

UN/CETDG/21/INF/34

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

(Twenty first session)

Geneva, 4-13 December 2000,
agenda item 2(b),

WORK OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Draft amendments to the Recommendations on the Transport of Dangerous Goods

Chapter 3.4 – Limited Quantities

Placarding of transport units Transmitted by the expert from the United Kingdom

Comments on Proposal ST/SG/AC.10/2000/10 transmitted by the experts from Australia, Germany and Sweden

Introduction

1. The expert from the United Kingdom has reviewed the proposals set out in paper 2000/10 and has a number of comments on both the detail of the proposal and the philosophy of the approach adopted. Whilst the introduction to the paper faithfully reflects the decisions of the Sub-Committee at its July 2000 session, the expert from the United Kingdom continues to believe that those decisions are fundamentally flawed in that they fail to have regard to the underlying principles applied to limited quantities/consumer goods/retail packagings throughout the Model Regulations.

General principles

2. Almost from their inception, the Model Regulations have recognised that, whilst there remains an intrinsic **hazard**¹ from classified dangerous goods carried in limited quantities, the **risk**² associated from such carriage, even as amalgamated loads, are sufficiently reduced to merit less comprehensive transport provisions. This approach was developed at the time largely on the basis of accumulated experience and pragmatism.

¹ The inherent capacity to cause harm dependent upon intrinsic properties

² The likelihood that harm will arise from the hazard of a substance multiplied by the degree of exposure

3. The current proposal states that the Sub-Committee agreed that a system of placarding for limited quantity loads should not be 'risk orientated'. What then should such a system be based upon? Evidence for the need for placarding to date seems to consist largely of anecdotal evidence which seems to suggest the need for information for emergency services on the basis of the risk posed to emergency responders. No documented evidence has been presented on the potential number of lives which might be saved as a result of further regulating the millions of limited quantity transport movements world-wide.
4. What is required, of course, is soundly based scientific evidence to determine the level of risk posed by goods in limited quantities against those carried under 'normal' provisions. Unfortunately, such information is simply not available. It is believed, however, that some countries are beginning to look at this problem. In the United Kingdom, for example, some limited research work is currently being undertaken at the Health and Safety Laboratory, although the results are not expected for some time. Further work needs to be done to justify changing the basis of regulation to apply more stringent provisions for dangerous goods carried in limited quantities. Once such information was available, an informed debate leading to soundly based proposals could be undertaken.

Modal approach

5. The Model Regulations are intended to be used as the basis not only for international transport but also for national regulations by all modes of transport. The current proposal does not address air transport of limited quantities as such. For sea transport it recognises the current requirement for the placarding of transport units containing dangerous goods in limited quantities. It fails to appreciate, however, that the reasoning for this requirement is based essentially on the unique requirements for stowage on board a vessel, where questions of confinement and ease of evacuation take primacy. The proposal appears to take no particular account of the needs of inland waterway transport, which is an essential element of transport in many large countries. In essence, therefore, the proposals are driven by conditions relating to land transport by road and rail.
6. On this basis, the expert from the United Kingdom reiterates the views expressed at the July 2000 Sub-Committee meeting that this is an issue which is best addressed by the respective modal bodies. Whilst appreciating that for some countries there would appear to be a resulting gap in the UN Model Regulations, the same can be said for specific requirements for, say, vehicle construction. Nevertheless, best practice can be found in appropriate regional provisions, which have wide credence, such as ADR in Europe and CFR 49 in North America. This situation will remain until such time as the Model Regulations themselves include mode specific annexes.
7. The authors of the proposal recognise the need for modal decisions to be made. They suggest that there is a need to set "suitable and applicable minimum levels" at which transport units should be placarded for domestic land transport. It is suggested, with no supporting argumentation, that 2000 litres/kilograms would be appropriate. Recalling that the Model Regulations are also intended to form the basis for national regulations, how would national competent authorities form a

view on whether this level, if any were, appropriate? Indeed this may present some conflict with other modal thresholds.

Documentation

8. Paper 2000/10 records the decision of the Sub-Committee not to address the question of documentation but fails to recognise that for air transport, documentation is an integral part of determining the requirements for the transport of goods in limited quantities. It also fails to recognise the essential link between the proposed LQ placard and the transport document in informing emergency responders of the nature of the hazard of the substances being carried and the subsequent risk to the responders. Regard must be taken of the fact that differing modes of transport will hold transport documentation in a variety of ways, including electronically remote from the transport unit.

