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GALILEO IOV – ONE YEAR IN ORBIT. STREAMLINING OPERATIONS WITHIN DIFFERENT
OPERATION CENTRES

Abstract

Due to the challenging system architecture of the Galileo mission, the operations of the Galileo IOV satellites from LEOP to routine phase had to be performed by different Operations Control Centres. In fact, the satellites were designed by Astrium Ottobrunn - Germany, LEOP operations were conducted from the Centre National D'Etudes Spatiales in Toulouse - France, while PF Commissioning, IOT and routine operations were prepared and executed from DLR-GfR in Oberpfaffenhofen, Germany. All preparatory activities were shared between these sites. Consequently operational products had to be exchanged between different satellites operation centres, which required a dedicated effort to streamline the operational processes but inevitably also resulted in duplication of activities. This paper presents the operational workflow between the different Galileo IOV entities in terms of preparation, tools and processes, describes the interactions between the various parties involved and the multi-national partnership. The lessons learned gained through the first IOV-M1 launch preparation and IOT phase are also presented which should be taken into consideration for any future missions deploying a similar operational segment structure.