

# JUICE AO Clarifications Meeting Questions & Answers

ESTEC  
13/07/2012

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| <b>Date</b>              | <b>Event</b>  |
|--------------------------|---|
| June 25, 2012            | Release of AO for scientific instruments onboard the JUICE spacecraft |
| July 6, 2012             | Deadline for submission of (binding) Letters of Intent                |
| July 13, 2012            | Briefing meeting  |
| October 15, 2012         | Proposals due   |
| October - November, 2012 | Proposal evaluation   |
| January, 2013            | SSEWG and SSAC recommendations  |
| February, 2013           | SPC selection   |
| February, 2013           | Preliminary technical KO of instrument Phase A                        |
| End 2013                 | Release of updated ESA interface requirement documents                |
| Mid 2014                 | Instrument Consortia documentation package for ICR                    |
| November 2014            | Mission adoption and Multi-Lateral-Agreement signature                |

1. Planning of proposal evaluation and selection
  - a. Clarifications on proposals: about 2 – 3 weeks after the proposal deadline the review team may send requests for clarifications. It would be appreciated in the interest of the process, if these clarifications could be provided within 1 week.
2. 2 steps approach
  - a. With the maturation of the interface and programmatic documentation for the payload provision and the final agreements on the Instrument Consortia provision, ESA will issue an updated set of documents (including, in particular, updated EID-A, SIRD and SOCD) during the Definition Phase (within end of 2013).
  - b. The selected Instrument Consortia shall update their documentation packages for the implementation phase in line with the updated ESA documentation and shall submit them to ESA for evaluation for the Instrument Consolidation Review (mid 2014)  
=> additional documents are envisaged to be produced (see EID-A)

# Proposals from non-ESA Member States agreements with NASA



- All proposals regardless of their provision or funding will undergo the same ESA-managed evaluation process, with the goal to identify the best payload complement (accounting for all scientific, technical and programmatic aspects, as defined in the Science Management Plan SMP).
- NASA will carry out a parallel evaluation process for all proposals seeking NASA support by the recently released PEA (Program Element Appendix) through the SALMON (Stand Alone Mission of Opportunity Notice Announcement) system.
- Proposals submitted to NASA in response to SALMON (“US-led proposals”) will be transmitted to ESA before the ESA AO deadline. ESA will provide to NASA within one week of the submission deadline information about proposals submitted to ESA in response to the JUICE AO that include US Co-Investigators at any level to the extent required by NASA for their evaluation of such proposals.
- Proposals submitted after the ESA deadline, or not according to the requirements specified in the ESA AO, will not be considered by ESA for the purpose of the selection.
- NASA will provide information on the evaluations of all the proposals that include US contributions (whether US-led or not) according to the schedule discussed by ESA and NASA to allow the ESA evaluation process to take into account these proposals, following the same approach applied to all other proposals.
- The PRC recommendations and the ESA internal evaluations will be the reference elements used to submit the JUICE payload complement to the ESA Scientific Advisory bodies for evaluation and recommendation (as per usual ESA process). The NASA evaluation results will be the reference elements used for the NASA selection process for U.S. funding contributions.

The ESA evaluation – recommendation – selection process will lead to the definition of the JUICE scientific payload complement, while the parallel NASA process will identify the NASA contributions (whether U.S. led or not) offered to ESA for the JUICE mission.

# Structure and content of the Proposals



1. Executive summary
2. Part I: Scientific and Technical Plan
3. Part II: Experiment Interface Document – Part B (EID-B)
4. Part III: Instrument Engineering Plan
5. Part VI: Product Assurance Plan
6. Part V: Management Plan
7. Part VI: Instrument Financial Plan  
With Letter of Endorsement from the Lead Funding Agency

## Note that:

- The purpose of the EID-B is to formalize the Instrument Consortium response to the technical and programmatic requirements.
- After selection, the EID-B will be maintained and updated at regular intervals, and will become essentially a contractual document between the ESA Project Office and the selected PI-led consortium.
- The purpose of EID-B is mainly to provide factual data on all aspects of the proposed instrument
- Discussion, justification and risk assessment, etc. are provided in Part I.
- The quality of the factual input in Part II (EID-B) is essential for a smooth start of the Definition Phase. It is anticipated that these interfaces will need to be matured after selection up to the Preliminary Requirements Review (PRR), when the interfaces shall be frozen. It is therefore very important that a detailed level of interface documentation be provided at the proposal stage. All interfaces shall be consistent with and substantiated by the preliminary design. All the requirements from instrument towards the spacecraft shall be collected in an Appendix of EID-B and these (if approved) will become part of the System Requirements Document.

# Proposal submission form (to appear in the coming weeks)

SCIENCE PORTAL    SCIENCE & TECHNOLOGY    RESEARCH

**esa**    **Cosmic Vision 2015-2025**    Science Programme  
European Space Agency

**JUICE**    12-Jul-2012 10:46:02 UT

## Proposal submission form

### JUICE Scientific Instrumentation

Through this form you can submit your Proposal in response to the Announcement of Opportunity for scientific instrumentation onboard JUICE, issued in June 2012.

Full details of the Announcement of Opportunity (AO) can be found at: [http://sci.esa.int/juice\\_ao](http://sci.esa.int/juice_ao)

Before submitting your Proposal, please make sure that it conforms to the guidelines provided in the AO.

