



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)**

**TWENTY-SIXTH MEETING**

**Montréal, 16 to 27 October 2017**

**Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2019-2020 Edition**

**AMENDMENTS TO TRAINING PROVISIONS DEVELOPED BY THE DGP WORKING GROUP ON TRAINING**

(Presented by the Chairman of the DGP Working Group on Training)

**SUMMARY**

This working paper presents amendments to the proposed new training provisions contained in Attachment 4 to the 2017-2018 Edition of the Technical Instructions. They were developed by the DGP Working Group on Training to address issues identified at DGP-WG/17 through feedback provided by States, international organizations and industry on the proposed training provisions (see paragraph 3.2.1.5 of the DGP-WG/17 Report (DGP/26-WP/3)).

**Action by the DGP:** The DGP is invited to agree to the amendments presented in Appendix A to this working paper and to determine whether they should be incorporated in the 2019-2020 Edition of the Technical Instructions.

**1. INTRODUCTION**

1.1 The DGP Working Group on Training (DGP-WG/Training) met in Washington, D.C. from 17 to 21 July 2017. The purpose of the meeting was to progress outstanding work identified at the 2017 working group meeting of the DGP (DGP-WG/17, Montréal, 24 to 28 April 2017) following the training group's review of feedback from States, international organizations and industry on the proposed revised training provisions contained in Attachment 4 to the Technical Instructions. This feedback was in response to State letter AN11/2.1-16/91 and to the survey provided on the ICAO public website (see paragraph 3.2.1.5 of DGP-WG/17 Report contained in DGP/26-WP/3). The work identified included:

- a) clearly defining the objective of the training provisions so that States were clear on what training must achieve;

- b) developing guidance on development and delivery of dangerous goods training in accordance with the new provisions for Part 1;4;
- c) developing guidance on assessment and clarifying the intent of continuous assessment;
- d) clarifying the responsibilities and competencies of employers, instructors and regulators;
- e) addressing entities without specific functions in the Technical Instructions;
- f) developing guidance on implementation and transitional arrangements;
- g) aligning provisions with new PANS-TRG terminology; and
- h) addressing comments received to State letter AN11/2.1-16/91 on the guidance on competency-based training for State employees involved in the regulation and oversight of dangerous goods material contained in the Supplement to the Technical Instructions.

1.2 Accordingly, DGP-WG/Training developed amendments to the training provisions contained in Attachment 4, Chapter 1 to the Technical Instructions as shown in Appendix A to this working paper (Appendix A uses the redline/strikeout feature to display changes, Appendix B is a clean version with all amendments incorporated). DGP-WG/Training also developed amendments to the guidance material currently contained in Attachment 4, Chapters 2 through 5 and to the Supplement. These are provided in DGP/26-WP/40 and DGP/26-WP/41 respectively.

1.3 DGP-WG/Training developed provisions addressing training of entities not knowingly handling dangerous goods in Part 1;4.1.2. Consensus could not be reached among working group members as to whether such training could be mandated. The same arguments raised at previous DGP meetings were raised (see paragraph 3.5.4 of the DGP-WG/17 report provided in DGP/26-WP/3). The group placed “must/should” in square brackets in order to highlight the need for a decision on whether or not the provision could be mandatory. It was recognized that the issue would be discussed by DGP/26 under Agenda Item 6.4.

## 2. ACTION BY THE DGP

2.1 The DGP is invited to agree to the amendments presented in the appendix to this working paper and to determine whether they should be incorporated in the 2019-2020 Edition of the Technical Instructions.

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## APPENDIX A

### PROPOSED AMENDMENTS TO TRAINING PROVISIONS IN THE TECHNICAL INSTRUCTIONS

#### Part 1

#### GENERAL

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The amendments below are based on Attachment 4, Chapter 1 to the 2017-2018 Edition of the Technical Instructions

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#### INTRODUCTORY NOTE

The objective of a dangerous goods training programme is to ensure that persons are competent to perform their assigned functions. An approach to achieving this objective is provided in Chapter 2 to Attachment 4.

