



P1484.20.3

Type of Project: New IEEE Standard Project Request Type: Initiation / New PAR Request Date: 03 Sep 2021 PAR Approval Date: 09 Nov 2021

PAR Expiration Date: 31 Dec 2025

PAR Status: Active

1.1 Project Number: P1484.20.3 **1.2 Type of Document:** Standard

1.3 Life Cycle: Full Use

2.1 Project Title: Standard Data Model for Sharable Competency Definitions

3.1 Working Group: Competency Data Standards(C/LT/C/LT/CD)

3.1.1 Contact Information for Working Group Chair:

Name: James Goodell

Email Address: jgoodell2@yahoo.com

3.1.2 Contact Information for Working Group Vice Chair:

None

3.2 Society and Committee: IEEE Computer Society/Learning Technology(C/LT)

3.2.1 Contact Information for Standards Committee Chair:

Name: Richard Tong

Email Address: richard@yixue.us

3.2.2 Contact Information for Standards Committee Vice Chair:

Name: James Goodell

Email Address: jgoodell2@yahoo.com

3.2.3 Contact Information for Standards Representative:

None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:

Mar 2022

4.3 Projected Completion Date for Submittal to RevCom: Sep 2022

- **5.1** Approximate number of people expected to be actively involved in the development of this project: 20
- **5.2 Scope of proposed standard:** This standard describes referencing and sharing competency definitions (and frameworks of competency definitions with related objects) as used in education and training systems at all levels. In this standard a competency is defined for a skill, knowledge, ability, attitude, habit of practice, or learning outcome.
- 5.3 Is the completion of this standard contingent upon the completion of another standard? No
- **5.4 Purpose:** This Standard provides a way to formally represent the core characteristics of a competency, whether it is highly contextualized, completely decontextualized, or anywhere in between. It enables interoperability among learning systems that deal with competency information by providing a means for them to refer to common definitions with common meanings. The Standard provides a formal mechanism for profiling that extends the expressivity of the core characteristics using properties defined in other publicly available standards.
- **5.5 Need for the Project:** There is a growing industry interest in competency-based education, training, and workforce development. Shareable competency definitions enable systems, courseware, assessments, digital credentials, and learning tools to interoperably reference the same competencies. This standard supports other standards and projects of the Learning Technology Standards Committee (C/LT) including standards for adaptive instructional systems (P2247.x) and Learner Experience Data (P9274.x). This technical standard complements, and is complemented by P1484.20.2.
- **5.6 Stakeholders for the Standard:** The stakeholders include designers of learning systems, including adaptive instructional systems (AIS) and their enterprise customers, developers of data systems that use digital credentials, users and designers of learning content, catalogers of learning content, educators, and human resources departments who need to track and exchange competency data for recruitment, staffing, assessments and training.

6.1 Intellectual Property

- **6.1.1** Is the Standards Committee aware of any copyright permissions needed for this project? N_0
- **6.1.2** Is the Standards Committee aware of possible registration activity related to this project? No

7.1 Are there other standards or projects with a similar scope? Yes

Explanation: There are numerous other standards and de facto standards that address the definition, storage and transfer of competency definitions data, including Credential Engine's CTDL-ASN, Common Education Data Standards' competency domain, HR Open's recruiting and assessment standards (e.g. "positionCompetencies"), IMS Global's RCDEO and CASE(R), the MedBiquitous Competency Framework (ANSI /MEDBIQ CF.10.1-2012), as well as region-specific standards and de facto data formats. This new standard is based on an analysis of the practices across markets and regions. It is intended to provide common data definitions with an approach to internationalization that serve to align with, rather than replace existing technical standards for encoding competency data. It is intended to provide an internationalized standard data model.

- 7.2 Is it the intent to develop this document jointly with another organization? No
- **8.1 Additional Explanatory Notes:** P1484.20.2 is Recommended Practices for Defining Competencies.