

DANGEROUS GOODS PANEL (DGP)

THIRTIETH MEETING

Montréal, Canada, 6 to 10 October 2025

Agenda Item 5: Clarifying State oversight responsibilities in Annex 18 (Ref: Job Card DGP.005.05)

PROPOSED AMENDMENT TO ANNEX 18 TO CLARIFY STATES' RESPONSIBILITIES WITH RESPECT TO THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR

(Presented by the Secretary)

SUMMARY

This working paper contains the proposed amendment to Annex 18 developed by the DGP Working Group on Annex 18 (DGP-WG/Annex 18). The amendment aims to clarify States' responsibilities with respect to the safe transport of dangerous goods by air and the relationship between Annex 18 and other Annexes that have an impact on dangerous goods.

Action by the DGP: The DGP is invited to:

- a) agree to the proposed amendment to Annex 18 contained in the appendix to this working paper; and
- b) determine a realistic applicability date for the amendment.

1. INTRODUCTION

Amendments to Annex 18 – *The Safe Transport of Dangerous Goods by Air* to clarify States' responsibilities with respect to the safe transport of dangerous goods by air were agreed at DGP/29 with the understanding that they would be refined based on feedback through formal coordination with relevant expert groups. Editorial revisions were subsequently made across most chapters along with more substantive revisions to the operator provisions in proposed Chapter 6. Revisions were also made to the security provisions feedback from the Aviation Security Panel (AVSECP). The revisions, other than those to operator responsibilities, were endorsed by the 2024 DGP Working Group Meeting (Montréal, 21 to 25 October 2024 (DGP-WG/24) (see paragraph 4.5.1 of the DGP/29 report). Amendments to operator responsibilities were further revised after DGP-WG/24 and prior to formal coordination with the eleventh meeting of the Flight Operations Panel (Montréal, 20 to 24 January 2025) (FLTOPSP/11) to address concerns from flight operations experts related to their relationship with Annex 6. Coordination with

FLTOPSP/11 and the seventh meeting of the Safety Management Panel (4 to 5 (virtual) and 10 to 13 (Montréal) December 2024) (SMP/7) identified the need for further work to address concerns from both panels. While significantly improved, there was agreement among these bodies and DGP-WG/Annex 18 that the amendment was not yet mature enough to be sent to States and international organizations for comment. The Air Navigation Commission (ANC) reviewed the amendment at the twelfth meeting of its 228th session and requested the Secretariat to share concerns it raised with the panel.

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- The 2025 DGP Working Group Meeting (Delhi, India, 21 to 25 April 2025) was provided a summary of work undertaken by the DGP Working Group on Annex 18 (DGP-WG/Annex 18) since DGP-WG/24 (see paragraph 4.5.1 of the DGP-WG/25 report) to address concerns raised. Several gaps and inconsistencies between Annex 18 and Annex 6 were identified and subsequently addressed through a DGP-FLTOPSP inter-panel working group established following FLTOPSP/11. The finalized amendment to Annex 18 is presented in Appendix A to this working paper. The deletion of definitions for "passenger aircraft" and "cargo aircraft" is dependent on the outcome of discussions on the proposal submitted in DGP/30-WP/32. The definitions are therefore placed in square brackets and the justification for deleting them shaded in yellow.
- 1.3 Revisions to what was presented at DGP-WG/25 along with justification for making them are presented in DGP/30-IP/8. Consequential amendments to Annex 6 developed by the DGP-FLTOPSP inter-panel working group are presented in DGP/30-WP/22. The amendment to Annex 6 along with any comments provided from DGP/30 will be presented to the twelfth meeting of the FLTOPSP (FLTOPSP/12, Montreal, 17 to 21 November 2025).

2. IMPLEMENTATION PLAN AND APPLICABILITY DATE

2.1 The ANC stressed the essential need for a strong implementation plan due to the extent of the changes being made. It questioned whether it was feasible for States to meet an applicability date of November 2028. The panel is invited to discuss whether delaying applicability until November 2030 would be appropriate. This would give more time for outreach to States. Outreach activities should result in safety improvements before November 2030, given that the amendments strengthen what is already required.

3. ACTION BY THE DGP

- 3.1 The DGP is invited to agree to:
 - a) review the proposed amendment to Annex 18 as contained in the appendix to this working paper;
 - b) agree to an applicability date of November 2030.

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APPENDIX

PROPOSED AMENDMENT TO ANNEX 18

PROPOSED AMENDMENT TO INTERNATIONAL STANDARDS AND RECOMMENDED PRACTICES

ANNEX 18

TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR NOTES ON THE PRESENTATION OF THE PROPOSED AMENDMENT

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

Text to be deleted is shown with a line through it.

text to be deleted.

2. New text to be inserted is highlighted with grey shading. new text to be inserted

3. Text to be deleted is shown with a line through it followed by the replacement text which is highlighted with grey shading.

PROPOSED AMENDMENT TO

ANNEX 18

THE SAFE TRANSPORT OF DANGEROUS GOODS BY AIR

FOREWORD

Historical background

Annex 18 governs the international transport of dangerous goods by air. The material in—this the Annex was developed by the Air Navigation Commission in response to a need expressed by Contracting States for an internationally agreed set of provisions governing the safe transport of dangerous goods by air. In order to assist in achieving compatibility with the regulations covering the transport of dangerous goods by other modes of transport, the provisions of this Annex are based on the Recommendations of the United Nations Committee of Experts on the Transport of Dangerous Goods and the Regulations for the Safe Transport of Radioactive Materials of the International Atomic Energy Agency. The Annex was originally adopted by Council on 26 June 1981 and became applicable on 1 January 1984.

Origin:	Rationale:
DGP/29	Justification: The objective of Annex 18 is currently provided under the heading for "Relationship with the <i>Technical Instructions for the Safe Transport of Dangerous Goods by Air</i> ". It is proposed to move the objective as a general statement at the beginning of the Foreword under the heading for "Historical background" to make it immediately clear.
	The current text under "Historical background" about the provisions of the Annex being based on the Recommendations of the United Nations Committee of Experts on the Transport of Dangerous Goods and the Regulations for the Safe Transport of Radioactive Materials of the International Atomic Energy Agency is inaccurate. It is not the Annex that is based on these recommendations and regulations, but rather the Technical Instructions. It is proposed to explain the relationship with these bodies in the "Relationship with the Technical Instructions" section. It is also proposed to delete the reference to the IAEA regulations as it is considered unnecessary. The relevant material from these regulations are included in the United Nations recommendations upon which the Technical Instructions are based. The input from the IAEA is explained in the Foreword of the Technical Instructions. The original adoption and applicability dates of the Annex are proposed for inclusion in the Annex for the sake of consistency with other Annexes.

Relationship with the *Technical Instructions* for the Safe Transport of Dangerous Goods by Air (Doc 9284)

The provisions of Annex 18 govern the international transport of dangerous goods by air. The broad provisions of this Annex are amplified by the detailed specifications of the *Technical Instructions for the*

Safe Transport of Dangerous Goods by Air (Doc 9284) (Technical Instructions). The provisions of the Technical Instructions are based on recommendations on the transport of dangerous goods developed for all modes of transport by the United Nations Economic and Social Council's Committee of Experts on the Transport of Dangerous Goods. The intent of using this common base by all modes of transport is to allow cargo to be transferred safely and smoothly between air, sea, rail, and road modes. Modifications from these recommendations are made in the Technical Instructions to address specific aviation safety needs while keeping in mind the need to ensure compatibility with other modes of transport.

Origin:	Rationale:
DGP/29	Justification: The objective of Annex 18 is moved to the beginning of the foreword under "Historical background" (see justification under that paragraph). The new text is moved from this same paragraph ("Historical background") and modified to more clearly explain the relationship between the Technical Instructions and the United Nations recommendations (see justification under "Historical background".

Status of the Technical Instructions

The detailed specifications of the Technical Instructions are considered binding on a State by virtue of 2.3.1 of this Annex unless it has notified a difference to this provision under Article 38 of the Convention.

Origin:	Rationale:
DGP/29	Justification: The inside cover of Annex 18 explains the status of the Technical Instructions. The status was agreed by States in recognition of the critical need for compliance with the Technical Instructions to ensure safety. It is proposed to make this explanation more visible by including it in the Foreword.

Amendments to Annex 18 and the Technical Instructions

Annex 18 is intended to contain stable material requiring only minor amendments using the normal Annex amendment process. The Technical Instructions require more substantial and frequent amendments to keep up with day-to-day operational use.

The Air Navigation Commission established the Dangerous Goods Panel (DGP) and tasked it with maintaining the Technical Instructions. The DGP meets periodically to review comments received from States and interested international organizations, to consider any changed recommendations of the United Nations Committee, to address safety and facilitation issues specific to air transport and to prepare revised editions of the Technical Instructions. Amendments recommended by the DGP are published in panel meeting reports and made publicly available on www.icao.int/dangerous-goods.

Amendments recommended by the DGP are reviewed by the Air Navigation Commission and approved and published by decision of the Council of ICAO. Action taken by the Air Navigation Commission or the Council on the recommendations is published in the Supplement to DGP meeting reports and made available on www.icao.int/dangerous-goods.

A new edition of the Technical Instructions is published every two years. Amendments to the Technical Instructions during the specific period of applicability of an edition of the document may also be published if

deemed necessary. Amendments during the specific period of applicability are made available on www.icao.int/dangerous-goods.

Origin:	Rationale:
DGP/29	Justification: The status and amendment process for the Technical Instructions is unlike that for any other ICAO provisions. It is therefore considered necessary to make the process and the ability for States to see amendments being proposed visible.

Guidance

Guidance to States on the implementation of Annex 18 is contained in *Oversight and Management of the Safe Transport of Dangerous Goods by Air Manual (Doc xxxxx, forthcoming)*.

The Technical Instructions are supported by the Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284SU). The Supplement contains guidance to assist States when considering authorizations to transport dangerous goods by air that the Technical Instructions forbid under normal circumstances through approvals or exemptions.

Origin:	Rationale:
DGP/29	Justification: A new section containing references to available guidance is proposed to support States.

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INTERNATIONAL STANDARDS AND RECOMMENDED PRACTICES

CHAPTER 1. DEFINITIONS

When the following terms are used in this Annex, they have the following meanings:

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

- a) the transport of dangerous goods forbidden on passenger and/or cargo aircraft where the Technical Instructions state that such goods may be carried with an approval; or
- b) other purposes as provided for in the Technical Instructions.

Note.— In the absence of a specific reference in the Technical Instructions allowing the granting of an approval, an exemption may be sought.

Baggage. Personal property of passengers or crew carried on an aircraft by agreement with the operator.

Origin:	Rationale:
DGP/30	The amendment to Annex 18 introduces references to baggage. Baggage is defined in Annex 9 and the Technical Instructions. It is proposed to replicate the definition in Annex 18 to ensure consistent application of the term.

Cargo. Any property carried on an aircraft other than mail and accompanied or mishandled baggage.

Note.— This definition differs from the definition of "cargo" given in Annex 9 — Facilitation whereby Annex 9 excludes stores (supplies) from cargo, but Annex 18 does not.

Origin:	Rationale:
DGP/29	The definition for cargo is currently not in Annex 18, but it is in the Technical Instructions. The panel is proposing the definition in the Technical Instructions be added to the Annex given the need to understand the distinction between cargo, baggage and mail established through the proposed revised structure of the Annex. The definition in Annex 9 – <i>Facilitation</i> excludes stores (supplies), but the one in the Technical Instructions does not. This misalignment was purposely introduced into the 2011-2012 Edition of the Technical Instructions to ensure operator stores classified as dangerous goods being shipped for replacement or repair comply with the Technical Instructions. Aligning with the definition in Annex 9 would create significant gaps and have safety implications with respect to the transport of dangerous goods.

[Cargo aircraft. Any aircraft, other than a passenger aircraft, which is carrying goods or property.]

Origin:	Rationale:
DGP/30	The definition for cargo aircraft and passenger aircraft (see below) are proposed for deletion because they are considered unnecessary. They have been wrongly used by States to determine who can be on an aircraft, when that determination is governed by Annex 6. Deleting it will help avoid such misinterpretations. [Provisions for determining who can be on board aircraft dedicated to cargo operations have been added to Part 7 (Operator responsibilities) of the Technical Instructions, with a link to Annex 6, to compensate for the deletion of the definitions.]

<u>Civil aviation authority (CAA)</u>. The governmental entity or entities, however titled, that are directly responsible for the regulation of all aspects of civil air transport, technical (i.e. air navigation and aviation safety) and economic (i.e. the commercial aspects of air transport).

Origin:	Rationale:
DGP/30	The term is referred to in Annex 18 and a definition for it is contained in <i>Safety Oversight Manual</i> (Doc 9734). It is proposed to include the definition in Annex 18 to ensure consistent interpretation of what is meant when CAA is referred to.

Consignment. One or more packages of dangerous goods accepted by an operator from one shipper at one time and at one address, receipted for in one lot and moving to one consignee at one destination address.

Crew member. A person assigned by an operator to duty on an aircraft during a flight duty period.

Dangerous goods. Articles or substances which are capable of posing a <u>riskhazard</u> to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

Origin:	Rationale:
DGP/26 AN Min. 207-5 AN Min. 209-2	Goods for incorporation in the 2019-2020 Edition. The amendment corrected inaccurate use

Dangerous goods accident. An occurrence associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in fatal or serious injury to a person or major property or environmental damage.

Note.— A dangerous goods accident may also constitute an aircraft accident as defined in Annex 13— Aircraft Accident and Incident Investigation.

Origin:	Rationale:
DGP/26 and	Clarification that a dangerous goods accident is not restricted to an accident associated with the operation of an aircraft. The wording aligns with text in the definition for dangerous

DGP/29	goods incident. It is important to capture accidents not associated with the operation of an
	aircraft because they could indicate a safety deficiency that might have resulted in an
	aircraft accident if the dangerous goods had been loaded on the aircraft.

Dangerous goods incident. An occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to where:

- a) a person, is injured;
- b) there is property or environmental damage;
- c) there is fire, breakage, spillage, leakage of <u>fluid contents</u> or radiation or <u>there is</u> other evidence that the integrity of the packaging has not been maintained. Any; or
- d) occurrence relating to the transport of dangerous goods which seriously jeopardizes the safety of the aircraft or its occupants is also deemed to constitute a dangerous goods incident is jeopardized.

<u>Note.— A dangerous goods incident may also constitute an aircraft incident as defined in Annex 13— Aircraft Accident and Incident Investigation.</u>

Origin:	Rationale:
DGP/26 and DGP/29	 Editorial amendments to improve readability (see DGP/26 Report and DGP/26-IP/6). "fluid" is replaced with "contents" to include solids. Note added to establish relationship between a dangerous goods incident and an aircraft incident under Annex 13. It is similar to the one added under "Dangerous goods accident".

