SPACE SYSTEMS SYMPOSIUM (D1)
System Engineering Tools, Processes and Training (2) (6)

Author: Mr. Javier Gonzales
ITA-CTA, Brazil, jega9999@hotmail.com

Prof. Geilson Loureiro
Instituto Nacional de Pesquisas Espaciais (INPE), Brazil, geilson@lit.inpe.br

A SYSTEMS ENGINEERING APPROACH FOR ORGANIZATIONAL ARCHITECTURE

Abstract

There is a growing interest in obtaining new proposals to a clear and comprehensive definition of organizational architecture and its subsequent implementation. Currently there are plenty of proposals between simple and complex but not yet meet the expectations of users. After reviewing related literature, it is evident, that although there is plenty of information there is no clarity about the conception of an organization as a whole. So, this paper proposes a framework named "Enterprise Framework" (EFR) that can synthesize the different complex aspects taken into account at the time of conception and those handled in the running of the company. The issues to be managed in the Framework are: "Strategy", "Process", "Information" and "Structure" aiming at the optimization of resources, which are divided into four groups: "Material", "Financial", "Human" and "Technological". The detailing of the proposal will show the relationship of these elements through the Meta-Model created, which should serve as a guide in the application process. The proposal also is supported by the concepts of systems engineering, concurrent engineering and enterprise architecture primarily, which can also support the concept of System of Systems Engineering. To make a practical application of implementing EFR, some selected tools are used for this purpose. On the subject of enterprise modeling there is no fixed rule, because every company is a different reality and depends upon many internal and external factors of final considerations to determine how to deploy. Keywords: Enterprise Architecture, Framework, Systems Engineering, Meta-Model