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Author: Dr. Dieter Birreck
OHB System AG, Germany

HISPASAT H36W-1, ONE YEAR OF SUCCESSFUL IN-ORBIT OPERATION OF OHB'S FIRST
GEOSTATIONARY TELECOMMUNICATION SATELLITE

Abstract

In January 2017 OHB System's first geostationary telecommunication satellite has been successfully launched from the European Space Port in Kourou. This was the major milestone of a public-private-partnership between ESA, Hispasat and OHB System, which was signed in 2009. The goal was to design, build, launch and operate a satellite based on OHB's SmallGeo platform, a transparent payload and an innovative payload with On-Board processing and an antenna with electronic beam forming. Beside the innovative REDSAT payload, which can be seen as a precursor of the S/W defined satellites, H36W-1 uses full electric propulsion for station-keeping and relocation maneuvers and operates a GPS receiver in the geostationary orbit.

The satellite has been operated in orbit for more than one year. The paper will provide operational results obtained and will discuss the operational experience. It will focus on the newly introduced technologies as REDSAT payload, full-EP and GPS and provide details on the excellent operational performance. An outlook will be given on the further development of the SmallGeo platform and its capability to provide a basis for the further development of S/W defined satellites.