

LiteBIRD-Europe Phase-A Governance Structure

16th July 2019

This document is intended to establish the governance structure of the LiteBIRD-Europe team during the current Phase A of the project. It will be revised when ESA and CNES will make a decision about their commitment, which could not exactly coincide with the JAXA Phase B planned for 2021, and depending also on National Agencies' potential commitment schedule. If needed, revisions may be proposed at any time by members of the Steering Committee and will need to be approved following the voting procedure detailed below.

In the following, we define 'partner' a group of people from a single country participating in the LiteBIRD-Europe collaboration.

The LiteBIRD-Europe Phase-A team is coordinated by a Steering Committee, chaired by a Chair and represented on outside by a Spokesperson, and a Deputy Spokesperson.

1. Steering Committee (SC)

Role:

The role of the Steering Committee is to

- a. Organise, build and coordinate Europe-wide support for LiteBIRD (manpower and fundings);
- b. Organise discussions and take decisions about the hardware contributions between European partners and the associated planning for the European contribution;
- c. Organise discussions with Japan, US and other partners on the organisation of the DA and DM efforts across the continents and countries;
- d. Organise the work and contributions of Europe-based researchers to JSGs and global LiteBIRD initiatives;
- e. Interact closely with the Project Manager and the System Engineer team;
- f. Coordinate activities needed to provide information/feedback to ESA;
- g. Propagate information from/to the LiteBIRD-Europe members through National representatives;
- h. Decide on the entry of new potential partner candidates and the composition of the Steering Committee.

Composition:

The Steering Committee is composed of representatives from each European country member of the European LiteBIRD team. In order to respect the involvement of all partners at the current date of the project, the following convention has been agreed:

- partners with strong involvement in both software and hardware sides have two representatives on the SC;
- partners with strong involvement in only one aspect (software or hardware) have one representative on the SC.

Following this convention, the Steering Committee at the current date consists of representatives from: France (2), Germany (1), Italy (2), The Netherlands (1), Norway (1), Spain (1), Sweden (1), and UK (2).

The members of the Steering Committee are chosen internally by each partner within National members of LiteBIRD. These representatives can be replaced at anytime if requested by the partner.

The SC is responsible for adapting its composition in case of major changes of involvement or commitment of National Agencies during Phase A.

Working organisation:

The Steering Committee will have regular calls every two weeks, with minutes circulated internally and general reports about SC and LiteBIRD activities will be made public on the LiteBIRD-Europe webpage.

All decisions taken by the SC will be based on voting with a two-third majority. All SC members will be eligible voting members. Planned upcoming votes will be announced in advance via email and voting will be made during meetings or via email to the Chair of the SC before the meeting from those who are absent. Every decision taken will be announced to the SC members via email and will allow a 48h period for comments before being fully ratified.

2. Spokesperson, Deputy Spokesperson, Chair

The SC will elect with two-third majority a Spokesperson, a Deputy Spokesperson and a Chair, who will act for a 1-year term, and possibly extended to the end of the Phase A.

Spokesperson / Deputy Spokesperson: They will be the single point of contact between the European Consortium and ESA / JAXA / NASA. They will

- a. Represent the LiteBIRD-Europe team in meetings and discussions;
- b. Propagate information from ESA / JAXA / NASA to the SC;
- c. Transmit messages from the European SC to ESA / JAXA / NASA;
- d. Work closely together in order to implement the responsibilities as listed in points a)-c) above.

Chair: They will

- a. Chair the SC;
- b. Coordinate monitoring of European work-plan progress with the Project Manager;
- c. Organize the SC meetings;
- d. Ensure the conformity of the vote procedure;
- e. Circulate minutes of the meetings to the SC;
- f. Supervise the distribution of LiteBIRD activities reports to all LiteBIRD-Europe members;

- g. Coordinate actions described in point a)-f) above with the Spokesperson and the Deputy Spokesperson as needed.

