Paper ID: 16524 oral

SPACE SYSTEMS SYMPOSIUM (D1)

System Engineering Tools, Processes and Training (1) (3)

Author: Mr. Franck Durand-Carrier Centre National d'Etudes Spatiales (CNES), France, franck.durand-carrier@cnes.fr

Dr. Geilson Loureiro National Institute for Space Research - INPE , Brazil, geilson@lit.inpe.br

THE NEW ISO STANDARD ON TRL

Abstract

The aim of this paper is to present the new ISO standard highlighting what has changed regarding previous definitions and interpretations of the nine levels of TRL (Technology Readiness Levels). In the last two IACs the progress in the preparation of the ISO standard has been presented. This paper is a follow up on the further progress on the standard preparation.

TRLs (Technology Readiness Levels) are the different levels of a metric which aims to assess technology maturity.

They offer a systematic assessment of a given technology in the context of its intended application. They are relevant not only to the development of the technology itself, but also to its integration into units, sub systems and systems. They allow communication between managers and specialists or between specialists of various disciplines and various industrial areas.

They were adopted by many companies and governmental agencies around the world and were "de facto" an international language. However, as this language has not been harmonized and detailed, it was sometimes leading to some misunderstanding. For this reason International Organization for Standardization (ISO) started a project to develop a standard called "Definition of the Technology Readiness Levels (TRL) and their criteria of assessment".

This standard was necessary to ensure that the same scale is used by every one thus avoiding any ambiguity, and to guarantee a maximum accuracy in the framework of international cooperation. It was also a need in order to be efficient in the business agreements between agencies and industries and in the whole customer-supplier chain.