Designated postal operator. Any governmental or non-governmental entity officially designated by a Universal Postal Union (UPU) member country to operate postal services and to fulfil the related obligations arising from the acts of the UPU Convention on its territory.

Exception. A provision in this Annex which excludes a specific item of dangerous goods from the requirements normally applicable to that item.

Origin:	Rationale:
DGP/30	The term is not referred to in Annex 18, so it is unnecessary for it to be defined. "Excepted" is referred to in Annex 18, but the dictionary definition is sufficient.

Exemption. An authorization, other than an approval, granted by an appropriate national authority providing relief from the provisions of the Technical Instructions.

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Origin:	Rationale:
DGP/30	"Flight crew member is not referred to in Annex 18, it is therefore unnecessary to define it.

<u>Misdeclared dangerous goods.</u> Dangerous goods offered for transport by air with incorrect documentation, marks, or labels.

Origin:	Rationale:
DGP/29 and DGP/30	"Misdeclared dangerous goods" is referred to in proposed Standards and Recommended Practices (SARPs) aimed at mitigating risks associated with dangerous goods being shipped that do not comply with the Technical Instructions and in revised SARPs for dangerous goods safety intelligence. The term is currently referred to in Annex 18, Chapter 12, Dangerous goods accident and incident reporting and there has been on-going queries from States and industry on what is meant by it.

<u>Mail.</u> Dispatches of correspondence and other items tendered by, and intended for delivery to, postal services in accordance with the rules of the Universal Postal Union (UPU).

Origin:	Rationale:
DGP/29	Mail is referred to in Annex 18. It is defined in Annex 9 and the Technical Instructions. It is proposed to replicate the definition from these documents in Annex 18 to ensure consistent interpretation of the term.

Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Overpack. An enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage.

Note.— A unit load device is not included in this definition.

Package. The complete product of the packing operation consisting of the packaging and its contents prepared for transport.

Packaging. Receptacles One or more receptacles and any other components or materials necessary for the receptacle receptacles to perform its their containment function and other safety functions.

Note.— For radioactive material, see Part 2, paragraph 7.21.3 of the Technical Instructions.

Origin:	Rationale:
DGP/27 AN Min. 213-3	Recommended by DGP/27 (Recommendation 1/1). Harmonizes the definition with the one contained in the UN Recommendations on the Transport of Dangerous Goods and corrects an out-of-date reference in the note. The definition is also contained in the Technical Instructions and already aligns with the UN Model Regulations. The Air Navigation Commission made a preliminary review of Recommendation 1/1 and, noting the amendment was editorial in nature, agreed that it should be referred for comments to Contracting States and appropriate international organizations, together with the Commission's own comments and proposals thereon, only as part of a more substantive amendment to Annex 18. (AN Min. 213-3)

[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.]

Origin:	Rationale:
DGP/30	The definition for passenger aircraft and cargo aircraft (see above) are proposed for deletion because they are considered unnecessary. They have been wrongly used by States to determine who can be on an aircraft, when that determination is governed by Annex 6. Deleting it will help avoid such misinterpretations. [Provisions for determining who can be on board aircraft dedicated to cargo operations have been added to Part 7 (Operator responsibilities) of the Technical Instructions, with a link to Annex 6, to compensate for the deletion of the definitions.]

Pilot-in-command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Remote pilot-in-command. The remote pilot designated by the operator as being in command and charged with the safe conduct of a flight.

Origin:	Rationale:
DGP/30	Remote pilot-in-command is now referred to in Annex 18. It is proposed to replicate the definition from Annex 6 to ensure consistent interpretation of the term.

Safety management system (SMS). A systematic approach to managing safety, including the necessary organizational structures, accountabilities accountability, responsibilities, policies and procedures.

Origin:	Rationale:
DGP/30	The existing definition for SMS aligns with the definition n the first edition of Annex 19. The amendment is proposed to align it with the definition in the latest edition of Annex 19 (second edition).

Serious injury. An injury which is sustained by a person in an accident and which:

- a) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or
- b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
- c) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
- d) involves injury to any internal organ; or
- e) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
- f) involves verified exposure to infectious substances or injurious radiation.

State of Destination. The State in the territory of which the consignment is finally to be unloaded from an aircraft.

State of Occurrence. The State in the territory of which an accident or incident occurs.

Origin:	Rationale:
DGP/30	State of occurrence is referred to in revised provisions requiring information to be provided to specific entities in the event of an aircraft accident or incident. The term is defined in Annex 13. It is proposed to replicate the definition from Annex 13 to ensure consistent interpretation of the term.

State of Origin. The State in the territory of which the consignment is first to be loaded on an aircraft.

State of the Operator. The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

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.

UN number. The four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals to identify an article or substance or a particular group of articles or substances.

Origin:	Rationale:	
DGP/30	"UN number" is not referred to in Annex 18, so it is unnecessary for it to be defined.	

<u>Undeclared dangerous goods.</u> Dangerous goods offered for transport by air which are not identified as dangerous goods in accordance with the Technical Instructions.

Origin:	Rationale:
DGP/29 and DGP/30	"Undeclared dangerous goods" is referred to in proposed Standards and Recommended Practices (SARPs) aimed at mitigating risks associated with dangerous goods being shipped that do not comply with the Technical Instructions and in revised SARPs for dangerous goods safety intelligence. The term is currently referred to in Annex 18, Chapter 12, Dangerous goods accident and incident reporting and there has been on-going queries from States and industry on what is meant by it.

Unit load device. Any type of freight container, (ULD). A device for grouping and restraining cargo, mail and baggage for air transport. It is either an aircraft container, or a combination of an aircraft pallet with a net, or and an aircraft pallet with a net over an igloonet. A ULD is designed to be directly restrained by the aircraft cargo loading system.

Note <u>I</u>.— *An overpack is not included in this definition.*

Note 2.— A freight container for radioactive material is not included in this definition (see Part 2, paragraph 7.1.3 of the Technical Instructions).

Origin:	Rationale:
DGP/29 and DGP- WG/23	The definition has been in the Annex since its first edition. It is also contained in the Technical Instructions. The wording refers to older terminology and to articles that are no longer used. The amendment modernizes the terminology. The addition of Note 2 is made for the sake of alignment with the definition in the Technical Instructions. It was added to the Technical Instructions to differentiate a freight container for radioactive material from a ULD, because the former has specific characteristics that do not necessarily apply to a ULD. The amendment will ensure this concept is clear and ensure alignment between the two documents.

CHAPTER 2. APPLICABILITYGENERAL

2.1 Objective

Each State shall promote the safety of the aircraft, its occupants, ground personnel, the general public and the environment as a primary objective in all matters related to the safe transport of dangerous goods by air.

Origin:	Rationale:
DGP/29	The safe transport of dangerous goods by air is dependent on the diligence of entities both within and outside the aviation system. The primary objective when using aviation to transport or carry dangerous goods for those outside the aviation system is not typically the safety of the aircraft and its occupants. It is therefore important to make it clear to all entities that safety is the primary objective when it comes to the safe transport of dangerous goods by air. This SARP is based on 2.1.1 of Annex 17 — <i>Security</i> , another Annex that deals with entities outside the aviation system.

2.1.2 and 2.1.3 of current Annex 18 are moved to 2.4.2.1 and 2.4.2.2:

2.1.2 Where specifically provided for in the Technical Instructions, the States concerned may grant an approval provided that in such instances an overall level of safety in transport which is equivalent to the level of safety provided for in the Technical Instructions is achieved.

- 2.1.3 In instances:
- a) of extreme urgency; or
 - b) when other forms of transport are inappropriate; or
 - c) when full compliance with the prescribed requirements is contrary to the public interest,

the States concerned may grant an exemption from the provisions of the Technical Instructions provided that in such instances every effort shall be made to achieve an overall level of safety in transport which is equivalent to the level of safety provided for in the Technical Instructions.

Origin:	Rationale:
DGP/29	It is proposed to move the approval and exemption provisions from the applicability section to the limitation on the transport of dangerous goods by air section because they are more associated with the latter than with applicability. Approvals and exemptions are already mentioned in that section, so keeping all the relevant SARPs together makes them more comprehensive.

2.1.4 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 1 of current Annex 18 is moved to under 2.4.2.1 and Notes 2 and 3 of current Annex 18 are moved to under 2.4.2.2:

Note 1. For the purpose of approvals, "States concerned" are the States of Origin and the Operator, unless otherwise specified in the Technical Instructions.

Note 2. For the purpose of exemptions, "States concerned" are the States of Origin, Operator, Transit, Overflight and Destination.

Note 3. Guidance for the processing of exemptions, including examples of extreme urgency, may be found in the Supplement to the Technical Instructions (Part S-1, Chapter 1, 1.2 and 1.3).

Origin:	Rationale:
DGP/29	Note 1 is specific to approvals and Notes 2 and 3 are specific to the exemptions. It is proposed to move Note 1 under the provision for approvals (now 2.4.2.1) and Notes 2 and 3 under the provision for exemptions (now 2.4.2.2) to improve clarity.

Note 4. Refer to 4.3 for dangerous goods forbidden for transport by air under any circumstances.

Origin:	Rationale:
DGP/29	Note 4 is necessary in the current Annex because the provisions for approvals and exemptions and the provisions for dangerous goods forbidden under any circumstance are in different sections of this chapter. This is no longer necessary, since all these provisions are proposed for inclusion in the same location, i.e. the limitation on the transport of dangerous goods section.

Note 5. 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.

Origin:	Rationale:
DGP/29	Note 5 is moved to Chapter 6: Operator responsibilities as Note 6. The note is currently under the provisions for approvals and exemptions, but its application goes beyond these.
	Moving the note to Chapter 6 makes the provisions for operators more comprehensive.

2.12.2 General applicability Applicability

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

Origin:	Rationale:
DGP/29	a) "General" is removed for the sake of consistency with other Annexes.b) Applying the Annex to aviation rather than to the operation of the aircraft is intended to ensure that entities other than the operator that contribute to the safe transport of dangerous goods are covered by this Annex.

The following is moved from 2.3 of current Annex 18:

2.3 Domestic civil aircraft operations

2.2.2 Recommendation.— In the interests of safety and of minimizing interruptions to the international transport of dangerous goods, Contracting States should also take the necessary measures to achieve compliance with the Annex and the Technical Instructions for Each State should apply the Standards and Recommended Practices contained in this Annex to domestic civil aircraft operations aviation.

Origin:	Rationale:
DGP/29	a) The provision relates to the applicability of the Annex and the Technical Instructions to domestic civil aircraft operations. There is a current recommendation to take the necessary measures to achieve compliance with the Annex and the Technical Instructions to domestic transport, but it is currently located outside of the applicability section of Chapter 2 (2.3). It is therefore proposed to move the recommended practice under the international applicability SARP.
	b) "Each" is added before "Contracting State" for the sake of consistency.
	 c) The current recommendation refers to the Annex and the Technical Instruction. Removing the reference to the Technical Instructions is proposed as it is considered redundant, given that Annex 18 makes the document binding on a State. d) It is proposed to replace "to achieve compliance" with "apply" for the sake of clarity
	and consistency.
	e) Text referring to "the interests of safety and minimizing interruptions to the international transport of dangerous goods" is considered more appropriate as guidance material. It is therefore proposed to remove it from the recommended practice and to elaborate on the concept in a new guidance document to support the implementation of Annex 18 (Oversight and Management of the Safe Transport of Dangerous Goods by Air Manual (Doc xxxxx, forthcoming).
	f) "to domestic aircraft operations" is replaced with "to domestic civil aviation" to align with the revision to the previous SARP for the same reason, i.e. to ensure that entities other than the operator that contribute to the safe transport of dangerous goods are covered.

The following is moved from 2.4 of current Annex 18:

2.4 Exceptions

<u>2.4.12.2.3</u> Articles and substances which would otherwise be <u>classed_classified</u> as dangerous goods but which are required to be aboard the aircraft in accordance with the pertinent airworthiness requirements and operating regulations, or for those specialized purposes identified in the Technical Instructions, shall be excepted from the provisions of this Annex.

- 2.4.22.2.4 Where articles and substances intended as replacements for those described in 2.4.12.3 or which have been removed for replacement are carried on an aircraft, they shall be transported in accordance with the provisions of this Annex except as permitted in the Technical Instructions.
- 2.4.3 Specific articles and substances carried by passengers or crew members shall be excepted from the provisions of this Annex to the extent specified in the Technical Instructions.

Origin:	Rationale:
DGP/29	The provisions in current 2.4 relate to the applicability of the Annex and the Technical Instructions, but they are located outside of the applicability section of Chapter 2. It is therefore proposed to move the Standards to this section, i.e. the applicability section.
	The provision in current 2.4.3 is proposed for deletion because it is not considered valid. Specific articles and substances carried by passengers and crew are subject to Annex 18 and Part 8 of the Technical Instructions. This is clarified through the proposed new SARP in 2.4.1.2.

The following is moved from 2.2 of current Annex 18:

2.22.3 Dangerous Goods Compliance with the Technical Instructions

- 2.2.12.3.1 Each Contracting State shall take the necessary measures aimed at ensuring that any entity that offers, handles, transports or causes to achieve be offered, handled or transported dangerous goods in cargo or mail achieves compliance with the detailed provisions contained in the Technical Instructions.
- 2.2.2 **Recommendation.** Each Contracting State should inform ICAO of difficulties encountered in the application of the Technical Instructions and of any amendments which it would be desirable to make to them.
- 2.3.2 Each State shall implement measures aimed at ensuring that passengers and crew members achieve compliance with the detailed provisions contained in Part 8 of the Technical Instructions.
- 2.3.3 Each Contracting—State shall also—take the necessary—measures to ensure the entities referred to in 2.3.1 and 2.3.2 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.

The following is moved to 3.3 in proposed new Chapter 3:

2.2.2 Recommendation. Each Contracting State should inform ICAO of difficulties encountered in the application of the Technical Instructions and of any amendments which it would be desirable to make to them.

The following is moved from 2.2.3 of current Annex 18:

2.2.32.3.4 **Recommendation.**— Although an amendment to the Technical Instructions with an immediate applicability for reasons of safety may not yet have been implemented in a Contracting State, such State should, nevertheless, facilitate the movement of dangerous goods in its territory which are consigned from another Contracting State in accordance with that amendment, providing the goods comply in total with the revised requirements.

