EGS-CC Integrator Support - Airbus Defence and Space

Abstract

The European Ground Systems – Common Core (EGS-CC) is a European initiative with its main goal to develop a common infrastructure to support space systems Monitoring and Control (M&C) in pre- and post-launch phases for all mission types. This is expected to bring a number of benefits, such as the seamless transition from spacecraft Assembly, Integration and Testing (AIT) to Mission Operations (MO), reduce cost and risk, support the modernisation of legacy systems and promote the exchange of ancillary implementations across organisations. The initiative is being performed as collaboration between ESA, European National Agencies and European Industry.

EGS-CC is not a complete integrated and ready to use system, even if it covers the core functionality expected for the addressed domain. Airbus Defence and Space (ADS) has identified a number of additional common building blocks which are shared between all the EGS-CC based business applications needed to support its institutional and commercial projects. The ACCEPTO project is its EGS-CC based Monitoring & Control (M&C) product line for Tests and Operations. As such, it is the ADS deployment of the EGS-CC for all business applications, used to support the testing and operations of satellites, launchers and orbital systems.

The objective of this activity is to verify the interoperability of the EGS-CC with the relevant building blocks of the ADS infrastructure and as such, provide potential inputs to the definition of the ESTEC EGSE Reference Facility, in terms of EGS-CC integration approach and supported interfaces, problems encountered, lessons learned, etc.

The above objective shall be achieved by supporting the current EGS-CC engineering and validation efforts, and shall include the operational validation of the integration of the EGS-CC in the ADS infrastructure, by performing an assessment using the data of one or more actual Space projects.