

IAF SPACE SYSTEMS SYMPOSIUM (D1)

Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards. (5)

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E-GLOSSARY CAPABILITIES AND POTENTIAL BENEFICIARIES – AS APPLICATION OF BEST PRACTICE

Abstract

As an application of best practice within significant engineering projects, a glossary capitalizing upon a set of unambiguous and precise definitions based around a set of agreed terms is essential. In today's world, glossaries are being digitized, put on-line and largely integrated to word processors as part of knowledge capitalization, management and transfer promoting ease of use and maintenance. Acting towards knowledge sharing and preservation, the European Cooperation for Space Standardization (ECSS) has developed and published a coherent set of more than 120 standards which encompass over 30,000 requirements, which are applied during the contract negotiation for space system development. ECSS has a duty to assure a common understanding between the customers' needs and the suppliers' capabilities expressed in the requirements. The ECSS glossary, a collection of common technical terms, created to support that objective, has also been adopted as a European Norm in 2001. In 2015 the ECSS standards were published in a requirements database, which provided the capability to collect all specified terms and definitions together. A comparison of terms and definitions revealed a need to provide for a more encompassing set of drafting rules. In addition, this creation of a single repository of all ECSS concept definitions enabled the development of an approach to embrace 21st century technology. Moreover it addresses the needs of the forthcoming "digital generation" starting their careers in Space business. One of the main aims of ECSS is to address and improve the use and usability of the set of ECSS requirements. In order to achieve this, the e-Glossary introduces improvements in process, infrastructure and technology, monopolising on those advances recently realised, and, those that are under development within the area of standardization. The proposed paper explores the provision of a e-based glossary management system, required by large projects' development and operations life cycle. This paper takes as main use case, the glossary required by the European Space community that ECSS serves by providing rigorous and rationalised support to requirements use. In addition the application of a glossary for the benefit of space industrial organisations which is formally applying terms and definitions will be explored.