



International Civil Aviation Organization

**WORKING PAPER**

DGP/24-WP/77

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**English only**

## **DANGEROUS GOODS PANEL (DGP)**

### **TWENTY-FOURTH MEETING**

**Montréal, 28 October to 8 November 2013**

**Agenda Item 3: Development of recommendations for amendments to the *Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284SU) for incorporation in the 2015-2016 Edition**

### **GUIDANCE FOR STATES WHEN INSPECTING DG TRAINING PROGRAMMES**

(Presented by B. Firkins)

#### **SUMMARY**

This working paper proposes the addition into the Supplement of some recommendations for States regarding the inspection of dangerous goods training programmes.

**Action by the DGP:** The DGP is invited to:

- comment upon and/or adopt the guidance for States to consider during inspections and approvals of dangerous goods instructors when reviewing dangerous goods training programmes, in Chapter 5 of Part 7 of the Supplement as shown in Appendix A to this working paper.
- consider whether Attachments A and B to Attachment II to Chapter 7 of Part 7 of the Supplement are assessment checklists, rather than approval checklists, and if so to make the changes shown in Appendix B to this working paper.
- consider the proposed changes to Attachment B to Attachment II to Chapter 7 of Part 7 of the Supplement; which are shown in Appendix C to this working paper.

## 1. INTRODUCTION

1.1 A paper was presented at the 2013 Meeting of the Dangerous Goods Panel Working Group of the Whole (DGP-WG/13, Montreal, 15 to 19 April 2013) (DGP-WG/13-WP/5) that raised some questions about the adequacy of the existing text in Part 1;4.3 with respect to the qualifications and knowledge of instructors of dangerous goods courses.

1.2 A paper is to be presented at DGP/24-WP/38, Recommendations for Instructors of Dangerous Goods Courses, presented by D. Brennan, regarding the recommendations for instructors who deliver dangerous goods training programmes.

1.3 This paper provides some additional guidance to States regarding the inspection of dangerous goods training programmes, and in particular, those persons who deliver the training programme, based on the experiences of some State Dangerous Goods inspectors.

1.4 The paper also includes some suggested additional material to be considered for Attachment B to Attachment II to Chapter 7 of Part 7 of the Supplement. These changes include some items which are required to be part of the training programme, including record keeping and a test of understanding.

1.5 In reviewing Attachments A and B to Attachment II of Part S-7;7, it was considered that the checklist was a tool to assist in the assessment of a dangerous goods manual and a dangerous goods training programme, rather than the approval.

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## APPENDIX A

### PROPOSED AMENDMENT TO PART S-7 OF THE SUPPLEMENT TO THE TECHNICAL INSTRUCTIONS

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## Part S-7

### STATE'S RESPONSIBILITIES WITH RESPECT TO OPERATORS

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#### Chapter 5

#### INSPECTIONS

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##### 5.6 TRAINING PROGRAMMES

5.6.1 The Technical Instructions require that the operator's training programmes for all staff be approved. The inspection is to confirm that training meets the requirements of the Technical Instructions.

5.6.2 An operator, depending on its size, may have several training programmes customized to the individual responsibilities of its staff. Also, even if the operator does not carry dangerous goods, there is still a need for training programmes for both operational and ground staff dealing with passengers and their baggage; dangerous goods training for such staff may be included, for example, in the safety and emergency procedures training.

5.6.3 The inspection should review a reasonable proportion of the training material to ensure that it is current and relevant to the category of employee and the operator's needs. It is also appropriate to examine how the operator ensures that the training material remain up to date.

5.6.4 For more complex training programmes, delivered at different locations and by different instructors, the inspection should consider the consistency in the training courses and training outcomes.

5.6.5 A crucial component to an effective training programme is the knowledge and capability of those persons who are responsible for creating and delivering the training and who oversee the training programme. Training delivery methods include classroom or other face-to-face courses and those which do not rely upon human interaction, such as computer-based or correspondence delivery.

5.6.5 The inspection should review the technical knowledge and operational experience of the personnel who are responsible for the training programme. There may be several people jointly responsible for the programme, for example, one person may have responsibility for the technical dangerous goods content, another person for the method of learning and delivery, another person for day-to-day oversight of the scheduling of employees for induction and recurrent training and retention of training records.

5.6.5 Where the course is delivered by non-human interaction, the inspection should review the composition and delivery of the training. Aspects to consider include whether the information is presented in a logical sequence, whether the learning processes are interactive and engaging, whether all syllabus areas are covered adequately, whether there is an opportunity to ask questions and gain assistance from a knowledgeable person, and whether the test of understanding is suitably robust to prevent cheating or inappropriate collaboration.

5.6.6 When reviewing larger training organizations, either within the operator's direct control or as an out-sourced arrangement, the inspection should review whether there is a process for identifying the need for new persons to be involved in managing and /or delivering the training programme. The process for training, developing and maintaining the technical knowledge and instructional delivery of the instructor should also be reviewed.

5.6.7 The Technical Instructions require that training records be kept. The reason for retaining records is to ensure that those employees who are required to be trained have completed their training and that recurrency training can be scheduled in a timely manner. The inspection should review the retained training records to ensure that they contain the required details and that the process for managing recurrency training is in place and effective.

