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Knowledge management for space activities in the digital era (2)

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SHARING SEMANTIC RESOURCES AMONG THE SPACE COMMUNITY: A KNOWLEDGE MANAGEMENT ISSUE

Abstract

The advent of space 4.0 leads us to bring together actors who, according to former usages, evolved within microcosms that were more or less impervious or whose interfaces with other microcosms were stable. This stability guaranteed the identity of the objects or services exchanged. Today, we have gone through intensive innovation regimes and the European space sector must become globally competitive if it is fully integrated into European society and the European economy. This requires a sustainable space sector, closely linked to the social and economic base. In these circumstances, it becomes necessary to set up mechanisms for sharing and searching for information and knowledge that make it possible to overcome traditional disciplinary divisions and language barriers. These systems can take different forms, for example by encouraging the meeting of space actors with others from other sectors (transport, automobile, etc.), by contributing to the training of future generations of engineers in the space sector and by involving students in adapted projects, by facilitating collaboration between the space sector and the Humanities sector, by implementing information portals that make the findings of the European space projects available to professionals in the field and citizens interested in space-related information. Such is the case for the portal which is to be implement by the project HATCH, a Coordination and Support Action of Horizon2020. It is clear that under these conditions the provision of linguistic and more generally semantic resources for communication and research is essential. It is equally clear that the production of these resources must be seen in the context of cooperation between space actors, such as space agencies. In this communication we will show that the specification, creation, availability in an operational framework, and maintenance over time of these resources, is indeed in itself a large Knowledge Management (KM) project. One need for instance to consider it with regards to the different dimension of KM: its sociolinguistic and conceptual dimension, its technological dimension, its management dimension and its strategical /economical dimension. Considered as piece of knowledge per se, semantic resources should be qualified with respect to quality criteria such as their ability to satisfy requirements concerning search/discovery of information or long term preservation of knowledge.