten Exemplare zu den Sitzungen mitzubringen. Das Zentralamt verfügt nur über eine sehr geringe Reserve.

**Agenda item 2: Status of the amendment of RID/ADR Chapter 1.9**

5. Mr. Rein (D) referred to the version of RID Chapter 1.9 concerning restrictions on carriage imposed by the competent authorities as documented in the final report of the 40<sup>th</sup> session of the RID Committee of Experts (document A 81-03/501.2004), which is to enter into force on 1 January 2005. The task of the newly formed working group on standardized risk analysis, formulated during the above meeting was to find and define possibilities for standardizing risk analysis to evaluate the need for measures in the context of Chapter 1.9 of RID. In so doing, there was a need to harmonize the procedure for rail transport and road transport.
6. Mr. Tiemersma (NL) pointed out that standardized risk analysis was not the only way to resolve the problems that exist, but that other steps at national level must also be possible.
7. Mr. Rein (D) explained that the use of more stringent safety requirements made by different parties should also continue to be possible. The standardization of risk analysis should be restricted to demonstrating the need for measures in the context of Chapter 1.9.
8. With regard to Mr. Rein's (D) proposal to set up an agency for the technical management and coordination of the project through the Association for Plant and Reactor Safety (GRS) and to obtain financial support for the project in the framework of a network to be established, Mr. Laakso (EU) made clear that he welcomed the initiative, but could not give any general undertakings.
9. Mr. Visser (UIC) pointed out that section 1.9.5 contained in the present draft Chapter 1.9 of RID did not deal with any restrictions on carriage. He was of the view that in Chapter 1.9, a clear division between the provisions for restrictions on carriage and the "special safety provisions" should be made. Mr. Rein (D) was of the view that as far as the text was concerned, section 1.9.5 was sufficiently separate from the provisions concerning restrictions on carriage. Mr. Tiemersma (NL) also questioned the need for another amendment. The chairman suggested discussing this item again at the next session of the RID Committee of Experts.

**Agenda item 3: Work assignment for the working group on standardized risk analysis for RID/ADR Chapter 1.9**

10. Mr. Visser (UIC) introduced UIC's paper on the standardization of risk analysis for the carriage of dangerous goods by rail, which was distributed electronically in the run up to the session. According to their paper, UIC considered the most important tasks of the working group to be to deal with the subjects of risk acceptability, case histories of accidents, the comparison of risk analysis methods and to take account of technical progress when carrying out risk assessment. In the context of UIC's possible contribution to the work of the working group, the offer was renewed to carry out, for a pan-European case history, a new analysis of serious rail accidents involving dangerous goods that had occurred in recent decades, using the present accident report form in RID/ADR 1.8.5. Supplemented by data on the flow of traffic, this information should be made available to the working group.
11. The chairman confirmed that a fresh data analysis was to be given top priority, before even the comparison of methods, and this would form the basis for dealing with the subject of risk acceptability.
12. Dr. Schiess (CH) pointed out that consideration of major accidents alone was not enough to provide reliable accident statistics. Mr. van den Brand (NL) also shared this opinion, although he welcomed UIC's initiative as a possible contribution to covering the conditional probabilities in analysing the incident tree.

13. In Mr. Laakso's (EU) view, the consideration of rail accidents involving the carriage of dangerous had to entail similar activities for other modes of transport.
14. Mr. Rein (D) pointed out that the existing obligation to report on accidents would in future also lead to smaller accidents being recorded. He considered the analysis of major accidents being offered to be important input for calibrating the risk analysis models.
15. With regard to the working group's task to develop a guide to standardizing risk analysis, Dr. Salander-Ludwig (UIC) pointed out that in so doing, the financial feasibility of the risk analysis itself, and of the measures, had to be taken into account. In addition, she referred to the current development of an accident database at UIC.
16. In Mr. Rein's (D) view, irrespective of the precise definition of the outcome the working group was aiming for, an attempt should be made to include the initial results of the work in the version of RID/ADR which was to enter into force on 1.1.2007.
17. Mr. van den Brand (NL) endorsed the need for the additional statistical analysis of accidents beyond the carriage of dangerous goods and pointed out the problem that if the standardization of risk analysis was too far-reaching, this might encroach into areas outside the scope of RID/ADR and into States' sovereignty.
18. The chairman considered that the comments made were items for the planned preparation of a guide.
19. Mr. Cailleton (F) pointed out that risk analysis consisted of many elements and went beyond the regulatory scope of RID. He also emphasized the need for a common approach for both rail and road transport.

