Table 1. Draft Metadata Recommendations

	Basic Properties	
Unique ID	A globally unique identifier (GUID) that uniquely describes the activity.	Required
Name	The human-readable name of the activity.	Required
Description	A human-readable description of the activity.	Required
Language(s)	The primary language(s) used in the activity.	Recommended
Subject	The primary educational subject covered by the activity.	Optional
Topic(s)	The primary topic(s) of the activity.	Optional
Author(s)	Person or organization that created the activity.	Recommended
Contributor(s)	Person or organization that supported the author (e.g., artists, reviewers).	Recommended
Publisher(s)	The person or organization that produced and distributed the activity.	Recommended
Provider(s)	The service provider, service operator, or service performer; the goods producer. Another party (a seller) may offer those services or goods on behalf of the provider. A provider may also serve as the seller.	Recommended
Copyright Holder(s)	The party holding the legal copyright to the activity.	Recommended
License(s)	The legal constraints that govern distribution and use of the activity.	Recommended
Version(s)	A number representing the release version of the activity. Each should be related to a release date.	Required
Publication Date(s)	The date when the activity was created or updated. Each date should be related to a specific version.	Required
Size (Uncompressed)	A number representing the file size of the activity.	Optional
Publication Status	A description of the current lifecycle state of the activity (e.g., draft, alpha, beta, final).	Recommended
Keyword(s)	Search engine-compatible words that describe the activity.	Required
Full Text	The full text of the activity (if applicable).	Optional
User Guidance	Instructions describing activity usage and installation.	Optional
Citation(s)	Relevant bibliographic citations.	Optional

Competency Relationships		
Competency	A container element (which may require other identifying fields).	Recommended
Educational Framework(s)	The educational framework(s) that the activity is aligned to.	Recommended
Interactive Multimedia Instruction (IMI) Level of Interactivity	The level of interactivity the activity exhibits (passive, limited, complex, real-time).	Required
Difficulty	The amount of challenge that the activity presents to the learner.	Optional
Expected Mastery	The expected level of mastery per competency that the learner is expected to have upon completion of the activity with an affiliated confidence value.	Recommended

Interoperability Properties		
Launch URI	The web URI used to launch the activity.	Recommended
Conformance	The specifications/standards to which the activity conforms.	Optional
Authorization Level(s)	The permissions needed to run the activity (e.g., security clearance).	Optional
Metadata URI(s)	The location of this metadata (potentially with extensions).	Optional
	The technical requirements necessary to run this activity (e.g., operating system types and versions, browsers, additional hardware or software).	Recommended
Metadata Author(s)	The creators of activity metadata. May be a person or a software component.	Optional

Interoperability Properties		
3 \ /	Content features of the resource, such as accessible media, alternatives, and supported enhancements for accessibility.	Optional
Accessibility API(s)	Indicates that the resource is compatible with the referenced accessibility API.	Optional
Accessibility Control	Identifies input methods that are sufficient to fully control the described resource.	Optional
Accessibility Hazard(s)	Characteristics of the described resource that are physiologically dangerous to some users.	Optional

Learning Experience Properties		
Target User Role	The intended activity user (e.g., learner, teacher, etc.).	Optional
Expected Completion Time	Estimated average time needed for completion of the activity. May be a range.	Optional
Duration	For a media file, its exact run time.	Optional
Maximum Time Allowed	Maximum allowed time for completion of the activity.	Optional
Time Limit Action	The action initiated upon exceeding the maximum time.	Optional
Educational Context	The level of education the activity was designed for (e.g., middle school, high school, university, training).	Optional
Content Granularity(s)	The functional granularity (e.g., course, unit, lesson) that the activity represents.	Recommended
Learning Resource Type(s)	The types of content presented by the activity (e.g., text, simulation, video, audio, augmented reality). It should be descriptive of the medium used by the activity rather than the educational purpose for which the activity is intended.	Required
Instructional Type(s)	The types of instructional use the activity was designed for (e.g., practice, assessment). It should be descriptive of the educational purpose the activity is intended for rather than the type of content presented by the activity.	Recommended

Learner Relationships		
Learner Language	The expected primary language of the learner that the activity was designed for.	Recommended
Learner Age	The expected age range of the learner that the activity was designed for.	Optional
Learner Physical Requirement(s)	Physical characteristics needed by the learner to be successful in this activity.	Optional
Learner Aptitude(s)	Aptitudes (e.g., ASVAB scores) that the activity was designed for.	Recommended
Learner Reading Level(s)	The range of reading levels (e.g., K–12) that the activity was designed for.	Recommended
Learner Job(s)	The expected learner job function, role, or Military Occupational Specialty (MOS) that the activity was designed for.	Optional
Prerequisite(s)	Competencies, credentials, or other activities required to begin this activity.	Recommended
Learner Job(s)	The expected learner job function, role, or MOS the activity was designed for.	Optional
Prerequisite(s)	Competencies, credentials, or other activities required to begin this activity.	Recommended

Activity Relationships		
	Expresses the relationship of the activity to another specific activity (e.g., prerequisite activities, assessments that are appropriate for specific teaching activities, reference materials that relate to the activity). There may be many relationships.	Recommended