

IAF Committee Briefs

Winter 2022

IAF SPACE OPERATIONS COMMITTEE (SOC)

1. Introduction

The IAF Space Operations Committee is covering all aspects of human and robotic spaceflight missions and involves many organizations and industries across the globe, which are active in this field.

2. Latest Developments

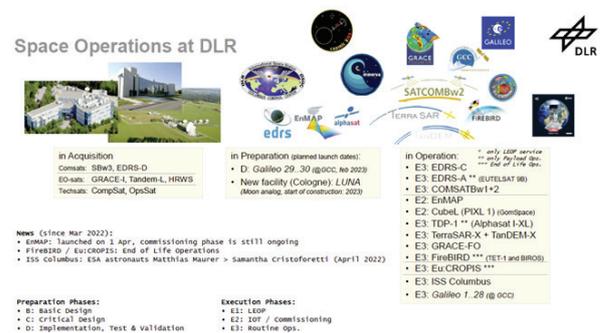
During its regular committee meetings member organizations and industries provided their report on the latest status.

ESA reported on the latest operations status of its missions:

- The Bepi Colombo mission en route to Mercury has achieved its second of 6 Mercury fly-bys and is planned to finally arrive there in December 2025;
- Solar Orbiter also recently achieved another fly-by around Venus (September 2022) to change its orbit observing the sun;
- ESA's TGO and Mars Express missions provided continuous data relay support to surface probes and rovers from different countries on Mars;
- The Gaia Astrometry mission operated by ESOC release its 3rd star catalogue with around 1.8 billion objects and stars leading to the world's science community.

JPL reported on the latest status of its Mars exploration and the achievements since the first missions and rovers to the red planet. See also <https://vimeo.com/731884430/78270c7266>.

DLR reported their latest status as follows:



The Eumetsat status is shown in the next figure:



3. Highlights

Following its successful launch on an Ariane 5 from French Guiana the James Webb Space Telescope has completed its commissioning phase. Several papers and presentations on this achievement were presented during the IAC 2022 in Paris.

The Committee has also submitted and supported the successful application of Frederic Nordlund, ESA, for the IAF Excellence Award in International Cooperation, which was awarded to him during the IAC 2022.

4. Future Outlook

The SpaceOps community is preparing for the upcoming **17th SpaceOps conference (SpaceOps 2023)** taking place from 6-10 March, 2023 in Dubai, United Arab Emirates, which will be hosted by the **Mohammed Bin Rashid Space Centre (MBRSC)**.

Several of the members are looking forward to new launches:

- The Artemis I mission to the moon still in 2022
- ESA's Juice mission (Jupiter), Euclid (a mission to explore the "dark universe"), Sentinel-1C (joint mission with the European Union) – all slated for launch in 2023;



- Eumetsat and ESA are planning to launch Meteorosat Third Generation (MTG) meteorological imaging satellite at the end of 2022 and the MTG meteorological sounding satellite as of the end of 2023.

5. Committee Activities

The IAF Space Operations Committee joins the SpaceOps organization in a new initiative (called Space Operations Committees Alumni, SOCA). SOCA's objective is to establish the historical continuity between space operations of the past and those of the future and to foster cooperation and knowledge transfer between "old" and "young" generations of engineers and scientists in the field of space operations.