3. Project Manager and System Engineer

Management support to the SC will be provided by the Project Manager. Management support will facilitate the organisational and administrative activities undertaken by the SC and HFT System Team.

The Project Manager's duties/responsibilities are:

- a. Coordination of the European Consortium working plan in line with the Japanese/USA/Canadian and European Space Agencies' working plans;
- b. To work with the System Engineer and HFT System Team to define the European work plan and schedule, including critical paths and risk analysis;
- c. Implementation of the required project planning to deliver the European work plan;
- d. Regular progress monitoring of the European tasks (i.e., regular progress monitoring of the HFT-based JSGs);
- e. Liaise with the Chair of the SC to review project progress at the SC meetings;
- f. Coordination with the SC and HFT System Team to address any deviations from the European work plan;
- g. Support the SC with the coordination of report preparation/compilation;
- h. Coordination of deliverables and establishment of approval procedures for deliverables.

The HFT Team will be supported in technical work by a System Engineer, who will act as the technical manager for the HFT and lead the coordination of the definition of the HFT & Sub-K cooler architecture. He will interact with the Project Manager and the SC to define the European work plan and schedule. He will be the contact person for the technical aspects between the HFT, the sub-K cooler and the ESA and the JAXA. He will maintain a regular contact with both Space Agencies.

The System Engineer's duties/responsibilities for the HFT system are:

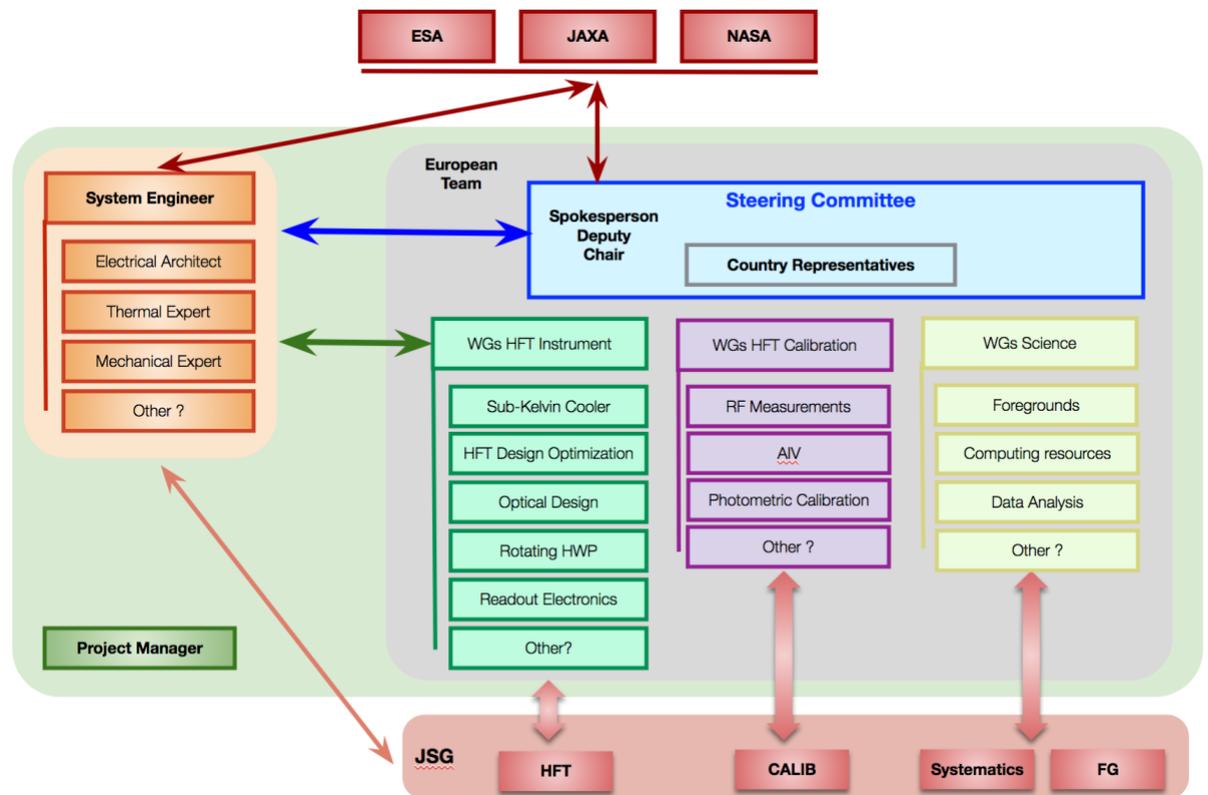
- a. To assist the HFT scientists in the ESA CDF study:
 - By having a transversal understanding of the HFT;
 - By defining the interfaces between the several subsystems of the telescope;
 - By reporting on the design evolutions during CDF session to the European collaboration;
 - By following the work done and checking the consistency on the several sub-systems between two CDF sessions;
- b. To decline and to define the technical specifications in relation to the scientific objectives;
- c. To organize the discussions and trade off on several technical solutions;

