MPEG-SCORM:
an Ontological Approach of Interoperable Metadata for Digital Television and e-Learning

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Abstract— **The convergence of digital media offers an integration of ICT focused on telecommunications and multimedia domain (under responsibility of the Moving Picture Experts Group, ISO/IEC JTC1 SC29) and the ICTE (the ICT for Education), managed by the ISO/IEC JTC1 SC36, highlighting the MPEG standards, employees as content and metadata to the multimedia Digital TV and the technologies applied to e-Learning. Regarding this, there is the problem of developing an interoperable matching for normative bases, achieving an innovative proposal in the convergence between digital telecommunications and applications for e-Learning, also essentially multimedia. To reach this purpose it is proposed to create a standard ontology of interoperable metadata for web, digital TV and extensions for mobile devices based on the integration between MPEG-21 and SCORM metadata standards. The methodology used consists on building an ontology MPEG-21 SCORM which can be achieved on making a correspondence through the XPath language, managed by the W3C. The employ of the XPath language is desirable for matching and mapping both metadata schema patterns – integrating MPEG-21 (mostly Digital Item Declaration Language) and SCORM metadata schema. The practical purpose is the creation and storage of objects for use in digital telecommunications as Digital Television, in an interoperable way with the e-Learning industry, here as description metadata for all sorts of media and hypermedia to create learning objects.**

Keywords— **Digital Television, e-Learning, Metadata, MPEG, SCORM**

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