IMS Specifications: APIs for the Education Technology Interoperability Ecosystem for HED

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**EduAPI** is a set of industry standard extensible APIs to support user provisioning, common source ID and administrative data exchange.
Objectives of the APIs

• To enable **Interoperability** for the transfer of educational data for Higher Education (**data in motion**).

• Abstract model to separate the service solution from the technology solution

• Provide off-the-shelf code libraries and reference implementations to ease wide-scale adoption
IMS Global Learning Information Services (LIS) v2.0

The information architecture for learning
Course Planning & Scheduling

• Uses the LIS API to enable the SIS to provide the Planning & Scheduling (PAS) system with the requirements

• Use iCAL to realise the Event Service for the notification of the created schedules
• Linking the Student Information System (SIS) to the Learning Management System (LMS) for K-12 institutions
  – Class Enrollment
  – Exchanging Gradebooks
  – Provisioning of Learning/Teaching Resources
    • Common Cartridge/Thin Common Cartridge
    • LTI
IMS Service-based Specifications

• We provide APIs for:
  – Learning Information Services (LIS)
  – OneRoster
  – Course Planning & Scheduling (CPS)
  – LTI/LTI Advantage
  – Competencies & Academic Standards Exchange (CASE)
  – OpenBadges
  – LTI Research Search
  – Computer Adaptive Testing (CAT)
  – Comprehensive Learner Record (CLR)
What IMS Means When Creating a Specification for an API

• Information Model
• Binding Description
• Conformance & Certification
• OpenAPI representation
Modelling Workflow

UML Authoring Tool

Eclipse/Papyrus

'xmi'

XSL Transform

'.txmi'

XSL Transform

'json/yaml'

OpenAPI files

Swagger Editor

'xmi'

'xmi'

XSL Transform

'ServiceXMI.xsd'

Other artifacts (inc. profiled/localized versions)

Code files
Conformance & Certification

• This is an essential part of the development of a specification and sustaining the relevance of the specification
  – Service Provider Certification
  – Consumer Certification
  – Data Validation
Key Recommendations

• Keep the scope focused
  – For HED, what is the first interoperability problem to solve for Europe/Your Country
  – Something **not** Everything

• Be successful within 12 months i.e. this time next year
  – Initial solutions being demonstrated/used
Questions & Comments