

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Future Space Transportation Systems Verification and In-Flight Experimentation (6)

Author: Mr. Giorgio Tumino
European Space Agency (ESA), France, Giorgio.Tumino@esa.int

THE PRIDE PROGRAMME: FROM APPLICATIONS TO MISSION DEFINITION

Abstract

The Programme for a Reusable In-orbit Demonstrator for Europe (PRIDE) is an ESA programme whose objective is to define and develop an affordable reusable European space transportation system to be launched by VEGA, able to perform in-orbit experimentation and demonstration of technologies for application missions, de-orbit, return from orbit and land on ground for re-flights, addressing progressive technological challenges with limited risks and minimal financial efforts for Europe.

The PRIDE objective was successfully refocused at last ESA Council at Ministers level held in 2014, to implement the following three main shared principles: 1. implementing applications driven mission requirements, 2. building on widest past and present European achievements, 3. harmonizing European resources. The refocus allowed increasing the number of ESA States participating to the programme, including Italy, France, United Kingdom, Spain, Switzerland, Sweden, Romania, Portugal, and Ireland. In addition, discussions with Belgium are progressing to harmonize activities from the ESA General Support Technology Programme, as successfully done within the IXV development.

The PRIDE step-1 activities will focus on the mission and system definition including supporting technology developments, to prepare the development within the step-2 to be submitted for approval at next ESA Council at Ministers level in 2016.

The planning of the PRIDE step-1 activities encompasses two main types of activities: • Institutional activities up to Q2-2015, for the finalization of the high level requirements, and for the investigation of harmonization and cooperation opportunities. • Industrial activities from Q3-2015 to Q4-2016, for the detailed definition of the mission and system on the basis of the high level requirements finalised within the institutional activities above.

The 66th IAC presentation and article will provide a unique opportunity to present the up-to-date status of the PRIDE institutional and industrial activities.