Origin:	Rationale:
DGP/29	 a) 2.3: The revision to the heading is proposed to better describe the intent of the section. b) 2.3.1: Which entities are subject to the Technical Instructions has been the subject of extensive discussions on the Dangerous Goods Panel, specifically with respect to whether entities handling cargo but not intending to handle dangerous goods can be subject to them. Entities such as freight forwarders play an important role in preventing undeclared dangerous goods from being introduced into the air cargo system, so there has been a desire by members of the DGP to require training on how to identify and reject dangerous goods for all such entities, even if they do not intend to handle them. Some States do not have authority to enforce dangerous goods regulations on entities not performing functions described in the Technical Instruction. However, they do have authority over a person or organization once they have performed a dangerous goods function, such as offering cargo for transport that includes dangerous goods, regardless
	of whether the person or organization knowingly or unknowingly performed the function. The wording "or <i>causes</i> to be offered, handled or transported" is intended to capture this concept. c) 2.3.1 and 2.3.2: Current 2.2.1 could incorrectly be interpreted to imply that the <i>State</i> needs to comply with the detailed provisions contained in the Technical Instructions. It is the entities performing functions related to the transport of dangerous goods by air and passengers and crew carrying dangerous goods that need to achieve compliance. The proposed amendment makes clarifies who needs to comply with the Technical
	Instructions. It separates the provision into two distinct areas, one to address those dealing with dangerous goods in cargo or mail (2.3.1) and the other to address passengers and crew carrying dangerous goods (2.3.2). d) 2.3.3: Current 2.2.1 contains two Standards. An editorial amendment is proposed to create a separate Standard for compliance with any amendment to the Technical Instructions (2.3.3).
	e) 2.3.4: Current 2.2.2 is moved to proposed new 3.3 in Chapter 3: Provision of information to ICAO which consolidates all SARPs related to providing ICAO with information in one place.

The following is moved from 2.6 of current Annex 18:

2.6 Surface transport

<u>2.3.5</u> **Recommendation.**— <u>States Each State</u> should <u>make provisions take measures</u> to enable dangerous goods intended for air transport and prepared in accordance with the ICAO-Technical Instructions to be accepted for <u>surface transport by other modes of</u> transport to or from aerodromes.

Origin:	Rationale:
DGP/29	 a) The amendment to the heading is proposed because multimodal transport is a common term in the dangerous goods world and makes the intent of the provision easier to understand. b) Editorial revisions are proposed for the sake of clarity and consistency. c) The references to "ICAO" is unnecessary as there is now a definition for "Technical Instructions". d) It is proposed to move the recommendation from its current location to this location so that all provisions related to the Technical Instructions are in one place.

The following is moved to new Chapter 3, 3.2:

2.5 Notification of variations from the Technical Instructions

2.5.1 Where a Contracting State adopts different provisions from those specified in the Technical Instructions, it shall notify ICAO promptly of such State variations for publication in the Technical Instructions.

Note. Contracting States are expected to notify a difference to the provisions of 2.2.1 under Article 38 of the Convention only if they are unable to accept the binding nature of the Technical Instructions. Where States have adopted different provisions from those specified in the Technical Instructions, they are expected to be reported only under the provisions of 2.5.

Origin:	Rationale:
DGP/29	The requirement for States to inform ICAO of State variations is proposed to be moved to a new Chapter 3: Provision of information to ICAO. The new chapter is proposed so that all SARPs related to providing ICAO with information is in one place.

2.5.2 **Recommendation.** The State of the Operator should take the necessary measures to ensure that when an operator adopts more restrictive requirements than those specified in the Technical Instructions, the notification of such operator variations is made to ICAO for publication in the Technical Instructions.

Origin:	Rationale:
DGP/29	Few operator variations are reported to ICAO, and updates to already reported variations are not always provided. Users of the Technical Instructions cannot depend on these variations. Operator variations are more reliably reported to industry and included in industry regulations. It is therefore proposed that the recommendation be deleted.

The following is moved to 2.3.5:

2.6 Surface transport

Recommendation. States should make provisions to enable dangerous goods intended for air transport and prepared in accordance with the ICAO Technical Instructions to be accepted for surface transport to or from aerodromes.

Origin:	Rationale:
D C D /20	
DGP/29	Current 2.6 is moved to the 2.3.5 in the section on Compliance with the Technical
	Instructions so that all provisions related to the Technical Instructions are in one place.

The following is moved to new Chapter 3, 3.1:

2.7 National authority

Each Contracting State shall designate and specify to ICAO an appropriate authority within its administration to be responsible for ensuring compliance with this Annex.

Origin:	Rationale:
DGP/29	The requirement for States to designate and specify to ICAO an appropriate authority within its administration to be responsible for ensuring compliance with this Annex is proposed to be moved to a new Chapter 3: Provision of information to ICAO. The new chapter is proposed so that all SARPs related to providing ICAO with information is in one place.

The following is moved from Chapter 4:

CHAPTER 4. 2.4 Limitation on the transport of dangerous goods by air

4.12.4.1 Dangerous goods permitted for transport by air

2.4.1.1 Each State shall permit <u>T</u>the transport of dangerous goods <u>as cargo or mail</u> by air <u>shall be forbidden</u> except as established in <u>solely in accordance with</u> this Annex and the detailed <u>specifications and procedures</u> <u>provided inspecifications of</u> the Technical Instructions.

Origin:	Rationale:
DGP/29	 a) Moved from Chapter 4 (Limitation on the transport of dangerous goods by air) to keep the general regulatory framework for transport of dangerous goods by air in one place. b) Editorial revisions to the Standard are proposed to improve clarity by aligning the wording with the header. c) "Each State" is added to reflect the fact that the SARP is directed at the State. d) The addition of a reference to cargo or mail is proposed to differentiate from passenger baggage in the next SARP (2.4.1.2). e) "specifications and procedures" is replaced with "provisions" for the sake of consistency with other parts of the Annex.

2.4.1.2 Each State shall permit the carriage of dangerous goods by passengers or crew members solely when specifically permitted in accordance with Part 8 of the Technical Instructions.

Origin:	Rationale:
DGP/29	 a) New Standard which replaces the exception from the Annex of specific articles and substances carried by passengers or crew members currently contained in 2.4.3 because dangerous goods carried by passengers and crew are not excepted from the Annex. They are forbidden unless specifically permitted in the Technical Instructions, and there are criteria for allowing them there. b) Having the provision here clarifies the distinction between dangerous goods carried as cargo and dangerous good carried by passengers and crew and the fact that they are both covered by the Annex

2.4.2 Dangerous goods forbidden for transport by air unless approved or exempted

The dangerous goods described hereunder shall be forbidden on aircraft unless exempted by the States concerned under the provisions of 2.1 or Each State shall not permit the transport of dangerous goods identified in the Technical Instructions as being forbidden for transport by air under normal circumstances unless the provisions of the Technical Instructions indicate they may be transported under an approval granted by the State of Origin: States concerned in accordance with 2.4.2.1 or an exemption granted by the States concerned in accordance with 2.4.2.2.

a) dangerous goods that are identified in the Technical Instructions as being forbidden for transport in normal circumstances; and

b) infected live animals.

Origin:	Rationale:
DGP/29	 a) Moved from Chapter 4 (Limitation on the transport of dangerous goods by air) to keep the general regulatory framework for transport of dangerous goods by air in one place. b) The addition of "approved" in the heading is proposed because the SARP refers to both approvals and exemptions. c) "Each State shall not permit" added to reflect the fact that the SARP is directed at the State.
	d) Editorial amendments to clarify intent.
	e) The references to exemption and approval provisions have changed because it is proposed to move these provisions from the general applicability section to this section.
	f) Reference to only State of Origin for an approval is inconsistent with what is currently in the general applicability section, which includes the State of the Operator as part of the approval process. "States concerned" is explained under the specific provisions for approvals (2.4.2.1) and exemptions (2.4.2.2) below.
	g) Deleted "infected live animals" because this is covered by the Technical Instructions.

The following is moved from 2.1.2 of current Annex 18:

<u>2.1.2</u> <u>2.4.2.1 Approvals</u>

Where specifically provided for in the Technical Instructions, the States concerned may grant an approval provided that in such instances an overall level of safety in transport which is equivalent to the level of safety provided for in the Technical Instructions is achieved.

The following is moved from under 2.1.4 of current Annex 18:

Note—I.— For the purpose of approvals, "States concerned" are the States of Origin and the Operator, unless otherwise specified in the Technical Instructions.

2.1.3 2.4.2.2 *Exemptions*

In instances:

- a) of extreme urgency; or
- b) when other forms of transport are inappropriate; or
- c) when full compliance with the prescribed requirements is contrary to the public interest,

the States concerned may grant an exemption from the provisions of the Technical Instructions provided that in such instances every effort shall be made to achieve an overall level of safety in transport which is equivalent to the level of safety provided for in the Technical Instructions.

Origin:	Rationale:
DGP/29	a) Moved from the current general applicability section in 2.1.3 as it relates more to the limitation provisions than to applicability provisions.b) Addition of heading for the sake of clarity.

2.1.4 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.

Origin:	Rationale:
DGP/29	The Standard in 2.1.4 is proposed for deletion as it is considered more appropriate to address its intent, which is not clear by the wording, in guidance material. The intent of the SARP is to address challenges faced by the State of Overflight when considering whether to grant an exemption when the criteria for granting it are not applicable to that State. The challenges faced by the State of overflight are transferred to applicants, who are often unable to acquire an exemption. Addressing the issue through guidance will allow for more comprehensive assistance to States on the subject.

Current Note 1 is moved to under 2.4.2.1:

— Note 1. For the purpose of approvals, "States concerned" are the States of Origin and the Operator, unless otherwise specified in the Technical Instructions.

Note—2<u>1</u>.— For the purpose of exemptions, "States concerned" are the States of Origin, Operator, Transit, Overflight and Destination.

Note-3_2.— Guidance for the processing of exemptions, including examples of extreme urgency, may be found in the Supplement to the Technical Instructions (Part S-1, Chapter 1, 1.2 and 1.3). Oversight and Management of the Safe Transport of Dangerous Goods by Air Manual (Doc xxxxxx, forthcoming), Chapter yy.

Origin:	Rationale:
DGP/29	The guidance for processing of exemptions is currently contained in the Supplement to the Technical Instructions, but it is proposed to move all guidance specific to States from the Supplement to a new manual so that all guidance is consolidated in one place. The note is updated accordingly.

Note 4. Refer to 4.3 for dangerous goods forbidden for transport by air under any circumstances.

Note 5. 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.

2.4.3 Dangerous goods forbidden for transport by air under any circumstances

- 2.4.3.1 Each State shall forbid any article or substance to be transported by air under any circumstance if, as presented for transport, it 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.
- <u>2.4.3.2 The Aarticles and substances referred to in 2.4.3.1 shall include those</u> that are specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport by air under any circumstances shall not be carried on any aircraft.
- 2.4.3.23 Each State shall not grant approvals or exemptions for articles and substances identified in 2.4.3.1.

Note.— Guidance on dangerous goods forbidden for transport under any circumstance is provided in <u>Doc xxxx</u> (forthcoming), Chapter yy.

Origin:	Rationale:
DGP/29	 a) Moved from Chapter 4 (Limitation on the transport of dangerous goods by air) to keep the general regulatory framework for transport of dangerous goods by air in one place. b) The current SARP in 4.3 refers to articles or substances specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport under and circumstance. The Technical Instructions make it clear that it is not possible to list all dangerous goods that should be forbidden under any circumstance. It is therefore proposed to include an explanation of what cannot be safely transported on an aircraft in the SARP and to include guidance for determining this in the new document referred to in the note. c) States should not grant approvals or exemptions to transport such articles or substances. New 2.4.3.2 makes this clear.

CHAPTER 3. CLASSIFICATION PROVISION OF INFORMATION TO ICAO

The classification of an article or substance shall be in accordance with the provisions of the Technical Instructions.

Note. The detailed definitions of the classes of dangerous goods are contained in the Technical Instructions. These classes identify the potential risks associated with the transport of dangerous goods by air and are those recommended by the United Nations Committee of Experts on the Transport of Dangerous Goods.

Origin:	Rationale:
DGP/29	The intent of this Standard is to ensure anyone preparing a package containing dangerous goods for transport classifies the hazards associated with the dangerous goods in accordance with the Technical Instructions. However, the Standard does not make this clear nor does it make the obligation that the Standard places on a State clear. A new Chapter 5 on the safety of the supply chain is proposed which captures the intent and State obligation of this SARP and similar SARPs in current Chapters 5 (Packing), 6 (Labelling and marking) and 7 (Shipper's responsibilities).

The following is moved from current 2.7:

2.73.1 National authority

Each—Contracting State shall designate and specify to ICAO an appropriate <u>national</u> authority within its administration to be responsible for ensuring compliance with this Annex.

Origin:	Rationale:
DGP/29	Proposed to be moved from Chapter 2 to this chapter so that all SARPs related to providing information to ICAO are in one place.

The following is moved from current 2.5:

2.53.2 Notification of variations from the Technical Instructions

2.5.1 Where a Contracting State adopts different provisions from those specified in the Technical Instructions, it shall notify ICAO promptly of such State variations for publication in the Technical Instructions.

Note.— <u>Contracting Each</u> States <u>are is</u> expected to notify a difference to the provisions of <u>2.2.1</u> <u>2.3.1 and 2.3.2</u> under Article 38 of the Convention only if they are unable to accept the binding nature of the Technical Instructions. Where States have adopted different provisions from those specified in the Technical Instructions, they are expected to be reported only under the provisions of <u>2.5.3.2</u>.

Origin:	Rationale:
DGP/29	Proposed to be moved from Chapter 2 to this chapter so that all SARPs related to providing information to ICAO are in one place.

The following is moved from current 2.2.2:

3.3 Difficulties encountered in the application of the Technical Instructions

2.2.2 **Recommendation.**— Each—Contracting State should inform ICAO of difficulties encountered in the application of the Technical Instructions and of any amendments which it would be desirable to make to them.

Origin:	Rationale:
DGP/29	a) Heading added to differentiate between other sections of this chapter b) Proposed to be moved from Chapter 2 to this chapter so that all SAPRs related to
	b) Proposed to be moved from Chapter 2 to this chapter so that all SARPs related to providing information to ICAO are in one place.

CHAPTER 4. LIMITATION ON THE TRANSPORT OF DANGEROUS GOODS BY AIRSTATE SAFETY MANAGEMENT RESPONSIBILITIES

4.1 Dangerous goods permitted for transport by air

The transport of dangerous goods by air shall be forbidden except as established in this Annex and the detailed specifications and procedures provided in the Technical Instructions.