- d. To define the interfaces (mechanical, optical, power & mass budget, ...) between the HFT and the other systems of LiteBIRD and to verify that they are compliant;
- e. To estimate the costs of the HFT for the several designs studied.

The System Engineer's duties/responsibilities for the sub-K cooler sub-system are:

- a. To assist the sub-k coolers team in the ESA CDF study:
 - By having a good understanding of the LiteBIRD cooling chain;
 - By knowing and clearly defining the interfaces of the sub-K cooler;
 - By reporting on the design evolutions during CDF session to the cooling chain team;
 - By following the work done and checking the consistency on the several sub-systems between two CDF sessions.
- b. To warranty that the interfaces defined by the cooling chain are respected by the sub-K cooler;
- c. To estimate the costs for the HFT and sub-K cooler for the several designs studied.

Suggested organigramme:



4. Membership

Currently the LiteBIRD-Europe community consists of two layers:

1. The wide LiteBIRD-Europe community is composed of all members of the National LiteBIRD effort of all European partners involved in the LiteBIRD-Europe collaboration, where each National collaboration defines its rules.
2. Only a subgroup of the LiteBIRD-Europe members is part of the LiteBIRD Phase-A Collaboration as External Collaborators or Full Members.

The External Collaborator status is obtained by submitting a proposal to contribute to the Phase-A work to the Japanese and US PIs who, after reviewing the proposal, will approve or decline the entrance. In addition to the full members, only External Collaborators, will have full access to material, documents and working activities. Rights and responsibilities of External Collaborators are defined in the “LiteBIRD External Collaborator Policy Version 1.0” document. The Full Membership status will be clarified within the period covered by this governance policy by the global LiteBIRD Collaboration and the SC will ensure that the point of the LiteBIRD-Europe partner is taken into account in this process to the fullest extent possible.

The case of new External Collaborator candidates within a LiteBIRD-Europe partner.

Individuals from a LiteBIRD-Europe partner (i.e., LiteBIRD-Europe members from layer 1 above) who want to become External Collaborators at this stage of Phase A and have an approval of their National LiteBIRD teams should contact the LiteBIRD-Europe SC expressing interest and potential contribution to the mission. The SC will then assess their contribution and propose the new individuals to the Japanese and US PIs as External Collaborators. If approved, the new people will be fully integrated into the Joint Study Groups and LiteBIRD-Europe activities.

The case of new LiteBIRD-Europe partners.

Membership for new partners of LiteBIRD Europe will be established through a two-step process:

1. The group of people representing a new partner will have to follow the standard procedure for External Collaborators, i.e., contact the LiteBIRD-Europe SC who will submit a proposal to the PIs, and join the activities of the Joint Study Groups.
2. After having clearly identified their potential contribution to the JSG and having started an active collaboration with the other European partners, they can request to be part of the LiteBIRD-Europe SC.