# TECHNICAL REPORT

### ISO/IEC TR 29163-3

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Information technology — Sharable Content Object Reference Model (SCORM®) 2004 3rd Edition —

Part 3: Run-Time Environment Version 1.1

Technologies de l'information → Modèle de référence d'objet de contenu partageable (SCORM®) 2004 3e édition —

Partie 3: Environnement du temps d'exécution Version 1.1

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ISO/IEC TR 29163-3, which is a Technical Report of type 3, was prepared by the Advanced Distributed Learning (ADL) Initiative (as SCORM® 2004 3rd Edition Run-Time Environment Version 1.1) and was adopted, under a special "fast-track procedure", by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by the national bodies of ISO and IEC.

ISO/IEC TR 29163 consists of the following parts, under the general title *Information technology* — *Sharable Content Object Reference Model (SCORM®) 2004 3rd Edition*:

- Part 1: Overview Version 1.1
- Part 2: Content Aggregation Model Version 1.1
- Part 3: Run-Time Environment Version 1.1
- Part 4: Sequencing and Navigation Version 1.1

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### **Advanced Distributed Learning (ADL)**

### SCORM® 2004 3rd Edition Run-Time Environment (RTE) Version 1.1

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Institute of Electrical and Electronics Engineers (IEEE) Learning Technology Standards Committee (LTSC) (http://ltsc.ieee.org/)

IMS Global Learning Consortium, Inc. (http://www.imsglobal.org/)

ADL would also like to thank the ADL Community for their commitment and contribution to the evolution of SCORM.

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### SECTION 1

# The SCORM® Run-Time Environment (RTE)

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## 1.1. Introduction to the SCORM Run-Time Environment (RTE) Book

The Sharable Content Object Reference Model (SCORM®) is often described as a set of books on a bookshelf. The Run-Time Environment (RTE) book is one of a set of books (refer to Figure 1.1a: *The Run-Time Environment Book as Part of the SCORM Bookshelf*). More information on the other SCORM books and their relationships to one another can be found in the SCORM 2004 Overview. The SCORM RTE book describes the Learning Management System (LMS) requirements in managing the run-time environment (i.e., content launch process, standardized communication between content and LMSs and standardized data model elements used for passing information relevant to the learner's experience with the content). The RTE book also covers the requirements of Sharable Content Objects (SCOs) and their use of a common Application Programming Interface (API) and the SCORM Run-Time Environment Data Model.



Figure 1.1a: The SCORM Run-Time Environment Book as Part of the SCORM Bookshelf

#### 1.1.1. What is Covered in the SCORM RTE Book?

There are several key concepts that are introduced in the SCORM RTE book. The book covers the essential LMS responsibilities for sequencing content objects (SCOs or Assets) during run-time and allowing SCOs to indicate navigation requests. In addition, guidance is offered for providing navigation controls to learners. General subjects discussed include:

RTE Management: Launching of content objects – SCOs and Assets,
 Management of communications with a SCO, Run-time environment data model management