

# **DANGEROUS GOODS PANEL (DGP)**

#### TWENTY-EIGHTH MEETING

Virtual, 15 to 19 November 2021

Agenda Item 5: Clarifying State oversight responsibilities in Annex 18 (Ref: Job Card DGP.005.03)

# REPORT OF THE DGP WORKING GROUP ON CLARIFYING STATES' RESPONSIBILITIES IN ANNEX 18

(Presented by Rapporteur of the DGP Working Group on Clarifying States' Responsibilities in Annex 18)

### **SUMMARY**

This information paper provides a summary of the progress made on ANC Job Card DGP.005.03: Clarifying State oversight responsibilities in Annex 18.

### 1. **INTRODUCTION**

1.1 The DGP Working Group on Clarifying States' Responsibilities in Annex 18 (DGP-WG/Annex 18) was established to progress the work on ANC Job Card DGP.005 — Clarifying State oversight responsibilities in Annex 18. The job card was developed after deficiencies were identified through work on aligning Annex 18 dangerous goods reporting and oversight requirements in Annex 18 with Annex 19 (ANC Job Card DGP.002.01). That work revealed a lack of clarity and sufficient detail in Annex 18 to effectively outline States' responsibilities with respect to the safe transport of dangerous goods by air and the interrelationship of oversight responsibilities between dangerous goods and other aviation activities. It was also identified that although notes to clarify that the scope of an operator's safety management system included the carriage of dangerous goods, nothing was introduced to clarify States' safety management responsibilities. It was concluded that establishing a relationship between State oversight of the safe transport of dangerous goods by air with the State safety management responsibilities and critical elements of a system that enables a State to discharge its responsibilities for safety oversight contained in Annex 19 would provide clarity.

#### 2. PROGRESSION OF WORK

2.1 DGP-WG/Annex 18 has conducted its work virtually and through two face-to-face meetings following a brief one day "kick-off" meeting after DGP/26 (Montréal, 16 – 27 October 2017).

The output from these virtual and face-to-face meetings was provided to the twenty-seventh meeting of the DGP (DGP/27, 16 to 20 September 2019) (see paragraph 4.1 of the DGP/27 Report) and the next items for the working group to consider were identified. These were:

- a) the need to highlight interrelationships between Annex 18 and other ICAO Annexes using the document developed at the London face-to-face meeting (see DGP/27 Report, paragraph 4.1 and Appendix C to DGP/27-IP/2);
- b) how to structure all of Annex 18 around the safety management provisions developed by the working group (see DGP/27 Report, paragraph 4.1);
- c) whether recommendation to modify existing protocol questions was necessary based on the proposed revisions to Annex 18; and
- d) whether existing guidance material related to States' oversight responsibilities contained in the Supplement should be maintained in that document along with additional guidance material that may be identified as necessary, or if consideration should be given to moving appropriate guidance to an attachment to Annex 18 or a separate document; and
- 2.2 DGP-WG/Annex 18 has been unable to meet face-to-face since DGP/27 on account of the COVID-19 pandemic, and progressing the work virtually is challenging due to the complexity of its tasks. However, a working document has been developed through coordination with the Secretariat to set the stage for progressing the items identified in a) and b) above. This has resulted in a document that contains a very draft framework for how Annex 18 might be revised and restructured so as to clarify States' responsibilities, including text which outlines the interrelationships between Annex 18 and the other ICAO Annexes. The document also includes draft amendments already developed by DGP-WG/Annex 18. It is intended as a starting point for DGP-WG/Annex 18 to develop a new structure. The document is provided in the appendix to this information paper.

### 3. **NEXT STEPS**

- 3.1 DGP-WG/Annex 18 will endeavour to progress its work virtually until such time as a face-to-face meeting is possible. It is expected that the working group will make significant progress on items 2 a) and b) when it meets face-to-face. This will involve working with the draft framework provided in the appendix to develop amendments to Annex 18 that clearly outline States dangerous goods safety management responsibilities and addresses identified gaps, including the need to ensure:
  - a) the traditional safety oversight responsibilities (eight critical elements) that form the foundation of the State Safety Programme are incorporated taking into account upcoming amendments to Annex 19;
  - b) the proactive State safety programme elements are incorporated;
  - c) identified misalignments with other ICAO Annexes, based on the interrelationships identified in Appendix C to DGP/27-IP/2, are removed (may result in recommendations for amendment to other Annexes);
  - d) the output of DGP.002 (Dangerous Goods Accident and Incident Reporting System) aligns with output of this job card;

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e) WPE 9417 (Provisions to ensure compliance of entities outside aviation stream) from job card DGP.003.02 is addressed (Mitigating safety risks posed by the carriage of lithium batteries by air);

- f) safety risks associated with undeclared dangerous goods are addressed (DGP/27 Recommendation 6/2).
- 3.2 The DGP is invited to note the information in this information paper and support the next steps outlined in paragraph 3.1.

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#### **APPENDIX**

# WORKING DOCUMENT FOR THE DEVELOPMENT OF A REVISED AND RESTRUCTURED ANNEX 18

### VERY DRAFT REVISED STRUCTURE

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Appendix

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# **FOREWORD**

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Relationship with other Annexes and 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 within a State's safety programme. They are an extension of those contained in Annex 6—Operation of Aircraft. The broad provisions of this Annex 18 are amplified by the detailed specifications of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284). In order that a comprehensive document may be available to States for implementation of the dangerous goods provisions prescribed by this Annex, an Attachment hereto describes the interrelationships between Annex 18 and other Annexes bearing on the subject of the safe transport of dangerous goods by air.

### CHAPTER 1. DEFINITIONS

Consideration may be given to adding definitions for:

Aircraft (from Annex 6)

COMAT Not currently referred to, but referred to in Annex 6 with respect to dangerous goods.

