



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
WORKING GROUP MEETING (DGP-WG/23)**

**Rio de Janeiro, Brazil, 15 to 19 May 2023**

- Agenda Item 2: Managing air-specific safety risks and identifying anomalies (REC-A-DGS-2025)**  
**2.2: Develop proposals, if necessary, for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2025-2026 Edition**

**LOADING OF DANGEROUS GOODS IN AIRCRAFT NOT OCCUPIED BY PASSENGERS**

(Presented by L. Cascardo)

**SUMMARY**

This working paper proposes a discussion about loading requirements. It asks for the views of the Dangerous Goods Panel about loading of dangerous goods in situations where there are no clear requirements presented in the Technical Instructions, including situations where dangerous goods may be loaded in aircraft cabins not occupied by passengers. It also initiates a discussion about how to consider the capabilities of aeroplanes and their systems in loading requirements.

Action by the DGP-WG is in paragraph 2.

**1. INTRODUCTION**

1.1 Part 7;2.1 of the Technical Instructions presents requirements for loading dangerous goods in a passenger aircraft. According to this requirement, dangerous goods can only be transported in Class B or C cargo compartments.

1.2 According to the actual definition in Part 1;3.1.1:

**Passenger aircraft.** An aircraft that carries any person other than a crew member, an operator's employee in an official capacity, an authorized representative of an appropriate national authority or a person accompanying a consignment or other cargo.

1.3 Part 7;2.4.1 of the Technical Instructions presents requirements for loading dangerous goods bearing the "cargo aircraft only" label in a cargo aircraft.

1.4 According to the actual definition in Part 1;3.1.1:

**“Cargo aircraft.** Any aircraft, other than a passenger aircraft, which is carrying goods or property.”

1.5 So, there are clear requirements for loading dangerous goods when:

- a) there are passengers onboard the aircraft; or
- b) there are no passengers onboard and the dangerous good bear the “cargo aircraft only” label.

1.6 It is important to note that the same requirements pointed in both situations apply to many dangerous goods irrespective of their hazards and risk they pose to air transport.

1.7 It is also important to note that there is a lack of loading requirements or guidance in the Technical Instructions for situations where there are no passengers onboard and the dangerous goods do not bear the “cargo aircraft only” label.

1.8 Since the COVID-19 pandemic, many operators and authorities have been discussing about different possibilities to carry cargo onboard aircraft cabins not occupied by passengers (e.g., using seat containers, changing the aircraft seat configuration, etc.). One of the aspects of those discussions was the possibility or not to carry different classes and divisions of dangerous goods in the cabin and not in the cargo compartment.

1.9 In a situation where dangerous goods not bearing the “cargo aircraft only” label are loaded in the passenger cabin of and aircraft not occupied by passengers and, if we consider solely the Technical Instructions, no restrictions would apply to the transport of these dangerous goods, mainly because no loading requirements related to this situation are present in Part 7.

1.10 If we extend our considerations beyond Annex 18 — *The Safe Transport of Dangerous Goods by Air* and the Technical Instructions, ICAO has published a new Chapter 15 to Annex 6 — *Operation of Aircraft* on cargo compartment safety, where a specific safety risk assessment needs to be done before loading cargo in different cargo compartments and *Guidance for Safe Operations Involving Aeroplane Cargo Compartments* (Doc 10102), that describes risk mitigation strategies and provides guidance about how to consider the capabilities of aeroplanes and their systems.

1.11 Although the requirements and guidance about risk mitigation strategies and the capabilities of aeroplanes could be useful to decide if dangerous goods are allowed or not in the cabin, those documents were written in a way that seem to restrict the discussion to cargo compartments. Both risk mitigation strategies and considerations about capabilities could be used in the discussion of loading of dangerous goods, especially because the actual requirements are applied considering mainly if passengers are present or not onboard the aircraft and not fully considering the risks the dangerous goods pose to air transport.

1.12 This working paper asks for a discussion about the views of the Dangerous Goods Panel on requirements applicable to loading of dangerous goods. A few questions are presented in paragraph 2.1 to guide the discussion.

2. **ACTION BY THE DGP-WG**

2.1 The DGP-WG is invited to provide views about each of the questions below:

- a) How does the DGP see the lack of loading requirements in the Technical Instructions for dangerous goods not bearing the “cargo aircraft only” label that are being loaded in cargo compartments?
- b) How does the DGP see the lack of loading requirements in the Technical Instructions for dangerous goods not bearing the “cargo aircraft only” label that are being loaded in the passenger cabin when there are no passengers onboard?
- c) Are Annex 6, Chapter 15 and Doc 10102 applicable if an operator seeks to load dangerous goods in the passenger cabin where there are no passengers onboard the aircraft?
- d) What is expected for future loading requirements of the Technical Instructions now that performance-based requirements can be developed considering capability of different aircraft and their systems?

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