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APPENDIX B

PROPOSED AMENDMENT TO PART S-7 OF THE SUPPLEMENT  
TO THE TECHNICAL INSTRUCTIONS

Part S-7

STATE'S RESPONSIBILITIES  
WITH RESPECT TO OPERATORS

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Chapter 7

ANNEX 6 INFORMATION RELEVANT TO STATE'S  
DANGEROUS GOODS RESPONSIBILITIES

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ATTACHMENT II TO CHAPTER 7

DANGEROUS GOODS MANUAL AND TRAINING PROGRAMME CHECKLISTS

Dangerous Goods Operations Manuals and Training Programme Approval

**Purpose:** The purpose of this document is to provide the objectives and tasks a State should conduct during the review and approval of an operator's authority to transport dangerous goods.

**Scope:** A State should inspect and monitor the dangerous goods transported by the operator within its governing authority. The inspection process should verify that an operator's dangerous goods procedures and practices adhere to State operating regulations and the Technical Instructions. This includes a method of validating an operator's authority to transport dangerous goods as cargo.

The attached documents include checklists for a State to reference when reviewing an operator's dangerous goods programme. While these checklists cannot replace the necessary dangerous goods oversight experience and training of State inspector personnel, States may wish to incorporate these checklists into their oversight programmes to ensure a consistent approach to approving dangerous goods manuals and training programmes. The checklists may also be of assistance to operators developing their dangerous goods manual and training programmes.

Attachment A: Dangerous Goods Manual – ~~Approval~~ **Assessment** Checklist

Attachment B: Dangerous Goods Training Programme – ~~Approval~~ **Assessment** Checklist

**Attachment A**

| **Dangerous Goods Manual – ~~Approval~~ Assessment Checklist**

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**Attachment B**

| **Dangerous Goods Training Programme – ~~Approval~~ Assessment Checklist**

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**APPENDIX C**

**PROPOSED AMENDMENT TO PART S-7, CHAPTER 7, ATTACHMENT B TO  
ATTACHMENT II OF THE SUPPLEMENT TO THE TECHNICAL INSTRUCTIONS**

**Part S-7**

**STATE'S RESPONSIBILITIES  
WITH RESPECT TO OPERATORS**

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**Chapter 7**

**ANNEX 6 INFORMATION RELEVANT TO STATE'S  
DANGEROUS GOODS RESPONSIBILITIES**

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**ATTACHMENT II TO CHAPTER 7**

**DANGEROUS GOODS MANUAL AND TRAINING PROGRAMME CHECKLISTS**

Attachment B

Dangerous Goods Training Programme — ~~Approval~~ Assessment Checklist

Name of the air carrier:	Certification number:	State inspector:			
Certificate type:	<input type="checkbox"/> Carrying dangerous goods as cargo <input type="checkbox"/> Not Carrying dangerous goods as cargo	<input type="checkbox"/> Passenger <input type="checkbox"/> All cargo			
<u>Category of Personnel being trained</u> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/>		<u>Initial</u> <input type="checkbox"/> <u>Recurrent</u> <input type="checkbox"/>	<u>Method of Delivery</u> Face to Face <input type="checkbox"/> Correspondence <input type="checkbox"/> Internet/CBT <input type="checkbox"/>		
Reviewed by:	Date:	Approved by:	Approved: <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Objective:</b>					
This checklist is designed to assist the State in determining if the operator's dangerous goods training programme contains the information required in the Technical Instructions.					
<b>Tasks:</b>					
To meet the objective, the State should accomplish the following tasks:					
1. Identify the operator's representative that has overall responsibility for the dangerous goods training programme.					
2. Review the content of the dangerous goods training programme.					
<u>3. Review the process for developing and maintaining instructor knowledge and ability to deliver the operator's dangerous goods training programme</u>					
3.4. Coordinate any corrections or additions as needed with the operator's representative and applicable State inspector.					
<b>Questions:</b>					
To meet the objective, the State should determine whether the dangerous goods training programme contains the following elements:					
General philosophy	Applicable reference from the Technical Instructions	Yes	No	N/A	
1. Purpose of dangerous goods training programme	1;4, Introductory Note, 1;4.1				
2. Applicable regulatory materials	Foreword;1;1, 1;2				
3. Use of the Technical Instructions	1;1.1				
4. Definitions used in air transportation of dangerous goods	1;3.1				
5. General transportation requirements	1;2				
6. Transport by aircraft	1;1.1.1				
7. Training requirements and record-keeping	1;4				
8. Dangerous goods security	1;5				