State safety programme (SSP)

Surveillance

Safety risk

Safety oversight

Safety data

Safety performance indicator

Safety performance target

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.

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

**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.

The following amendment was recommended by DGP/26 as part of Recommendation 1/1. The ANC conducted a final review of this amendment following State consultation. It was pointed out, and recognized by the Commission, that the amendment proposal was administrative in nature and, as such, should be consolidated with other Annex 18 amendment proposals which could imply a later applicability date than the currently indicated 7 November 2019. (AN Min 209-2)

**Dangerous goods.** Articles or substances which are capable of posing a risk hazard 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.

The following amendment is proposed for the sake of alignment with dangerous goods incident and to differentiate from the definition of an aircraft incident in Annex 13.

**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.

The following is added for the sake of clarity. The note is currently included under the definition for dangerous goods incident in the Technical Instructions.

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

The following amendments are largely structural to improve readability. In addition, "fluid" is replaced with "contents" so as to address solids.

- <u>D</u>angerous 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 fluidcontents or radiation or there is other evidence that the integrity of the packaging has not been maintained. Any: or
  - d) any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants is also deemed to constitute a.
- Note.—A dangerous goods incident-<u>may also constitute an aircraft incident as defined in Annex 13</u>—Aircraft Accident and Incident Investigation.
- **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.
- **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.
- 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.

Recommended by DGP/27 (Recommendation 1/1). 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.

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

- *Note.* For radioactive material, see Part 2, paragraph 7.2 7.1.3 of the Technical Instructions.
- **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.
- **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.
- **Safety management system (SMS).** A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

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 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.
- *Unit load device.* Any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo.

Λ	lote.— .	An	over	pack	is	not	incl	luded	! in	this	de	finiti	on.

*Replace* Chapter 2 with the following:

# CHAPTER 2. APPLICABILITY

### 2.1 General applicability

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

*Moved* from 2.3 because believe it has more to do with applicability. Reference to TIs not necessary because it's incorporated through reference to Annex 18:

2.1.2 **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 domestic civil aircraft operations.

### 2.3 Exceptions

2.4.1 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.

Incorporate COMAT terminology since it is referred to in Annex 6? Need to strengthen the need for interface management to ensure people shipping COMAT classified as dangerous goods is subject to Technical Instructions.

2.4.2 Where articles and substances intended as replacements for those described in 2.4.1 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.

Isn't this contradictory? They aren't subject to Parts 3, 4,5 and 6 of the Tis, but are subject to Part 8 and indirectly Part 2. So saying excepted doesn't make sense.

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.

# CHAPTER 3. DETAILED INSTRUCTIONS

### 3.1 Dangerous Goods Technical Instructions

- 3.1.1 Each Contracting State shall take the necessary measures to achieve compliance with the detailed provisions contained in the Technical Instructions. Each Contracting State shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions.
- 3.1.2 **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.

### 3.2 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.

# CHAPTER 4 PROVISION OF INFORMATION TO ICAO

#### 4.1 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.

#### 4.2 Notification of variations from the Technical Instructions

Should make the difference between difference and variation clear. Refer to website with state variations?

- 4.2.1 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.
- 4.2.2 **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.

### 4.3 Difficulties encountered in the application of the Technical Instructions

**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.

# CHAPTER 5. LIMITATION ON THE TRANSPORT OF DANGEROUS GOODS BY AIR

Note..— 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.

Suggest reordering the following, e.g. under any circumstances/under normal circumstances/permitted

### 5.1 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.

### 5.2 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.

### 5.3 Dangerous goods forbidden for transport by air unless exempted under normal circumstances

- 5.3.1 The dangerous goods described hereunder shall be forbidden on aircraft unless exempted by the States concerned under the provisions of 5.3.2 or unless the provisions of the Technical Instructions indicate they may be transported under an approval granted by the State of Origin States concerned:
  - a) dangerous goods that are identified in the Technical Instructions as being forbidden for transport in normal circumstances; and

Do we need infected live animals?

b) infected live animals.

### 5.3.2 Exemptions

- 5.3.2.1 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.

- 5.3.2.2 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.— For the purpose of exemptions, "States concerned" are the States of Origin, Operator, Transit, Overflight and Destination.
- Note 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).

More work needed on clarifying States' responsibilities, distinguishing between approval for operator versus approval for entity needing to transport goods, making sure terminology aligns with Annex 6 terminology, clearly distinguishing if it does not

### 5.3.3 Approvals

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.

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

# CHAPTER 6. SAFETY OF THE SUPPLY CHAIN

This would be a new chapter, so just an outline right now to get started with. It would incorporate shipper responsibilities currently in Annex 18 and adding State responsibilities aimed at mitigating risk of non-compliance/undeclared (this would also be addressed in chapter for operations and chapter for pure State responsibilities). All in alignment with A6/chapter 15 and 19.

### 6.1 Primary aviation legislation

6.1.1 [base language on A19 Ch 3 and Appendix 1, e.g. State shall promulgate/enact/implement laws that enable the State to regulate all entities handling dangerous goods and resolution of safety issues/ensure compliance etc.]

### 6.2 Specific operating regulations

- 6.2.1 [base language on A19 Ch 3 and Appendix 1, e.g. State shall promulgate regulations for entities in the supply chain that conform to Annexes to the Convention and the Technical Instructions) including, at a minimum regulations to ensure that:
  - a) all entities performing dangerous goods functions are trained in accordance with Technical Instructions
  - b) items offered for transport are not dangerous goods forbidden for transport;
  - c) hazards associated with dangerous goods to be transported are identified in accordance with the classification criteria of Part 2 of the Technical Instructions:
  - d) dangerous goods are packed in accordance with the Technical Instructions [is it necessary to maintain 5.2 in Annex 18?][do we need anything within the limits of Part 3?];
  - e) hazards associated with dangerous goods are communicated to the operator in accordance with the labelling, marking and documentation requirements in Part 5 of the Technical Instructions [is it necessary to maintain chapter 6 in Annex 18?]; and
  - f) a certification or declaration is provided to the operator that the consignment is acceptable for transport and in compliance with applicable regulations including additional air transport requirements of the Technical Instructions in accordance with Part 5 of the Technical Instructions.

