

Copernicus Sentinel-1 Next Generation Mission Advisory Group

Terms of Reference

The objective of the Mission Advisory Group (MAG) is to advise ESA on the design and development of the space component of the Copernicus Sentinel-1 Next Generation (S1NG) Mission. User Requirements identified under the responsibility of the European Commission (EC) have been consolidated in the Mission Requirements Document (MRD). The S1NG MRD will be consolidated in collaboration with the MAG and used throughout the Phase B2/C activities to guide design consolidation activities. ESA will closely collaborate with the EC to ensure that there will be a seamless flow of information between the space component and the other components of the targeted operational service(s).

In this context, the Copernicus S1NG MAG for Phase B2/C is tasked with providing advice to ESA as follows:

1. Support, guidance and advice on:
 - the analysis of the user requirements provided by the EC regarding the space component,
 - compatibility between the mission objectives of the Space Component and the relevant system specifications,
 - refining the translation of mission objectives into observation requirements (including advice on implementation trade-offs), which could result in refining the corresponding mission requirements as captured in the MRD,
 - trade-off considerations between the baseline and add-on options for the space component,
 - instrument calibration (on-ground/in-orbit, as necessary),
 - specifying Level 1 and 2 products and product quality requirements,
 - specification and approaches to derive uncertainty estimates at Level 1b and Level 2,
 - studies and requirements on the Level 1 and Level 2 retrieval algorithms,
 - data processing up to and including Level 2,
 - requirements, methods and accuracy of geophysical validation,
 - study and campaign requirements including end- to-end product calibration/validation, retrieval algorithms,
 - preparation for Phase E1 calibration, validation and verification activities and coordination of international validation contributions;
 - end-to-end performance simulations for the Space Component,
 - promoting the mission using presentations and publications.
2. Members may be asked, within reasonable effort, to help generating documentation or presentation material addressing specific topics.
3. Members are expected to meet on an ad-hoc basis up to four times a year, as needed.
4. Membership of the group is not supported by consultancy contracts, though ESA will cover necessary travel and subsistence*. Exceptions may occur when specific tasks require particular effort or when members are involved in scientific study contracts**.

5. Membership of the Group is expected to last from the start of Phase B2 into the development phase. Group membership and Terms of Reference will be reviewed after the Critical Design Review (CDR), i.e. at the end of Phase C.
6. Any member of this Group shall be obliged to declare any potential conflict of interest in relation to this activity.
7. A member of the Group cannot be a member of, advisor to, or consultant to, any industrial consortium awarded the Phase B2/C/D/E1 industrial contracts run by ESA for this mission.
8. A member of the Group shall be independent from ESA Advisory Boards to Earth Observation Programmes, which comprise Member State Delegates (e.g. Programme Board for Earth Observation, and the Data Operations, Scientific and Technical Advisory Group). Members shall not be Delegates or engaged in an advisory capacity to Member State Delegations.
9. Members of the Group shall sign a Non-Disclosure Understanding (NDU) to safeguard proprietary information and intellectual property.
10. All Communications, Press Releases, Publications or publicly distributed material concerning the Mission shall be discussed and the content agreed with ESA prior to release.

***Subsistence Allowance & Responsibilities of the Agency**

The subsistence allowance (Group II per diem), as paid by the Agency shall be deemed to cover all out-of-pocket expenditure, during the relevant period, with the exception of travel expenses. These allowances shall be deemed to cover expenditure such as meals and hotels. ESA assumes no responsibility, or obligation, refund expenses such as personal insurance, medical expenses, and travel documents (except visa). In the absence of submission of the relevant invoice concerning the hotel (or other official or commercial accommodation), the daily subsistence allowance shall be reduced by 50%. The Agency shall only reimburse travel expenses and subsistence to a bank account held in the name of the attendee of a meeting and not to the bank account of his/her institute or company. Travel expenditure and subsistence shall not be paid to those people who have a non-exchange of funds (NEF) agreement with the Agency.

*** In the case of instances where study contract and MAG meetings take place on consecutive days, the ESA study contract reimbursement rules shall take precedence. Subsistence, if due, will be paid for the days of the MAG meeting only.*