**Agenda item 4:           Presentation of the risk analysis that already exists in France, the Netherlands, Switzerland and the United Kingdom**

20. Mr. Balmer (CH) explained the procedure in Switzerland for quantitative risk analysis for the transport of dangerous goods by rail. This was followed by Mr. van den Brand's (NL) presentation on the basic aspects of risk analysis and its implementation in the Netherlands and, based on this knowledge, on ideas about international standardization in relation to the work of this working group.
21. In the subsequent discussion, Mr. Heintz (F) stressed the need to achieve standardization that was consistent with existing national and international rules, particularly with the European directives concerning rail safety.
22. In reply to a comment by Mrs. Geysels (IRU) that the proportion of risk analysis which, according to the presentation, it was possible exactly to determine scientifically was surprisingly small, Mr. van den Brand (NL) made clear that a large proportion of the risk analysis models and methods used did in fact rest on there being agreement between different expert opinions. Dr. Riley (UK) stressed the difficulty of achieving such agreement by reference to an international conference in Toronto where it had not been possible to reach consensus between the methods of different groups of experts in relation to the risk assessment of a set transport scenario.
23. Dr. Schiess (CH) emphasized that in risk analysis, there were a lot of areas and interest groups that had to be taken into account.

24. Dr. Riley's (UK) presentation provided an overview of the risk assessment procedures in the United Kingdom. At the request of Dr. Ludwig (D), Dr. Riley offered to make available an additional diagram showing the public risk in road transport. Mr. Tiemersma (NL) also recommended aiming at improving the safety of dangerous goods transport by exchanging findings from risk analyses in different countries.
25. Mr. Cailleton (F) said that in France, there was no general definition of risk criteria for the carriage of dangerous goods by rail, but that decisions were made depending on the individual case. The next presentation by Dr. Ruffin (F) explained the status of the research programme carried out by INERIS to develop a multimodal risk analysis model on the basis of the OECD/PIARC model for tunnels.
26. In reply to a further query from Mr. Laakso (EU) concerning the distribution and practicability of the model presented, Dr. Ruffin (F) explained that distribution of the model was controlled by PIARC (World Road Association). The model was already used in other countries as well, but as yet, no results from them were known. Mr. Cailleton (F) added that experiences resulting from its implementation in France for comparative risk analysis between tunnels and open lines should be incorporated into a guide.
27. Mr. Cailleton (F) replied to Mr. van den Brand's (NL) question concerning the applicability of the model when an absolute assessment of the risk was dispensed with, by referring to the fact that there were no absolute risk assessment criteria in France and that for assessing alternative routes, a relative approach was sufficient.
28. Dr. Gilibert (CH) drew attention to the need to achieve agreement with regard to the risk analysis methods and the criteria for deriving measures. In connection with the OECD/PIARC model, when WP.15 had reviewed it, it had been established that in attributing the risks, political aspects had to be incorporated as well as the aspects founded on technical safety. For example, the quantity limits in ADR 1.1.3.6 were taken over as the quantity threshold for tunnel safety, and the highly toxic and corrosive substances had not been included. These conclusions should also be incorporated into the OECD/PIARC model.
29. In reply to a question from Mrs. Geysels (IRU) concerning the choice of the types of wagon and weight categories that were taken into account in the model, Dr. Ruffin (F) explained that the choice of scenarios was based on a consensus at European level which took statistical data into consideration.
30. Mr. Wilkin (B) was of the view that because the possibility existed of making a detailed record of the flows of substances in rail transport it was not necessary to classify substances. Dr. Ruffin (F) confirmed this possibility, but pointed out that in order to establish scenarios for accidents involving dangerous goods in both road and rail transport, further information over and above the information referred to would be needed.

**Agenda item 6: Provisional plan of work for developing a standardized risk analysis**

31. After a brief overview by Dr. Lange (D) of GRS's areas of work and of its experience in the field of dangerous goods transport risk analysis, there followed a presentation on the main subjects to be dealt with in the working group and on a plan of work for the standardization of risk analysis as a basis for discussion.