### 6.3 State safety risk management

- 6.3.1 [maybe not appropriate in A18, to consider] The State of the Operator shall [approve/review/accept] operator's processes and procedures for managing safety risks associated with the supply chain.
- 6.3.2 The State shall establish and maintain a process to identify hazards associated with the supply chain from safety intelligence [new term in upcoming proposed Annex 19 amendment].
- 6.3.3 The State shall develop and maintain a process that ensures the assessment of safety risks associated with identified supply chain hazards.
- 6.3.4 The State shall develop and maintain a process to ensure risks induced by interfacing entities are managed [need to expand based on upcoming amendments to Annex 19]

### 6.4 Resolution of safety issues

- 6.4.1 State shall establish mechanisms for the resolution of issues related to safety of the supply chain, up to and including enforcement measures.
- 6.4.2 States shall ensure that identified safety issues are resolved in a timely manner through a system which monitors and records progress, including actions taken by individuals and organizations in the supply chain to resolve such issues.

# 6.5 State safety assurance

[(commensurate with size and complexity]

- 6.5.1 States shall establish an acceptable level of supply chain safety performance [needs significant discussion, putting this here as a place holder].
- 6.5.2 States should develop and maintain a process to evaluate the effectiveness of actions taken to manage supply chain safety risks and resolve safety issues.

# 6.6 Safety promotion/awareness/positive safety culture [needs to be adjusted to upcoming amendments to Annex 19]

Much more work needed. Extremely important for undeclared/compliance. There will be amendments to Annex 19 on safety promotion, so will need to align.

6.6.1 States shall establish measures to improve safety awareness and promote positive safety culture throughout supply chain.

Measures to promote a positive safety culture internally Sharing and exchange of safety information internally, externally, globally

# CHAPTER 7. DANGEROUS GOODS OPERATIONS [I.E. OPERATOR FUNCTIONS]

### Needs lots of work/discussion.

Primary aviation legislation (State of the Operator shall enact and implement laws that enable the State to regulate ... continued surveillance ... resolution of safety issues ..etc.)

Specific operating regulations (State of the Operator shall adopt regulations that provide for specific approval and surveillance of dg activities in conformity to Annexes to the Convention and the Technical Instructions):

### Some things to consider:

- Maybe some of what is in Chapter 8 can be removed because it is in the Technical Instructions (create a higher level Standard)
- High level standards for Acceptance, NOTOC, loading, capabilities of aircraft, operational considerations, use of ULDs/FCCs/FRCs, safety of the supply chain
- Connection to Annex 6, Chapter 15
- Expand upon SMS requirements as relates to dangerous goods (including Annex 6, Chapter 15)
  - Safety risk management
  - Safety promotion/awareness/positive safety culture
    - Supply chain (including AMOs)
    - Provision of information (from Chapter 9)
- Emergency response (existing 9.5, 9.6, Doc 9481?)
- Training
- Consider whether there is a need for provisions in Annex 6 or PANS for wider audience
- States shall review/approve/accept operators
- State safety management responsibilities. Much is covered by Annex 6, so specific to DG

# CHAPTER 8. TRANSPORT OF DANGEROUS GOODS BY POST

	Moved from current Chapter 10:
	8.1 Establishment of training programmes
Initial and recurrent dan accordance with the Techr	gerous goods training programmes shall be established and maintained in nical Instructions.
	8.2 Approval of training programme
	Moved from Chapter 10:
Focus needs to be on what	State needs to do, may need more details from Technical Instructions
	g programmes for designated postal operators shall be approved by the civitate where the mail is accepted by the designated postal operator.
aviation authority of the Si	

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).

# **CHAPTER 9. TRAINING PROGRAMMES**

Should more from the Technical Instructions be here?

# 9.1 Establishment of training programmes

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

Moved DPO training to Chapter 14

# 9.2 Approval of training programmes

- 9.2.1 Dangerous goods training programmes for operators shall be approved by the appropriate authority of the State of the Operator.
- Note.— Dangerous goods training programmes are required for all operators regardless of whether or not they are approved to transport dangerous goods.
- 9.2.3 **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.
- Note 1.— Dangerous goods training programme requirements for designated postal operators are included in Chapter 14.
- 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.

Incorporate some of this in Chapter 3 (Licensing/approvals etc)

*Replace* reporting and investigation provisions currently contained in with the following new provisions. These revised provisions are based on Annex 19 with Amendment 1 incorporated.

Upcoming amendments to Annex 19 will likely result in the need to modify terminology

# CHAPTER 10. DANGEROUS GOODS SAFETY DATA AND SAFETY INFORMATION COLLECTION, ANALYSIS, PROTECTION, SHARING AND EXCHANGE

Note.— In addition to the provisions of this chapter, other provisions relative to the promotion of dangerous goods accident and incident prevention by collection and analysis of safety data and by a prompt exchange of safety information, as part of the State safety programme (SSP), are included in Annex 19—Safety Management and, to this effect, are applicable to this Annex. Further guidance is contained in the Safety Management Manual (SMM) (Doc 9859).

# 10.1 Safety data collection and processing systems

The State shall ensure its safety data collection and processing systems (SDCPS) capture, store, aggregate and enable the analysis of dangerous goods safety data and dangerous goods safety information in accordance with Annex 19, 5.1.

