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THE MICROSATELLITE LAUNCH VEHICLE (VLM-1) FUNCTIONAL ANALYSIS

Abstract

This papers aims to present the functional analysis for the microsatellite launch vehicle – VLM-1. In this phase of the systems VLM-1 development the systems requirements are linked to the functional logical models. Concerning on the necessity to develop an architecture free of implementation the functional architecture lead to the functions that the VLM-1 should accomplish. The functions are deployed from the scenarios in the product life cycle processes. This approach focus on the model-based systems engineering. A commercial systems engineering tool is used to capture and manage the functions derived from the logical models of the vehicle and its scenarios. The results are the management of the exchange of engineering product data derived from the VLM-1 system analysis and the traceability through the life cycle of the product. Models generated using the commercial systems engineering tool also enables an effective control and configuration management.