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

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THE COPERNICUS EXPANSION HPCM AND THE OHB CONTRIBUTION: OVERVIEW AND CURRENT STATUS.

Abstract

Copernicus, the European Union's programme for observing and monitoring the Earth, represents, beside Galileo and EGNOS, one of the most successful space programs coordinated and managed by the European Commission in partnership with ESA, the member states and Agencies. Copernicus relies on global data acquired from satellites as well as ground-based, airborne and sea borne systems that generate information freely made available to service providers, public authorities and international organizations to improve the quality of life of citizens in Europe and in the world. The six services offered by Copernicus cover the following fields: Atmosphere, Marine, Land, Climate Change, Security and Emergency.

2020 is an important milestone for the Copernicus Program since it marks the first concretization of the Copernicus Evolution: major parts of the European space industry worked on delivering the bids for the B2CD implementation of the 6 expansion missions: the CO2 Monitoring Mission (CO2M), the Land Surface Temperature Monitoring mission (LSTM) the Polar Ice and Snow Topographic Mission (CRISTAL), the Copernicus Hyperspectral Imaging Mission for the Environment (CHIME), the Copernicus Imaging Microwave Radiometer mission (CIMR), and the Radar Observing System for Europe mission (ROSE-L).

The aim of the paper is to describe these missions and their potential contributions to the overall Copernicus services. For the ones where OHB is involved, the paper describes the technical solution proposed to fulfill the mission objectives with a view on the key features of each solution.