- Note 1.— Within the context of this Annex, SDCPS refers to processing and reporting systems, safety databases, schemes for exchange of information, and recorded information including but not limited to:
  - a) data and information related to safety investigations by State authorities, operators or other entities involved with the transport of dangerous goods by air;
  - b) mandatory safety reporting systems as indicated in 5.1.2 of Annex 19 and 11.1.1 of this Annex; and
  - c) voluntary safety reporting systems as indicated in 5.1.3 of Annex 19 and 11.1.2 of this Annex.
- Note 2.— Guidance related to SDCPS is contained in the Safety Management Manual (SMM) (Doc 9859) and the [DG guidance material].

### 10.1.1 Mandatory safety reporting system

- 10.1.1.1 State shall include reporting of dangerous goods accidents, dangerous goods incidents and occasions when undeclared or misdeclared dangerous goods are discovered as part of their mandatory safety reporting systems in accordance with the provisions of Annex 19.
- 10.1.1.2 States' mandatory reporting systems shall include a requirement for the operator to report dangerous goods accidents and dangerous goods incidents to the appropriate authority of the State in which they occurred and to the State of the Operator.

- 10.1.1.3 States' mandatory reporting systems shall include a requirement for the operator to report occasions when undeclared or misdeclared dangerous goods are discovered in cargo or mail to the appropriate authority of the State in which they were discovered and the State of the Operator.
- 10.1.1.4 States' mandatory reporting systems shall include a requirement for the operator to report occasions when dangerous goods not permitted to be carried by passengers or crew are discovered by the operator, or the operator is advised by the entity that discovers the dangerous goods, either in the baggage or on the person, of passengers or crew members to the appropriate authority of the State in which this occurred.
- Note. Dangerous goods permitted to be carried by passengers and crew are provided in Part 8 of the Technical Instructions.
- 10.1.1.5 States' mandatory reporting systems shall include a requirement for entities other than operators to report dangerous goods accidents and dangerous goods incidents to the appropriate authority of the State in which they occurred.
- 10.1.1.5 States' mandatory reporting systems shall include a requirement for entities other than operators to report occasions when undeclared or misdeclared dangerous goods are discovered [] to the appropriate authority of the State in which they were discovered.
- 10.1.1.6 States' mandatory reporting systems shall include a requirement for operators to report dangerous goods occurrences in accordance with the detailed provisions in the [Technical Instructions].

### 10.1.2 Voluntary safety reporting system

- 10.1.2.1 States shall establish a voluntary dangerous goods safety reporting system to collect safety data and safety information from operators that is not captured by mandatory safety reporting systems in accordance with Annex 19, 5.1.
- 10.1.2.2 **Recommendation.** States should establish a voluntary dangerous goods safety reporting system to collect safety data and safety information not captured by mandatory reporting systems for entities other than operators in accordance with Annex 19, 5.1.

### 10.1.3 Safety investigations

- 10.1.3.1 States shall establish procedures for collecting data and information related to dangerous goods safety investigations which include, at a minimum:
  - a) dangerous goods accidents and dangerous goods incidents;
  - b) undeclared or misdeclared dangerous goods in cargo, mail or baggage; and
  - c) other safety issues related to the transport of dangerous goods by air.

### 10.2 Safety data and safety information analysis

States shall establish and maintain a process to analyse the dangerous goods safety data and dangerous goods safety information from the SDCPS and associated safety databases in accordance with Annex 19, 5.2.

### 10.3 Safety data and safety information protection

- 10.3.1 States shall accord protection to dangerous goods safety data captured by, and dangerous goods safety information derived from, voluntary safety reporting systems and related sources in accordance with Annex 19, 5.3.
- 10.3.2 **Recommendation.** States should extend the protection referred to in 11.3.1 to safety data captured by, and safety information derived from, mandatory dangerous goods safety reporting system and related sources in accordance with Annex 19, 5.3.

# 10.4 Safety information sharing and exchange

- 10.4.1 The State shall share and exchange dangerous goods safety information in accordance with Annex 19, 5.4.
- 10.4.2 If a State, in the analysis of the dangerous goods information contained in its safety data collection and processing system (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.
- Note 1.— Provisions for a SDCPS and safety information sharing and exchange between States are included in Annex 19. Further guidance is contained in the Safety Management Manual (SMM) (Doc 9859).
- Note 2.— Whenever practicable, the safety information sent to ICAO is to be prepared in one of the working languages of the Organization.

This may not be necessary. If it were, it would be in every Annex or at least in Annex 19.

- [ 10.4.3 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.]
- 10.4.4 States shall participate in cooperative efforts with other States with the aim of eliminating unsafe practices and non-compliance with the Technical Instructions.
- 10.4.5 States' cooperative efforts shall include coordination of investigations of dangerous goods accidents and dangerous goods incidents, identified safety issues related to the transport of dangerous goods, non-compliance with the Technical Instructions and enforcement actions.

This "working document" Chapter 11 replicates all State safety management Standards from Annex 19, Chapter 3 and links applicable Standards to States' dangerous goods responsibilities. Much of it is now already incorporated in draft amendments in prior chapters. Providing here to consider if more needs to be incorporated/added to an appendix/added to attachment.

# CHAPTER 11. STATE SAFETY MANAGEMENT RESPONSIBILITIES RELATED TO THE TRANSPORT OF DANGEROUS GOODS

Note 1.— Chapter 3 to Annex 19 contains the general provisions for State safety management responsibilities which are applicable to this Annex. This chapter contains additional provisions specific to the safe transport of dangerous goods.

Does this need to be strengthened?

Note 2.— Annex 6 contains provisions for certification and continued surveillance of the operator, including responsibilities related to the transport of dangerous goods by air. This chapter contains additional provisions specific to the transport of dangerous goods.

