



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-SECOND MEETING

Montréal, 5 to 16 October 2009

Agenda Item 1: Development of proposals, if necessary, for amendments to Annex 18 — *The Safe Transport of Dangerous Goods by Air*

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

5.1: Approvals

5.2: Exemptions

EXEMPTIONS AND APPROVALS

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SUMMARY

This paper summarizes the work carried out so far in reviewing the areas of the requirements for approvals and exemptions in the Technical Instructions and the Supplement (guidance to States) and proposes to use the information in the appendix as a basis for further discussion.

Action by the DGP: The DGP is invited to:

- a) consider the appendix to this working paper as a basis for the discussion;
- b) consider the suggested parts/chapters of the various documents requiring amendment shown within the appendix to this working paper and confirm whether they are appropriate;
- c) advise whether any other areas of approvals and exemptions need to be addressed within the Technical Instructions or other documents; and
- d) consider the outcome of the working group and the proposed amendments for adoption in Annex 18 — *The Safe Transport of Dangerous Goods by Air*, 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).

1. INTRODUCTION

1.1 At the DGP Working Group of the Whole Meeting in Auckland (DGP-WG09, 4 to 8 May 2009) the subject of reviewing the requirements for approvals and exemptions and the need for reviewing the guidance material to states in the Supplement in this respect was raised (DGP/22-WP/3, paragraph 3.5.1.4 refers).

1.2 Since then the panel confirmed that continued work on the subject is appropriate, and a two-day working group before DGP/22 was convened to further discuss the items discussed at DGP-WG09 (DGP/22-WP/3, paragraph 3.5.1.4 refers).

1.3 Further work, while preparing for the DGP and the established working group, has been done by a small informal working group consisting of some European States. The outcome of this work is presented in the appendix to this working paper.

1.4 Using the issues raised at DGP-WG09 as a basis, the appendix to this working paper indicates the areas which are felt should be subject to specific changes and proposes the action that could be taken. It also indicates the areas of Annex 18, the Technical Instructions, and the Supplement where amendments are required.

APPENDIX

SUGGESTED AMENDMENTS TO ANNEX 18, THE TECHNICAL INSTRUCTIONS AND THE SUPPLEMENT TO THE TECHNICAL INSTRUCTIONS

1. ANNEX 18

1.1 Amend the definition of “exemption:”

Exemption. An authorization issued by an appropriate national authority ~~providing relief from the provisions of this Annex~~ to permit the carriage of dangerous goods identified in the Technical Instructions as forbidden for transport as cargo under normal circumstances, unless the provisions of the Technical Instructions indicate they may be transported under an approval issued by the [State of Origin and the State of the Operator].

1.2 Add new definition for “Approval”:

Approval. An authorization issued by an appropriate national authority for:

a) the transport of those entries listed in the Technical Instructions as forbidden on passenger and/or cargo aircraft but which may be carried with the approval of the state of origin and the state of the operator; or

b) other purposes as specified in the Technical Instructions.

1.3 Add new definition for “Alleviation”:

Alleviation: Except when dangerous goods may only be carried in accordance with an exemption or approval, an authorization granted by the State of origin, the State of the operator and the State of transit (if applicable) to provide relief from the provisions of these Instructions.

1.4 Add new definition for “Technical Instructions”:

Technical Instructions: The Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council.

1.5 Replace 2.1 with the following:

2.1 General applicability

2.1.1 The Standards and Recommended Practices of this Annex shall be applicable to all international operations of civil aircraft.

2.1.2 In instances of extreme urgency or when other forms of transport are inappropriate or full compliance with the prescribed requirements is contrary to the public interest, the States concerned may grant the following:

- a) an exemption from the provisions of the Technical Instructions to permit the transport of dangerous goods:
 - 1) identified in those Instructions as forbidden for transport as cargo under normal circumstances;
 - 2) [dangerous goods of division 6.2 and class 7 which are transported not in accordance with the provisions of these Instructions].

