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

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Item 5(b) of the provisional agenda
Proposals for amendments to RID/ADR/ADN: new proposals

Carriage in Bulk

Belgian comments on documents ECE/TRANS/WP.15/AC.1/2011/15 and 16

I. Introduction

1. At the March 2010 session of the Joint Meeting, it was agreed that an informal working group should meet in October 2010 at the invitation of the United Kingdom to consider all the current requirements for bulk transport in order to streamline them, taking into account the need for multimodal harmonization.

2. At the start of the meeting of the working group, the participants listed arguments for and against a complete harmonisation with the UN system, but no real discussion on this topic took place. At the end, four delegations expressed themselves in favour of the replacement of the RID/ADR bulk provisions with the UN system, two were against and two others reserved their position (again without any previous discussion).

3. Belgium is of the opinion that a fundamental change of long-standing transport conditions (such as the RID/ADR bulk provisions) needs to be the result of a thorough and objective cost-benefit analysis. This analysis should take place first, before taking on the proposal of the United Kingdom and Romania in document ECE/TRANS/WP.15/AC.1/2011/16 (which takes the replacement of the RID/ADR bulk provisions with the UN system for granted).

II. Elements for a cost-benefit analysis

4. Bulk transport based on the VV/VW system of RID/ADR has an excellent safety record. Enormous amounts of dangerous goods have been carried in this way for very many years without major incidents or accidents. Improvement of safety has obviously little or no bearing on the analysis.

5. The major benefit that is being envisaged is achieving a multi-modal harmonisation of the provisions governing the bulk transport of dangerous goods.

- For this multi-modal aspect, carriage by sea is the determining factor, as there is little or no bulk transport by air.

- the IMDG code itself does not allow sheeted bulk containers (BK1) to be used. Moreover, in spite of what is being suggested in the report of the working group (paragraph 4, second bullet point), it is certain that BK1 will not be introduced in the IMDG code in the near or even remotely distant future. Even a complete harmonising with the UN system will therefore not result in a multi-modal harmonisation.
- Additionally, the UN system and the IMDG code only allow bulk transport for a very limited range of dangerous substances, and the IMDG code will not extend this range significantly in the years to come (even if this limitation would be reviewed in the context of a "*possible future revision of the UN Model Regulations*" as the report of the working group seems to suggest).

It is to be noted that these discrepancies between the provisions for the land and the sea mode will continue to exist. Even if a proposal to replace the RID/ADR bulk provisions with the UN system along the lines of ECE/TRANS/WP.15/AC.1/2011/16 were to be accepted, a separate RID/ADR/ADN system would be maintained [1].

Thus, the only harmonisation that could possibly be achieved concerns the design, construction, inspection, testing and marking of one of the two bulk container types (BK2), but not its use.

6. Concerning the design, construction, inspection, testing and marking, distinction can be made between three kinds of bulk containers : (large) containers with dimensions above the limits set out in the CSC-convention, smaller containers and the load compartments of vehicles and wagons.

- According to section 7.1.3 of ADR, containers with dimensions above the limits set out in the CSC-convention may not be used to carry dangerous goods (in bulk or otherwise) unless they satisfy the provisions of the CSC. This means that already now they automatically fulfil the conditions of a BK1 or BK2 container and that no further action is necessary. The overwhelming majority of multimodal bulk transport takes place in this kind of containers.
- The smaller containers and the load compartments of vehicles and wagons do not automatically fulfil the conditions of a BK1 or BK2 container. The problem lies not with the design and construction requirements of UN for these non-CSC bulk containers, because these are very succinct and self-evident :

These bulk containers shall be designed and constructed so as to be strong enough to withstand the shocks and loadings normally encountered during carriage including, as applicable, transhipment between modes of transport (6.8.4.2)

Vehicles shall comply with the requirements of, and be acceptable to, the competent authority responsible for land transport of the materials to be transported in bulk. (6.8.4.3)

The important difference between the RID/ADR bulk provisions and the UN system is the action to be undertaken by the competent authority :

These bulk containers shall be approved by the competent authority and the approval shall include the code for designating types of bulk containers in accordance with 6.8.2.3 and the requirements for inspection and testing as appropriate (6.8.4.4)

[1] In that separate RID/ADR/ADN system, the statement "*Bulk container BK(x) approved by the competent authority of…*", which is required by UN for non-CSC bulk containers, would not be introduced, thus creating another disharmony.

