

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

25 November 2024

Sixty-fifth session

Geneva, 25 November-3 December 2024

Item 16 (a) of the provisional agenda

Other business:

Programme of work for the biennium 2025-2026

Evolution of transport systems and the Model Regulations – New agenda item

Transmitted by the experts from the United States of America

I. Introduction

1. At the sixty-third session of the Sub-Committee informal document INF.36 was submitted posing several questions related to technological advancements and modernization of supply chains and the opportunities and challenges they present in regulating dangerous goods transport. A lunchtime working group was held during the sixty-third session to discuss the matter, and the report of that group noted “the robustness of the current regulatory system had been acknowledged while recognizing at the same time the need to continue to evolve to embrace and accommodate new technologies and changes in shipping practices.”
2. The creation of a specific agenda item in the Programme of Work for 2025-2026 titled “Evolution of transport systems” is proposed to encourage proposals on this topic and consolidate those proposals that would otherwise be submitted under various agenda items (e.g., listing, classification and packaging or miscellaneous).

II. Discussion

3. The development of new supply chain models including drop shipping, third party vendors, direct to consumer shipping often by non-traditional methods (e.g., delivery orders placed through apps) introduce new challenges in ensuring the safe and efficient transport of dangerous goods. At the same time, telematics, and automated tools to verify labelling and create documentation can be used to enhance safety and embedded tracking systems offer improved shipment transparency.
4. The evolution of distribution systems and an increasingly global marketplace also means that dangerous goods are increasingly ubiquitous and in high demand. Products containing lithium ion batteries, medicines, cosmetics, paints and inks are so prevalent now that for many it is easy to forget that they are dangerous goods and require special handling. In response to a changing transport environment and scientific advances this Sub-Committee has over the years amended the *Model Regulations* as new data informs classification decisions, created provisions to facilitate the transport of limited quantities, and accommodated modern packaging materials.
5. Many of these innovations originate from regional and national systems. Competent authority approvals provide a mechanism for testing new technologies, promoting increased transportation efficiency and productivity, and ensuring economic competitiveness without compromising safety. In this way, they allow the dangerous goods industry to integrate new processes, products, and technologies into production and the transportation stream safely,

quickly, and effectively. Additionally in recent years, the Sub-Committee and the Joint Meeting have considered amendments addressing specific business practices intended to support efficiencies regarding e-commerce and related topics such as the use of consolidation bins and reduced size marks.

6. Inclusion of an agenda item specific to the evolution of transport systems will prompt the submission of working and informal documents, provide interested parties the ability to share experiences with new and emerging technology, alternate transport configurations, and facilitate discussions on appropriate transport conditions.

III. Proposal

7. Propose the inclusion of a new agenda item in the Programme of Work for 2025-2026 “Evolution of transport systems”.

IV Sustainable Development Goals

8. This document supports Sustainable Development Goal 9, *Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation*. Specifically, the proposal supports Target 9.1 to *Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all*.