### 11.1 State safety programme (SSP)

Specific references are included for the time being to facilitate discussion. Removing seemed to be the consensus of the group, but will be revisited when proposed amendments become more mature.

The State shall ensure that the safe transport of dangerous goods by air is addressed in their State safety programme (SSP), commensurate with the size and complexity of the State's civil aviation system, in accordance with the provisions in Annex 19, 3.1.

Note.— Guidance on an SSP is contained in the Safety Management Manual (SMM) (Doc 9859).

### 11.2 State safety policy, objectives and resources

11.2.1 Primary aviation legislation (CE 1)

Need to check with Safety management/legal re "promulgate" (previous version was enact and implement", which aligned with Annex 6, Appendix 5).

Do we need to be more specific with regards to functions, to ensure entities other than operator are covered? Or does "safety transport of dangerous goods by air cover" all applicable functions?

11.2.1.1 The State shall promulgate laws that enable the oversight and management of the safe transport of dangerous goods by air, consistent with the requirements contained in the Convention on International Civil Aviation, the resolution of safety issues and the enforcement of regulations through the relevant authorities or agencies established for that purpose.

*Note.*— *See Annex 19, 3.2.1.* 

### 11.2.2 Specific operating regulations (CE 2)

- 11.2.2.1 The State shall promulgate specific operating regulations that provide for the safe transport of dangerous goods by air in conformity with the Annexes to the Convention on International Civil Aviation. This shall include, at a minimum, national requirements emanating from the primary legislation for the safe transport of dangerous goods by air in accordance with Annex 19, 3.2.2.
- 11.2.2.2 States shall periodically review the specific operating regulations, guidance material and implementation policies for the safe transport of dangerous goods by air to ensure they remain relevant and appropriate.

# 11.2.3 State system and functions (CE 3)

There was a question with regard to terminology and why "management of safety' is used here, but "oversight and management of the safe transport of dangerous goods by air" in 3.2.1.1. The terminology aligns with Annex 19, Appendix 1, 3.1 for this paragraph and Appendix 19, Appendix 1, 1.1 for paragraph 3.2.1.1.

Management of safety is an all-encompassing term, including oversight and SSP (see Chapter 8 of Safety management manual). Can be further clarified by safety management experts at working group meeting preceding DGP/27.

11.2.3.1 The State shall establish relevant authorities or agencies responsible for the management of safety with respect to the safe transport of dangerous goods by air in accordance with Annex 19, 3.2.3.

Should it be compliance with this Annex in this case (like current 2.7)?

- 11.2.3.2 The State shall specify to ICAO the relevant authority or agency responsible for the management of safety with respect to the transport of dangerous goods by air.
- 11.2.3.3 The State shall use a methodology to determine its staffing requirements for the management of dangerous goods safety according to the size and complexity of dangerous goods air transport activities in their State.
  - 11.2.3.4 **Recommendation.** The methodology in 11.2.3.3 should be documented.

Lots of discussion on whether should be and or or. It's "or" in Annex 19

11.2.3.5 The State shall ensure that authority [and/or] agency personnel have adequate support, credentials and transportation to accomplish, independently, their dangerous goods safety management tasks.

# 11.2.4 Qualified technical personnel (CE 4)

Need to incorporate the need for OJT and experience somewhere (it's protocol question)

11.2.4.1 States shall establish minimum requirements for the qualification of dangerous goods technical personnel in accordance with Annex 19, 3.2.4.

- Note. The term "technical personnel" refers to those persons performing safety-related functions for or on behalf of the State
- 11.2.4.2States shall ensure that dangerous goods technical personnel performing safety-related functions are provided appropriate initial and recurrent training to maintain and enhance their competence at the desired level.
- Note.— Guidance on training for State employees involved in the regulation and oversight of transport of dangerous goods by air is contained in Part 1, Chapter 5 of the Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284SU).
  - 11.2.5 Technical guidance, tools and provision of safety-critical information (CE 5)

Minor comment – wording of this doesn't seem to be optimal. Wouldn't "The State shall "maintain" dangerous goods technical guidance ..." make more sense? To be brought to attention of safety management.

11.2.5.1 The State shall establish dangerous goods technical guidance and tools and provide safety-critical information in accordance with Annex 19, 3.2.5.

Is there a need to elaborate on this in guidance or perhaps in appendix to Annex 18 (e.g. need to strengthen provisions for approvals/exemptions).

- 11.2.5.2 The State shall ensure that dangerous goods technical personnel are provided with technical guidance manuals containing the policies, procedures and standards to be used when performing dangerous goods safety-management functions.
- 11.2.5.3 The State shall ensure that dangerous goods technical personnel are provided with technical guidance manuals containing the policies, procedures and standards to be used in the resolution of dangerous goods safety issues, including enforcement.
- 11.2.5.4 The State shall ensure that that dangerous goods technical personnel are provided with technical guidance manuals that address ethics, personal conduct and the avoidance of actual or perceived conflicts of interest in the performance of official duties.

### 11.3 State safety risk management (CE 6)

### 11.3.1 Licensing, certification, authorization and approval obligations

Somehow needs to be a link to 2.1.3 and 2.1.4 of A18 (exemptions/approvals) or the text needs to be incorporated here

Need link to A6 AOC/OPS spec (Appendix or guidance)?

The State shall meet the licensing, certification, authorization and approval obligations in accordance with Annex 19, 3.3.1.

States shall implement documented processes and procedures to ensure that individuals and organizations performing an aviation activity meet the established requirements before they are allowed to exercise the

privileges of a dangerous goods license, certificate, authorization or approval to conduct the relevant aviation activity.