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 granted by the State of Origin:

- a) dangerous goods that are identified in the Technical Instructions as being forbidden for transport in normal circumstances; and
- b) infected live animals.

4.3 Dangerous goods forbidden for transport by air under any circumstances

Articles and substances that are specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport by air under any circumstances shall not be carried on any aircraft.

Origin:	Rationale:
DGP/29	The SARPs currently in Chapter 4 for the limitation on the transport of dangerous goods are moved to Chapter 2 to keep the general regulatory framework for transport of dangerous goods by air in one place.
	It is proposed that Chapter 4 contain safety management provisions specific to dangerous goods with the aim of ensuring all entities involved with the safe transport of dangerous goods are working towards the level of safety expected in aviation.

Note 1.— Provisions for a State Safety Programme (SSP) are contained in Chapter 3 to Annex 19. Guidance on an SSP is contained in the Safety Management Manual (SMM) (Doc 9859).

Note 2.— This chapter contains specific State safety management responsibilities relevant to the safe transport of dangerous goods by air. Guidance on the integration of the safe transport of dangerous goods by air into the SSP is contained in Doc xxxx (forthcoming).

Origin:	Rationale:
DGP/29	Authorities involved with the safe transport of dangerous goods by air may not all be part of the aviation sector in some States. The notes are intended to ensure all are aware of the requirements for a State safety programme and the fact that the transport of dangerous goods by air is an integral part of it.

4.1 Approval and exemption obligations

Each State shall implement documented processes and procedures to ensure that individuals and organizations performing an activity related to the transport of dangerous goods by air meet the established requirements before they are allowed to exercise the privileges of an approval or exemption to conduct the relevant dangerous goods activity.

Note.— Guidance on the establishment of documented processes and procedures related to the granting of exemption and approval obligations is contained in Doc xxxx (forthcoming), Chapter yyyy.

Origin:	Rationale:
DGP/29 DGP/27	This Standard is aimed at ensuring States meet their responsibilities with respect to the granting of exemptions and approvals related to the transport of dangerous goods by air. The DGP has identified a need for additional guidance on the issuance of approvals and exemptions, particularly with respect to which entities the approval or exemption should be issued to and the relationship between the shipper, the operator and the State authorities processing them. Ensuring each Contracting State has documented process and procedures and providing guidance to assist them in developing them will help ensure States meet their exemption and approval obligations.

4.2 Dangerous goods safety investigations

- 4.2.1 Each State shall establish a process to investigate dangerous goods accidents and dangerous goods incidents reported in accordance with Chapter 10 in support of the management of safety in the State.
 - 4.2,2 Each State shall implement a risk-based process for the analysis and investigation of:
 - a) occasions when undeclared or misdeclared dangerous goods are discovered in cargo or mail;
 - b) occasions when dangerous goods not permitted in passenger or crew baggage are discovered; and
 - c) other safety issues

which are reported in accordance with Chapter 10 in support of the management of safety in the State.

Origin:	Rationale:
0.18	
DGP/29	This new Standard replaces the SARPs currently in 12.1 and 12.2 that require each Contracting State to establish procedures for investigating and compiling information concerning dangerous goods accidents and incidents which occur in its territory and involve the transport of dangerous goods originating or destined for another State and to report in accordance with the Technical Instructions and recommends the same when not originating or destined for another State.
	While accidents and incidents defined in accordance with Annex 13 apply to the operation of an aircraft, dangerous goods accidents and incidents defined in accordance with Annex 18 do not necessarily occur on board an aircraft. This SARP is intended to ensure that dangerous goods accidents or incidents that do not meet the criteria for accidents or incidents defined in Annex 13 are investigated. The investigation of an accident or incident that did not occur on board an aircraft is valuable because it may reveal safety deficiencies that need to be resolved to prevent another accident or incident and to prevent an incident from leading to an accident.
	The wording of the Standard is revised to:
	 a) align with the wording in Annex 19; b) require the establishment of a process to conduct safety investigations for all accidents and incidents involving the transport of dangerous goods that are reported to the State regardless of where they occurred; c) remove the reference to compiling information because this is covered in new Chapter 10 which is proposed to contain provisions related to safety intelligence.

4.2.3 Each State shall participate in cooperative efforts with other States conducting dangerous goods safety investigations, as appropriate, with the aim of resolving safety issues and eliminating violations of dangerous goods regulations.

Origin:	Rationale:
DGP/29	This new Standard replaces the recommendation currently in 11.2. The cooperation of States when conducting safety investigations of an international nature is critical for the resolution of dangerous goods safety issues. The recommendation is therefore upgraded to a SARP. Supporting guidance is included in the current recommendation. It is proposed to delete it and to incorporated it in the new guidance document to support implementation of Annex 18.

4.3 Management of safety risks

4.3.1 Dangerous goods transported as cargo or mail

- 4.3.1.1 Each State shall address safety risks associated with dangerous goods offered, handled or transported or caused to be offered, handled or transported as cargo or mail by air.
- 4.3.1.2 Each State shall implement measures aimed at preventing dangerous goods not in compliance with the Technical Instructions from being transported in cargo or mail by air.
- 4.2.1.3 Each State shall implement measures aimed at ensuring that any person that offers, handles or transports or causes to be offered, handled or transported dangerous goods in cargo or mail has processes and

procedures in place to identify dangerous goods in cargo or mail that are not in compliance with the Technical Instructions and to prevent them from being offered for transport by air or loaded on an aircraft.

4.3.2 Dangerous goods carried by passengers and crew

- 4.3.2.1 Each State shall address safety risks associated with dangerous goods carried by passengers or crew.
- 4.3.2.2 Each State shall implement measures aimed at preventing passengers or crew from carrying dangerous goods on board an aircraft which they are not permitted to carry.
- 4.3.2.3 Each State shall implement measures aimed at ensuring that entities handling baggage have processes and procedures in place to recognize dangerous goods not permitted to be carried by passengers or crew and to prevent them from being carried on an aircraft when they are discovered.

Note.—. Guidance on managing safety risks associated with dangerous goods is contained in Docs 10102 and Doc xxxx (forthcoming), Chapter yyyy.

Origin:	Rationale:
DGP/29	Section 4.3 addresses risk posed by hazards introduced throughout the supply chain and carried by passengers and crew, particularly when not in compliance with regulations, which may pose significant safety risks to aviation. Annex 6 obligates the operator to consider the supply chain in its safety risk management activities. Supply chains impact multiple operators. It is therefore important for the State to assess system-wide hazards and manage system-wide safety risks to improve system-wide safety. These SARPs will be supported by robust guidance material.

4.4 State safety promotion

4.4.1 Dangerous goods transported as cargo or mail

4.4.1.1 Each State shall include activities aimed at preventing the transport of dangerous goods in cargo and mail by air which are not in compliance with the provisions of this Annex and the Technical Instructions in the State safety promotion activities required by Annex 19.

4.4.2 Dangerous goods carried by passengers or crew

- 4.4.2.1 Each State shall include activities to increase passenger and crew awareness of dangerous goods which they are forbidden to carry on an aircraft in the State safety promotion activities through its SSP.
- 4.4.2.2 Each State shall establish means to promote dangerous goods safety and a positive safety culture throughout the supply chain.

Origin:	Rationale:
DGP/29	State safety promotion specific to dangerous goods is needed for the same reasons it is needed in other aviation sectors. The new SARPs are needed because State safety promotion needs to extend beyond the aviation system. This is essential to the management of safety risks associated with the transport of dangerous goods, particularly the risk of noncompliance with dangerous goods regulations.

CHAPTER 5. PACKING SAFETY OF THE SUPPLY CHAIN

5.1 General requirements

Dangerous goods shall be packed in accordance with the provisions of this chapter and as provided for in the Technical Instructions.

5.2 Packagings

- 5.2.1 Packagings used for the transport of dangerous goods by air shall be of good quality and shall be constructed and securely closed so as to prevent leakage which might be caused in normal conditions of transport, by changes in temperature, humidity or pressure, or by vibration.
- 5.2.2 Packagings shall be suitable for the contents. Packagings in direct contact with dangerous goods shall be resistant to any chemical or other action of such goods.
- 5.2.3 Packagings shall meet the material and construction specifications in the Technical Instructions.
- 5.2.4 Packagings shall be tested in accordance with the provisions of the Technical Instructions.
- 5.2.5 Packagings for which retention of a liquid is a basic function, shall be capable of withstanding, without leaking, the pressure stated in the Technical Instructions.
- 5.2.6 Inner packagings shall be so packed, secured or cushioned as to prevent their breakage or leakage and to control their movement within the outer packaging(s) during normal conditions of air transport. Cushioning and absorbent materials shall not react dangerously with the contents of the packagings.
- 5.2.7 No packaging shall be reused until it has been inspected and found free from corrosion or other damage. Where a packaging is reused, all necessary measures shall be taken to prevent contamination of subsequent contents.
- 5.2.8 If, because of the nature of their former contents, uncleaned empty packagings may present a hazard, they shall be tightly closed and treated according to the hazard they constitute.
 - 5.2.9 No harmful quantity of a dangerous substance shall adhere to the outside of packages.

Origi	in:	Rationale:
DGP	2/29	The provisions in this chapter are details contained in the Technical Instructions. The
		SARPs are therefore redundant. Packing requirements are now covered more generally by
		the SARP proposed in new Chapter 5, 5.2.1 b) 3).

Origin:	Rationale:
DGP/29	A new chapter on the safety of the supply chain is proposed to more clearly outline the expectations of States. Current Annex 18 has three separate chapters that address responsibilities of entities involved with preparing and offering dangerous goods for transport. These are: Chapter 3: Classification; Chapter 5: Packing; Chapter 6: Labelling and marking; Chapter 7: Shipper's responsibilities. All of them point to the provisions of the Technical Instructions, with some provisions from the Technical Instructions repeated in the Annex. They do not directly state what is required of the State, and there does not appear to be any rationale for determining what should be repeated and what should simply be referred to. This new chapter clearly defines what is expected of the State, which is to adopt regulations directed at entities in the supply chain preparing, offering and transporting dangerous goods for transport by air. The new chapter lists the functions for which regulations are needed and refers to the applicable parts of the Technical Instructions where the detailed Instructions are found. Listing the functions provides the added benefit of an overview of how the Technical Instructions mitigate risk.

5.1 Primary aviation legislation

Each State shall promulgate laws that enable the oversight and safety management of entities that offer, handle, transport or cause to be offered, handled or transported dangerous goods by air, the resolution of safety issues and the enforcement of regulations through the relevant authorities established for that purpose.

Origin:	Rationale:
DGP/29	This, along with proactive/risk-based SARPs in new Chapter 4, replace what is the current Standard in 11.1. The current Standard requires inspection, surveillance and enforcement procedures for all entities performing any dangerous goods function prescribed in a State's regulations. Requiring surveillance activities for all these entities is impossible to implement given the vast numbers performing dangerous goods functions and the fact that licence, certification, authorization or approval obligations do not apply to entities other than operators and designated postal operators. Inspection and enforcement procedures are covered by the SARPs for State safety risk management. It will be supplemented by guidance material.

5.2 Specific operating regulations

Each State shall establish specific operating regulations to require, at a minimum, that:

- a) a person does not offer or cause to be offered for transport:
 - 1) articles or substances which are forbidden for transport in accordance with 2.4.3;
 - 2) articles or substances which are forbidden for transport in accordance with 2.4.2 unless permitted by the States concerned through an approval or exemption;

Origin:	Rationale:
DGP/29	5.2.1 a) and b) replace part of current 7.1.

- b) a person does not offer or cause to be offered dangerous goods for transport unless:
 - 1) associated hazards are identified in accordance with the classification criteria of Part 2 of the Technical Instructions;

Origin:	Rationale:
DGP/29	5.2.1 b) 1) replaces current Chapter 3

2) risks associated with the identified hazards are mitigated at the package level through quantity limitations, packing and packaging requirements in accordance with Parts 3, 4 and 6 of the Technical Instructions;

Origin:	Rationale:
DGP/29	5.2.1 b) 2 Replaces part of current 7.1 (Shippers' responsibilities — general requirements) and Chapter 5 (Packing).

3) hazard and handling information are communicated to entities in the supply chain in accordance with the marking, labelling and documentation requirements of Parts 3, 4 and 5 of the Technical Instructions;

Origin:	Rationale:
DGP/29	4.1.2 b) 3) replaces Chapter 6 (Labelling and Marking) and 7.2 (Dangerous goods transport document).

c) documentation is retained in accordance with the Technical Instructions;

Origin:	Rationale:
DGP/29	The need for documentation to be retained is required by the detailed provisions of the
	Technical Instructions. The documentation is evidence of compliance and provides
	important information for safety investigations.

d) in the case of radioactive material, a radiation protection programme is established in accordance with Part 1;6 of the Technical Instructions;

Origin:	Rationale:
	The Technical Instructions contain provisions for a radiation protection programme by entities involved with the transport of radioactive material. There was never any reference to this in Annex.

- e) operators accept, handle and transport dangerous goods in accordance with Chapter 6;
- f) dangerous goods accidents, dangerous goods incidents and occasions when undeclared or misdeclared dangerous goods are discovered are reported in accordance with Chapter 10;
- g) training and assessment is conducted in accordance with Chapter 9;

h) dangerous goods are not offered, caused to be offered or accepted for transport by mail unless specifically permitted in accordance with Chapter 8; and

Origin:	Rationale:
DGP/29	5.2.1 e), f), g) and h) establish the need for the State to establish regulations aimed at the operator, reporting, training and assessment and the mail. They refer to the associated SARPs in the Annex.

i) entities other than operators involved in the transport of dangerous goods by air provide such information to their personnel as will enable them to carry out their responsibilities regarding the transport of dangerous goods including instructions as to the action to be taken in the event of emergency involving dangerous goods.

Note.— The operator's responsibility to establish dangerous goods procedures, instructions and guidance in its operations manual is contained in Annex 6, Part I, Chapter 14; Part III, Chapter 12; and Part IV, Chapter 14.

Origin:	Rationale:
	5.2.1 i) is moved from 9.4. The text in 9.4 is modified to make it applicable to entities other than the operator, given that the operator is required to provide the information and instructions in the Operators Manual in accordance with Annex 6 and is now proposed to be covered to be SARPs in Chapter 6. This is reflected through the note under g).

CHAPTER 6. LABELLING AND MARKING

6.1 Labels

Unless otherwise provided for in the Technical Instructions, each package of dangerous goods shall be labelled with the appropriate labels and in accordance with the provisions set forth in those Instructions.

