

## **Economic Commission for Europe**

### **Inland Transport Committee**

#### **Working Party on the Transport of Dangerous Goods**

**1 July 2014**

#### **Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods**

Geneva, 15-19 September 2014

Item 9 of the provisional agenda

**Any other business**

### **Carriage of coal in bulk – Comments on document OTIF/RID/CE/GTP/2014/5 transmitted by EURACOAL**

#### **Transmitted by the Government of Poland**

#### **Introduction**

1. At the first meeting of the RID Committee of Experts' standing working group UIC submitted informal document INF.6, which contained information concerning incidents on open barges carrying coal in bulk. In the informal document the standing working group was informed that a test series of coal samples yielded the result that using the N.4 test for (imported) coal, it cannot be ruled out that such coal has the properties of dangerous goods, thus qualifying it to be assigned to Class 4.2, packing group III. UIC proposed that special conditions of carriage should be implemented in RID and that of the carriage of coal in bulk by rail as dangerous goods should be safeguarded by a multilateral special agreement between the states affected.

2. The above document was followed by a proposal presented by EURACOAL at the second session of the standing working group. It included a draft special provision 665, according to which coal, coke and anthracite, which, using the procedure referred to in RID 2.2.42.1.5, can be assigned to Class 4.2, packing group III and to UN No. 1361 CARBON, are not subject to the provisions of RID if certain conditions described in the special provision concerned are met.

3. At the standing working group a number of comments have been submitted concerning the proposal and the conditions to be met in order to exempt the carriage of coal from the requirements of RID. Therefore, EURACOAL submitted its revised proposal in document OTIF/RID/CE/GTP/2014/5.

4. Poland still has a number of doubts concerning the proposed regulations and would like to share them with the standing working group.

#### **Explanation**

5. The draft special provision 665 proposed in the document referred to above refers to hard coal, coke and anthracite to be assigned to Class 4.2, packing group III and to UN No. 1361 CARBON. Poland's doubts concern the grounds for classifying hard coal, anthracite and coke under UN 1361 (even if the results of the N.4 test are positive).

6. UN 1361 is described as Carbon, animal or vegetable origin. Historically, in the RID from 1967 (still valid in 1984), when there were no UN numbers assigned to dangerous

goods, marginal 431 point 8 included material referred to as charcoal, freshly burned (with an additional description concerning its size and burning time). Since UN numbers have been assigned, this position was applied to the carriage of charcoal. The above indicates that UN 1361 was created to set up the conditions for the carriage of charcoal and dust from burnt plants and animals rather than for solid mineral material, in this case hard coal (or anthracite).

As far as the description "animal or vegetable origin" under UN 1361 is concerned, even if this phrase is to be applied to the process that took place millions of years ago, coke still falls outside this description, as it is not of natural origin, but a product of a technological process of destructive distillation of low-ash, low-sulphur bituminous coal.

7. Poland's doubts concerning the adequacy of the classification of hard coal, anthracite and coke under UN 1361 also derive from the unofficial part of RID that includes the NHM codes (listed in Harmonised Commodity Code). In Table B, next to UN 1361, there is only NHM 2803 (Carbon "carbon blacks and other forms of carbon, not otherwise specified). In the Harmonised Commodity Code, this NHM number is listed in section "INORGANIC CHEMICALS ..."1; and this section does not include hard coal (under NHM 2701), lignite (under NHM 2702) or coke (under NHM 2704). These materials are listed in section "MINERAL FUELS ..."2.

8. It is also worth noting that the criteria of tests described under 33.3.1.3.3.1 of the UN Manual of Tests and Criteria used for classifying materials in Class 4.2 as self-heating substances are based on the self-ignition temperature of charcoal, which is 50 °C for a sample cube of 27 m3.

9. It should be mentioned here that the question of the classification of hard coal, anthracite and coke under UN 1361 has consequences not only for rail transport, but also for other modes, including road, inland waterway and maritime transport. Therefore, in the opinion of Poland, the subject should not be dealt with solely at the level of the RID Committee of Experts.

10. Poland would also like to draw attention to the existing data concerning incidents with hard coal, anthracite or coal. In informal document INF.6, UIC points out that self-ignition in rail freight transport is extremely rare. According to data from Germany since 1997, only five wagons on the same train could be documented as affected by a smouldering fire due to the self-ignition of coal during transport. Data gathered from Polish sources also make an argument for the currently used method of transporting coal in open wagons, and not in sheeted or movable wagons where the risk of deflagration has to be taken into account. At the national rail infrastructure, no incidents of coal self-ignition have been documented in the register maintained since 2005. Also, consignors of coal have not been informed of any incidents with coal self-ignition during carriage by rail.

11. Poland believes that the available information concerning incidents in the transport of coal, anthracite and coke, and consequently safety reasons, do not justify the additional measures indicated in the proposal submitted by EURACOAL with respect to transport of the three substances mentioned in draft special provision 665. The proposed solution may create an unnecessary burden for participants in the carriage of hard coal, anthracite and coke, which may adversely affect the competitiveness of rail transport. Therefore, Poland is not in favour of taking hasty decisions on the subject concerned, but would rather see a

---

<sup>1</sup> Full title of the section is: "INORGANIC CHEMICALS; ORGANIC OR INORGANIC COMPOUNDS OF PRECIOUS METALS, OF RARE-EARTH METALS, OF RADIOACTIVE ELEMENTS OR OF ISOTOPES".

<sup>2</sup> Full title of the section is: "MINERAL FUELS, MINERAL OILS AND PRODUCTS OF THEIR DISTILLATION; BITUMINOUS SUBSTANCES; MINERAL WAXES".

solution that would carefully address all the aspects presented above and be well justified by safety reasons.

### **Proposal**

12. Taking into account the arguments presented above concerning the classification of hard coal, anthracite and coke under UN 1361 and the possible consequences of such classification for other modes of transport and safety aspects in rail transport, Poland would like to ask the standing working group to refer the question of classification to the UN Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals. Poland proposes to ask the Sub-Committee for an interpretation of UN No. 1361 and for an opinion on whether this entry also applies to hard coal, anthracite and coke. Afterwards, further work on the subject could be based on the opinion of the Sub-Committee, so that the suitability of solutions with respect to the transport of hard coal, anthracite and coke does not raise any doubts or entail unexpected consequences for other modes of transport. The final solution or regulation should be tailored meticulously so that it does not make rail transport less competitive than other modes of transport. It should include only those substances (or their forms) which, according to the UN Regulations, should unquestionably be classified as self-heating substances and the requirements adopted should address real risks inherent in the carriage of such goods.

---