

OntoElect Approach for Iterative Ontology Refinement: a Case Study with ICTERI Scope Ontology¹

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Abstract. This research work is focused on the experimental validation of the OntoElect approach to ontology engineering in the case study of iterative refinement of the ICTERI Scope Ontology. OntoElect has been used for evaluating the commitment of the domain knowledge stakeholders to the ontological offering measured as positive and negative votes. The analysis of the measures allowed us answering the questions about the fitness of the ontological offering to the implicit requirements of the stakeholders as well as the completeness of the domain model with respect to their implicit expectations. The paper briefly presents the idea of OntoElect as a socially inspired approach for ontology engineering. It further describes the objectives and the set-up of our experiment. Finally it presents the results of the experiment.

Keywords. ICTERI Scope Ontology, ontology engineering, domain knowledge stakeholder, socially inspired approach, evaluation, refinement.

Key terms. SociallyInspiredApproach, KnowledgeEngineeringMethodology, SubjectExpert, SubjectDomain, Metric.

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