

IAA MULTILINGUAL ASTRONAUTICAL TERMINOLOGY SYMPOSIUM (E8)  
Multilingual Astronautical Terminology (1)

Author: Ms. Mahsa Taheran  
Satellite Research Institute, Iranian Space Research Center, Iran,  
mahsa.taهرانvernoosfaderani@community.isunet.edu

Mr. Gholam Reza Ashrafi  
Iran, ashrafi.gr@gmail.com

THE LINGUISTIC CHALLENGES OF USING SPACE STANDARDS IN EMERGING SPACE  
COUNTRIES, BASED ON THE LESSONS FROM THE WORK ON ECSS GLOSSARY OF TERM IN  
IRAN SPACE RESEARCH CENTER.

**Abstract**

Space standards are the systematically documented long term experience of the many parties involved in space activities. There is no surprise indeed that an emerging space country uses these standards for space projects. This approach can reduce the risk of the projects, saving cost and time of reaching success.

With the great advantages of using space standards though, comes the challenging question of whether or not we understand the standard requirements correctly. This challenge is sometimes technical, and due to technical incompetence due to lack of experience. But technical misunderstandings are not the only challenge to overcome when working with international standards. Semantics plays a significant role as well. First, not all of the standard terms are directly, or easily, projectable in the host language. Second, some of the terms are close in meanings, and differentiating among them is essential, and sometimes difficult to do. Third, through the years some of the terms are used wrongly in some institutions, based on the user preferences. These long-settled substitutes are hard to be altered. Therefore, harmonization of terms is as essential as clearly defining them.

With all said, after several years of using ECSS standard, it was clear that a glossary of terms for space standards are necessary for the space community in Iran. ECSS is widely used in all academic and industrial teams due to its availability and regular updates in Iran. Therefore, it was decided to develop a space glossary to help harmonize the space community in how they comprehend the specific requirements of the standard. The first edition of the glossary was published in 2016 and the second edition is under publication.

This paper explains the approach taken to develop a glossary of space standard terms, based on ECSS glossary of terms. It also discusses the terms which were a topic of technical discussions. The significance of these disputable terms is that they give us a clue on where we may not have a clear technical understanding of the term as well. Therefore, the paper focuses on these terms and the nature of ambiguity in projecting them to the Persian language.