6.2 Markings

- 6.2.1 Unless otherwise provided for in the Technical Instructions, each package of dangerous goods shall be marked with the proper shipping name of its contents and, when assigned, the UN number and such other markings as may be specified in those Instructions.
- 6.2.2 Specification markings on packagings. Unless otherwise provided for in the Technical Instructions, each packaging manufactured to a specification contained in those Instructions shall be so marked in accordance with the appropriate provisions of those Instructions and no packaging shall be marked with a packaging specification marking unless it meets the appropriate packaging specification contained in those Instructions.

6.3 Languages to be used for markings

Recommendation. In addition to the languages required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the markings related to dangerous goods.

Origin:	Rationale:
DGP/29	The provisions in this chapter are details contained in the Technical Instructions. The SARPs are therefore redundant. Labelling and marking requirements are now covered more generally by the SARP proposed in new Chapter 5, 5.2.1 b) 4).

CHAPTER 7. SHIPPER'S RESPONSIBILITIES

7.1 General requirements

Before a person offers any package or overpack of dangerous goods for transport by air, that person shall ensure that the dangerous goods are not forbidden for transport by air and are properly classified, packed, marked, labelled and accompanied by a properly executed dangerous goods transport document, as specified in this Annex and the Technical Instructions.

Origin:	Rationale:	
DGP/29	This SARP is covered by proposed new 5.2.1 a), 5.2.1 b) 2), 5.2.1 b) 3), 5.2.1 b) 4) and 5.2.1 b) 5)	

7.2 Dangerous goods transport document

- 7.2.1 Unless otherwise provided for in the Technical Instructions, the person who offers dangerous goods for transport by air shall complete, sign and provide to the operator a dangerous goods transport document, which shall contain the information required by those Instructions.
- 7.2.2 The transport document shall bear a declaration signed by the person who offers dangerous goods for transport indicating that the dangerous goods are fully and accurately described by their proper shipping names and that they are classified, packed, marked, labelled, and in proper condition for transport by air in accordance with the relevant regulations.

Origin:	Rationale:
DGP/29	The provisions in 7.2 are details contained in the Technical Instructions. The SARPs are therefore redundant. The dangerous goods transport document is covered by proposed new 5.2.1 b) 3)

7.3 Languages to be used

Recommendation. In addition to the languages which may be required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the dangerous goods transport document.

Origin:	Rationale:
DGP/29	This recommendation is contained in by Part 5, Chapter 4, 4.1.6.3 of the Technical Instructions. It is therefore redundant.

Origin:	Rationale:
DGP/29	This rational applies to all of new Chapter 6 (Operator's responsibilities):
	 A change in the structure of the chapter is proposed to differentiate between those operators with and those without specific approvals to transport dangerous goods as cargo in alignment with the structure of the dangerous goods chapters in Annex 6 (Chapters 14 in Parts I and IV and Chapter 12 in Part II). This makes the responsibilities applicable to each type of operator clear and establishes a stronger connection with Annex 6. The SARPs for the operator responsibilities have been expanded to ensure all the detailed provisions in the Technical Instructions are connected to a high-level Standard in the Annex to provide more visibility to States, enabling them to better assess an operator's ability to perform dangerous goods functions through the AOC process and during surveillance activities. Editorial amendments to existing SARPs are made to make the subject of the SARP
	clear and to align with language used in Annex 6 (i.e. "The operator shall").

CHAPTER 86. OPERATOR'S RESPONSIBILITIES

- Note 1.— This chapter distinguishes responsibilities for operators who have not been issued a specific approval to transport dangerous goods (6.2) from those who have been issued a specific approval to transport dangerous goods (6.3) by separating them into two sections. Specific approval in the context of this chapter refers to an approval issued to an air operator in accordance with Annex 6.
- Note 2.— Annex 19 includes safety management provisions for air operators. Further guidance is contained in the Safety Management Manual (SMM) (Doc 9859).
- Note 3.— The carriage of dangerous goods is included in the scope of the operator's safety management system (SMS).
- Note 4.— See Annex 6 Operation of Aircraft, Part I International Commercial Air Transport Aeroplanes, Chapter 15 and Part IV International Operations Remotely Piloted Aircraft Systems, Chapter 15 for SARPs concerning cargo compartment safety.
- Note 5.— It is not intended that this Annex be interpreted as requiring an operator to transport a particular article or substance. It is also not intended to prevent an operator from adopting requirements on the transport of a particular article or substance in addition to what is required by this Annex.

Origin:	Rationale:
DGP/29	Note 1 explains the structure of the chapter and what is meant by a specific approval.
	Note 4 refers to operator responsibilities impacting dangerous goods contained in Annex 6.
	Note 5 is moved from Chapter 2: Applicability. The note is currently under the provisions for approvals and exemptions, but its application goes beyond these. Moving the note to this chapter makes the provisions for operators more comprehensive. Editorial amendments are proposed for clarification.

6.1 General

- 6.1.1 The provisions of 6.2 apply to operators who have not been issued a specific approval for the transport of dangerous goods.
- 6.1.2 The provisions of 6.3 apply to operators who have been issued a specific approval for the transport of dangerous goods.

Origin:	Rationale:
DGP/29	6.1.1 and 6.1.2 set out the applicability of the two remaining sections in this chapter, one for those operators without specific approval to transport dangerous goods as cargo and one for those with specific approval. The two sections correspond with the two sections in Annex 6, Part I, Chapter 14, Part II, Chapter 12 and Part IV, Chapter 14. DGP proposes to maintain the dangerous goods provisions in Annex 18 and to replace what is in Annex 6 with references to the sections in this Annex. Keeping the dangerous goods SARPs in Annex 18 allows for a comprehensive set of dangerous goods provisions and facilitates maintenance of them. DGP proposes repeating provisions that apply to both types of operators in 6.2 and 6.3 as is done in Annex 6. This eliminates any ambiguity as to what each operator is responsible for, which is sometimes the case for operators without specific approval.

6.2 Operators with no specific approval for the transport of dangerous goods

Origin:	Rationale:
DGP/29	6.2 is a proposed new section specific to operators with no specific approval for the transport of dangerous goods as cargo. It is added with the aim of making dangerous goods responsibilities for these operators clear (see rationale under 6.1.3).

6.2.1 General

provisions for operators to include dangerous goods procedures, instructions and guidance in its operations manual, including emergency procedures involving dangerous goods.

Note 2.— See also Annex 6 Part I, 4.2.1.3.1, Part III, 2.2.1.3.1 and Part IV, 4.2.2.1 for work performed by third parties on behalf of the operator.

Origin:	Rationale:
DGP/29	Note 1 is proposed in lieu of maintaining the Standards in current 9.2 and 9.4 requiring information and instructions to flight crew members in the Operations Manual and information to other operator employees involved in the transport of dangerous goods enabling them to carry out their responsibilities given that these requirements are in Annex 6.
	Note 2 refers to Standards in Annex 6 requiring the operator to develop policies and procedures for third parties that perform work on its behalf.

6.2.2 Dangerous goods carried by passengers and crew

- 6.2.2.1 The operator shall ensure that measures are in place to mitigate the risk of passengers and crew members carrying dangerous goods on board an aircraft which they are not permitted to carry.
 - 6.2.2.2 The mitigations required by 6.2.2.1 shall include, at a minimum:
- a) measures aimed at ensuring that passengers and crew members are aware of the limitations on the carriage of dangerous goods on aircraft; and
- b) ensuring relevant personnel are trained to assist them in identifying and detecting dangerous goods.

Note 1.— See Part 7;5 of the Technical Instructions for provision of information to passengers and for passenger check-in procedures.

Note 2.— See Part 7;6 of the Technical Instructions for provisions to aid recognition of dangerous goods in general cargo, baggage or mail.

Origin:	Rationale:
DGP/29	6.2.2.1 and 6.2.2.2 are proposed new SARPs aimed at mitigating against the risk of dangerous goods in baggage or mail being transported on an aircraft that are not in compliance with the Technical Instructions. The Technical Instructions currently contain several prescriptive requirements related to information to passengers and crew to make them aware of dangerous goods limitations. The proposed new SARPs are intended to make the need to mitigate the risk clear while not limiting measures to what is provided in Technical Instructions. It aims to ensure operators implement effective measures for their specific operating environment while incorporating the existing measures in the Technical Instructions in a manner that focuses on what needs to be achieved.

6.2.2.3 The operator shall establish criteria for approving a passenger or crew member to safely carry dangerous goods that are identified by Part 8 of the Technical Instructions as only being permitted with the approval of the operator.

Origin:	Rationale:
DGP/29	6.2.2.3 is a proposed new SARP. Some dangerous goods are only permitted for carriage by passengers and crew with the approval of the operator as specified in Table 8-1 of the Technical Instructions (e.g. battery-powered mobility aids, oxygen cylinders required for medical use, dry ice). There are specific handling and loading requirements for the operator for some of them. Including this general SARP in the Annex is proposed to make it clear to States that the operator needs to demonstrate it can carry these goods safely.

6.2.2.4 The operator shall load dangerous goods carried by passengers or crew members in accordance with the applicable requirements of the Technical Instructions.

Origin:	Rationale:
DGP/29	The Technical Instructions contain loading requirements for certain dangerous goods carried by passengers and crew, but there is no related Standard in current Annex 18. 6.2.2.4 is proposed to close that gap and to make it clear to States.

6.2.2.5 The operator shall isolate baggage suspected of being contaminated by dangerous goods and nullify any hazardous contamination before the baggage is subsequently transported.

6.2.3 Transport of cargo or mail

- 6.2.3.1 The operator shall ensure that measures are in place to mitigate the risk of:
- a) dangerous goods being transported as cargo on an aircraft;
- b) dangerous goods being transported which are intended as replacement for or removed for replacement of those required to be aboard an aircraft in accordance with pertinent airworthiness requirements and operator regulations; and
- c) dangerous goods being transported in mail which are not in compliance with the Technical Instructions.
- 6.2.3.2 The mitigations required by 6.2.3.1 shall include, at a minimum:
- a) measures aimed at ensuring that cargo customers are aware of the limitations on the transport of dangerous goods as cargo on aircraft;
- b) measures aimed at assisting operators' cargo acceptance personnel in identifying, detecting and rejecting dangerous goods presented as general cargo and dangerous goods not permitted in mail.
 - *Note 1.— See 2.4 for limitations on the transport of dangerous goods by air.*
- Note 2.— See Part 7;1.1 of the Technical Instructions for cargo acceptance procedures related to detecting dangerous goods presented as general cargo.
- Note 3.— See Part 7;4.8 of the Technical Instructions for provision of information at cargo acceptance points.

Note 4.— See Part 7;6 of the Technical Instructions for provisions to aid recognition of dangerous goods in general cargo, baggage or mail.

Origin:	Rationale:
DGP/29	6.2.3.1 and 6.2.3.2 are proposed new SARPs aimed at mitigating the risk of non-compliance dangerous goods being transported by air.
	The inadvertent transport of undeclared dangerous goods offered as general cargo, dangerous goods in air mail that are not permitted, and dangerous goods carried by passengers and crew that are not permitted pose a risk to aircraft. The Technical Instructions currently contain several prescriptive requirements for information concerning dangerous goods to be provided to various entities that may introduce this risk as one way to mitigate it. These are referred to in the Notes proposed for inclusion under 6.2.3.2. The proposed new SARPs are intended to make the need to mitigate the risk clear while not limiting measures to what is provided in Technical Instructions. It aims to ensure operators implement effective measures for their specific operating environment while incorporating the existing measures in the Technical Instructions in a manner that focuses on what needs to be achieved.

6.2.3.3 Damage or leakage

The operator shall ensure that cargo or mail suspected of being contaminated by dangerous goods is isolated and any hazardous contamination nullified before the cargo or mail is subsequently transported.

Origin:	Rationale:
DGP/29	Current 8.4.3 applies to packages of dangerous goods appearing to be damaged or leaking but not to mail, and it implies that the operator would know that a package contained dangerous goods. The operator would only know if a package contained dangerous goods if it was declared as such. The SARP in 8.4.3 is therefore proposed to contamination from undeclared dangerous goods.

6.3 Operators with a specific approval for the transport of dangerous goods

6.3.1 General

Note 1.— Specific approvals for the transport of dangerous goods are issued by the State of Operator in accordance with Annex 6.

Note 2.— Annex 6, Part I, Chapter 14 and Appendix 2, Annex 6, Part III, Chapter 12 and Appendix 8 and Annex 6, Part IV, Chapter 14 and Appendix 2 include provisions for the operators to include dangerous goods procedures, instructions and guidance in its operations manual, including emergency procedures involving dangerous goods.

Note 3.— See also Annex 6, Part I, 4.2.1.3.1, Part III, 2.2.1.3.1 and Part IV, 4.2.2.1 for work performed by third parties on behalf of the operator.

Origin:	Rationale:
DGP/29	Note 1 creates a link to Annex 6 with respect to the AOC process by explaining where the provisions for a specific approval are contained.
	Note 2 creates a link to Annex 6 with respect to the operations manual and for it to include emergency procedures involving dangerous goods by where the requirements are. This requirement is currently contained in Annex 18 through 9.2 and 9.4. It is proposed for deletion given that it is redundant.
	Note 3 refers to Standards in Annex 6 requiring the operator to develop policies and procedures for third parties that perform work on its behalf.

6.3.2 Dangerous goods carried by passengers and crew members

- 6.3.2.1 The operator shall ensure that measures are in place to mitigate the risk of passengers and crew members carrying dangerous goods on board an aircraft which they are not permitted to carry.
 - 6.3.2.2 The mitigations required by 6.3.2.1 shall include, at a minimum:
 - a) measures aimed at ensuring passengers and crew members are aware of the limitations on the carriage of dangerous goods on aircraft; and
- b) ensuring relevant personnel are trained to assist them in identifying and detecting dangerous goods.

<u>Note 1.— See Part 7;5 of the Technical Instructions for provision of information to passengers and for passenger check-in procedures.</u>

Note 2.— See Part 7;6 of the Technical Instructions for provisions to aid recognition of dangerous goods in general cargo, baggage or mail.

Origin:	Rationale:
DGP/29	6.2.2.1 and 6.2.2.2 are proposed new SARPs aimed at mitigating against the risk of dangerous goods in baggage or mail being transported on an aircraft that are not in compliance with the Technical Instructions. The Technical Instructions currently contain several prescriptive requirements related to information to passengers and crew to make them aware of dangerous goods limitations. The proposed new SARPs are intended to make the need to mitigate the risk clear while not limiting measures to what is provided in Technical Instructions. It aims to ensure operators implement effective measures for their specific operating environment while incorporating the existing measures in the Technical Instructions in a manner that focuses on what needs to be achieved.

6.3.2.3 The operator shall establish criteria for approving a passenger or crew member to safely carry dangerous goods that are identified by Part 8 of the Technical Instructions as only being permitted with the approval of the operator.