<b>Limitations</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Dangerous goods forbidden on aircraft	1;2.1			
2. Exempt dangerous goods	1;1.1.5, 1;2.2, 1;2.4, 1;2.5			
3. Dangerous goods carried by passengers or crew	8;1.1			
<b>General requirements for shippers</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Shippers specific responsibilities and compliance to regulations	1;1.1, 1;1.2, 5;1.4			
2. Identify and recognize dangerous goods COMAT	1;2.2			
3. Specific dangerous goods COMAT exceptions	1;2.2			
<b>List of dangerous goods</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Purpose and use of the dangerous goods table	3;2			
2. Proper shipping names	2;0.3, 3;1.2			
3. Hazard class (definition)	2;0.2			
4. UN/ID Numbers	2;0.3			
5. Packing group	2;0.2.4			
<b>General packing requirements</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Shippers responsibilities	5;1.4			
2. General packing requirements	5;1.1			
3. Packing instructions and assignments	4;2			
4. Excepted quantity exceptions	3;5.1			
5. Limited quantity exceptions	3;4.1			
<b>Labelling and marking</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Markings required on packages containing dangerous goods	5;2			
2. Labels required on packages containing dangerous goods	5;3			
<b>Dangerous goods transport documents and other relevant documentation</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Shipper's certification requirements for dangerous goods	5;4.1.6			
2. Transport document requirements	5;4, 7;4.11			
3. Description of dangerous goods required on transport documents	5;4.1.4, 5;4.2			
4. Provision of information	7;4			

<b>Acceptance procedures</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Acceptance and rejection procedures and requirements for dangerous goods	7;1			
2. Passenger and cargo provision of information requirements	7;4.8, 7;5.1			
3. Unit load device and package inspection	7;1.3, 7;1.4, 7;3.1			
<b>Recognition of undeclared dangerous goods</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Hidden shipment indicators	7;6.1			
2. Suspicious cargo and baggage awareness	7;6.1, 7;5.2.2			
3. Reporting of accidents and incidents and undeclared or misdeclared dangerous goods	7;4.4, 7;4.5, 7;4.6, 7.4.7			
<b>Storage and loading procedures</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Unit load device and package inspection	7;2.8, 7;3.1.2			
2. Stowage compatibility	7;2.2			
3. Orientation of packages	7;2.3, 5;3.5.2			
4. Securing packages	7;2.4.2			
5. Location of packages	7;2.4.1			
6. Damages from shipments of dangerous goods	7;3			
<b>Pilots' notification</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Notification to pilot-in-command	7;4.1			
2. Emergency response information	7;4.2, 7;4.3, 7;4.7			
<b>Provisions for passengers and crew</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Dangerous goods exceptions	1;2.4, 1;2.5, 8;1.1			
<b>Emergency procedures</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
1. Use of the <i>Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods</i> (Doc 9481) or similar guidance	7;4.9			
<b>Test – To verify understanding</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<u>1. Test is appropriate for the category of employee</u>	<u>1:4.2.4</u>			
<u>2. Test is completed satisfactorily</u>	<u>1:4.2.4</u>			
<u>3. Test adequately covers syllabus areas</u>				
<b>Training Records</b>	<b>Applicable citations</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<u>1. Individual's name</u>	<u>1:4.2.5(a)</u>			
<u>2. Most recent training completion month</u>	<u>1:4.2.5(b)</u>			
<u>3. Description, copy or reference to training materials</u>	<u>1:4.2.5(c)</u>			

<u>4. Name and address of organization providing training</u>	<u>1:4.2.5(d)</u>			
<u>5. Evidence that shows a test has been completed</u>	<u>1:4.2.5(e)</u>			
<u>6. Records retained for 36 months</u>	<u>1:4.2.6</u>			
<b><u>Recurrent Training</u></b>	<b><u>Applicable citations</u></b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>N/A</u></b>
<u>1. Process to monitor and manage recurrent training of employees</u>	<u>1:4.2.3</u>			
<b><u>Programme Delivery – Face-to-face</u></b>	<b><u>Applicable citations</u></b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>N/A</u></b>
<u>1. Instructors have satisfactory technical knowledge and experience</u>	<u>1:4 Introductory Note</u>			
<u>2. Instructors ability to deliver programme material is satisfactory</u>	<u>1:4 Introductory Note</u>			
<u>3. Method to ensure consistent delivery of the Dangerous Goods Training Programme</u>	<u>1:4 Introductory Note</u>			
<u>4. Process to identify and train new instructors in the training programme</u>	<u>1:4 Introductory Note</u>			
<b><u>Programme Delivery – Correspondence/Online/Computer-based</u></b>	<b><u>Applicable citations</u></b>	<b><u>Yes</u></b>	<b><u>No</u></b>	<b><u>N/A</u></b>
<u>1. Persons responsible for the content of the DG Programme material have appropriate technical knowledge</u>	<u>1:4 Introductory Note</u>			
<u>2. Persons responsible for the delivery of the dangerous goods training material</u>	<u>1:4 Introductory Note</u>			
<u>3. The programme material is presented logically</u>	<u>1:4 Introductory Note</u>			
<u>4. The material is presented in an informative and stimulating manner</u>	<u>1:4 Introductory Note</u>			
<u>5. The student is able to ask questions and seek further explanation about the programme material</u>	<u>1:4 Introductory Note</u>			
<u>6. There are self-check assessments in the material that permit students to self-evaluate during the progress of the course.</u>	<u>1:4 Introductory Note</u>			
<u>7. There are robust mechanisms to prevent students cheating and taking short-cuts</u>	<u>1:4 Introductory Note</u>			
<b>Comments:</b>				