

IAF SPACE SYSTEMS SYMPOSIUM (D1)  
Space Systems Engineering - Methods, Processes and Tools (1) (4A)

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ECSS REQUIREMENTS MANAGEMENT: FROM DOORS TO THE FUTURE MASTER DATABASE

**Abstract**

ECSS has established a coherent set of some 130 space standards in the domains space project management, engineering, product assurance and sustainability, which hold roughly 25.000 requirements. These are made applicable, in total or part, in business agreements for European space development programs. In order to ease the requirements flow down from top level customer through the entire supply chain and their verification control, all standards have been transferred into the common requirements management tool IBM DOORS ®. However, development and maintenance of the ECSS standards today occurs widely still in Microsoft Office ® tools, mostly MS-Word, because done by working groups composed of members throughout the complete institutional/industrial supply chain, who often are not familiar with DOORS. This process of developing standards in Word and transferring them into DOORS has brought many drawbacks, which triggered ECSS to investigate in state-of-the-art alternatives. This investigation by a dedicated task force is currently going on with four major sequential objectives: 1. Collection of stakeholder needs 2. Establishment of a User Requirements Document 3. Collection and evaluation of bids from interested vendors 4. Proposed roadmap as recommendation to the ECSS Steering Board for further proceeding It is believed that once the new requirements management tool “E-RMS” (ECSS Requirements Management System) has been established as new standard tool for managing ECSS requirements, this will pave the way for a broader application beyond ECSS for managing spacecraft development requirements in general. The paper reports on the intended application of the future E-RMS, the derived key requirements on its capabilities and the progress status of the activity.