Editorial Note.— 2) added as believed to be of a sensitive or political in nature.

- b) an approval for the transport of dangerous goods forbidden on passenger and/or cargo aircraft where the Technical Instructions state that such goods may be carried with approval, or other purposes as specified in these Instructions; or
- c) An alleviation to provide relief from the provisions of the Technical Instructions other than when an exemption or approval are required,

provided that in such cases every effort shall be made to achieve an overall level of safety in transport which is at least equivalent to the level of safety provided by these Instructions.

Note 1.— For the purposes of exemptions, “States concerned” are those of the origin, operator, transit, overflight and destination. For the State of Overflight, if none of the criteria for granting an exemption are relevant, an exemption may be granted based solely on whether it is believed that an equivalent level of safety in air transport has been achieved.

Note 2.— For the purposes of approvals and alleviations “States concerned” are those of the origin, transit and operator.

Note 3.— Refer to 4.3 for dangerous goods forbidden for transport by air under any circumstances.

Note 4.— It is not intended that this Annex be interpreted as requiring an operator to transport a particular article or substance or as preventing an operator from adopting special requirements on the transport of a particular article or substance.

1.6 Amend paragraph 2.2.1 as follows:

2.2.1 Each Contracting State shall take the necessary measures to achieve compliance with the detailed provisions contained in the Technical Instructions ~~for the Safe Transport of Dangerous Goods by Air (Doc 9284), approved and issued periodically in accordance with the procedure established by the ICAO Council.~~ Each Contracting State shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions.

1.7 Amend paragraph 4.2 as follows:

4.2 Dangerous goods forbidden for transport by air unless exempted

The dangerous goods described hereunder shall be forbidden on aircraft unless exempted by the States concerned under the provisions of 2.1 or unless the provisions of the Technical Instructions indicate they may be transported under an approval issued by the State of Origin:

- a) articles and substances that are identified in the Technical Instructions as being forbidden for transport ~~in~~ as cargo under normal circumstances; and
- b) infected live animals.

2. TECHNICAL INSTRUCTIONS

2.1 Replace Part 1;1.1.2 with the following:

1.1.2 In instances of extreme urgency or when other forms of transport are inappropriate or full compliance with the prescribed requirements is contrary to the public interest, the States concerned may grant the following:

- a) An exemption from the provisions of the Instructions to permit the carriage of dangerous goods:
 - 1) identified in those Instructions as forbidden for transport as cargo under normal circumstances;
 - 2i) [dangerous goods of division 6.2 and class 7 which are transported not in accordance with the provisions of these Instructions].

Editorial Note.— 2) added as believed to be of a sensitive or political in nature.

- b). An approval for the transport of those entries listed in Table 3-1 as forbidden on passenger and/or cargo aircraft to which Special Provision A1, A2 [or A109] has been assigned in column 7; or other purposes as specified in these Instructions; or
- c). An alleviation to provide relief from the provisions of the Instructions other than when an exemption or approval are required,

provided that in such cases every effort shall be made to achieve an overall level of safety in transport which is at least equivalent to the level of safety provided by these Instructions.

For the purposes of exemptions, "States concerned" are those of the origin, operator, overflight, transit and destination. For the State of Overflight, if none of the criteria for granting an exemption are relevant, an exemption may be granted based solely on whether it is believed that an equivalent level of safety in air transport has been achieved. For the purposes of approvals and alleviations "States concerned" are those of the origin and operator.

2.2 Delete Note 2 under 1;1.1.2:

~~— Note 2.— Unless otherwise provided for, exemptions may be granted to permit the carriage of dangerous goods that are identified in columns 10 and 11 or 12 and 13 of the Dangerous Goods List (Table 3-1) as being forbidden. Exemptions may also concern other parts of the Technical Instructions.~~

2.3 Amend Part 1;2.1 as follows:

**2.1 DANGEROUS GOODS FORBIDDEN FOR TRANSPORT BY AIR
UNDER ANY CIRCUMSTANCE**

Any article or substance which, as presented for transport, is liable to explode, dangerously react, produce a flame or dangerous evolution of heat or dangerous emission of toxic, corrosive or flammable gases or vapours under conditions normally encountered in transport must not be carried on aircraft under any circumstance, i.e. they cannot be carried under an exemption, approval or alleviation.

