



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
MEETING OF THE WORKING GROUP OF THE WHOLE**

Auckland, New Zealand, 4 to 8 May 2009

Agenda Item 5: Resolution, where possible, of the non-recurrent work items identified by the Air Navigation Commission or the panel

Agenda Item 5.1: Approvals

Agenda Item 5.2: Exemptions

EXEMPTIONS AND APPROVALS

(Presented by R. Richard)

SUMMARY

The WG is invited to discuss the application of exemption and approval authorizations within the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) and the *Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284su) with a view of simplifying the process through development of a rationalized approach. Additionally, the WG may consider an intercessional working group to develop guidance to States on the review and issuance of exemptions and approvals.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 A number of papers have been submitted for the Panel's review relative to the issuance of exemptions and approvals. These papers address the differences between exemptions and approvals; when and what should be authorized for consideration; who are the States concerned; A1, A2 and A109; the evaluation/consideration requirements; equivalent level of safety; and the validity of the document in relation to other States. The United States has a great deal of experience reviewing and issuing exemptions and approvals as a means of alternative compliance to the Technical Instructions in cases where the Technical Instructions do not appropriately address a specific situation. The Panel member nominated by the United States offers the following thoughts for consideration by the working group.

1.2 Exemptions

1.2.1 Annex 18 — *The Safe Transport of Dangerous Goods by Air* and Part 1;1.1.2 of the Technical Instructions provide an authorization for States to issue an exemption under certain conditions.

It is important to note that this authorization requires the provisions of an exemption only provided that a level of safety in transport equivalent to the level of safety provided by the Technical Instructions is achieved. Therefore, when in compliance with the provisions of the Technical Instructions, an appropriate level of safety must be ensured. We believe this authorization is necessary to provide appropriate transport safety provisions for new technologies, medical applications, and unique situations that are not specifically addressed by the provisions of the Technical Instructions.

1.3 Approvals

1.3.1 Approval authorizations are provided in a number of different means. There are specific approval authorizations in various sections throughout the Technical Instructions. Many of these authorizations relate to classification or packaging. In addition, SP A1, A2, and A109 authorize State of Origin approval for materials that are forbidden for transport by either passenger or cargo aircraft depending on the assignment in Table 3-1.

1.3.2 We support a comprehensive review of the specific approval authorizations currently in the Technical Instructions with the view of including additional specific authorizations where appropriate.

1.3.3 For SP A1, A2, and A109, we believe a rationalized approach should be developed for their assignment based on the hazardous properties of the material. Additionally, we believe that the authorization represented by each provision should be amended. Recommendations include:

- a) A1: The SP is currently applied to some materials that are forbidden on passenger aircraft but acceptable for cargo aircraft. It provides approval authority to transport this material on passenger carrying aircraft. A1 is suggested that this provision should be applied in the same manner, but require approval from the State of Origin and the State of Operator.
- b) A2: The SP is currently applied to some materials that are forbidden for transport on both passenger carrying and cargo aircraft. A2 provides approval authority to transport this material on passenger carrying or cargo aircraft. It is suggested this provision should apply approval authority only to cargo aircraft by the State of Origin. If transport by passenger carrying aircraft is deemed appropriate or necessary, that authorization could be subject to the exemption provision.
- c) A109: This SP is currently applied to only three UN Numbers. These are UN 0059, UN 0065, and UN 0099. It is suggested this SP could be deleted. Movement of those UN Numbers would then be subject to the exception provisions. If it was deemed necessary through past experience to facilitate their movement, these UN Numbers could also be assigned A2 since the new A2 would only be authorized for transport on cargo aircraft.

1.4 **Equivalent Level of Safety**

1.4.1 The Panel has been asked to consider and comment on what should be considered by a State when reviewing a request for exemption or approval, and how a decision of equivalent level of safety should be determined. These authorizations are an alternative means of compliance to the provisions of the Technical Instructions; therefore, an equivalent level of safety must always be demonstrated. Determination of an equivalent level of safety includes:

- a) A review of the applicable regulatory provisions. This includes an identification of the specific provisions which will not be met, thus requiring an equivalent level of safety determination.
- b) A review of any potential increased risk to safety or property that may result from deviating from the provisions in question and identification of the measures considered necessary or appropriate to address that risk. This should include substantiation with applicable analysis or evaluation demonstrating that the proposed additional measures will achieve a level of safety that is at least equal to that required by the regulation.
- c) A thorough review and risk assessment to identify and evaluate potential transportation risks. This may include a risk analysis addressing failure modes and effects, a systems safety evaluation, and an explanation of the measures imposed to ensure each risk factor has been evaluated to provide an appropriate level of safety.
- d) When appropriate, risk mitigation factors and a safety analysis may be based on analogy to requirements in place for technologies posing similar risks in order to ensure safety and regulatory consistency.

1.5 **Proposed Actions**

1.5.1 The Panel member from the US suggests the establishment of an intercessional working group to address the following issues:

- a) Exemption authority. Are the current provisions in Part 1;1.1.2 of the Technical Instructions sufficient or is additional clarification necessary?
- b) Approval authority
 - 1) Review existing approval reference sites and determine if additional approval references are appropriate. Seek input from States to identify areas of the TI that are commonly the subject of approval requests.
 - 2) Evaluate what authority should be provided through the application of A1 and A2.
 - 3) Develop a rationalized approach for assigning A1 and A2.
- c) Supplement to the Technical Instructions. Develop additional guidance in the Supplement available to States for the review and issuance of exemptions and approvals. This could include clarifying guidance on how to apply the authorizations provided in the Technical Instructions. It could also include sample application

checklists that competent authorities could chose to require from applicants, as well as sample exemption or approval documents as a template for competent authorities to follow.

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

2.1 The DGP-WG is invited to consider the information presented in this WP with the view of establishing an intercessional working group to complete the proposed actions reference herein.

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