



ICAO

Circular 356

Guidelines on Digital Learning for Cabin Crew Training



Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION



Documents

Document Sharing Hub



| ICAO

Circular 356

Guidelines on Digital Learning for Cabin Crew Training

Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION 

Documents
Document Sharing Hub

Published in separate English, Arabic, Chinese, French, Russian
and Spanish editions by the
INTERNATIONAL CIVIL AVIATION ORGANIZATION
999 Robert-Bourassa Boulevard, Montréal, Quebec, Canada H3C 5H7

For ordering information and for a complete listing of sales agents
and booksellers, please go to the ICAO website at www.icao.int

Cir 356, Guidelines on Digital Learning for Cabin Crew Training

Order Number: CIR356
ISBN 978-92-9258-886-1

© ICAO 2020

All rights reserved. No part of this publication may be reproduced, stored in a
retrieval system or transmitted in any form or by any means, without prior
permission in writing from the International Civil Aviation Organization.

TABLE OF CONTENTS

	<i>Page</i>
Glossary	(v)
Chapter 1. Introduction to digital learning	1
1.1 General.....	1
1.2 Baseline considerations.....	1
1.3 E-learning versus digital learning	2
1.4 Benefits of implementing digital learning	2
1.5 Blended learning approach.....	4
1.6 Levels of user interactivity	6
1.7 Limitations of digital learning	6
1.8 Adapting cabin crew training via digital learning.....	7
Chapter 2. Applying digital learning	9
2.1 How to build a digital learning programme	9
2.2 Instructional design process.....	9
2.3 Instructional design model.....	10
2.4 Training delivery methods	12
2.5 Instructor availability	14
2.6 Evaluation methods.....	14
2.7 User training	15
Chapter 3. Quality assurance in digital learning.....	16
3.1 Content management system.....	16
3.2 Learning management system	16
3.3 Quality management process.....	17
3.4 Contingency planning	18
Chapter 4. Regulatory considerations	19
4.1 Regulatory approval process.....	19
4.2 Aspects for consideration	19
4.3 Surveillance.....	20

Downloaded from https://www.icao.int/publications/CAO%20Circular%20356%202020.pdf

GLOSSARY

DEFINITIONS

Approved training — cabin crew. Training conducted under special curricula and supervision approved by a Member State that, where applicable, is conducted within an approved training organization.

Cabin crew member. A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

Classroom training. In-person, instructor-led training which may include group exercises and interactive instructional sessions.

Competency. A dimension of human performance that is used to reliably predict successful performance on the job. A competency is manifested and observed through behaviours that mobilize the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.

Computer-based training. Training involving instructional aids, such as computers and tablets. Computer-based training may encompass the use of data storage medium (such as CD-ROM or flash drive), as well as web-based training (commonly referred to as e-learning), distance learning and digital learning (such as virtual learning and gamification).

Hands-on exercise. Exercise on the use of equipment or aircraft systems that is conducted without a specific context. Equipment that is removed from operation, or other representative training equipment considered acceptable by the State, can be used for the purposes of this training.

Operator. The person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Safety performance indicator. A data-based parameter used for monitoring and assessing safety performance.

Simulated exercise. Exercise representing a full context scenario (e.g. aircraft evacuation) where cabin crew apply the operator's procedures and associated crew responsibilities for dealing with the specific situation. This is typically conducted in a representative training device capable of reproducing the appropriate environment or equipment characteristics (e.g. cabin, flight deck, accessible cargo compartment, crew rest area, etc.), or on an actual 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.

ABBREVIATIONS AND ACRONYMS

App	Application
CMS	Content management system
ILT	Instructor-led training
LMS	Learning management system
VR	Virtual reality

Chapter 1

INTRODUCTION TO DIGITAL LEARNING

1.1 GENERAL

1.1.1 The purpose of this circular is to provide detailed guidance on designing, developing and using digital learning for cabin crew safety training. It also provides basic concepts and information on the processes and resources involved in digital learning development. These guidelines focus on formal learning, specifically on structured courses designed to meet job-related learning objectives. They do not address assessment needs or evaluation stages of a training programme but rather the design, development and delivery methods that are specific to digital learning.

1.1.2 Digital learning should support classroom training and hands-on exercises with new technologies. These guidelines provide information about digital learning and the strengths and weaknesses of approaches to implementing technology-based learning in general. In addition, to keep trainees involved and motivated, and to improve the training and learning experience, the aspects covered in these guidelines should be taken into consideration when designing technology-based training.

1.1.3 Digital learning offers opportunities to improve competencies, including knowledge and skills. It can offer enhanced safety via well-trained and competent aviation professionals.

1.1.4 Digital learning is not meant to replace classroom training, hands-on exercises or traditional simulated exercises in their entirety. Based on the technological methods used, digital learning can recreate a realistic environment that best simulates line operations. This level of realism in training reinforces the development and application of competencies alternatively trained in a classroom setting or through hands-on exercises. Digital learning should be selected as a training delivery method when it is deemed suitable to attain the learning outcomes and its use results in an equivalent or increased level of competence for the trainee.

1.2 BASELINE CONSIDERATIONS

1.2.1 The way organizations view the learning process and how people learn has evolved over the years. Additionally, the aviation industry is constantly evolving and deals with new challenges, diverse cultures, different generations of trainees and new regulations. These issues raise the question of how to make training more effective and sustainable. Organizations should focus on what can be done and what kind of technology can be used to enhance training. Digital learning is an opportunity to improve and change the way training content is retained.

1.2.2 Points to consider when choosing digital learning include, but are not limited, to:

- a) Is learning best delivered in one unit or spread out over time?
- b) Does training address an immediate learning objective?
- c) Do trainees have access to hardware and software?
- d) Are trainees sufficiently self-motivated for digital learning or self-directed modes of learning?