32. Dr. Lange (D) welcomed UIC's renewed offer to provide accident data as set out above, but asked them to check to what extent it would be possible also to provide information on accidents in freight transport as a whole, as a further important basis. Mr. Visser (UIC) agreed to seek possibilities for supporting the working group from among those responsible for the UIC's existing rail accidents database.
33. Dr. Schiess (CH) noted that in having a restriction to a few classes of substances, rare but serious accidents should not be forgotten, e.g. those involving ammonium nitrate or explosives. According to Mr. Visser (UIC), approximately 90% of fertiliser transport did not come under the requirements of RID. In connection with this, Mr. del Rey Llorente (E) drew attention to an accident involving ammonium nitrate that had recently occurred in Spain.
34. In the light of recent events, at the suggestion of Mr. Visser (UIC), the chairman asked for a minute's silence to remember the victims of the dangerous goods accident in North Korea.
35. Mr. van den Brand (NL) proposed setting up a small group to discuss with UIC the requirements and requests with regard to the data to be provided. Dr. Lange (D) supported this proposal. Mr. Visser (UIC) expressed doubt that information that went beyond the scope of Chapter 1.8.5 could be provided. The chairman proposed forming such a working group either directly or in bilateral discussions.
36. Mr. Tiemersma (NL) thought that in the context of the working group's work, there should also be a discussion on the advantages and disadvantages of applying a standardized risk analysis.
37. The chairman and Dr. Lange (D) suggested that agenda item 7 on possible support from the European Commission be brought forward as a basis for continuing the discussion on agenda item 6.

**Agenda item 7: Cooperation/support from the European Commission in developing a standardized risk analysis**

38. With regard to the European Commission's interest in the possible outcome of the working group, Mr. Laakso (EU) cited transparency of measures in accordance with RID/ADR Chapter 1.9, the promotion of unhindered freight transport in Europe, particularly of dangerous goods transport by rail within the meaning of Directive 96/49/EC, and the harmonization of provisions with a parallel effect on other modes of transport. In addition, he drew attention to the potential benefit of the results for the security of transport operations involving dangerous goods, which was becoming increasingly significant.
39. No assurances could be given with regard to the EU's possible partial funding of the work. A request to submit proposals by the deadline of 30 June 2004, the objective of which the work being planned was in principle suitable for, was to be published on the internet in a few days. Any project proposal from the working group would go through the usual assessment process and be subject to the customary ancillary conditions. The maximum share of the subsidy could be 50% of the actual costs of the project, so the remaining share would have to be raised elsewhere. When the application was made, the main tenderer would already have to be established, as well as the other members of the consortium.

**Agenda item 6: Provisional plan of work for developing a standardized risk analysis (continued)**

40. Accordingly, the chairman opened for discussion as the main points to be clarified the organisation and allocation of the work and the possibilities for co-funding.
41. In reply to the concern expressed by Mr. van den Brand (NL) that the objective of the working group to promote unhindered freight transport could be at the expense of national opportunities for protecting the population, Mr. Laakso (EU) explained that for the EU, unhindered transport was paramount, but that according to RID/ADR and Directive 96/49/EC, the possibility of having national restrictions for reasons of safety was ensured.
42. Mrs. Geysels (IRU) reminded the meeting that the project also concerned road transport and as a basis for discussing the possibilities for co-funding, requested an estimate of the scale of the project.
43. Dr. Lange (D) drew attention to the difficulty of making an estimate without a detailed definition of tasks. Assuming GRS provided expert coordination of the project management and that other States' institutions joined in with the work, he estimated that it would be in the region of 1 million € per year over two years, but it was necessary that the co-funding be resolved quickly owing to the need to meet the deadline for submitting a project proposal.
44. Based on the information available, the chairman asked the States represented to make known their interest in collaborating on the project and in helping to fund it.
45. Mr. Le Fort (CH) announced Switzerland's readiness, in principle, to take part in the project, but referred to the need for further talks to clarify financial involvement. According to Mr. Laakso, funding from non EU Member States was equally possible, as it also was of course from the new EU Member States.
46. Mr. del Rey Llorente (E) expressed great interest in the project, owing amongst other things to the planning of Spain's own methods of risk analysis in tunnels, but could not at the moment say anything with regard to the financial aspect.
47. At Dr. Ruffin's (F) request, Mr. Laakso (EU) explained that in calling for tenders, this was a request to submit proposals, and industry participation was also possible.
48. Mr. van den Brand (NL) said that whether his country participated would depend on the aim of the project and considered that a contribution to the funding was unlikely if too great a restriction were placed on national rules as a result of the process of standardization.
49. Dr. Lange (D) said the main task of the project was first to review the existing methods in order to make clear the opportunities for harmonization and to ensure the transparency of risk analysis. As he understood it, it should be possible for the Netherlands to support this.
50. Mr. Cailleton (F) made any agreement to take part dependant upon discussions that had still to be held with the other ministries concerned. He considered that further points to be dealt with in a requirement specification that might need to be broadened were the aspect concerning the dependency of the risk analysis methods used on the type of questions, and informing the public.

