Enhancing the Access to Public Procurement Notices by Promoting Product Scheme Classifications to the Linked Open Data Initiative

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EXECUTIVE SUMMARY

This chapter introduces the promotion of existing product scheme classifications to the Linked Open Data initiative in the context of the European Union and other official organizations such as United Nations. A common data model and an enclosed conversion method based on Semantic Web vocabularies such as SKOS are also presented to encode data and information following the W3C standards RDF and OWL. This work is applied to the e-procurement sector, more specifically, to

enhance the access to the public procurement notices published in the European Union. Finally, an evaluation of the gain, in terms of expressivity, is reported with the objective of demonstrating the advantages of applying Linked Data to retrieve information resources.

ORGANIZATION BACKGROUND

WESO is a multidisciplinary research group from the Department of Computer Science and the Departments of Philology at the University of Oviedo created by the Associate Professor Dr. José Emilio Labra Gayo. Since 2005 WESO is involved in semantic web research, education and technology transfer. The growth of the Internet in the last years has brought relevant changes in the way of communication. Nowadays governments, citizens, enterprises and society are more interconnected than ever and information is the key to keep the interconnection among parties. This new information society needs a step forward to exploit the new opportunities and challenges. WESO research activities try to apply semantic web technologies in order to facilitate the transition to a new web of data.

As academic research group, one of our aims is to boost the research, innovation and competitiveness of the organizations using the knowledge. WESO seeks to support research and innovation focusing on:

- Providing research services on semantics.
- Applying semantic technologies to improve existing products.
- Addressing the new-technology barriers.
- Developing and training.
- Fostering the knowledge in the scientific and industrial areas.
- Teaching to a new wave of professionals.

WESO brings together these activities for enabling and supporting people, organizations and systems to collaborate and interoperate in the new global context.

Our research lines focus on semantic web technologies with emphasis on (but not restricted to):

- **Semantic Architectures:** Designing and developing architectures based on domain knowledge.
- **Collaborative Semantic Services:** Improving existing solutions with a semantic collaborative approach.
- **Linked and Open Data:** Offering new solutions for combining RDF vocabularies and publishing data.