7. It is clear that a meaningful and credible approval system, applied systematically to all bulk transports in other containments than CSC containers will have significant cost and resource implications for the competent authorities as well as for the owners/operators, whilst only a very limited number of these containments (which are mainly the load compartments of vehicles and wagons) will be used for multimodal land/sea transport. The others will not benefit in any way from their BK-approval.

8. Proposal ECE/TRANS/WP.15/AC.1/2011/16 shows that the UK and Romania are aware of this problem, and they attempt to minimise the burden on the resources of the competent authorities by reducing the approval procedure to its absolute minimum. However, the solution they propose has the following disadvantages :

- according to the proposed 6.11.4.3.2, an approval is not necessary if the bulk containers comply with the relevant provisions of UIC leaflets or (in most cases non-existing) standards. It is obvious that this is in contradiction with the UN-requirement in 6.8.4.4.
- in all other cases, the manufacturer/owner/operator of a bulk container would automatically obtain the approval after he certifies that the container meets the relevant provisions for design and construction (which they do if they are able to resist to the normal conditions of transport and transhipment). This procedure is so blatantly void of any practical significance that it will be very detrimental to the credibility of the competent authority imposing it.
- the suggested approval procedure is unsystematic and illogical : on the one hand it is based on initial and periodic inspections (for CSC-bulk containers) and on the other hand it does not impose any inspections at all (for the other bulk containers).

9. As the BK-approval of the load compartments of vehicles and wagons would only deal with the strength and mechanical resistance of those compartments and their accessories, the rules for approval would be independent of the dangerous properties of the goods (comparable to the provisions of 6.11.3.1 to 3 for the CSC-containers). The direct link with the homologation of those wagons/vehicles is obvious. A BK approval of these load compartments therefore should be incorporated in the homologation procedure (which means cooperation with WP.29, COTIF and possibly EU on the international level, and with the national homologation bodies within each country).

III. Conclusions and proposals

9. Whether or not replacing the RID/ADR bulk provisions with the UN system is not a safety issue.

A complete multi-modal harmonisation of the provisions for bulk transport is neither wishful nor possible (in particular due to deliberate differences in the dangerous substances allowed in bulk and in the use of BK1 bulk containers). Two separate systems will continue to exist and the only harmonisation that is being proposed (and that could possibly be achieved) concerns the design, construction, inspection, testing and marking of the bulk container types to be used.

The overwhelming majority of multimodal land/sea bulk transport takes place in CSC-containers, which already now automatically fulfil the conditions of a BK1 or BK2 container.

A meaningful and credible BK-approval system applied systematically to all non-CSC containment systems for bulk will have significant cost and resource implications for the competent authorities as well as for the owners/operators, whilst only a very limited number of them will be used for multimodal land/sea transport. The others will not benefit in any way from their BK-approval.

The benefits of replacing the RID/ADR bulk provisions with the UN system clearly do not outweigh the costs involved.

10. It is proposed not to replace the RID/ADR bulk provisions with the UN system, but to concentrate on making the VV/VW provisions clearer, rationalised, more modern and user-friendly (along the lines of the proposed 7.3.3 in ECE/TRANS/WP.15/AC.1/2011/16, in which BK1 and BK2 would be replaced with sheeted and closed container or vehicle/wagon, respectively).

If this proposal should not be accepted, the approval system for load compartments of vehicles and wagons is to be developed by, or in close cooperation with WP.29 and COTIF.