Note.— Air operator certification and validation provisions, including provisions related to dangerous goods, are provided in Annex 6 (see chapter 4, 4.2.1.8, Appendix 5, Appendix 6 and Attachment C).

### 11.3.2 Safety management system obligation

- 11.3.2.1 States shall require the transport of dangerous goods be included in the scope of the operator's safety management system (SMS) in accordance with 3.3.2 of Annex 19.
- 11.3.2.2 The State shall ensure that operators establish procedures for investigating safety issues related to the transport of dangerous goods through the application of their SMS.
- 11.3.2.3 **Recommendation.** The State should encourage entities other than the operator to establish procedures for investigating safety issues related to the transport of dangerous goods by air.

# 11.3.3 Accident and incident investigation

- 11.3.2.2 States shall establish a process to investigate dangerous goods accidents and dangerous goods incidents in support of the management of safety in the State.
- Note.— Guidance on dangerous goods investigations can be found in [guidance DGP working group is developing]....

### 11.3.4 Hazard identification and safety risk assessment

- 11.3.4.1 States shall establish and maintain a process to identify dangerous goods hazards from collected safety data in accordance with Annex 19, 3.3.4.1
- Note. Further information regarding safety data collection, analysis and the sharing and exchange of safety information can be found in Annex 19 and Chapter 11 of this Annex.
- 11.3.4.2 The State shall develop and maintain a process that ensures the assessment of dangerous goods safety risks associated with the identified hazards in accordance with Annex 19, 3.3.4.2.

### 11.3.5 Management of safety risks (CE 8)

States shall establish mechanisms for the management of dangerous goods safety issues for all entities performing any function prescribed in the Technical Instructions in accordance with Annex 19, 3.3.5 and Appendix 1, 8.

Note.— Guidance on the management of dangerous goods safety risks is contained in [our guidance material on investigation]

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# 11.4 State safety assurance

# 11.4.1 Surveillance obligations (CE 7)

11.4.1.1 The State shall ensure that surveillance obligations required by Annex 19, 3.4.1 are implemented for all entities performing any function prescribed in its regulations for transport of dangerous goods by air.

Note.— The surveillance of the service provider takes into consideration the safety performance as well as the size and complexity of its aviation products or services.

11.4.1.2 **Recommendation.**— States should establish procedures to prioritize inspections, audits and surveys towards those areas of greater safety concern or need.

# 11.4.2 State safety performance

The State shall establish the acceptable level of dangerous goods safety performance to be achieved through their SSP in accordance with Annex 19, 3.4.2.

# 11.5 State safety promotion

The State should promote State safety in accordance with Annex 19, 3.5.

Chapter 12, developed by DGP-WG/reporting regarding dangerous goods surveillance operations is deleted because the provisions are covered in proposed Chapter 3 and revised Chapter 12 (SDCPS)

Chapter 13, dangerous goods safety investigations developed by DGP-WG/Reporting is deleted because its covered by new Chapter 3 and 10 (SDCPS)

# CHAPTER-1312. DANGEROUS GOODS SECURITY PROVISIONS

Each Contracting State shall establish dangerous goods security measures, applicable to shippers, operators and other individuals 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.

*Insert* the following new Attachment to Annex 18:

#### **ATTACHMENT TO ANNEX 18**

#### INTERRELATIONSHIP BETWEEN ANNEX 18 AND OTHER ANNEXES

# 1. ANNEX 6 — OPERATION OF AIRCRAFT

1.1 Air operator certificate (Annex 6, Part I, 4.2.1, Chapter 14, Appendix 5, Appendix 6; Annex 6, Part II, 2.1.2, 2.2.3; Annex 6, Part III, Section II, 2.2.1, Chapter 12, Appendix 1, Appendix 3)

- 1.1.1 Annex 6, Parts I International Commercial Air Transport Aeroplanes and Part III International Operations Helicopters prohibit an operator from engaging in commercial air transport operations unless it is in possession of a valid air operator certificate (AOC) issued by the State of the Operator. The AOC authorizes the operator to conduct commercial air transport operations in accordance with its operations specifications. The operations specifications include an indication of whether or not an operator has specific approval to transport dangerous goods as cargo. The minimum information required on the AOC and its associated operations specifications are provided in Appendix 6 to Part I and Appendix 3 to Part III. All operators have dangerous goods responsibilities, regardless of this specific approval status. High-level responsibilities for each category of operator are provided in Chapter 14 of Annex 6, Part I and Chapter 12 of Annex 6, Part III. Personnel, including third-party personnel, involved in the acceptance, handling, loading and unloading of cargo must be informed of the operator's operational approval and limitations with regard to the transport of dangerous goods. Supporting guidance is provided in Annex 6, Part II, Attachment I.
- 1.1.2 The issuance of an AOC by the State of the Operator is dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations (including dangerous goods), training programmes and ground handling and maintenance arrangements consistent with the nature and extent of the operations specified. The continued validity of the AOC is dependent on the operator maintaining this.
- 1.1.3 There are no AOC requirements in Annex 6, Part II *International General Aviation Aeroplanes*, but Part III specifies that provisions for carriage of dangerous goods are contained in Annex 18 and prohibits the commencement of flight until the pilot-in-command is satisfied that the aeroplane operating limitations, contained in the flight manual, or its equivalent, will not be exceeded. Therefore, if dangerous goods are carried, the pilot-in-command would need to determine whether an incident involving them could be contained by the elements of the aircraft design until the aircraft makes a safe landing.
- 1.1.4 The State of the Operator is required to establish a system for both the certification and continued surveillance of the operator in accordance with Appendix 5 to Annex 6, Part I, Appendix 1 to Annex 6, Part III, and Appendix 1 to Annex 19 to ensure the required standard operations established in 4.2 are maintained.
- 1.1.5 Annex 6 requires Contracting States to recognize AOCs issued by another Contracting States as valid, provided the requirements under which the AOC was issued are at least equal to the applicable Standards specified by Annexes 6 and 19. States are required to establish a programme with procedures for the surveillance of operations in their territory by a foreign operator and for taking appropriate action when necessary to preserve safety. Operators are required to meet and maintain the requirements established by the States in which the operations are conducted.

