

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

25 August 2023

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

Geneva, 19–27 September 2023

Item 5 (a) of the provisional agenda

Proposals for amendments to RID/ADR/ADN:

Pending issues

Application of SP376 for critically damaged lithium batteries

Transmitted by the Government of Belgium

Summary

Executive summary:	The current requirements for the transport of critically damaged lithium batteries according to P911 and SP 376 do not guarantee, especially for rail and inland waterways transport, proper communication of the necessary transport conditions and could lead to transport disruptions and traffic perturbations in the event of thermal run-away and gas or smoke emissions, which cannot be ruled out.
Decision to be taken:	Require, at least for rail and inland waterways transport, a transport authorisation from the competent authorities of the countries concerned in the transport.
Related documents:	Informal document INF.9 of the sixty-second session of the Sub-Committee of Experts on the Transport of Dangerous Goods

Introduction

1. During the last Sub-Committee of Experts on the Transport of Dangerous Goods in July 2023, Belgium introduced informal document UN/SCETDG/62/INF.9 concerning the application of SP376 for critically damaged lithium batteries. You can find this document and the extract of the report related to it in annex.
2. In the meantime, our attention has been drawn to some packagings approved for the transport of damaged lithium batteries in accordance with P911 for which specific surrounding conditions for transport where necessary according to P911 (f).
3. Nevertheless, P911 does not impose or indicate how the transport conditions of the packaging should be communicated towards the intervening parties during transport and we see a significant risk that parties involved in transport are not aware of these conditions.
4. Considering that thermal run-away and gas or smoke emissions are not excluded during the transport, we are of the opinion that this risk is unacceptable, certainly for rail and inland waterways transport.
5. To ensure a proper chain of communication, we propose to amend SP376 to require an authorization from the competent authorities involved in the transport, at least for rail and

inland waterways transport. In this way, the competent authority can ensure that the necessary transport conditions are made known to all parties.

6. In addition, we envision that in case a thermal we envision ensues during transport and/or significant amounts of smoke are produced, this may cause serious perturbations to railway traffic. A situation we do not consider desirable. As such, requiring the authorization of the competent authority may lead to more consciousness about the risk that is posed by these kinds of traffic and may allow the competent authority to take precautionary measures to alleviate problems occurring during the transport.

Proposal

7. For RID and ADN, modify SP 376, 5th paragraph as follows (the amended text is in bold):

“Cells and batteries identified as damaged or defective and liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapors under normal conditions of carriage shall be packed and carried in accordance with packing instruction P 911 of 4.1.4.1 or LP 906 of 4.1.4.3, as applicable. Alternative packing and/or carriage conditions may be authorized by the competent authority of any [RID Contracting State/AND Contracting Party] who may also recognize an approval granted by the competent authority of a country which is not an RID Contracting State provided that this approval has been granted in accordance with the procedures applicable according to RID, ADR, ADN, the IMDG Code or the ICAO Technical Instructions. In both cases the cells and batteries are assigned to transport category 0. **Carriages of such cells and batteries shall only be done with the authorization of the competent authority of the countries concerned in the transport operation.**”

8. For RID, modify SP 376, last paragraph as followed (the amended text is in bold): “~~If applicable, a~~ **A copy of the competent authority authorization shall accompany the carriage.**”

Justification

9. Requiring authorization from the competent authority makes it easier to communicate the necessary transport conditions and to make parties aware of the risks. Indeed, this communication is difficult to guarantee for rail and inland waterways transport with the current requirements.

10. Following the comments received by the other delegations, Belgium will prepare a new proposal for the next RID Committee of Experts, the next Administrative Committee of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways, the next Joint meeting or the next Sub-Committee of Experts on the Transport of Dangerous Goods.

Annex

UN/SCETDG/62/INF.9 (unece.org)

Extract of the report ST/SG/AC.10/C.3/124 :

D. Damaged or defective lithium batteries

Informal document: INF.9 (Belgium)

60. It was recalled that, for the transport of critically damaged cells and batteries, the initial intention of the Sub-Committee was to introduce packing and transport conditions aimed at making these cells and batteries inert and non-reactive during transport. Since the Sub-Committee could not come to a harmonized text describing the wide range of possible solutions to achieve this goal, it was decided to introduce packing instructions P911/LP906 with a set of requirements aimed at containing a dangerous reaction during the transport of critically damaged cells and batteries. In addition, it was decided to introduce the last sentence of the fifth paragraph of special provision 376 to allow the competent authority to approve alternative packaging methods and/or alternative transport conditions, which achieve an acceptable level of safety.

61. The expert from Belgium volunteered to come back at the next session with a revised proposal taking account of the comments received, including a clarification on the communication and a detailed justification.
