

ISO/IEC JTC 1/SC36

LETSI Liaison Report

LETSI's mission is to shorten the adoption cycle for innovations in elearning: new products, teaching methods, and business models. The successful introduction and broad adoption of new products – perhaps several generations of new products, each building on top of the others – will require that these new systems, apps, and web-based services conveniently exchange data about learners and learning with the enterprise LMS and with each other.

LETSI's first project, called Runtime Web Services (RTWS), created a web service transport mechanisms for the CMI data (IEEE 1484.11.1) that underlies SCORM, as reported last year. In other words, we kept the same data model, and relaxed the assumption that a learning activity is captive to the enterprise LMS. The resulting specification supports early adopters who are trying to employ out-of-browser activities in their teaching and training (games, simulations, intelligent tutoring systems, mobile apps, etc.)

LETSI is now launching an effort to redefine the data payloads to support truly distributed elearning systems.

1. We have outlined a set of data models that span the needs of future elearning systems (learning activity description, remote launch data including entitlements, assessment data, student background, accessibility, etc.) We do not intend to define all of these data models anew. We have examined relevant standards from the IEEE, ISO, ADL, AICC, SIFA, and others and have focused our efforts on missing or out-of-date data models.
2. We are forming, jointly with the IEEE LTSC CMI working group, a Knoodl.com community to define a framework, called the Data Model Definition Language (DMD) that will support consistent semantics across a set of data models. The IEEE RAMLET working group used Knoodl, an ontology-building tool, to model the semantics for all of the content packaging schemes. The resulting standard, IEEE 1414.13.1, is about to go to ballot.
3. This fall, we will define an initial set of data models based on the DMD. Each of these models will be inherently extensible. LETSI's expects that different market sectors (corporate, military, K12, higher ed, professional certification), local communities of practice, and new technology developers will extend the models as needed. Having a stable, shared core with consistent semantics will minimize the effort required of software developers who service multiple communities. Successful extensions can be brought back into the core, thus creating a breeding ground for plug-and-play technical innovation.

LETSI intends for its work to eventually proceed through the normal IEEE and ISO standardization process. However, since we feel that successful early adoption of innovation is key to revolutionary change in elearning, we intend to offer an interim interoperability solution – years before accredited standards can be finalized, published, implemented by vendors, and adopted. Our agile software development

projects, modeled after our success with RTWS, will produce documentation and tools for cutting-edge software developers. Some of these tools may be based on Knoodl and the semantic web.

To promote innovation and experimentation in different communities of practice, all of LETSI's future work will be openly available and unrestricted as regards to derivative works. There are several important parts of this architecture that remain to be defined. LETSI liaison status with ISO/IEC JTC 1/ SC36 is critical to our goal of serving the cutting edge of innovation in elearning. While we are all volunteers and are not able to attend the SC36 meetings every year, we carefully monitor the activities of the SC36 working groups and we look forward to working with SC36 to complete the picture and build a new software infrastructure for elearning.

LETSI's meetings are open and we invite SC36 delegations to participate. We have a monthly briefing about our plans and working group progress, for instance. To get on the mailing list, or to make other inquiries, please contact info@letsi.org.