

International Standards  
and Recommended Practices



**Annex 18**  
to the Convention on  
International Civil Aviation

# The Safe Transport of Dangerous Goods by Air

This edition incorporates all amendments  
adopted by the Council prior to 5 March 2011  
and supersedes, on 17 November 2011, all previous  
editions of Annex 18.

For information regarding the applicability  
of the Standards and Recommended Practices,  
see Foreword and the relevant clauses in  
each Chapter.

Fourth Edition  
July 2011

International Civil Aviation Organization

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*First Edition 1984*  
*Second Edition 1989*  
*Third Edition 2001*  
*Fourth Edition 2011*

*Technical Instructions for the Safe Transport of Dangerous Goods by Air* are approved, issued and amended by the Council and amplify the basic provisions of Annex 18. They contain all the detailed instructions necessary for the safe international transport of dangerous goods by air. Though not Standards themselves, they assume the character of Standards by virtue of Standard 2.2.1 of Annex 18. For this reason, the detailed requirements of the Technical Instructions are considered binding on a State unless, in the event that the State is unable to accept the binding nature of the Technical Instructions, it has notified a difference to the provisions of paragraph 2.2.1 of Annex 18 under Article 38 of the Convention. The Technical Instructions are published by ICAO in Doc 9284 which represents the only authentic source material.

### **Annex 18, The Safe Transport of Dangerous Good by Air**

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## AMENDMENTS

Amendments are announced in the supplements to the *Catalogue of ICAO Publications*; the Catalogue and its supplements are available on the ICAO website at [www.icao.int](http://www.icao.int). The space below is provided to keep a record of such amendments.

## RECORD OF AMENDMENTS AND CORRIGENDA

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# FOREWORD

## Historical background

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

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

The provisions of Annex 18 govern the international transport of dangerous goods by air. The broad provisions of this Annex are amplified by the detailed specifications of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284).

## Action by Contracting States

*Notification of differences.* The attention of Contracting States is drawn to the obligation imposed by Article 38 of the Convention by which Contracting States are required to notify the Organization of any differences between their national regulations and practices and the International Standards contained in this Annex and any amendments thereto. Contracting States are invited to extend such notification to any differences from the Recommended Practices contained in this Annex, and any amendments thereto, when the notification of such differences is important for the safety of air navigation. Further, Contracting States are invited to keep the Organization currently informed of any differences which may subsequently occur, or of the withdrawal of any differences previously notified. A specific request for notification of differences will be sent to Contracting States immediately after the adoption of each amendment to this Annex.

The attention of States is also drawn to the provisions of Annex 15 related to the publication of differences between their national regulations and practices and the related ICAO Standards and Recommended Practices through the Aeronautical Information Service, in addition to the obligation of States under Article 38 of the Convention.

In the specific case of 2.2.1 of this Annex, it should be noted that States are expected to file a difference only if they are unable to accept the binding nature of the Technical Instructions. Variations from the detailed provisions of the Technical Instructions are to be reported to ICAO for publication in that document as required by 2.5 of this Annex. Such detailed variations from the Technical Instructions will not be published with any other differences in a Supplement to this Annex and are not expected to be published under the provisions of Annex 15.

*Promulgation of information.* The establishment and withdrawal of any changes to facilities, services and procedures affecting aircraft operations provided in accordance with the Standards specified in this Annex should be notified and take effect in accordance with the provisions of Annex 15.

### Status of Annex components

An Annex is made up of the following component parts, not all of which, however, are necessarily found in every Annex; they have the status indicated:

1.— *Material comprising the Annex proper:*

- a) *Standards and Recommended Practices* adopted by the Council under the provisions of the Convention. They are defined as follows:

*Standard:* Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as necessary for the safety or regularity of international air navigation and to which Contracting States will conform in accordance with the Convention; in the event of impossibility of compliance, notification to the Council is compulsory under Article 38.

