IAF EARTH OBSERVATION SYMPOSIUM (B1) Future Earth Observation Systems (2)

Author: Ms. Ricarda Wernitz DLR, German Aerospace Center, Germany, ricarda.wernitz@dlr.de

Dr. Laura La Porta DLR, German Aerospace Center, Germany, laura.laporta@dlr.de Dr. Sebastian Fischer German Aerospace Centre (DLR), Germany, sebastian.fischer@dlr.de Dr. Tobias Storch German Aerospace Center (DLR), Germany, tobias.storch@dlr.de Dr. Andreas Ohndorf DLR (German Aerospace Center), Germany, and reas.ohndorf@dlr.de Dr. Emiliano Carmona German Aerospace Center (DLR), Germany, emiliano.carmona@dlr.de Mr. Helmut Mühle German Aerospace Center (DLR), Germany, helmut.muehle@dlr.de Mr. Paul Tucker OHB System AG - Munich, Germany, paul.tucker@ohb.de Mr. Hans-Peter Honold OHB System AG - Munich, Germany, hans-peter.honold@ohb.de

ENMAP: THE GERMAN SPACEBORNE IMAGING SPECTROSCOPY MISSION

Abstract

The Environmental Mapping and Analysis Program (EnMAP) is a spaceborne German hyperspectral satellite mission that aims at monitoring and characterizing the Earth's environment on a global scale. EnMAP is designed primarily as a scientific mission, with the primary goal to provide accurate and diagnostic information on the state and evolution of terrestrial and aquatic ecosystems for research and application in various fields such as agriculture and forestry, geology and soils, urban areas, coastal and inland waters. EnMAP will help to quantify and model crucial ecosystem processes, to study diverse effects of human intervention and to manage natural resources.

The project management of the EnMAP mission is with DLR Space Agency. The major elements are the Space Segment led by OHB System AG, the EnMAP Ground Segment headed by DLR in Oberpfaffenhofen, and the Scientific Principal Investigator by GFZ Potsdam. The EnMAP science segment is supported by the EnMAP Science Advisory Group (EnSAG), a panel of national and international scientists, and the EnMAP science project teams.

The mission is now ready for start with the Flight Acceptance review completed, and the satellite is being installed on its launcher, a Space X Falcon 9, with the launch scheduled for early April 2022.

This paper presents an update of the mission status, focusing on the launch and early orbit phase and presenting early results of the first weeks of the commissioning phase including Ground Segment and Space Segment activities.