



Workshop on Dangerous goods

10 - Expected elements of an Operating Manual (DG and non-DG)



European Union Aviation Safety Agency

EU-ASEAN Sustainable Connectivity Package Aviation Partnership Project
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10 - Expected elements of an Operating Manual (DG and non-DG)

1. Requirements
2. Content



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10 - Expected elements of an Operating Manual (DG and non-DG)

1. Requirements

2. Content

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10 - Expected elements of an Operating Manual (DG and non-DG)

01 – Requirements

Part 5 - Shipper's responsibilities

1.3 Information to employees

A shipper must provide such information to employees as will enable them to carry out the functions for which they are responsible with regard to the transport of dangerous goods by air.

Part 7 - Operator's responsibilities

4.2 Information to be provided to employees

An operator must provide such information in the operations manual and/or other appropriate manuals as will enable flight crews and other employees to carry out the functions for which they are responsible with regard to the transport of dangerous goods.

This information must include instructions as to the action to be taken in the event of emergencies involving dangerous goods (...)

Where applicable, this information must also be provided to ground handling agents.



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10 - Expected elements of an Operating Manual (DG and non-DG)

01 – Requirements

Part S-5 - State's responsibilities with respect to shippers

1.2 Organization and procedures

The inspection needs to confirm that there are sufficient resources for the intended operation and that individuals with specific responsibilities have been made aware of their responsibilities. It will ensure that reference manuals and regulatory guidelines are up to date and available to staff who need to use them.



Part S-7 - State's responsibilities with respect to operators

4.7 Compliance assurance

The competent authority should ensure compliance with the Technical Instructions (...)

Attachment I – chapter 2.2

Consistent with State operating regulations, the dangerous goods manual is required to be submitted to the State by the operator. The State will evaluate and approve or recommend changes to ensure compliance with State regulations and the Technical Instructions.

The operator should coordinate with the State, as necessary, to formulate a satisfactory dangerous goods manual. Once approved by the State, the operator may implement the approved operational procedures. Only the State may approve dangerous goods manuals.

10 - Expected elements of an Operating Manual (DG and non-DG)

01 – Requirements

Part S-7 - State's responsibilities with respect to operators

Attachment I – chapter 3

Operators **who do not accept, handle, or store dangerous goods** must provide procedures and instructions in the operator's manual as follows:

- procedures and instructions so that all personnel responsible for accepting and handling any cargo or packaged materials receive adequate training on the recognition of items classified as dangerous goods ("adequate" is defined in an operational sense to mean the demonstrated ability of required personnel to identify such items);
- procedures and instructions so that no packages are accepted by the operator that contain dangerous goods;
- procedures and instructions for reporting that damaged packages found to contain, or that are suspected of containing, dangerous goods are reported in compliance with the Technical Instructions.



10 - Expected elements of an Operating Manual (DG and non-DG)

01 – Requirements

(CAT, NCC, SPO, ~~NCO~~)



ORO.MLR.100 Operations manual – general

Regulation (EU) No 379/2014

- (a) The operator shall establish an operations manual (OM) as specified under 8.b of Annex IV to Regulation (EC) No 216/2008. (Basic regulation)
- (b) The content of the OM shall reflect the requirements set out in this Annex, Annex IV (Part-CAT), Annex V (Part-SPA), Annex VI (Part-NCC) and Annex VIII (Part-SPO), as applicable, and shall not

ARO.GEN.300 Oversight

Regulation (EU) 2019/1384

- (a) The competent authority shall verify:
 - (1) compliance with the requirements applicable to organisations or type of operations prior to the issue of a certificate, approval or authorisation, as applicable;
 - (2) continued compliance with the applicable requirements of organisations it has certified, specialised operations it has authorised and organisations from which it received a declaration;

10 - Expected elements of an Operating Manual (DG and non-DG)

01 – Requirements

(NCC, SPO, NCO)



Whatever the type of operation (except NCO no carrying DGs), it is required that procedures are established:

SPO non-SPA.DG >>	AMC4 ORO.MLR.100 (A9)
SPO SPA.DG >>	SPO.GEN.150
NCC non-SPA.DG >>	AMC2 ORO.MLR.100 (r)
NCC SPA.DG >>	NCC.GEN.150
NCO non-SPA.DG >>	Ø
NCO SPA.DG >>	NCO.GEN.140

