

OTIF



ORGANISATION INTERGOUVERNEMENTALE POUR
LES TRANSPORTS INTERNATIONAUX FERROVIAIRES

ZWISCHENSTAATLICHE ORGANISATION FÜR DEN
INTERNATIONALEN EISENBAHNVERKEHR

INTERGOVERNMENTAL ORGANISATION FOR INTER-
NATIONAL CARRIAGE BY RAIL

OTIF/RID/CE/GTP/2014/10

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Original: German

RID: 3rd Session of the RID Committee of Experts' standing working group
(Berne, 20 and 21 May 2014)

Subject: Carriage of UN 1361 Carbon in bulk;
Comments from Germany on document OTIF/RID/CE/GTP/2014/5 from
EURACOAL

Proposal transmitted by Germany

Introduction

1. In principle, Germany supports the amendments proposed by EURACOAL in document OTIF/RID/CE/GTP/2014/5.
2. Owing to a recent incident in Germany and following discussion with the experts and the coal industry, it was mutually agreed that the text EURACOAL has proposed for a new special provision 665 still needs to be amended in several places.

Proposals for amendment

3. The amendments compared with the proposed text for a new special provision 665 in document OTIF/RID/CE/GTP/2014/5 from EURACOAL are shown in bold and crossed out text.

"665 When carried in bulk, hard coal, coke and anthracite to be assigned to Class 4.2, packing group III and to UN No. 1361 CARBON are only subject to the following provisions and may also be carried in open wagons by derogation from the special provisions for carriage in bulk VW 4, provided that

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- (a) the temperature in the pile of the whole load intended to be carried in the next seven days is not higher than 60 °C ~~or~~ **and** the temperature of the cargo is not higher than 60 °C during or immediately after loading into the ~~hold~~ **wagon** or
- (b) this coal has been carried by inland navigation vessel and the temperature has already been measured and the storage period after unloading from the vessel is not longer than 7 days ~~or~~ **and the temperature during or immediately after loading into the wagon is not higher than 60 °C or**
- (c) the coal is conveyed from fresh extraction directly into the wagon ~~and without measuring the temperature.~~

Using suitable measuring methods, the filler shall ensure and document that the maximum permissible temperature of the cargo is not exceeded in the following cases:

- (a) before loading in relation to the quantity (the pile) which is intended to be transported by rail within the next seven days,
- (b) ~~or~~ **and during (insofar as this is technically possible)** or immediately after loading the wagons.

Documents connected to the consignment shall contain the following information: "Carriage according to special provision 665".

The other provisions of RID do not apply."

Secretariat note: In connection with the revision of the provisions for carriage in bulk, in the first sentence, "VW 4" should be replaced by: "VC 1 VC 2 AP 1".

Background explanation and justification

- 4. On 31 January 2014 near Heidelberg, it was noticed that smoke was coming from a full train load of coal on a bulk wagon which was open at the top (smouldering fire). The German police suspected that the cause was "self ignition" or "pockets of fire that were not discovered at the time of loading".
- 5. According to the operations report by the Heidelberg fire brigade, the smouldering was inside two physically separate wagons. Whereas a thermal imaging camera only detected a slight increase in temperature on the surface of the loaded wagon, a major increase in temperature was detected on the outer walls. In the wagon which was giving off a small amount of smoke, a thermal imaging camera measured a temperature of between 500 °C and 600 °C on one of the outer walls, a little above the unloading hatch. On the second wagon, a temperature increase of around 100 – 150 °C was detected.
- 6. The coal being carried was Colombian calentur coal from a ship. Calentur coal has already been investigated in terms of its classification. Following a positive N4 test in a 100 mm basket and a negative N4 test in a 25 mm basket, it was classified as dangerous goods "UN 1361, Class 4.2, PG III".
- 7. The coal was transshipped in Rotterdam between 28 and 30.12.2013 from the ship directly onto several inland waterway vessels. During transshipment, the temperature of the coal was monitored by thermal imaging cameras. The reports submitted say that the coal did not exceed a temperature of 60 °C.

8. The coal was then carried on to Germany in inland waterway vessels. There, the inland waterway vessels were unloaded on 29 and 30.12.2013 and on 2 and 3.01.2014.
 9. At the Orsoy interim storage facility, the temperature of the coal was measured daily using lances. Here too, the reports submitted say that the coal did not exceed a temperature of 60 °C.
 10. The train concerned, which was going to Heilbronn, was loaded on 31.01.2014 between 02.00 and 04.00. According to information from the operator of the interim storage facility, only coal with a pile temperature of less than 60 °C was loaded. It takes about 6 hours to travel from Orsoy Rheinhafen to Heilbronn. The load weighed 61.4 and 62.75 t per wagon. The train had a total of 24 wagons.
 11. In the subsequent discussion with the investigation authorities and the coal industry, it was established that apparently, despite the coal being monitored at the interim storage facility, glowing embers were the cause of the self-ignition during carriage by rail.
 12. This means that despite the fact that the piles of coal are monitored, it is also necessary to monitor the temperature during or immediately after the loading procedure in order to detect any previously undetected pockets of glowing embers.
 13. It also seems necessary to say something about the application of special provision 665 in the transport-related documents, so that during transport, it is known whether the consignor has classified the coal as non-dangerous goods or whether it is being carried in accordance with RID (UN 1361, Class 4.2, PG III).
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