51. Mr. Hoffmann (D) said he understood the reservations that had been raised, but with a view to present cases of planned transport restrictions, he called upon the States represented and the associations concerned to participate in finding a harmonized solution to the problems. He informed the meeting about initial attempts to produce funding from Germany.
52. Dr. Lange (D) offered to incorporate the discussions of the working group meeting into a revised version of a draft of the project in order then to undertake further iterative firming up of the project in direct contact with the interested States.
53. Mrs. Pearson (UK) expressed interest in taking part, but referred to the need for other ministries to be involved, so she could not give a financial undertaking at this stage either.
54. With regard to a proposal from Dr. Schiess (CH) also to include the subject of risk management in the considerations, the chairman and Mr. Visser (UIC) were of the view that this went beyond the working group's mandate.
55. Mr. Laakso (EU) explained that the applicability of a risk analysis model to the analysis of safety issues was an interesting aspect. In Mr. Tiemersma's (NL) view, improving safety was also an important function of risk analysis. In Dr. Ruffin's (F) view, the value of risk analysis arose from its value for the whole process.
56. Mrs. Geysels (IRU) perceived differences between the various contributions to the discussion as to how the aim was described, from standardization of the tools by producing a guide, to having only an exchange of experiences and methods of the various States. She requested clarification.
57. In the ensuing discussion, it was established that a step-by-step concept should be pursued, with the first step being to seek possibilities for harmonization before the basis for standardization was set down. In so doing, the principal aim was not to fix upon a specific model, but to set out minimum requirements and quality criteria for risk analysis.
58. In this context, Dr. Lange (D) mentioned the importance of minimum requirements in respect of the use of current methods that were as uniform as possible and of high-quality data, in order with this project to take an important step on the road towards the long-term aim of being able to interchange the methods used by various States. The chairman confirmed the importance of integrating scientific progress into a risk assessment.
59. In reply to Mr. Balmer's (CH) statement that the methodology used and the risk criteria for ensuring comparability should be firmly linked to each other, Dr. Lange (D) said that quantification of the risk should be separable from the assessment.
60. Mr. Mondril (P) made the decision on whether to participate dependant upon the definition of the aims of the project and wished to await the first draft of the project.
61. With reference to the harmonization of Chapter 1.9 in RID and ADR, Mr. Cailleton (F) was in favour of a corresponding alignment of risk analysis for rail, road and other transport modes. At the same time, he pointed out the guarantee of State sovereignty in the text of the European Framework Directive.

62. To sum up, Dr. Ludwig (D) stated as the objective of the project that the methods for demonstrating the need for measures should in future be made transparent and should fulfil certain minimum requirements. An attempt should be made to use a uniform methodology. Ensuring the quality of data and dealing with uncertainties should also be covered in guidelines. Mr. van den Brand (NL) shared this view of the objective.
63. On behalf of Germany, the chairman agreed to press ahead with setting up a project group and preparing a project proposal within the available time frame with the help of other States. He thanked those who had organized this working group meeting and closed the session.

**Agenda item 8: Any other business**

64. All the meeting documents that were not already available on the OTIF website would be published there.
  65. It was agreed to hold the next session of the working group on 21 and 22 October 2004. Germany said it was prepared to hold this session in Bonn and would again try to ensure that there would be interpretation into three languages.
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