*Recommended Practice:* Any specification for physical characteristics, configuration, matériel, performance, personnel or procedure, the uniform application of which is recognized as desirable in the interest of safety, regularity or efficiency of international air navigation, and to which Contracting States will endeavour to conform in accordance with the Convention.

- b) *Appendices* comprising material grouped separately for convenience but forming part of the Standards and Recommended Practices adopted by the Council.
- c) *Definitions* of terms used in the Standards and Recommended Practices which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.
- d) *Tables and Figures* which add to or illustrate a Standard or Recommended Practice and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

2.— *Material approved by the Council for publication in association with the Standards and Recommended Practices:*

- a) *Forewords* comprising historical and explanatory material based on the action of the Council and including an explanation of the obligations of States with regard to the application of the Standards and Recommended Practices ensuing from the Convention and the Resolution of Adoption.
- b) *Introductions* comprising explanatory material introduced at the beginning of parts, chapters or sections of the Annex to assist in the understanding of the application of the text.
- c) *Notes* included in the text, where appropriate, to give factual information or references bearing on the Standards or Recommended Practices in question, but not constituting part of the Standards or Recommended Practices.
- d) *Attachments* comprising material supplementary to the Standards and Recommended Practices, or included as a guide to their application.

### Selection of language

This Annex has been adopted in six languages — English, Arabic, Chinese, French, Russian and Spanish. Each Contracting State is requested to select one of those texts for the purpose of national implementation and for other effects provided for in the Convention, either through direct use or through translation into its own national language, and to notify the Organization accordingly.

## Editorial practices

The following practice has been adhered to in order to indicate at a glance the status of each statement: *Standards* have been printed in light face roman; *Recommended Practices* have been printed in light face italics, the status being indicated by the prefix **Recommendation**; *Notes* have been printed in light face italics, the status being indicated by the prefix *Note*.

It will be noted that in the English text the following practice has been adhered to when writing the specifications: Standards employ the operative verb “shall” while Recommended Practices employ the operative verb “should”.

Any reference to a portion of this document, which is identified by a number and/or title, includes all subdivisions of that portion.

Table A. Amendments to Annex 18

| <i>Amendment</i>   | <i>Source(s)</i>                                                                     | <i>Subject(s)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <i>Adopted/approved<br/>Effective<br/>Applicable</i> |
|--------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1st Edition        | Air Navigation Commission Study                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 26 June 1981<br>1 January 1983<br>1 January 1984     |
| 1                  | Sixth Meeting of the Dangerous Goods Panel                                           | Miscellaneous amendments for alignment with Recommendations of the UN Committee of Experts and IAEA.                                                                                                                                                                                                                                                                                                                                                                                                                           | 26 November 1982<br>26 March 1983<br>1 January 1984  |
| 2                  | Fifth, Sixth and Seventh Meetings of the Dangerous Goods Panel                       | Improved definitions for overpack and unit load device. Definitions of package and packaging aligned with Recommendations of the UN Committee of Experts. Addition of a paragraph covering surface transport to or from aerodromes. The requirement to provide information to the pilot-in-command revised to indicate when this information should be given.                                                                                                                                                                  | 1 June 1983<br>1 October 1983<br>1 January 1984      |
| 3                  | Eighth Meeting of the Dangerous Goods Panel                                          | Clarification of the circumstances when exemptions may be granted. Clarification of the segregation requirements of poisons or infectious substances from animals or foodstuffs.                                                                                                                                                                                                                                                                                                                                               | 25 March 1985<br>29 July 1985<br>1 January 1986      |
| 4<br>(2nd Edition) | Eleventh Meeting of the Dangerous Goods Panel                                        | General simplification of the provisions of Annex 18 through the removal of technical detail. Miscellaneous amendments to various provisions.                                                                                                                                                                                                                                                                                                                                                                                  | 24 February 1989<br>23 July 1989<br>16 November 1989 |
| 5                  | Fourteenth and Sixteenth Meetings of the Dangerous Goods Panel                       | Clarification of the responsibility of States to achieve compliance with any amendment to the <i>Technical Instructions for the Safe Transport of Dangerous Goods by Air</i> (Doc 9284). Clarification of the exceptions to dangerous goods carried by passengers and crew members.                                                                                                                                                                                                                                            | 10 March 1999<br>19 July 1999<br>4 November 1999     |
| 6<br>(3rd Edition) | Seventeenth Meeting of the Dangerous Goods Panel and Amendment 25 to Annex 6, Part I | a) revised definitions of dangerous goods, crew member, flight crew member and pilot-in-command;<br>b) revision of the provisions to grant exemptions in special circumstances by the States of Overflight to facilitate the movement of dangerous goods in an aircraft overflying its territory;<br>c) alignment of provisions regarding packaging with the Technical Instructions;<br>d) introduction of provisions to cover the requirement to load and stow dangerous goods in accordance with the Technical Instructions; | 7 March 2001<br>16 July 2001<br>1 November 2001      |