Origin:	Rationale:
DGP/29	6.2.2.3 is a proposed new SARP. Some dangerous goods are only permitted for carriage by passengers and crew with the approval of the operator as specified in Table 8-1 of the Technical Instructions (e.g. battery-powered mobility aids, oxygen cylinders required for medical use, dry ice). There are specific handling and loading requirements for the operator for some of them. Including this general SARP in the Annex is proposed to make it clear to States that the operator needs to demonstrate it can carry these goods safely.

6.3.2.4 The operator shall load dangerous goods carried by passengers or crew members in accordance with the applicable requirements of the Technical Instructions.

Origin:	Rationale:
DGP/29	The Technical Instructions contain loading requirements for certain dangerous goods carried by passengers and crew, but there is no related Standard in current Annex 18. 6.3.2.4 is proposed to close that gap and to make it clear to States.

6.3.2.5 The operator shall isolate baggage suspected of being contaminated by dangerous goods and nullify any hazardous contamination before the baggage is subsequently transported.

Origin:	Rationale:
DGP/29	Current Annex 18 has a similar requirement in 8.4.3 that does not apply to baggage. The Technical Instructions have provisions related to baggage. 6.3.2.5 is proposed to make it clear to States that operators need procedures in place to deal with baggage suspected of being contaminated by dangerous goods.

6.3.3 Transport of cargo and mail

6.3.3.1 Prevention of non-compliance

- 6.3.3.1.1 The operator shall ensure that measures are in place to mitigate the risk of:
- a) dangerous goods being transported as cargo on an aircraft that are not in compliance with the Technical Instructions and the limitations with regard to the transport of dangerous goods established in the Operations Manual;
- b) dangerous goods being transported which are intended as replacement for or removed for replacement of those required to be aboard an aircraft in accordance with pertinent airworthiness requirements and operator regulations that are not in compliance with the Technical Instructions; and
- b) dangerous being transported in air mail which are not in compliance with the Technical Instructions.

- 6.3.3.1.2 The mitigations required by 6.3.3.1,1 shall include, at a minimum:
- a) measures aimed at ensuring cargo customers are aware of the limitations on the transport of dangerous goods as cargo by air; and
- b) measures aimed at assisting operators' acceptance staff personnel in identifying, detecting and rejecting dangerous goods presented as general cargo.
- Note 1.— See 2.4 for limitations on the transport of dangerous goods by air.
- <u>Note 2.— See Part 7;4.8 of the Technical Instructions for provision of information at cargo acceptance points.</u>
- Note 3.— See Part 7;1.1 of the Technical Instructions for cargo acceptance procedures related to detecting dangerous goods presented as general cargo.

Note 4.— See Part 7;6 of the Technical Instructions for provisions to aid recognition of dangerous goods in general cargo, baggage or mail.

Origin:	Rationale:
DGP/29	6.3.3.1 contains proposed new SARPs aimed at mitigating the risk of non-compliance dangerous goods being transported by air.
	The inadvertent transport of undeclared dangerous goods offered as general cargo, dangerous goods in air mail that are not permitted, and dangerous goods carried by passengers and crew that are not permitted pose a risk to aircraft. The Technical Instructions currently contain several prescriptive requirements for information concerning dangerous goods to be provided to various entities that may introduce this risk as one way to mitigate it. These are referred to in the Notes proposed for inclusion at the bottom of the section. The proposed new SARPs are intended to make the need to mitigate the risk clear while not limiting measures to what is provided in Technical Instructions. It aims to ensure operators implement effective measures for their specific operating environment while incorporating the existing measures in the Technical Instructions in a manner that focuses on what needs to be achieved.

8.16.3.3.2 Acceptance of dangerous goods for transport as cargo

An 6.3.3.2.1 The operator shall not accept dangerous goods for transport by airas cargo:

- a) unless the dangerous goods are accompanied by a completed information is provided in accordance with Part 7;1.2 of the Technical Instructions describing the dangerous goods transport documentin the consignment, except where the Technical Instructions indicate that such a documentinformation is not required; and
- b) until the package, overpack or freight container containing the dangerous goods has been inspected in accordance with the acceptance procedures contained in Part 7;1 of the Technical Instructions.

Note 2. Special provisions relating to the acceptance of overpacks are contained in the Technical Instructions.

8.2 Acceptance checklist

- 6.3.3.1 An The operator shall develop and use an acceptance checklist as an aid to compliance with the provisions of 8.1 6.3.3.2.1 in accordance with Part 7;1 of the Technical Instructions.
- 6.3.3.2.3 The operator shall not accept a freight container or unit load device containing dangerous goods from a shipper except as permitted by 7;1 of the Technical Instructions.

Origin:	Rationale:
DGP/29	"As cargo" is added to reflect the fact that these acceptance procedures apply only to dangerous goods offered for transport as cargo.
	Sub-paragraph a) is modified from current 8.1 a) to accommodate dangerous goods information provided electronically, which the Technical Instructions allow.
	Note 1 under current 8.1 is deleted to remove the implication that the reporting of dangerous goods accidents and incidents is only applicable during acceptance.
	Note 2 under current 8.1 is deleted as it is considered unnecessary. "Overpack" is referenced in 6.3.3.1, making it clear that there are provisions for them in the Technical Instructions.
	A separate section for the acceptance checklist is considered unnecessary since it is directly related to the provisions in the previous section. It is therefore proposed to delete the heading in current 8.2.
	The requirement in proposed new 6.3.3.2.3 is contained in the Technical Instructions but not Annex 18. The amendment closes this gap.

6.3.3.3 Handling

6.3.3.3.1 *General*

- 6.3.3.3.1.1 The operator shall handle cargo containing dangerous goods in a manner that prevents damage, leakage or dangerous reaction in accordance with the provisions of the Technical Instructions.
- 6.3.3.3.1.2 The operator shall ensure that marks and labels required by the Technical Instructions are visible throughout the course of air transport in accordance with Part 7;2 of the Technical Instructions.
- 6.3.3.3.1.3 The operator shall ensure that dangerous goods contained in unit load devices are identified on the exterior of the unit load devices in accordance with Part 7;2 of the Technical Instructions.

Origin:	Rationale:
DGP- WG/Annex 18	How dangerous goods are handled contributes to their safe transport. The Technical Instructions contain provisions related to handling, yet there is no mention of this function in Annex 18. SARPs related to handling are proposed to address this gap in Annex 18.

86.3.3.3.2 *Loading, unloading and stowage*

Packages and overpacks containing dangerous goods and freight containers containing radioactive materials shall be loaded and stowed on an aircraft in accordance with the provisions of the Technical Instructions.

Origin:	Rationale:	
DGP/30	It is proposed to replace this general SARP with more detailed SARPs contained in this	
	section about loading and stowage and also requirements for unloading of dangerous goods.	

8.4 Inspection for damage or leakage

- 8.4.1 Packages and overpacks containing dangerous goods and freight containers containing radioactive materials shall be inspected for evidence of leakage or damage before loading on an aircraft or into a unit load device. Leaking or damaged packages, overpacks or freight containers shall not be loaded on an aircraft.
- 8.4.2 A unit load device shall not be loaded aboard an aircraft unless the device has been inspected and found free from any evidence of leakage from, or damage to, any dangerous goods contained therein.
- 8.4.3 Where any package of dangerous goods loaded on an aircraft appears to be damaged or leaking, the operator shall remove such package from the aircraft, or arrange for its removal by an appropriate authority or organization, and thereafter shall ensure that the remainder of the consignment is in a proper condition for transport by air and that no other package has been contaminated.
- 8.4.4 Packages or overpacks containing dangerous goods and freight containers containing radioactive materials shall be inspected for signs of damage or leakage upon unloading from the aircraft or unit load device. If evidence of damage or leakage is found, the area where the dangerous goods or unit load device were stowed on the aircraft shall be inspected for damage or contamination.

6.3.3.3.2.1 Damage or leakage

6.3.3.3.2.1.1 The operator shall not load dangerous goods as cargo onto an aircraft unless:

- a) packages, overpacks and freight containers containing dangerous goods have been inspected immediately prior to placing them in a unit load device or loading them on an aircraft and found free from any evidence of leakage or damage; and
- b) unit load devices have been inspected and found free from any evidence of leakage from, or damage to, any dangerous goods contained therein.

- 6.3.3.3.2.1.2 The operator shall inspect upon unloading:
- a) packages, overpacks and freight containers containing dangerous goods for evidence of damage or leakage from the aircraft or unit load device; and
- b) unit load devices containing dangerous goods from the aircraft for evidence of leakage from, or damage to any dangerous goods contained therein.
- 6.3.3.2.1.3 The operator shall ensure that cargo or mail containing or suspected of containing dangerous goods is removed from the aircraft or unit load device if there is evidence of damage or leakage in accordance with Parts 7;2 and 7;3 of the Technical Instructions.

6.3.3.3.2.2 Removal of contamination

The operator shall ensure that:

- a) any hazardous contamination found on an aircraft or unit load device from dangerous goods is removed without delay in accordance with the Technical Instructions.
- b) an aircraft which has been contaminated by radioactive materials is immediately taken out of service and not returned to service until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions.

Origin: Rationale: **DGP/29** The Standards for inspecting for damage or leakage of dangerous goods in current 8.4 is separated from Standards for removal of contamination in current 8.6 despite being related. The Standards for contamination are therefore moved under the Standards for inspecting for damage or leakage. "Inspection" is removed from the heading since the discovery of damage or leakage is not limited to inspections. The structure of the section is modified and reordered more logically to more clearly delineate inspections for damage or leakage during loading from inspections during unloading and the action that needs to be taken whenever damage or leakage is discovered. The current Standard for action to be taken if evidence of damage or leakage is discovered in 8.4.3 appears to be comprehensive when it is not. The action is replaced with a reference to more detailed action contained in the Technical Instructions. Current 8.4.3 applies only to packages of dangerous goods appearing to be damaged or leaking. It does not address leakage of dangerous goods from anything other than a package, including mail, and implies that the operator would know that a package contained dangerous goods. The operator would only know if a package contained dangerous goods if it was declared as such. The SARP in 8.4.3 is therefore proposed to be amended to ensure it covers contamination from declared and undeclared dangerous goods and dangerous goods in mail. It also replaces text specifying the action to be taken when evidence of damage or leakage is discovered, which appears to be comprehensive when it is not, with a reference to the detailed requirements in the Technical Insstructions. Editorial amendments are made for the sake of consistent language. A distinction between packages and overpacks containing dangerous goods and freight containers containing radioactive material was removed by simply stating "packages, overpacks and freight containers containing dangerous goods" since radioactive material is dangerous goods. The fact that freight containers can only contain radioactive material when shipping dangerous goods is not relevant to this section.

8.56.3.3.3.2.3 Loading restrictions in passenger cabin or on flight deck

<u>Dangerous</u> 6.3.3.2.3.1 <u>The operator shall ensure that dangerous</u> goods <u>shallare</u> not <u>be</u> carried in an aircraft cabin occupied by passengers or on the flight deck<u>of an aircraft</u>, except in circumstances permitted by the provisions of the Technical Instructions.

6.3.3.2.3.2 The operator shall ensure that dangerous goods are not carried in the main deck cargo compartment of an aircraft conducting passenger operations, except in circumstances permitted by the provisions of the Technical Instructions.

6.3.3.2.3.3 Notwithstanding the provisions in 6.3.3.3.2.3.2, the operator may transport dangerous goods in the main deck cargo compartment of an aircraft conducting passenger operations that do not meet the requirements of Part 7;2.1.1 of the Technical Instructions, if approved by the State of Origin and the State of the Operator, based on the results of an approved safety risk assessment process implemented by the operator.

6.3.3.2.3.4 The process required by 6.3.3.3.2.3.3 shall demonstrate how risks to the operation resulting from such an allowance can be managed.

6.3.3.3.2.3.5 The operator shall ensure that packages of dangerous goods bearing the "Cargo aircraft only" label are not loaded for transport on aircraft conducting passenger operations.

The following is moved from 8.9 of current Annex 18:

8.9 Loading on cargo aircraft

6.3.3.2.3.6 Packages The operator shall ensure that packages of dangerous goods bearing the "Cargo aircraft only" label shall beare loaded on an aircraft conducting cargo operations in accordance with the provisions in Part 7;2.4.1 of the Technical Instructions.

Origin:	Rationale:
DGP/29	Editorial amendments to make the subject of the action required clear and to point to the specific provisions of the Technical Instructions.

8.6 Removal of contamination

8.6.1 Any hazardous contamination found on an aircraft as a result of leakage or damage to dangerous goods shall be removed without delay.

8.6.2 An aircraft which has been contaminated by radioactive materials shall immediately be taken out of service and not returned to service until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions.

8.76.3.3.3.2.4 Separation and segregation

8.76.3.3.2.4.1 Packages The operator shall ensure that packages containing dangerous goods which might react dangerously one with one another shall not be stowed on an aircraft next to are segregated or separated from each other or in a position that would allow interaction between them in the event of leakage.

8.7.2 Packages of toxic and infectious substances shall be stowed on an aircraft, as applicable, in accordance with the provisions Part 7;2.2 of the Technical Instructions.

8.7.3 Packages 6.3.3.2.4.2 The operator shall ensure that packages of radioactive materials shall beare stowed on an aircraft so that they are separated from persons, live animals and undeveloped film, in accordance with the provisions in Part 7;2.9.6 of the Technical Instructions.

8.86.3.3.3.2.5 Securing of dangerous goods cargo loads

When 6.3.3.3.2.5.1 The operator shall protect dangerous goods subject toon the provisions contained herein are loaded in an aircraft, the operator shall protect the dangerous goods or in a unit load device from being damaged, and shall secure such goods in the aircraft in such a manner that will prevent any movement in flight which would change the orientation of the packages.

<u>6.3.3.2.5.2</u> For packages containing radioactive materials, the securing shall be adequate to ensure that the separation requirements of <u>8.76.3.3.2.5.1</u> are met at all times.

6.3.4 Operator responsibilities for specific types of dangerous goods

The operator shall comply with handling, stowage, loading and transport requirements for the specific types of dangerous goods identified in Part 7 of the Technical Instructions.

Origin:	Rationale:
DGP- WG/Annex 18	There are specific requirements for handling, stowing and transporting infectious substances and radioactive material and for handling and loading some specific types of dangerous goods contained in the Technical Instructions, but no mention of this is currently made in Annex 18. The amendment addresses this gap.