Detail and consequences of the current proposal

9. The current proposal for a placard for transport units containing different classes of dangerous goods in limited quantities requires an LQ marking. This, of course, assumes understanding of these letters for those countries, which do not use the Roman alphabet. The expert from the United Kingdom questions the value of that information to emergency responders since it seems unlikely to inform them of the need for specific action in the initial response to an incident which would reduce any risk to themselves. In an incident involving a transport unit with an LQ placard, because of the presence of tubes of glue, and a number of private cars, the intervention of the emergency responders may even be slowed, with fatal consequences for those trapped in the incident.
10. Some further consideration should now also be given as to whether the signal letters LQ should be adopted at this time. In the context of the Working Group on the Globally Harmonised System for Hazard Communication, consideration is currently being given to the use of hazard identifiers. It may be more appropriate to await the outcome of that work, which is expected early next year.
11. The proposal has determined that all inter-modal transport units undertaking international journeys containing dangerous goods in limited quantities, however small, should be placarded. Thus a road vehicle carrying one half-litre receptacle in a package of a Class 3 PG II acetone (UN 1090) undertaking a journey from France to the United Kingdom using the rail Eurotunnel Shuttle service (currently permitted through the Chunnel in quantities up to 250 litres per transport unit) must be marked with a Class 3 placard. Since, by deleting the wording "dangerous goods packed in limited quantities" from 5.3.1.1.2(a), the provisions of 5.3.2.1.1(b) would apply requiring the UN substance identification number to be displayed also. Should the example given have had a subsidiary risk, a second class label would also be required (see 5.3.1.1.3). It is very difficult to see how this would add significantly to the level of safety of such a journey.

12. The proposal also maintains the current exemption in 5.3.1.1.2 (a) for any quantity of explosives of Division 1.4, Compatibility Group S and Class 7 excepted packages of radioactive material. No justification is given for such an exemption. One must assume that it is on the basis of maintaining the status quo, which flies in the face of the logic applied elsewhere in paper 2000/10. If a case could be made for retaining such an exemption, it must be arguable that a similar case could be made for individual or groupings of substances and articles of other classes of dangerous goods.
13. The current proposal also fails to recognise the difficulties associated with local distribution operations of the type described in part 2 of Information Paper 17 from CEPE. For mixed loads of dangerous goods in limited quantities by road, a driver will need to constantly review which of the classes have been off- or on-loaded in order that they can change from the LQ placard to the Class placard or vice-versa as appropriate.
14. Decisions would also need to be made, without guidance from the UN Committee or the authors of the current proposal, on whether further down-stream modal requirements should follow from the need to placard. For example, would the drivers of road vehicles in Europe, subject to ADR provisions, be required to hold driver vocational training certificates? Would companies loading dangerous goods in limited quantities on a rail wagon in North Africa, subject to RID provisions, be required to appoint a Dangerous Goods Safety Advisor?
15. Information Paper 15 from AISE ably elucidates numerous other difficulties that would emanate from the adoption of the current proposal on which the expert from the United Kingdom would welcome clarification from the authors.

Conclusion

16. In conclusion, it remains the view of the expert from the United Kingdom that the philosophy and application of limited quantity/consumer commodity/retail packaging provisions throughout the Model Regulations should be reviewed over the next biennium or two on a comprehensive basis. This should be informed by appropriate cost benefit analyses and environmental impact assessments. Already during the current biennium proposals have been considered, and adopted, on revising the thresholds for limited quantities (as proposed by the expert from the United States in paper 1999/60) and harmonising labelling requirements (as proposed by the expert from the United Kingdom in paper 1999/41). In any event, the current proposal in paper 2000/10 is not, in the view of the expert of the United Kingdom, sufficiently well developed to be adopted at this session of the Committee of Experts.
-

Filename: inf-34.doc
Directory: C:\MyFiles\INTERNET\TRANS\DANGER\MEETINGS\ECOSO
C\2000_12
Template: C:\Program Files\Microsoft Office\Templates\Normal.dot
Title: Draft amendments to the Recommendations on the Transport of
Dangerous Goods
Subject:
Author: DETR
Keywords:
Comments:
Creation Date: 28/11/00 08.56
Change Number: 3
Last Saved On: 28/11/00 09.40
Last Saved By: UN/ECE
Total Editing Time: 1 Minute
Last Printed On: 06/12/00 14.59
As of Last Complete Printing
Number of Pages: 4
Number of Words: 1,546 (approx.)
Number of Characters: 8,815 (approx.)