| <i>Amendment</i>    | <i>Source(s)</i>                                                                     | <i>Subject(s)</i>                                                                                                                                                                                                        | <i>Adopted/approved<br/>Effective<br/>Applicable</i> |
|---------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
|                     |                                                                                      | e) revision of the provisions to place the overall responsibility with States to provide information to passengers;                                                                                                      |                                                      |
|                     |                                                                                      | f) revision of the provisions to ensure that emergency response personnel are informed without delay, after an accident or incident, about the dangerous goods carried as cargo on board the aircraft;                   |                                                      |
|                     |                                                                                      | g) revision of the provisions to enhance cooperation between States in taking action against shippers who wilfully violate the dangerous goods transport regulations; and                                                |                                                      |
|                     |                                                                                      | h) revision of the provisions of the pilot to provide information on dangerous goods on board in the event of an emergency.                                                                                              |                                                      |
| 7                   | Eighteenth Meeting of the Dangerous Goods Panel                                      | a) notification to ICAO of appropriate national authorities responsible for dangerous goods; and                                                                                                                         | 24 February 2003<br>14 July 2003<br>27 November 2003 |
|                     |                                                                                      | b) provision of emergency response information regarding dangerous goods.                                                                                                                                                |                                                      |
| 8                   | Nineteenth Meeting of the Dangerous Goods Panel                                      | a) a refinement of paragraph 9.6.1 to make it clear that the presence of dangerous goods needs to be reported only in the case of a serious incident in which the dangerous goods were likely to have been involved; and | 16 February 2005<br>11 July 2005<br>24 November 2005 |
|                     |                                                                                      | b) introduction of a new Chapter 13 requiring States to establish dangerous goods security measures.                                                                                                                     |                                                      |
| 9                   | Twentieth Meeting of the Dangerous Goods Panel                                       | The extension of the provisions in Chapter 12 relating to the investigation of dangerous goods accidents and incidents to include cases of misdeclared and undeclared dangerous goods.                                   | 19 February 2007<br>16 July 2007<br>20 November 2008 |
| 10<br>(4th Edition) | Twenty-first and twenty-second meetings of the Dangerous Goods Panel (DGP/21 and 22) | a) Loading of dangerous goods on cargo only aircraft; and                                                                                                                                                                | 4 March 2011<br>18 July 2011                         |
|                     |                                                                                      | b) requirements for the issuance of exemptions and approvals in Chapter 2 and to certain definitions in Chapter 1.                                                                                                       | 17 November 2011                                     |
| 11                  | Twenty-third meeting of the Dangerous Goods Panel (DGP/23)                           | Requirements for State inspection systems in Chapter 11 and to certain definitions in Chapter 1.                                                                                                                         | 27 February 2013<br>15 July 2013<br>14 November 2013 |