9.16.3.5 Information to pilot-in-command or remote-pilot-in-command

The operator of shall ensure that when an aircraft in which is to transport dangerous goods are to be carried shall provide as cargo, the pilot-in-command or remote-pilot-in-command, as applicable, is provided as early as practicable before departure of the aircraft with accurate and legible written or printed information as specified in accordance with Part 7;4.1 of the Technical Instructions.

Origin:	Rationale:
DGP/29	This Standard is moved from current 9.1 and modified to clarify that the information provided applies to dangerous goods transported as cargo and to include the remote-pilot-in-command.

6.3.6 Additional provisions for helicopters and remotely piloted aircraft

- 6.3.6.3 The State of the Operator may, based on the results of an approved safety risk assessment process implemented by the operator, allow for variations to the Technical Instructions for the transport of dangerous goods on helicopters or remotely piloted aircraft where full compliance is not appropriate or necessary due to the type of operation.
- 6.3.6.4 The process required by 6.3.6.3 shall demonstrate how risks to the operation resulting from such variations can be managed.

Note.— Examples of the types of operations where full compliance is not appropriate or necessary referred to in 6.3.6.3 include those involving unmanned sites, remote locations, mountainous areas and construction sites.

Note 2.— Guidance for States on approving variations from the Technical Instructions to transport dangerous goods on helicopters or remotely piloted aircraft is provided in Doc xxxx (forthcoming), Chapter yy.

Origin:	Rationale:
DGP/29	Proposed new 6.3.6.3 is contained in the Technical Instructions, but no mention of it is made in current Annex 18. The amendment addresses this gap. Proposed 6.3.6.4 is not contained in the Technical Instructions. It is added to ensure the State only approves variations if it can be demonstrated that safety risks can be managed. A consequential amendment to the Technical Instructions will be necessary if this is adopted. Guidance currently contained in the Supplement will be moved to the new guidance document to support the implementation of Annex 18.
	It is proposed to extend this provision to remotely-piloted aircraft, given that full compliance may similarly not always be appropriate or necessary for certain types of remotely-piloted aircraft.

Replace 9.6 with the following:	

6.3.7 Provision of information in the event of an aircraft accident, serious incident or incident

6.3.7.1 *Information to emergency services*

The operator shall, without delay, provide emergency services responding to an accident, serious incident or incident the information about the dangerous goods on board that was provided to the pilot-incommand or remote-pilot in command.

6.3.7.2 *Information to States*

6.3.7.2.1 Aircraft accident or serious incident

In the event of an aircraft accident or serious incident where dangerous goods as cargo may have been involved, the operator shall provide, as soon as possible, the information that was provided to the pilot-incommand or remote-pilot in command about the dangerous goods on board to the appropriate authorities of the State of the Operator and the State of Occurrence.

6.3.7.2.2 Aircraft incident

In the event of an aircraft incident, the operator shall, if requested to do so, provide, without delay, the information about the dangerous goods on board that was provided to the pilot-in-command or the remote-pilot-in-command to the appropriate authority of the State of Occurrence.

Note.— The terms "accident", "serious incident" and "incident" are as defined in Annex 13.

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Origin:	Rationale:
DGP/29	The provisions in 6.3.7 are modified from current 9.6 to improve clarity, to clarify who the intended recipients of the dangerous goods information are, and to facilitate the operator's ability to determine who to provide the information to and when to provide.

CHAPTER 7. SHIPPER'S RESPONSIBILITIES

7.1 General requirements

Before a person offers any package or overpack of dangerous goods for transport by air, that person shall ensure that the dangerous goods are not forbidden for transport by air and are properly classified, packed, marked, labelled and accompanied by a properly executed dangerous goods transport document, as specified in this Annex and the Technical Instructions.

Origin:	Rationale:
DGP/29	This SARP is covered by proposed new 5.2.1 a), 5.2.1 b) 2), 5.2.1 b) 3), 5.2.1 b) 4) and 5.2.1 b) 5)

7.2 Dangerous goods transport document

7.2.1 Unless otherwise provided for in the Technical Instructions, the person who offers dangerous goods for transport by air shall complete, sign and provide to the operator a dangerous goods transport document, which shall contain the information required by those Instructions.

7.2.2 The transport document shall bear a declaration signed by the person who offers dangerous goods for transport indicating that the dangerous goods are fully and accurately described by their proper shipping names and that they are classified, packed, marked, labelled, and in proper condition for transport by air in accordance with the relevant regulations.

Origin:	Rationale:
DGP/29	The provisions in 7.2 are details contained in the Technical Instructions. The SARPs are therefore redundant. The dangerous goods transport document is covered by proposed new 5.2.1 b) 4)

7.3 Languages to be used

Recommendation. In addition to the languages which may be required by the State of Origin and pending the development and adoption of a more suitable form of expression for universal use, English should be used for the dangerous goods transport document.

Origin:	Rationale:
DGP/29	This recommendation is contained in by Part 5, Chapter 4, 4.1.6.3 of the Technical Instructions. It is therefore redundant.

Origin:	Rationale:
DGP/29	A new chapter on airport operator's responsibilities is proposed to capture a requirement currently in the Technical Instructions

CHAPTER 7. AIRPORT OPERATOR'S RESPONSIBILITIES

7.1 Provision of information to passengers

Each State shall require airport operators to promulgate information in such a manner that passengers are warned of the types of dangerous goods which they are forbidden from carrying aboard an aircraft as provided for in Part 7 of the Technical Instructions.

Note.— Requirements for the operator to provide information to passengers are contained in Chapter 6.

The provisions for operator responsibilities contained in current Chapter 8 are modified and moved to Chapter 6. The provisions for dangerous goods by mail contained in current 11.4 are moved to a new chapter on the transport of dangerous goods by post.

CHAPTER 8. OPERATOR'S RESPONSIBILITIESCHAPTER 8. TRANSPORT OF DANGEROUS GOODS BY POSTTRANSPORT OF DANGEROUS GOODS BY MAIL

8.1 Designated postal operator's responsibilities

- 8.1.1 A designated postal operator accepting mail into air transport shall:
- a) establish and maintain a dangerous goods training programme in accordance with Chapter 9;
- b) implement procedures for preventing the introduction of dangerous goods in mail when not in compliance with the provisions of this Annex and the Technical Instructions; and
- c) implement procedures in accordance with Chapter 10 for the reporting of dangerous goods accidents, dangerous goods incidents and occasions when dangerous goods which do not comply with the provisions of this Annex and the Technical Instructions are discovered in mail.
- 8.1.2 A designated postal operator that allows dangerous goods in mail shall:
- a) ensure that dangerous goods are only permitted in the mail in accordance with Part 1;2.3 of the Technical Instructions; and
- b) not permit lithium batteries identified in Part 1;2.3 of the Technical Instructions in the mail into air transport unless the civil aviation authority of its State has issued a specific approval.

Origin:	Rationale:
DGP/29	Current Standard 11.4 requires procedures of designated postal operators for controlling the introduction of dangerous goods in mail into air transport be approved by the civil aviation authority of the Sate where the mail is accepted. Annex 18 does not require the designated postal operators to do anything. This new SARP outlines what the designated operator needs to do and what the civil aviation authority needs to consider when approving its procedures. It also adds a requirement for procedures for reporting of dangerous goods accidents, dangerous goods incidents and occasions when undeclared or misdeclared dangerous goods offered for air transport are discovered in mail. Data from these reports is necessary for the State's safety risk management activities.

8.1.3 Each State's designated postal operator accepting mail in another State shall comply with the requirements of 8.1.1 and 8.1.2.

Origin:	Rationale:
DGP/29	The designated postal operator is responsible for its postal operators regardless of where they operate. The civil aviation authority needs to evaluate how the designated postal operator manages its operation in other States when approving the dangerous goods training programme.

Moved from 11.4:

41.48.2 Approval of procedures for controlling the introduction of Ddangerous goods by mail into air transport

The procedures of <u>a State's</u> designated postal operators <u>for controlling the introduction of dangerous goods in mail into air transport identified in 8.1</u> shall be approved by the <u>State's civil aviation authority of the State where the mail is accepted.</u>

Note 1.—In accordance with the Universal Postal Union (UPU) Convention, dangerous goods are not permitted in mail, except as provided for in the Technical Instructions. See Chapter 9 for approval of the designated postal operator's dangerous goods training programme.

Note 2.— The Universal Postal Union has established procedures to control the introduction of dangerous goods into air transport through the postal services (see the UPU Parcel Post Regulations and Letter Post Regulations). The Universal Postal Convention embodies the rules applicable throughout the international postal service and the provisions concerning the letter-post and parcel-post services. The Universal Postal Union (UPU) requires that member countries ensure that their designated postal operators fulfil the obligations arising from the Universal Postal Convention. The Regulations to the Universal Postal Convention contain the rules of application necessary for the implementation of the Universal Postal Convention and reflect the ICAO Standards and Recommended Practices for the transport of dangerous goods in airmail (see the UPU Convention Manual).

Note 3.— Guidance for approving the procedures established by designated postal operators to control the introduction of dangerous goods into air transport may be found in the Supplement to the Technical Instructions (Part S-1, Chapter 3) Doc xxxx (forthcoming), Chapter yyyy.

Origin:	Rationale:
DGP/29	The wording of the Standard was modified to remove any implication that the civil aviation authority must approve procedures of a foreign designated postal operator operating in its territory. The SARP is intended to make the procedures of the State's DPOs subject to the approval of the CAA regardless of where the DPO is operating. Existing Note 1 is deleted because new Note 2 achieves the same intent more comprehensively. New Note 1 is added to refer to the training provisions in Chapter 9, which include those for designated postal operators.
	Amendments to Note 2 are proposed to more accurately reflect the role of the Universal Postal Union. The amendments make existing Note 1 unnecessary.

Origin:	Rationale:
DGP/29	The Standards in this chapter are either moved to other locations or deleted as they are considered redundant.

CHAPTER 9. PROVISION OF INFORMATION

9.1 Information to pilot-in-command

The operator of an aircraft in which dangerous goods are to be carried shall provide the pilot-in-command as early as practicable before departure of the aircraft with written information as specified in the Technical Instructions.

Origin:	Rationale:
DGP/29	This is now captured in Chapter 6, 6.3.5 to make the chapter on operator responsibilities
	more comprehensive.

9.2 Information and instructions to flight crew members

The operator shall provide such information in the Operations Manual as will enable the flight crew to carry out its responsibilities with regard to the transport of dangerous goods and shall provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

Origin:	Rationale:
DGP/29	It is proposed to delete this Standard because it is a duplicate of what is required in Annex 6. It is more appropriate for it to be in Annex 6, because it relates to the operation of the aircraft.

9.3 Information to passengers

Each Contracting State shall ensure that information is promulgated in such a manner that passengers are warned as to the types of dangerous goods which they are forbidden from transporting aboard an aircraft as provided for in the Technical Instructions.

Origin:	Rationale:
DGP/29	This is now captured more comprehensively through safety management SARPs directly at the State in 4.3.2 and 4.4.2, the operator through 6.6.2 and 6.6.3 and the aerodrome in Chapter 7.

9.4 Information to other persons

Operators, shippers or other organizations involved in the transport of dangerous goods by air shall provide such information to their personnel as will enable them to carry out their responsibilities with regard to the transport of dangerous goods and shall provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

Origin:	Rationale:
DGP/29	Information to operators is captured in Annex 6 and to entities other than operators in This is now captured in 5.2 i).

9.5 Information from pilot-in-command to aerodrome authorities

If an in-flight emergency occurs, the pilot in-command shall, as soon as the situation permits, inform the appropriate air traffic services unit, for the information of aerodrome authorities, of any dangerous goods on board the aircraft, as provided for in the Technical Instructions.

Origin:	Rationale:
DGP/29	This SARP is requiring a specific duty of the pilot-in-command. Annex 6 contains provisions for the duties of the pilot in command. It is therefore proposed to delete this requirement from Annex 18 and included it in Annex 6, given that it is an operational requirement.

9.6 Information in the event of an aircraft accident or incident

9.6.1 In the event of:

a) an aircraft accident; or

b) a serious incident where dangerous goods carried as cargo may be involved,

the operator of the aircraft carrying dangerous goods as cargo shall provide information, without delay, to emergency services responding to the accident or serious incident about the dangerous goods on board, as shown on the written information to the pilot in command. As soon as possible, the operator shall also provide this information to the appropriate authorities of the State of the Operator and the State in which the accident or serious incident occurred.

9.6.2 In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods as eargo shall, if requested to do so, provide information without delay to emergency services responding to the incident and to the appropriate authority of the State in which the incident occurred, about the dangerous goods on board, as shown on the written information to the pilot in command.

Note. The terms "accident", "serious incident" and "incident" are as defined in Annex 13.

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Origin:	Rationale:
DGP/29	The SARPs in 9.6 are now captured in 6.3.7 to make the chapter on operator responsibilities more comprehensive.

CHAPTER-10_9. TRAINING-PROGRAMMES AND ASSESSMENT

Origin:	Rationale for approach taken in amending the training provisions:
DGP/29	The title is modified to reflect the critical role assessment plays in ensuring personnel are competent to perform their dangerous goods functions.

10.19.1 Establishment of Dangerous goods training programmes

Initial and recurrent dangerous goods training programmes shall be established and maintained in accordance with the Technical Instructions.

Origin:	Rationale for approach taken in amending the training provisions:
DGP/29	This SARP is moved to 9.3.2.

<u>Note 1.— A training programme includes elements such as design methodology, assessment, initial and recurrent training, instructor qualifications and competencies, training records, and evaluation of the effectiveness of the training.</u>

Origin:	Rationale for approach taken in amending the training provisions:
DGP/29	The note is moved from the Technical Instructions. It is intended to make it clear that the State needs to consider more than a course syllabus when approving dangerous goods training programmes.

- 9.1.1 Each State shall require the establishment and maintenance of a dangerous goods training programme by any entity that:
 - a) offers, handles, or transports dangerous goods by air; or
 - b) causes dangerous goods to be offered, handled, or transported by air.

Origin:	Rationale:
DGP/29	Who requires a dangerous goods training programme is currently established in the Technical Instructions. There have been extensive discussions on the Dangerous Goods Panel on whether training programmes can be required for entities not intending to handle dangerous goods by air. Entities such as freight forwarders play an important role in preventing undeclared dangerous goods from being introduced into the air cargo system, but they can only do this if they know how to identify them. A mandatory requirement for freight forwarders and other entities handling general cargo to be trained was introduced into the 2005-2006 Edition of the Technical Instructions, but some panel members had not interpreted the provisions to be mandatory because they referred to guidance. Whether mandating training for entities not intending to handle dangerous goods is feasible globally was raised by the DGP when it was revising the dangerous goods training provisions in the Technical Instructions to support a competency-based approach to training and assessment. Some States did not have oversight authority over entities not performing functions described in the Technical Instructions, so a mandatory requirement was not feasible in

those States. However, entities performing functions described in the Technical Instructions are required to be trained in those States regardless of whether they knowingly or unknowingly perform them. The amendment is intended to capture this concept.