#### Chapter 4

#### DANGEROUS GOODS TRAINING

*Parts of this Chapter are affected by State Variations AE 2, BR 7, CA 11, HK 1;  
see Table A-1*

*Note.— Dangerous goods training programmes developed in accordance with the 2016-17 Edition of these Instructions may continue to be used until 31 December 2020. Records of such training and testing are valid for 24 months. However, if recurrent training and testing is completed within the final three months of validity of the previous training and testing, the period of validity extends from the month on which the recurrent training and testing was completed until 24 months from the expiry month of that previous training and testing.*

#### 4.1 ~~GENERAL REQUIREMENTS~~ ESTABLISHMENT OF DANGEROUS GOODS TRAINING PROGRAMMES

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The following note has been moved from under 4.2.1:

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*Note.— 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 training.*

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~~DGP/25 discussed whether or not training requirements for entities involved in the transport of non-dangerous goods as cargo were within the scope of Annex 18 and the Technical Instructions. It was agreed that the scope was not clearly defined (see paragraph 1.2 of the DGP/25 Report). The following alternative provisions are therefore tentatively proposed and will be finalized based on the outcome of work to clarify the scope of Annex 18 (see DGP/25 Report on Agenda Item 1, paragraph 1.2).~~

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~~[The employer must ensure that personnel are competent to perform any function described in these Instructions for which they are responsible prior to performing any of these functions. This must be achieved through training and assessment.]~~

~~[The employer must ensure that personnel with responsibilities for the processing, acceptance or handling of cargo, mail or passengers or of checked and/or carry-on baggage are competent to perform the function for which they are responsible prior to performing any of these functions. This must be achieved through training and assessment.]~~

~~— *Note.— Guidance on developing a competency-based approach to training is provided in Chapter 2 to Attachment 4.*~~

~~4.2.1~~ 4.1.1 The employer must establish and maintain a dangerous goods training programme for personnel performing any function described in these Instructions.

4.1.2 The employer [must/should] establish and maintain a dangerous goods training programme for personnel who may not perform any function described in these Instructions but do perform functions related to the movement of cargo.

baggage, passengers, or mail. The aim of the programme is to ensure personnel are competent to perform functions aimed at preventing undeclared dangerous goods or dangerous goods not permitted from being carried on an aircraft.

~~4.2.4~~Note.— Security personnel who are involved with the screening of passengers and crew and their baggage and cargo or mail must be trained irrespective of whether the operator on which the passenger or cargo is to be transported carries dangerous goods as cargo.

## **4.2 TRAINING PROGRAMMES**

~~4.2.1 The employer must establish and maintain a dangerous goods training programme.~~

~~Note.— 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 training.~~

~~4.2.2~~4.1.3 All operators must establish a dangerous goods training programme regardless of whether or not they are approved to transport dangerous goods as cargo.

~~4.2.6~~1.4 Training courses may be developed and delivered by or for the employer.

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The following note is moved from the Introductory note before the chapter title and modified as shown:

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Note.— The objective of a dangerous goods training programme is to ensure that persons are competent to perform their assigned functions. An approach to achieving this objective is provided in Chapter 2 to Attachment 4 Guidance on a Competency-Based Approach to Dangerous Goods Training and Assessment (Circ xxxx).

## **4.2 OBJECTIVE OF DANGEROUS GOODS TRAINING**

~~4.2.3~~4.2.1 The employer must ensure that personnel are competent to perform any function for which they are responsible prior to performing any of these functions. Personnel must be trained and assessed commensurate with the functions for which they are responsible prior to performing any of these functions. This must be achieved through training and assessment commensurate with the functions for which they are responsible.

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The following is moved from under 4.2.6:

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~~Note.— General information on the provisions for dangerous goods carried by passengers and crew (see Part 8) should be included in training courses, as appropriate.~~

~~4.2.2~~ Personnel who have received training but who are assigned to new functions must be assessed to determine their competence in respect of their new function. If competency is not demonstrated, appropriate additional training must be provided.

~~4.2.3~~ Personnel must be trained to recognize the hazards presented by dangerous goods, to safely handle them and to apply appropriate emergency response procedures.

~~[ Note.— In order to prevent the introduction of undeclared dangerous goods into air transport, any person, such as passenger or cargo reservation personnel and engineering personnel, who performs functions that may indirectly impact the movement of cargo, COMAT, baggage, passengers, or mail should also be trained.]~~

~~4.2.4 Security personnel who are involved with the screening of passengers and crew and their baggage and cargo or mail must be trained irrespective of whether the operator on which the passenger or cargo is to be transported carries dangerous goods as cargo.~~

## **4.3 RECURRENT TRAINING AND ASSESSMENT**

~~4.2.5~~4.3.1 Personnel must receive recurrent training and assessment within 24 months of previous training and assessment to ensure that competency has been maintained. However, if recurrent training and assessment is completed within the final three months of validity of the previous training and assessment, the period of validity extends from the month on which the recurrent training and assessment was completed until 24 months from the expiry month of that previous training and assessment.

