



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/18)**

Montréal, 1 to 5 October 2018

Agenda Item 2: Managing air-specific safety risks and identifying anomalies

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 2021-2022 Edition

SEGREGATION AND SEPARATION DURING DIFFERENT STAGES OF AIR TRANSPORT

(Presented by L. Cascardo)

SUMMARY

This working paper proposes a discussion about the possible lack of requirements about segregation of dangerous goods and separation of explosives during different stages of air transport.

Action by the DGP-WG: The DGP-WG is invited to discuss the possible lack of requirements for segregation and separation of dangerous goods during different stages of air transport.

1. INTRODUCTION

1.1 Segregation and separation requirements present in the Technical Instructions (Part 7;2.2) only apply to stowage on an aircraft. That means, according to the Technical Instructions, that Table 7-1 and Table 7-2 are only applicable when dangerous goods are on board an aircraft.

1.2 The UN Model Regulations mentions that:

“7.1.2 Segregation of dangerous goods

7.1.2.1 Incompatible dangerous goods shall be segregated from one another during transport. For the purposes of segregation, two substances or articles are considered mutually incompatible when their stowing together may result in undue hazards in the case of leakage, spillage, or any other accident.”

1.3 The Supplement to the Technical Instructions (Part S7;4.2) establishes some guidelines for the States while approving operator's procedures, including storage of dangerous goods:

“4.2 Storage of dangerous goods

Operators should provide specific guidance on the storage of dangerous goods. This guidance should include instructions for Class 8 (corrosive), Class 7 (radioactive), and Class 6, Division 6.1 (toxic) materials as described below:

- a) The storage of Class 8 (corrosive) materials next to, or in contact with, Class 4, Division 4.2 or 4.3 (flammable) solids or Class 5, Division 5.1 (oxidizing) materials must be prevented. The segregation prescribed in the Technical Instructions must be maintained for all packages containing dangerous goods that might react dangerously when stored in a position that causes or contributes to leakage.
...”

1.4 These Supplement provisions indicate the States should require the operators to write about procedures that are not related to requirements present in the Technical Instructions. Additionally, it only mentions segregation during storage, not considering other stages of air transport. We understand that the “safe transport of dangerous goods by air” encompasses stages beyond those when the dangerous goods are stowed on an aircraft.

1.5 There are no requirements in the Technical Instructions or in Annex 18 to ensure that incompatible dangerous goods are segregated or separated immediately before or after transport, for example, when dangerous goods are placed in an operator or ground handling agent dolly right next to the aircraft while waiting for their loading at the cargo compartment. At that moment, a dangerous goods incident, which by definition not necessarily occurs on board an aircraft, could start by the interaction of incompatible dangerous goods. Even though incompatible dangerous goods have not been loaded yet or have already been unloaded from an aircraft, a dangerous goods occurrence could affect the aircraft and its occupants.

1.6 Interactions could also occur in other stages of transport, for example, when dangerous goods might be under the operator's responsibility, such as when being transferred from one aircraft to another during a connection. We believe the actual regulations do not cover all stages of transport of dangerous goods by air.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to discuss the possible lack of requirements for segregation and separation of dangerous goods during different stages of air transport.

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