**Description of the experiment. Tools Interoperability**

The objective of the interoperability experiment proposed in EON2003 is to analyze how ontologies can be exchanged (exported and/or imported) between different tools - either ontology-related or general software-engineering related – and/or languages. We foresee to obtain as results of this experiment a set of conclusions, metrics and guidelines to assess on the quality of exports and imports, interoperability, and on how exported/imported ontologies can be integrated in different tools. These guidelines could be also used to decide in which cases it is better to use one ontology tool or another for different domains and with different modelling/reasoning needs.

Although it is not a requisite to perform this experiment, we recommend to use the same ontology description that was used in EON2002, in the travelling domain, which can be found in the EON2002 site (*http://km.aifb.uni-karlsruhe.de/eon2002*).

As an example, the following protocol can be used to perform this experiment:
1. Develop an ontology with an ontology tool (or reuse it from the EON2002 ontologies repository).
2. Export the ontology to other ontology languages and/or tools, depending on the export capabilities of the selected tool.
3. Assess the quality of the transformations performed by the selected tool, analyzing the losses of information in the translation process.
4. Import the ontology to tools able to import the format in which the ontology is available. This import can be also performed with the same tool used to develop the ontology.
5. Assess the quality of the transformation performed by the selected tools, analyzing the losses of information in the translation process.
6. Analyze the differences between the original ontology and the ontology that results from this circular transformation.

The previous protocol is suggested as a possible choice for experimenting interoperability between tools and languages. The workshop will be open to any other configurations where the central issue of interoperability is handled, such as comparing how different tools export to another language/tool, how they import from another language/tool, etc.