The content has to be adapted/reduced depending on the specificities of the operations

10 - Expected elements of an Operating Manual (DG and non-DG)

01 – Requirements



	CAT	NCC	SPO	NCO
Portable Electronic devices	CAT.GEN.MPA.140	NCC.GEN.130	SPO.GEN.130	NCO.GEN.125
Documents, manual and information to be carried	CAT.GEN.MPA.180	NCC.GEN.140	SPO.GEN.140	NCO.GEN.135
Transport of DGs	CAT.GEN.MPA.200	NCC.GEN.150	SPO.GEN.150	NCO.GEN.140
			SPO.SPEC.HESLO.110	NCO.SPEC.HESLO.110
Release of DGs			SPO.GEN.155	NCO.SPEC.160
			SPO.SPEC.PAR.125	NCO.SPEC.PAR.120
Carriage and use of weapons	CAT.GEN.MPA.155 .161.165		SPO.GEN.160	

10 - Expected elements of an Operating Manual (DG and non-DG)

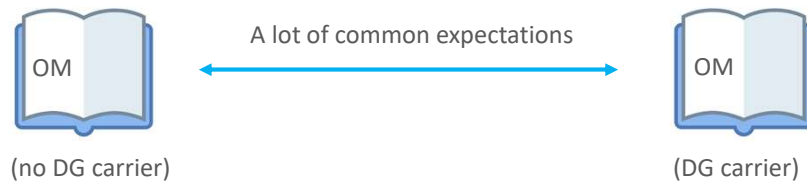
1. Requirements

2. Content

10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

Introduction



In this chapter, specificities of DG carriers will be written in orange

10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

AMC3 ORO.MLR.100 Operations manual – general

ED Decision 2021/005/R

CONTENTS — CAT OPERATIONS

- (a) The OM should contain at least the following information, where applicable, as relevant for the area and type of operation:

9 DANGEROUS GOODS AND WEAPONS

- 9.1 Information, instructions and general guidance on the transport of dangerous goods, in accordance with Subpart G of Annex V (SPA.DG), including:

- (a) operator's policy on the transport of dangerous goods;
- (b) guidance on the requirements for acceptance, labelling, handling, stowage and segregation of dangerous goods;
- (c) special notification requirements in the event of an accident or occurrence when dangerous goods are being carried;
- (d) procedures for responding to emergency situations involving dangerous goods;
- (e) duties of all personnel involved; and
- (f) instructions on the carriage of the operator's personnel on cargo aircraft when dangerous goods are being carried.

- 9.2 The conditions under which weapons, munitions of war and sporting weapons may be carried.



10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

Regulatory references

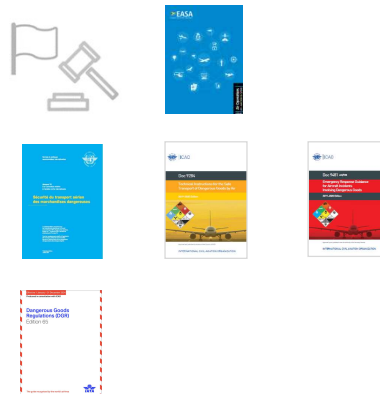
The operator should also clearly indicate which standard is chosen for his operations.

National Regulation

ICAO

- Annex 18;
- Technical Instructions (Doc 9284);
- Emergency Response Guidance (Doc 9481).

The use of the IATA DGR manual is acceptable although it is not a regulatory standard.



10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

OM – DG part

- the operator's policy on the non-transport/**transport** of dangerous goods;
- standards used by the operator (incl. the designation of a person responsible IAW ORO.AOC.135);
- the responsibility of the personnel concerned/**involved in this type of transport and their functions** (including subcontractors acting on its behalf and under its responsibility);
- information on the different hazard classes, marking and labelling of dangerous goods packages / **procedures for acceptance, handling, storage, segregation of dangerous goods**, and information to be provided to the captain;
- **instructions on the transport of operator's personnel on board cargo aircraft when dangerous goods are carried (where applicable)**;
- means of information provided to passengers;
- dangerous goods that may be carried by passengers and crew members;
- recognition of undeclared or misdeclared dangerous goods;
- occurrence/incident/accident reporting procedures;
- emergency procedures.