2.4 Amend the definition of “Exemption” in Part 1;3.1 as follows:

Exemption. An authorization issued by an appropriate national authority ~~providing relief from the provisions of these Instructions~~ to permit the carriage of dangerous goods identified in these Instructions as forbidden for transport as cargo under normal circumstances, unless the provisions of these Instructions indicate they may be transported under an approval issued by the [State of Origin and the State of the Operator].

Note.— The requirements for exemptions are given in 1;1.1.2.

2.5 Amend the definition of “Approval” in Part 1;3.1 as follows:

Approval. An authorization issued by the appropriate national authority for:

- a) transport of those entries listed in Table 3-1 as forbidden on passenger and/or cargo aircraft to which Special Provision A1; ~~or A2 or A109~~ has been assigned in column 7; or
- b) other purposes as specified in these Instructions.

Note.— Unless otherwise indicated, approval is only required from the State of Origin.

2.6 Add a new definition of “alleviation” in Part 1;3.1 as follows:

Alleviation. Except when dangerous goods may only be carried in accordance with an exemption or approval, an authorization granted by the State of Origin, State of Transit (if applicable) and the State of the Operator to provide relief from the provisions of these Instructions.

2.7 Amend Part 2;6.3.6.1 as follows:

6.3.6 Infected live animals

6.3.6.1 A live animal that has been intentionally infected and is known or suspected to contain an infectious substance must not be transported by air unless the infectious substance contained cannot be consigned by any other means. Infected live animals may only be transported under terms and conditions ~~approved~~ of an exemption granted by the appropriate national authority.

2.8 Amend Special Provision A2 as follows:

A2 This commodity may be transported on ~~passenger aircraft and on~~ cargo aircraft, only with the prior approval of the appropriate authority of the State of Origin under the written conditions established by the authority.

Where States, other than the State of Origin, have notified ICAO that they require prior approval of shipments made under this special provision, approval must also be obtained from the States of transit, overflight and destination and of the State of the Operator, as appropriate.

In each case the conditions must include the quantity limitations and packing requirements and these must comply with S-3;1.2.3 of the Supplement. A copy of the document(s) of approval, showing the quantity limitations and the packing and labelling requirements, must accompany the consignment.

2.9 Delete Special Provision A109:

A109 ~~This commodity may be transported on cargo aircraft, only with the prior approval of the appropriate authority of the State of Origin under the written conditions established by that authority. The conditions must include the quantity limitations and packing requirements and these must comply with S-3;1.2.4 of the Supplement. A copy~~

of the document of approval, showing the quantity limitations and packing requirements, must accompany the consignment.

2.10 Amend Table 3-1 as follows:

Name	UN No.	Class or division	Subsidiary risk	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger aircraft		Cargo aircraft	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Charges, shaped without detonator	0059	1.1D				A409A2			Forbidden		Forbidden	
Cord, detonating, flexible	0065	1.1D				A409A2			Forbidden		Forbidden	
Fracturing devices, explosive, without detonator for oil wells	0099	1.1D				A409A2			Forbidden		Forbidden	

3. THE SUPPLEMENT TO THE TECHNICAL INSTRUCTIONS

3.1 Amend S-1;1.1 as follows:

1.1 GENERAL INFORMATION TO BE PROVIDED TO A STATE FOR THE PROCESSING OF EXEMPTIONS, APPROVALS AND ALLEVIATIONS

1.1.1 Part 1;1.1.2 of the Technical Instructions provides for States to grant exemptions, approvals and alleviations to enable the transport by air of dangerous goods which may not normally be permitted or in conditions which are different to those prescribed in the Instructions. Such authorizations may only be granted in instances of urgency, when other forms of transport are inappropriate or when full compliance with the Technical Instructions is contrary to the public interest. The following is offered as guidance to States to determine whether these criteria have been met:

- a) *Urgency.* In deciding whether an application is urgent, States should consider why it is important for a consignment to reach its destination quickly or why it has been necessary to make an application at short notice. Applications based on commercial reasons only should not be viewed as urgent and carriage by other forms of transport should also be considered;
- b) *When other forms of transport are inappropriate.* Whilst carriage by other forms of transport may be possible, States should conduct a risk analysis which should include consideration of:

 - 1) *Length of journey.* Transport by other forms may result in an unrealistic journey time and could affect the viability of the dangerous goods;
 - 2) *Infrastructure.* The availability of other forms of transport may be limited;
 - 3) *Security.* The comprehensive security provisions of the air mode may reduce the possibility of unlawful interference (e.g. theft);
 - 4) *Routeing.* Transport by air may result in a reduced risk of exposure of the public to the dangerous goods in the event of an incident or accident. The risk of piracy may also be significantly reduced;
 - 5) *Safety.* The level of safety provided by air transport compared to other forms of transport;
 - 6) *Cost.* The cost of carriage by other forms of transport may be economically unreasonable. However, the decision to grant an exemption should not be based on cost alone.

c) When full compliance with the Technical Instructions is contrary to the public interest. Dangerous goods may need to be transported because of:

1) humanitarian relief;

2) environmental relief;

3) environmental provisions;

4) pestilence;

5) national or international security;

6) saving of life (e.g. rescue);

7) limited availability at destination.

1.1.2 When granting an exemption, approval or alleviation, every effort must be made to achieve an overall level of safety in transport which is at least equivalent to the level of safety provided by the Technical Instructions. In determining an equivalent level of safety the following should be considered:

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 risks in transport. 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.

1.1.3 When a State is approached for an exemption it is suggested that, if it is appropriate, at least the following information should be supplied before consideration is given to granting an exemption:

- a) the reason why it is essential the article or substance must be carried by air;
- b) a statement why the applicant believes the proposal (including any safety control measures specified by the applicant) will achieve a level of safety equivalent to that provided by these Instructions;
- c) proposed proper shipping name, classification and UN number with full supporting technical data;
- d) the proposed packaging;
- e) quantity to be carried;
- f) any special handling required and any special emergency response information;
- g) name and address of consignor and consignee; and
- h) the airports of departure and destination and the proposed dates of transport and routing.

3.2 *Amend S-1;1.2.3 as follows:*

1.2.3 The responsibility for obtaining the above exemption(s), approval or alleviation may rest with a State or with the operator or with the shipper, depending on States' national procedures. Generally, the applicant for an exemption, approval or an alleviation should be the party for whom the responsibilities are most relevant e.g. when an exemption is granted for dangerous goods which are forbidden under normal circumstances, it may be most appropriate for the shipper to apply. However, the exemption must address all affected parties. Irrespective of who is responsible, the operator must be in possession of confirmation that all the required exemptions have been obtained prior to accepting the goods for shipment.

Note.— Usually an exemption, approval or alleviation should cover a single occasion, but it may be necessary to issue exemptions to cover multiple occasions and/or multiple shippers.

3.3 Add a new S-1;1.2.4 as follows:

1.2.4 Where dangerous goods are forbidden on both passenger and cargo aircraft consideration should ordinarily only be given to carriage on cargo aircraft. Transport on a passenger aircraft should only be considered in exceptional circumstances.

3.4 Add a new S-1;1.2.5 as follows:

1.2.5 Where an exemption, approval or alleviation is required from more than one State, it is usually most appropriate for the State of origin to grant the initial exemption because they may have greater awareness of the shipper and the circumstances under which the dangerous goods will be shipped. However there may be circumstances where another State concerned might be better placed to grant the initial exemption.

— END —