

---

---

**Information technology for learning,  
education and training — Catalogue  
model for virtual, augmented and  
mixed reality content**

*Technologies de l'information pour l'apprentissage, l'éducation et  
la formation — Modèle de catalogue pour les contenus en réalité  
virtuelle, augmentée et mixte*

**(<https://standards.iteh.ai>)**  
**Document Preview**

[ISO/IEC TR 23843:2020](https://standards.iteh.ai/catalog/standards/iso/6a5ed6bf-2393-4514-85ed-f3dc2a4ea447/iso-iec-tr-23843-2020)

<https://standards.iteh.ai/catalog/standards/iso/6a5ed6bf-2393-4514-85ed-f3dc2a4ea447/iso-iec-tr-23843-2020>



**iTeh Standards**  
**(<https://standards.iteh.ai>)**  
**Document Preview**

[ISO/IEC TR 23843:2020](https://standards.iteh.ai/catalog/standards/iso/6a5ed6bf-2393-4514-85ed-f3dc2a4ea447/iso-iec-tr-23843-2020)

<https://standards.iteh.ai/catalog/standards/iso/6a5ed6bf-2393-4514-85ed-f3dc2a4ea447/iso-iec-tr-23843-2020>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO/IEC 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier; Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

|  |           |
|--|-----------|
| <b>Foreword</b> .....                                      | <b>iv</b> |
| <b>Introduction</b> .....                                  | <b>v</b>  |
| <b>1 Scope</b> .....                                       | <b>1</b>  |
| <b>2 Normative references</b> .....                        | <b>1</b>  |
| <b>3 Terms and definitions</b> .....                       | <b>1</b>  |
| <b>4 Abbreviated terms</b> .....                           | <b>2</b>  |
| <b>5 Background</b> .....                                  | <b>2</b>  |
| 5.1 Metadata for digital content.....                      | 2         |
| 5.2 Characteristics of VR/AR/MR content.....               | 2         |
| 5.3 Actors and roles.....                                  | 3         |
| 5.4 Video games as the reference model.....                | 4         |
| 5.5 Application of game metadata.....                      | 4         |
| <b>6 Catalogue model for VR/AR/MR content</b> .....        | <b>6</b>  |
| 6.1 ADDIE model.....                                       | 6         |
| 6.1.1 General.....   | 6         |
| 6.1.2 Analyse.....   | 6         |
| 6.1.3 Design.....  | 7         |
| 6.1.4 Develop.....   | 7         |
| 6.1.5 Implement.....                                       | 7         |
| 6.1.6 Evaluate.....  | 7         |
| 6.2 Requirements for the catalogue model.....              | 8         |
| 6.2.1 General.....   | 8         |
| 6.2.2 Content entity.....                                  | 8         |
| 6.2.3 Platform entity.....                                 | 9         |
| 6.2.4 Local release entity.....                            | 10        |
| 6.2.5 Distribution package entity.....                     | 11        |
| 6.2.6 Additional content entity.....                       | 11        |
| 6.2.7 Agent entity.....                                    | 12        |
| <b>Annex A (informative) Related metadata models</b> ..... | <b>13</b> |
| <b>Bibliography</b> .....                                  | <b>21</b> |

## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)) or the IEC list of patent declarations received (see <http://patents.iec.ch>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Joint Technical Committee ISO/IEC JTC1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).