~~4.2.6~~ Training courses may be developed and delivered by or for the employer.

~~Note.— General information on the provisions for dangerous goods carried by passengers and crew (see Part 8) should be included in training courses, as appropriate.~~

**4.4 TRAINING AND ASSESSMENT RECORDS**

~~4.2.7~~**4.4.1** The employer must maintain a record of training and assessment for personnel.

~~4.2.7.1~~**4.4.2** The record of training and assessment must include:

- a) the individual's name;
- b) the most recent training and assessment completion month;
- c) a description, copy or reference to training and assessment materials used to meet the training and assessment requirements;
- d) the name and address of the organization providing the training and assessment; and
- e) evidence which shows that personnel have been assessed as competent.

~~4.2.7.2~~**4.4.3** Training and assessment records must be retained by the employer for a minimum period of 36 months from the most recent training and assessment completion month and must be made available upon request to personnel or the appropriate national authority.

**4.5 APPROVAL OF TRAINING PROGRAMMES**

~~4.2.8~~**4.5.1** Dangerous goods training programmes for operators must be approved by the appropriate authority of the State of the Operator in accordance with the provisions of Annex 6 — *Operation of Aircraft*.

~~4.2.9~~**4.5.2** 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.— See 4.7 for approval of training programmes for designated postal operators.

**4.3.4.6 INSTRUCTOR QUALIFICATIONS AND COMPETENCIES**

~~4.3.4~~**4.6.1** Unless otherwise provided for by the appropriate national authority, instructors of initial and recurrent dangerous goods training must demonstrate or be assessed as competent in instruction and the function(s) that they will instruct prior to delivering such training.

~~4.3.2~~**4.6.2** Instructors delivering initial and recurrent dangerous goods training must ~~at least every 24 months~~ deliver such courses at least every 24 months, or in the absence of this, attend recurrent training.

**4.4.4.7 DESIGNATED POSTAL OPERATORS**

~~4.4.4~~**4.7.1** Staff of designated postal operators must be trained commensurate with their responsibilities. The subject matter with which their various categories of staff should be familiar is indicated in Table 1-4.

~~4.4.2~~**4.7.2** Dangerous goods training programmes for designated postal operators must be subjected to review and approval by the civil aviation authority of the State where the mail was accepted by the designated postal operator.

**Table 1-4. Content of training courses for staff of designated postal operators**

<i>Aspects of transport of dangerous goods by air with which they should be familiar, as a minimum</i>	<i>Designated postal operators</i>		
	<i>Categories of staff</i>		
	<i>A</i>	<i>B</i>	<i>C</i>
General philosophy	x	x	x
Limitations	x	x	x
General requirements for shippers	x		
Classification	x		
List of dangerous goods	x		
Packing requirements	x		
Labelling and marking	x	x	x
Dangerous goods transport document and other relevant documentation	x	x	
Acceptance of the dangerous goods listed in 1;2.3.2	x		
Recognition of undeclared dangerous goods	x	x	x
Storage and loading procedures			x
Provisions for passengers and crew	x	x	x
Emergency procedures	x	x	x

**CATEGORIES**

- A — Staff of designated postal operators involved in accepting mail containing dangerous goods
- B — Staff of designated postal operators involved in processing mail (other than dangerous goods)
- C — Staff of designated postal operators involved in the handling, storage and loading of mail

*Note.— Guidance on the aspects of training to be covered by staff of designated postal operators can be found in S-1;3.*

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## APPENDIX B

### PROPOSED AMENDMENTS TO TRAINING PROVISIONS IN THE TECHNICAL INSTRUCTIONS — CLEAN VERSION

#### Chapter 4

#### DANGEROUS GOODS TRAINING

*Parts of this Chapter are affected by State Variations AE 2, BR 7, CA 11, HK 1;  
see Table A-1*

*Note.— Dangerous goods training programmes developed in accordance with the 2016-17 Edition of these Instructions may continue to be used until 31 December 2020. Records of such training and testing are valid for 24 months. However, if recurrent training and testing is completed within the final three months of validity of the previous training and testing, the period of validity extends from the month on which the recurrent training and testing was completed until 24 months from the expiry month of that previous training and testing.*

##### 4.1 ESTABLISHMENT OF DANGEROUS GOODS TRAINING PROGRAMMES

*Note.— 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 training.*

4.1.1 The employer must establish and maintain a dangerous goods training programme for personnel performing any function described in these Instructions.