Note.— A dangerous goods training programme is required for all operators regardless of whether the operator has been issued a specific approval to transport dangerous goods in accordance with Annex 6.

Origin:	Rationale:
DGP/29	The note is moved from under current 10.2.1 and amended to refer to the specific approval required by Annex 6. The need for all operators to have dangerous goods training programmes is established in new 9.1.1, but it is important to maintain this note for the same reason it was added through Amendment 12 to Annex 18. The need for clarification was based on safety oversight audit results that highlighted a lack of awareness of dangerous goods training requirements in relation to operators not approved to carry dangerous goods.

9.1.2 Each State shall require the establishment and maintenance of a dangerous goods training programme by its designated postal operators regardless of whether the designated postal operator allows the introduction of dangerous goods in mail in accordance with Part 1 of the Technical Instructions.

Origin:	Rationale:
DGP/29	This is a proposed new SARP intended to ensure all DPOs are trained to ensure they are able to identify reject dangerous goods in mail when not permitted.

10.29.2 Approval of training programmes

10.2.19.2.1 Dangerous goods training programmes for operators The appropriate authority of the State of the Operator shall be approved by the appropriate authority of the State of the Operator the operator's dangerous goods training programme.

Origin:	Rationale:
DGP/29	Editorial revision for the sake of alignment with the wording of other Standards.

Note. Dangerous goods training programmes are required for all operators regardless of whether or not they are approved to transport dangerous goods.

Origin:	Rationale:
DGP/29	Moved to 9.1.1.

10.2.29.2.2 The State's civil aviation authority shall approve the Ddangerous goods training programmes for of the State's designated postal operators shall be approved by the civil aviation authority of the State where the mail is accepted by the designated postal operator.

Origin:	Rationale:	
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DGP/29

Revised to clarify the scope of oversight. Designated postal operators may operate in different States. The wording of the current Standard may imply that the civil aviation authority must approve the training programme of foreign designated postal operators operating in its State.

The existing SARP was added to Annex 18 through Amendment 12, along with new Standards in current 11.4, to control the introduction of dangerous goods not permitted in mail from entering the airmail stream. The provisions were intended to provide for stronger relationships between civil aviation and postal authorities. Not specifying the civil aviation authority as the authority required to approve the training programme could result in the designated postal operator approving itself. The civil aviation authority needs to approve the dangerous goods programme because of the unique risks to air transport of which the designated postal operator may appreciate.

10.2.39.2.3 **Recommendation.**— Dangerous goods training programmes required for entities other than operators and designated postal operators should be approved as determined by the appropriate national authority in accordance with its safety risk management activities.

Origin:	Rationale:
DGP/29	Modified to clarify that a risk-based approach to determining whether to approve other entities should be used. The decision will be different among States based on the level of risk posed by specific entities in the State and the size and complexity of the State. Alternate risk mitigating approaches may be more appropriate

Note 1. See 11.4 for dangerous goods by mail.

Note 2. See 4.2.2 of Annex 6 Operation of Aircraft, Part I International Commercial Air Transport Aeroplanes for surveillance of operations by a foreign operator.

Origin: Rationale:

DGP/30

Note 1 is deleted because provisions for the mail are no longer contained in one area and it would be inconsistent to cross reference provisions for one entity without cross referencing parts of the Annex for others.

The development of guidance material will be developed in lieu of maintaining Note 2. It has been reported that some States subject foreign operators' training programmes to review and approval despite training programmes only being subject to the approval of the State of the Operator. This note was intended to refer States to the Standard in Annex 6 that specifies that the State shall recognize as valid an air operator certificate issued by another Contracting State. However, operations experts recommend deleting this note and addressing the issue through guidance material, as the practice applies to more than dangerous goods and the Standard referred to in Annex 6 is intended to automatically apply only to personnel licenses and airworthiness certificates.

- 9.3.1 Each State shall require the employer to ensure their personnel are competent to perform any function for which they are responsible prior to performing any of these functions through dangerous goods training and assessment commensurate with the functions for which they are responsible.
- 9.3.2 Each State shall require the employer to provide initial and recurrent dangerous goods training and assessment in accordance with the Technical Instructions.
- 9.3.3 Each State shall require the employer to ensure that the competency of personnel is maintained.
- 9.3.4 Each State shall require the employer to ensure the effectiveness of the dangerous goods training programme.

Note.— An approach to ensuring personnel are competent to perform any function for which they are responsible is provided in Guidance on a Competency-based Approach to Dangerous Goods Training and Assessment (Doc 10147).

Origin:	Rationale:
DGP/29	These provisions are current contained in the Technical Instructions but not the Annex. Proposed to include them in the Annex given the State's responsibility to approve training
	programmes.

9.4 Training and assessment records

9.4.1 Each State shall require the employer to maintain and retain records of training and assessment in accordance with the Technical Instructions.

Origin:	Rationale:
DGP/29	The SARPs in Section 9.3 are moved from the Technical Instructions. The record of training provides evidence that employees have been trained and assessed as competent to perform their functions. They provide a standardized tool for authorities to use when evaluating training programmes.

CHAPTER 11. COMPLIANCE

11.1 Inspection systems

Each Contracting State shall establish inspection, surveillance and enforcement procedures for all entities performing any function prescribed in its regulations for air transport of dangerous goods with a view to achieving compliance with those regulations.

Note 1.—It is envisaged that these procedures would include provisions for:
 inspecting dangerous goods consignments prepared, offered, accepted or transported by the entities referred to in 11.1;
 inspecting the practices of the entities referred to in 11.1; and
 investigating alleged violations (see 11.3).

Note 2. Guidance on dangerous goods inspections and enforcement may be found in the Supplement to the Technical Instructions (Part S 5, Chapter 1 and Part S 7, Chapters 5 and 6).

Origin:	Rationale:
DGP/29	The SARP in 11.1 is now covered by new 5.1 and the proactive/risk-based SARPs in new Chapter 4.

11.2 Cooperation between States

Recommendation. Each Contracting State should participate in cooperative efforts with other States concerning violations of dangerous goods regulations, with the aim of eliminating such violations. Cooperative efforts could include coordination of investigations and enforcement actions; exchanging information on a regulated party's compliance history; joint inspections and other technical liaisons, exchange of technical staff, and joint meetings and conferences. Appropriate information that could be exchanged include safety alerts, bulletins or dangerous goods advisories; proposed and completed regulatory actions; incident reports; documentary and other evidence developed in the investigation of incidents; proposed and final enforcement actions; and educational/outreach materials suitable for public dissemination.

Origin:	Rationale:
DGP/29	The SARP in 11.2 is now covered by new 4.2.3.

11.3.1 Each Contracting State shall take such measures as it may deem appropriate to achieve compliance with its dangerous goods regulations including the prescription of appropriate penalties for violations.

11.3.2 **Recommendation.** Each Contracting State should take appropriate action to achieve compliance with its dangerous goods regulations, including the prescription of appropriate penalties for violations, when information about a violation is received from another Contracting State, such as when a consignment of dangerous goods is found not to comply with the requirements of the Technical Instructions on arrival in a Contracting State and that State reports the matter to the State of Origin.

Origin:	Rationale:
DGP/29	The SARPs in 11.3 are now covered by new 5.1 and the proactive/risk-based SARPs in new Chapter 4. More robust guidance will be contained in the new guidance document to support implementation of Annex 18.

11.4 Dangerous goods by mail

The procedures of designated postal operators for controlling the introduction of dangerous goods in mail into air transport shall be approved by the civil aviation authority of the State where the mail is accepted.

Note 1. In accordance with the Universal Postal Union (UPU) Convention, dangerous goods are not permitted in mail, except as provided for in the Technical Instructions.

Note 2. The Universal Postal Union has established procedures to control the introduction of dangerous goods into air transport through the postal services (see the UPU Parcel Post Regulations and Letter Post Regulations).

Note 3.— Guidance for approving the procedures established by designated postal operators to control the introduction of dangerous goods into air transport may be found in the Supplement to the Technical Instructions (Part S-1, Chapter 3).

Origin:	Rationale:
DGP/29	The SARPs for dangerous goods in the mail are now contained in a dedicated (Chapter 8).

CHAPTER 1210. DANGEROUS GOODS ACCIDENT AND INCIDENT REPORTING SAFETY INTELLIGENCE

- 12.1 With the aim of preventing the recurrence of dangerous goods accidents and incidents, each Contracting State shall establish procedures for investigating and compiling information concerning such accidents and incidents which occur in its territory and which involve the transport of dangerous goods originating in or destined for another State. Reports on such accidents and incidents shall be made in accordance with the detailed provisions of the Technical Instructions.
- 12.2 **Recommendation.** With the aim of preventing the recurrence of dangerous goods accidents and incidents, each Contracting State should establish procedures for investigating and compiling information concerning such accidents and incidents which occur in its territory other than those described in 12.1. Reports on such accidents and incidents should be made in accordance with the detailed provisions of the Technical Instructions.
- 12.3 With the aim of preventing the recurrence of instances of undeclared or misdeclared dangerous goods in cargo, each Contracting State shall establish procedures for investigating and compiling information concerning such occurrences which occur in its territory and which involve the transport of dangerous goods originating in or destined for another State. Reports on such instances shall be made in accordance with the detailed provisions of the Technical Instructions.
- 12.4 **Recommendation.** With the aim of preventing the recurrence of instances of undeclared or misdeclared dangerous goods in cargo, each Contracting State should establish procedures for investigating and compiling information concerning such occurrences which occur in its territory other than those described in 12.3. Reports on such instances should be made in accordance with the detailed provisions of the Technical Instructions.

Note.— The provisions for the development of safety intelligence contained in Chapter 5 of Annex 19 are applicable to this Annex. This chapter of Annex 18 contains specific safety intelligence development responsibilities relevant to the safe transport of dangerous goods by air.

10.1 Mandatory dangerous goods safety reporting

10.1.1 States shall require the operator to report:

- a) dangerous goods accidents to the appropriate national authority of the State in which they occurred and to the State of the Operator;
- b) dangerous goods incidents to the appropriate national authority of the State in which they occurred and to the State of the Operator;
- c) occasions when undeclared dangerous goods are discovered in cargo or mail to the appropriate national authority of the State in which they were discovered and the State of the Operator;
- d) occasions when misdeclared dangerous goods are discovered in cargo or mail, other than those discovered during the acceptance check required by 6.3.3.1, to the appropriate national authority of the State in which they were discovered and the State of the Operator;

- e) occasions when misdeclared dangerous goods are discovered in cargo or mail during the acceptance check required by 6.3.3.1, which if left undetected would cause the potential to endanger an aircraft, its occupants, or any other person to the appropriate national authority of the State in which they were discovered and the State of the Operator; and
- d) occasions when dangerous goods not permitted to be carried by passengers or crew members are discovered in baggage or on the person to the appropriate national authority of the State in which this occurred.
- Note 1.— 10.1.1 d) includes occasions when the operator discovers dangerous goods not permitted to be carried by passengers or crew and when the operator is advised they were discovered by another entity.
- Note 2.— Dangerous goods permitted to be carried by passengers and crew members are included in Part 8 of the Technical Instructions.
- 10.1.2 States shall require their designated postal operators to report to the civil aviation authority of the State where the mail is accepted:
 - a) dangerous goods accidents;
 - b) dangerous goods incidents; and
 - c) occasions when dangerous goods which do not comply with the provisions of this Annex and the Technical Instructions are discovered in mail.
- 10.1.3 **Recommendation.** States should require entities other than operators and designated postal operators to report dangerous goods accidents and dangerous goods incidents to the appropriate national authority of the State in which they occurred.
- 10.1.4 **Recommendation.** States should require entities other than operators to report occasions when undeclared or misdeclared dangerous goods are discovered to the appropriate national authority of the State in which they were discovered.
- 10.1.5 States shall ensure that dangerous goods safety data and dangerous goods safety information collected through mandatory dangerous goods safety reporting are incorporated into the safety data collection and processing system (SDCPS) required by Annex 19.
- Note.— Guidance on the establishment of an SDCPS is contained in the Safety Intelligence Manual (Doc 10159). Guidance specific to dangerous goods is provided in Doc yyyy (forthcoming).

10.2 Voluntary dangerous goods safety reporting

States should ensure that dangerous goods safety data and dangerous goods safety information not captured through the mandatory dangerous goods safety reporting system are reported through the voluntary safety reporting system established in Annex 19, Chapter 5.

Note.— Guidance on voluntary safety reporting systems is contained in Doc 10159. Guidance specific to dangerous goods is provided in Doc yyyy (forthcoming).

10.3 Safety data and safety information analysis

Note.— Guidance on safety data and safety information analysis is contained in Doc 10159. Guidance specific to dangerous goods is provided in Doc yyyy (forthcoming).

10.4 Safety data and safety information protection

Note.— Principles for the protection of safety data, safety information and related sources can be found in <u>Appendix 3 to Annex 19</u>. Guidance on safety data and safety information protection is contained in the Manual on Protection of Safety Information (Doc 10053).

10.5 Safety information sharing and exchange

- 10.5.1 If a State, in the analysis of the dangerous goods information contained in its SDCPS, identifies safety issues which may pose an unacceptable risk to the global aviation safety system, that State shall forward such safety information to ICAO with a minimum of delay.
- 10.5.2 States shall provide ICAO with dangerous goods information from their SDCPS upon request to address global safety issues related to the transport of dangerous goods by air.

Note.— Guidance to support the sharing and exchange of safety information and safety intelligence between States is contained in Doc 10159.

Origin:	Rationale:
DGP/29	The SARPs in current Chapter 10 relate to both investigating and reporting. The investigating part of the SARPs is proposed to be included in 4.2. The reporting requirements remain in the retitled chapter "Dangerous goods Safety Intelligence" and are modified to align with terminology in Annex 19.

CHAPTER-13_11. DANGEROUS GOODS SECURITY PROVISIONS

Each—Contracting State shall establish dangerous goods security measures, applicable to—shippers, operators and other individuals entities in the supply chain engaged in the transport of dangerous goods by air, to be taken, to minimize theft or misuse of dangerous goods that may endanger persons, property or the environment. These measures should be commensurate with security provisions specified in other Annexes and the Technical Instructions.

Origin:	Rationale:
DGP/29	The current reference to "other individuals" is ambiguous. Referring to "entities in the supply chain" covers the specific entities currently referred to and "other individuals" more clearly.