# 1.2 Specific approval, approval and acceptance actions (Annex 6, Part I, Attachment D, 2.1; Annex 6, Part III, Attachment C, 2.1)

- 1.2.1 Annex 6, Parts I and III categorize actions taken by a State on matters submitted for review as specific approvals, approvals, or acceptances depending on the nature of the response by the State to the matter submitted for its review. The terms should be harmonized when issuing dangerous goods approvals. A specific approval is an approval which is documented in the Operations Specifications for Commercial Air Transport. An approval is an active response by the State to a matter submitted for its review. An approval constitutes a finding or determination of compliance with the applicable Standards. An approval will be evidenced by the signature of the approving official, the issuance of a document or certificate, or some other formal action taken by the State. An acceptance does not necessarily require an active response by the State to a matter submitted for its review. Specific approvals, approvals and acceptances are forms of authorizations. An authorization entitles and operator, owner or pilot-in-command to undertake the authorized operations.
- 1.2.2 The State should make or arrange for a technical safety evaluation before issuing the specific approval, approval or acceptance. The evaluation should:
  - a) be accomplished by a person with specific qualifications to make such a technical evaluation;
  - b) be in accordance with written, standardized methodology; and
  - c) where necessary to safety, include a practical demonstration of the air operator's actual ability to conduct such an operation.
- 1.2.4 Guidance air operation certification and validation, including specific approvals, approvals and acceptance actions, is provided in Part I, Attachment D and Part II, Attachment C.

# 1.3 Training Annex 6, Part I, 9.3 e), 12.4 e), 14.2 a), 14.3 a); Annex 6, Part III, 7.3 d), 10.3 e), 12.3 a), 12.4 a))

- 1.2.1 Annex 6, Parts I and III contain the following dangerous goods training requirements:
- a) Dangerous goods training is required to be included in the ground and flight training programme that the operator is required to establish and maintain, approved by the State of the Operator, to ensure that all flight crew members are adequately trained to perform their assigned duties including knowledge and skills related to the transport of dangerous goods. Training is required on a recurrent basis, as determined by the State of the Operator, and is required to include an assessment of competence (9.3 e)).
- b) Dangerous goods training is required to be included in the cabin crew training programme that the operator is required to establish and maintain, approved by the State of the Operator, to ensure that each person is aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin (12.4 e)). Training is required before persons are assigned as a cabin crew member and completed annually through recurrent training.
- c) Dangerous goods training programmes that meet the requirements of Annex 18, the applicable requirements of the Technical Instructions and the requirements of the State's regulations are required to be established for all operators, regardless of whether or not they have specific approval for the transport of dangerous goods as cargo (14.2 and 14.3).

# 1.4 Operations manual (Annex 6, Part I; 4.2.3, 14.2 b), 14.3 b), Appendix 2, 2.1.35; Annex 6, Part II, 3.4.2.2, Attachment 3.A s); Annex 6, Part III, )

- 1.3.1 Annex 6 requires the operator to have an up-to-date operations manual for the use and guidance of operations personnel. Parts I and III require a copy of the manual together with all amendments and/or revisions to be provided to the State of the Operator for review and acceptance and, where required, approval. Parts I and III require the following specific items, which is in addition to what is required by 9.2 of this Annex, to be included in the operations manual related to dangerous goods:
  - 1.3.2 For all operators regardless of whether or not they have specific approval to transport dangerous goods:
  - a) details of the dangerous goods training programme (14.2 a) and 14.3 a));
  - b) policies and procedures to meet, at a minimum, the requirements of Annex 18, the Technical Instructions and the State's regulations to allow operator personnel to:
    - 1) identify and reject undeclared dangerous goods, including COMAT classified as dangerous goods; and
    - 2) report to the appropriate authorities of the State of the Operator and the State in which it occurred any:
      - i) occasions when undeclared dangerous goods are discovered in cargo or mail; and
      - ii) dangerous goods accidents and incidents.
  - c) information and instructions on the carriage of dangerous goods, in accordance with Chapter 14, including action to be taken in the event of an emergency (Annex 6; Appendix 2, 2.1.35)
- 1.3.3 In addition to 1.3.2 a) through c), for operators with a specific approval for the transport of dangerous goods as cargo:
  - a) policies and procedures to meet, at a minimum, the requirements of Annex 18, the Technical Instructions and the State's regulations to allow operator personnel to:
    - 1) identify and reject misdeclared dangerous goods, including COMAT classified as dangerous goods;
    - 2) report to the appropriate authorities of the State of the Opearator and the State in which it occurred any occasions when misdeclared dangerous goods are discovered in cargo or mail;
    - 3) report to the appropriate authorities of the State of the Operator and the State of Origin any occasions when dangerous goods are discovered to have been carried:
      - i) when not loaded, segregated, separated or secured in accordance with the Technical Instructions, Part 7, Chapter 2; and
      - ii) without information having been provided to the pilot-in-command;
  - b) accept, handle, store, transport, load and unload dangerous goods, including COMAT classified as dangerous goods as cargo on board an aircraft; and

c) provide the pilot-in-command with accurate and legible written or printed information concerning dangerous goods that are to be carried as cargo.