10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

Focus on some specific points to be addressed (where applicable)



- indication that the operator is not approved / **approved**;
- **listing of the authorized classes and/or divisions**;
- **listing of any restriction/specificity as mentioned in the approval**;
- **reminder about forbidden DG + procedure in case of exemption / specific approval**;
- reminder about the general and operator's exceptions (>> see presentation 02 - Limitations);
- **excepted/limited quantities**;
- marking and labelling;
- **acceptance procedure (incl. C/L)**;
- **procedure for handling and storing DG in the warehouse, procedure for loading DG in a/c**;
- instructions concerning weapons and ammunition of war and sport;
- procedure concerning the spare parts (AOG/COMAT) – **see here after**.

10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

Focus on some specific points to be addressed (where applicable)



- functions and tasks of personnel concerned / involved in the (non)transport of dangerous goods (see CBT training);
- description of the NOTOC;
- retention of documents or information (minimum period of 3 months);
- detail about dangerous goods that may be carried by passengers and crew – **see here after**;
- procedure related to the relocation of cabin baggage to the cargo compartment (incl. the ban on e-cigarettes, spare lithium batteries, etc.).

10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

Replacement parts (AOG/COMAT)

TIs Part 1 §2.2.1

Exceptions for dangerous goods of the operator
(see presentation 02 – Limitations)

When transported as COMAT...

(see TIs Part 1 §2.2.2, 2.2.3 & 2.2.4)

- articles and substances which are required to be aboard in accordance with the airworthiness requirements and operating regulations or that are authorized by the State of the Operator;
- Some articles carried aboard for use or sale on the aircraft during the flight or series of flights;
- dry ice intended for use in food and beverage service;
- electronic devices (...) containing lithium cells or batteries for use on the aircraft during the flight or series of flights.



2) except for when consigned by operators and carried in specific containers designed to meet the packaging requirements for the concerned items.

1) must be transported IAW the provisions of the TIs.

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02 – Content

Spare parts (AOG/COMAT)

TIs supplement – Part S-7, Attachment 1 to chapter 8

The State should ensure that operators that use aircraft components or consumable materials (e.g. aircraft spares) classified as dangerous goods include in their manuals and provide responsible personnel training on the following information:

- procedures and information to assist personnel (particularly maintenance, shipping, and storage personnel) to identify or recognize aircraft components and consumable materials that contain dangerous goods;
- procedures and information on how these aircraft components or consumable materials are to be moved, stored, or handled within the facilities of the operator, or other air agency with whom they contract services to or for;
- procedures and information for determining the proper packaging, marking, labelling, and materials compatibility, including instructions for the safe movement, storage, and handling of aircraft components and consumable materials classified as dangerous goods while they are within their facilities (including such materials as chemical oxygen generators);
- information, guidance, and precautions on the specific hazards associated with aircraft components and consumable materials classified as dangerous goods that are to be moved, stored, or handled within their facilities.



10 - Expected elements of an Operating Manual (DG and non-DG)

02 – Content

Other points that may be addressed in the OM

Human remains in coffins (HUM)

Suggestions:

- the coffin is hermetically sealed and has a disinfectant filter to allow decomposition gases to escape. It is designed to withstand rapid depressurization of the aircraft (approved coffin and filters);
- the coffin bears an external mark, plate or other visible sign confirming the approvals;
- for non-pressurised aircraft, operation should be limited to a maximum of FL100 to limit the risks associated with the coffin pressure problem;
- it should be mentioned on the NOTOC;
- in case of loading in the cabin, procedures will have to be described; (incl. the fact that it must be secured in such a way that emergency exits are not unusable).

Transport of live animal (AVI)

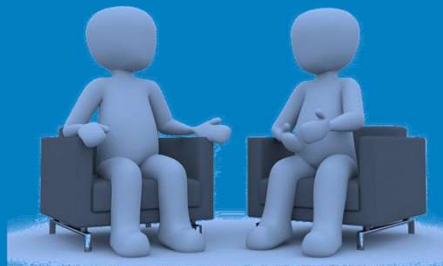
Transport of valuable cargo (VAL)



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Thank you for your attention



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