4.1.2 The employer [must/should] establish and maintain a dangerous goods training programme for personnel who may not perform any function described in these Instructions but do perform functions related to the movement of cargo, baggage, passengers, or mail. The aim of the programme is to ensure personnel are competent to perform functions aimed at preventing undeclared dangerous goods or dangerous goods not permitted from being carried on an aircraft.

*Note.— Security personnel who are involved with the screening of passengers and crew and their baggage and cargo or mail must be trained irrespective of whether the operator on which the passenger or cargo is to be transported carries dangerous goods as cargo.*

4.1.3 All operators must establish a dangerous goods training programme regardless of whether or not they are approved to transport dangerous goods as cargo.

4.1.4 Training courses may be developed and delivered by or for the employer.

*Note.— The objective of a dangerous goods training programme is to ensure that persons are competent to perform their assigned functions. An approach to achieving this objective is provided in Guidance on a Competency-Based Approach to Dangerous Goods Training and Assessment (Circ xxxx).*

##### 4.2 OBJECTIVE OF DANGEROUS GOODS TRAINING

4.2.1 The employer must ensure that personnel are competent to perform any function for which they are responsible prior to performing any of these functions. This must be achieved through training and assessment commensurate with the functions for which they are responsible.

*Note.— General information on the provisions for dangerous goods carried by passengers and crew (see Part 8) should be included in training courses, as appropriate.*

4.2.2 Personnel who have received training but who are assigned to new functions must be assessed to determine their competency in respect of their new function. If competency is not demonstrated, appropriate additional training must be provided.

4.2.3 Personnel must be trained to recognize the hazards presented by dangerous goods, to safely handle them and to apply appropriate emergency response procedures.

### 4.3 RECURRENT TRAINING AND ASSESSMENT

4.3.1 Personnel must receive recurrent training and assessment within 24 months of previous training and assessment to ensure that competency has been maintained. However, if recurrent training and assessment is completed within the final three months of validity of the previous training and assessment, the period of validity extends from the month on which the recurrent training and assessment was completed until 24 months from the expiry month of that previous training and assessment.

### 4.4 TRAINING AND ASSESSMENT RECORDS

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4.4.2 The record of training and assessment must include:

- a) the individual's name;
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- c) a description, copy or reference to training and assessment materials used to meet the training and assessment requirements;
- d) the name and address of the organization providing the training and assessment; and
- e) evidence which shows that personnel have been assessed as competent.

4.4.3 Training and assessment records must be retained by the employer for a minimum period of 36 months from the most recent training and assessment completion month and must be made available upon request to personnel or the appropriate national authority.

### 4.5 APPROVAL OF TRAINING PROGRAMMES

4.5.1 Dangerous goods training programmes for operators must be approved by the appropriate authority of the State of the Operator in accordance with the provisions of Annex 6 — *Operation of Aircraft*.

4.5.2 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.— See 4.7 for approval of training programmes for designated postal operators.*

### 4.6 INSTRUCTOR QUALIFICATIONS AND COMPETENCIES

4.6.1 Unless otherwise provided for by the appropriate national authority, instructors of initial and recurrent dangerous goods training must demonstrate or be assessed as competent in instruction and the function(s) that they will instruct prior to delivering such training.

4.6.2 Instructors delivering initial and recurrent dangerous goods training must deliver such courses at least every 24 months, or in the absence of this, attend recurrent training.

### 4.7 DESIGNATED POSTAL OPERATORS

4.7.1 Staff of designated postal operators must be trained commensurate with their responsibilities. The subject matter with which their various categories of staff should be familiar is indicated in Table 1-4.

4.7.2 Dangerous goods training programmes for designated postal operators must be subjected to review and approval by the civil aviation authority of the State where the mail was accepted by the designated postal operator.

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Limitations	x	x	x
General requirements for shippers	x		
Classification	x		
List of dangerous goods	x		
Packing requirements	x		
Labelling and marking	x	x	x
Dangerous goods transport document and other relevant documentation	x	x	
Acceptance of the dangerous goods listed in 1;2.3.2	x		
Recognition of undeclared dangerous goods	x	x	x
Storage and loading procedures			x
Provisions for passengers and crew	x	x	x
Emergency procedures	x	x	x

**CATEGORIES**

- A — Staff of designated postal operators involved in accepting mail containing dangerous goods  
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*Note.— Guidance on the aspects of training to be covered by staff of designated postal operators can be found in S-1;3.*