22 November 2022

## Subject: Community letter about international coordination of spaceborne SAR missions

Dear Directors of Space Agency Earth Observation departments,

In 2018, a group of several space agencies began community-wide discussions on ways to improve the international coordination of spaceborne synthetic aperture radar (SAR) missions to maximum science and societal returns. The 1<sup>st</sup> Workshop on International Coordination for Spaceborne Synthetic Aperture Radar was held that year in the Pasadena, California, USA, attended by 60 participants. A second workshop took place at ESA/ESRIN in Italy on 28-30 September 2022, with more than 90 participants.

The main purposes of these activities have been to foster information exchange and to facilitate coordination and collaboration among agencies, stakeholders, users, researchers, and other community members. We believe that a fully optimised and coordinated international SAR constellation, based on existing and planned missions among the space agencies would bring substantial enhanced science and societal benefit that would not be possible from a single Agency. To achieve such a vision would require the community to address several issues, including:

- improving the discovery of existing data through uniformly discoverable metadata and common metadata formats
- fostering an open, full and free data policy by inviting all space agencies to follow that policy whenever possible
- coordinating observation requirements for future SAR missions during the planning/formulation phase
- fostering R&D for Earth sciences studies and the development of new applications
- promoting the use of SAR data for operational applications
- exploiting synergies and cooperation potential in the scope of new SAR missions leading to enhanced information benefiting science and applications

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Toward addressing the last item, we have engaged with and encouraged participation of company representatives in the Commercial/New Space sector to explore the role their SAR data might play in R&D activities and development of new applications.

We view the work in this Group as a grass-roots effort supported primarily by scientific and technical community members, including space agency scientists and technologists. As such we see it as complementary to the work undertaken within CEOS, including that conducted by the CEOS Virtual Constellations and working group activities (e.g. WGISS, WGC&V).

For your attention, please find attached the list of high-level recommendations drawn at the end of the 2<sup>nd</sup> Workshop. We also include the points of contact in each space agency that is active in this Group should you have further questions.

The Third Workshop is now planned for Autumn 2024 and will be held in Japan, organised by JAXA. Dr. Shin-Ichi Sobue, email: <u>sobue.shinichi@jaxa.jp</u>, is now the point of contact for activities leading up to the 3<sup>rd</sup> Workshop. We humbly request support from your agency, so Group members have the resources to act on the list of recommendations in the next two years, in time to report on their achievements at the next meeting.

With kind regards.

Prof. Charles Elachi Caltech Organiser of the 1<sup>st</sup> workshop Dr. Maurice Borgeaud European Space Agency Organiser of the 2<sup>nd</sup> workshop

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Attachment: Recommendations of the 2<sup>nd</sup> Workshop

List of point of contacts among the space agencies

- ESA: Dr. Rune Floberghagen
- NASA: Dr. Gerard Bawden (NASA HQ), Dr. Paul Rosen (NASA/JPL)
- JAXA: Dr. Shin-Ichi Sobue
- CSA: Dr. Guennadi Kroupnik
- DLR Dr. Elizabeth Nuncio Quiroz (DLR/RFA), Prof. Alberto Moreira (DLR/HR)
- ASI: Dr. Luigi Dini
- CONAE: Dr. Laura Frulla
- ISRO: Dr. Nilesh Desai