# 1.5 Cargo compartment safety (Annex 6, Part I; Chapter 15)

- 1.5.1 Annex 6, Part I, Chapter 15 requires that the State of the Operator to ensure that the operator establishes policies and procedures for the transport of items in the cargo compartment, which include the conduct of a specific safety risk assessment and provides specific items that must be included in the safety risk assessment. These are the hazards associated with the properties of the items to be transported, the capabilities of the operator, operational considerations, the capabilities of the aeroplane and its systems, the containment characteristics of unit load devices, packing and packaging, the safety of the supply chain for items to be transported, and the quantity and distribution of dangerous goods items to be transported. Guidance to support operators in conducting these safety risk assessments is provided in *Guidance for Safe Operations Involving Aeroplane Cargo Compartments* (Doc 10102).
- 1.5.2 Annex 6, Part I, Chapter 15 requires the elements of the cargo compartment(s) fire protection system, as approved by the State of Design or State of Registry, and a summary of the demonstrated cargo compartment fire protection certification standards to be provided in the aeroplane flight manual or other documentation supporting the operational of the aeroplane. Guidance to support this requirement is provided in Doc 10102. Annex 8 Airworthiness of Aircraft contains complimentary Standards (see paragraph 2).
- 1.5.3 Annex 6, Part I, Chapter 15 requires the operator to establish policies and procedures that address the items to be transported in the cargo compartment that ensure, to a reasonable certainty, that in the event of a fire involving those items, it can be detected and sufficiently suppressed or contained by the elements of the aeroplane design associated with cargo compartment protection, until the aeroplane makes a safe landing. Guidance on establishing these policies and procedures is provided in Doc 10102

1.7 Supporting Guidance (Annex 6, Part I, Attachments D and J; Annex 6, Part III, Attachments C and I)

Guidance concerning actions required by States in connection with the operator certification requirements is provided in Attachment D to Part I and Attachment C to Part III. The attachments specify that dangerous goods are subject to specific approval actions as an indication of formal action on the part of the State of the Operator resulting in an addition to the operations specification.

FOR DGP and FLTOPSP: There may be a disconnect in that Part I, Attachment D, 3.3.2 r) and Part III, Attachment C, 3.3.2 l)refers only to DG training for flight crew and does not indicate approval of the State of the Operator

### 2. ANNEX 8 — AIRWORTHINESS OF AIRCRAFT

VERY DRAFT. To be adjusted based on more detailed review of Annex 8 including upcoming amendments

# 2.1 Systems design features for Cargo compartment protection (Annex 8, Part IIIA, 4.1 g) Part IIIB, 4.2 g); Part IVB, 4.2 g) and Part VB, 4.2 g)

- 2.1.1 Annex 8 requires that, for aeroplanes over 5 700 kg for which application for certification was submitted on or after 2 March 2004, special consideration be given to design features that affect the ability of the flight crew to maintain controlled flight including requirements for:
  - a) each cargo compartment to be equipped with a built-in fire detection system, and a means to suppress a fire, except when the presence of a fire would be easily discovered by a crew member while at their station and the crew member has a means to extinguish it rapidly;
  - b) as of 7 March 2021, for aeroplanes of a maximum certificated take-off mass in excess of 45 000 kg or with a passenger seating capacity greater than 60, cargo compartment fire suppression systems, including their extinguishing agents, to be designed so as to take into account a sudden and extensive fire such as could be caused by an explosive or incendiary device; and
  - c) for those aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 2025, the elements of the aeroplane design associated with cargo compartment fire protection, and a summary of the demonstrated standards that were considered in the process of aeroplane certification to be included in the required aeroplane documentation and made available to the operator.

Guidance for meeting the requirement described in 2.1.1 c) is provided in Doc 10102.

2.1.1 Annex 8 requires that, for helicopters for which application for certification was submitted on or after 13 December 2007 and for aeroplanes not exceeding 5 700 kg for which application for certification was submitted on or after 7 March 2021, special consideration be given to design features that affect the ability of the flight crew to maintain controlled flight. It recommends for these aircraft that this include the elements of the aeroplane design associated with cargo compartment fire protection, and a summary of the demonstrated standards that were considered in the process of aeroplane certification be included in the required aeroplane documentation and made available to the operator.

# 3. ANNEX 19 – SAFETY MANAGEMENT (Annex 19, Foreword and Chapter 3)

VERY DRAFT. Propose that guidance be developed to assist States in incorporating dangerous goods activities into SSP

3.1 The SARPs in Annex 19 are intended to assist States in managing aviation safety risks. It supports the continued evolution of a proactive strategy to improve safety performance. This is critical given the increasing complexity of the global air transportation system and the interrelated aviation activities required to assure the safe

operation of aircraft. The foundation of this proactive safety strategy is based on the implementation of a State safety programme (SSP) by the State and safety management systems (SMS) by its service providers, each of which systematically addresses safety risks. The SSP includes the traditional critical elements of a State safety oversight system, which aims to ensure the effective implementation by the aviation industry of prescriptive SARPs, and elements that support safety management and safety performance principles.

- 3.2 Annex 19 is applicable to safety management functions related to, or in direct support of, the safe operation of the aircraft, which includes dangerous goods operations. It requires that States establish and maintain a State safety programme that is commensurate with the size and complexity of the State's civil aviation system but may delegate safety management-related functions and activities to another State, Regional Safety Oversight Organization (RSOO) or Regional Accident and Incident Investigation Organization (RAIO). The State retains responsibility of activities that are delegated. The implementation of an SSP requires coordination among multiple authorities that contribute to the safe operation of aircraft.
  - 3.3 The SARPs that support the establishment and maintenance of the SSP are structured into four components:
  - a) State safety policy, objectives and resources;
  - b) State safety risk management;
  - c) State safety assurance; and
  - d) State safety promotion.

An indicative list of dangerous goods tasks that support the implementation of the SSP is provided in the *Supplement to the Technical Instructions* (Part S-1, Chapter 5, Attachment II).