Upon successful submission of your Proposal, you will receive an automatic confirmation email at the email address provided by you.

For any technical questions about, or help with, this web form please contact the web team at [Scitech.Editorial@esa.int](mailto:Scitech.Editorial@esa.int)

**Note: All fields on the form are mandatory, apart from the comments and Appendices.**

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#### Contact Details

**First Name:\***

**Last Name:\***

**Email:\***

**Institution:\***

**Postal address:\***

**Country:\***

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#### Submission Details

**Title of proposal:\***

**Cover Letter and Executive summary:\***

**Part I:\*** Scientific and Technical Plan

**Part II:\*** Experiment Interface Document (EID-B)

**Part III:\*** Instrument Engineering Plan

**Part IV:\*** Product Assurance Plan

**Part V:\*** Management Plan

**Part VI:\*** Instrument Financial Plan

**Annexes:**

**Comments:**

\* denotes a mandatory field

# Proposal submission form (to appear in the coming weeks)

- ▶ Objectives
- ▶ Spacecraft
- ▶ Mode 1 - Instrument
- ▶ Scenario & Operations
- ▶ Mission Team
- ▶ Documents
- ▶ Calendar
- ▶ News Archive
- ▶ Images and Videos
- LOFT**
- MarcoPolo-R**
- NGO**
- Solar Orbiter**
- SPICA**
- STE-QUEST**
- Services**
  - ▶ Publications
  - ▶ Images and Videos
- Contact Us**

## Contact Details

**First Name:\***

**Last Name:\***

**Email:\***

**Institution:\***

**Postal address:\***

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## Submission Details

**Title of proposal:\***

**Cover Letter and Executive summary:\***

**Part I:\*** Scientific and Technical Plan

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**Part III:\*** Instrument Engineering Plan

**Part IV:\*** Product Assurance Plan

**Part V:\*** Management Plan

**Part VI:\*** Instrument Financial Plan

**Annexes:**

**Comments:**

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# Questions and Answers

## (Format and Programmatic)

## Questions

Have Key Team CVs and other annexes to be considered within the 40 pages of STP?

Co-I list with roles and responsibilities is also a part of vol. V (Management plan). Can this list required in vol. 1 (Section 10), which may take 2 pages, be moved outside the page limit to the Annex?

## Answer

According to the “AO Proposal Template” for Part I:

Section 10: Complete list of Co-Investigators

Name, affiliation and e-mail addresses of the Co-Is with specification of their expertise and roles in the Consortium

***(here it should be just a synthetic list, possibly 1 page, and it is indeed part of the STP)***

Annex: Qualifications and Experience of PI Team, Co-PI(s) and Key Staff

***(this is an Annex, therefore outside the limit of 40 pages for the STP)***

## **Question**

Are foldouts allowed in vol. 1, and, in that case, how many A4 pages does one A3 fold out correspond to? The A3 fold-up is the only way to present the science requirement matrix.

## **Answer**

Yes foldouts in Vol. I are allowed but don't forget that the file must be submitted as "pdf"; so be careful in how you format the large tables to avoid problems during printing. 1 A3 page should count for 2 A4 pages.

## **Question**

In Vol. 1 it is required one section per instrument element or package sensor. The only place where the detailed sensor design will be explained is EID-B section Instrument description. Will the EID-B be available for scientific reviewers of Payload Review Committee?

## **Answer**

Yes, all information (except financial) will be available to the Payload Review Committee (PRC) Non-Disclosure Agreement (NDA) will have to be signed by PRC members

## **Question**

Where should teams report the instrument radiation analysis? They are long. For example, the star tracker radiation analysis (a part of the AO data package) is 121 pages long.

## **Answer**

We suggest as appendix of the EID-B

## **Question**

Normally Reference list is out of the page limit. Can this rule be applied for vol. 1? The reference list may take up to 1-2 pages.

## **Answer**

Yes. Reference list can be an Annex and will not be counted as part of the 40 allowed pages.

## **Question** (on data sheets)

In the document "AO for JUICE", page 13, Section 2.2.3 Technical Description and Design it stands "If the proposed instrument consists of more than one unit/sensor, each data sheet shall be given in Annex 1". What data should be in the "data sheets"? Is Annex 1 outside the page limit?

## **Answer**

Data sheet content: unit name & purpose, mass, volume, key accommodation issues, performances, operation

Annexes are not counted in the 40 pages limit

## **Question**

Can we submit reference documents, for example technical reports as annexes to EID-B and vol. 3 (Engineering Plan)?

## **Answer**

Yes

**WARNING:** Use of Annexes should not be abused. They should be used only to provide specific technical information

## **Question**

Can you confirm that it is possible to propose a limited set of sensors for either the particle or the radio and wave packages from the full list described in the MPDD ?

## **Answer**

The MPDD is a “reference document”, not an “applicable document”. Any instrument or set of sensors able to fulfil part of the science requirements with a fair usage of the resources available for the payload as given in the EID-A will be eligible in the AO.

## **Question**

- What kind of endorsement is expected in the specific case of non-EU contributions?
- Kind and details of budget info to be provided, also for non-EU contributions

## **Answer**

For the second bullet: level of details must be the same for all contributions (both European or non-European)

For the first bullet: Answer is the same as posted on the "juice web" in answer to a similar question => see below

## **Question**

*I would like to know how do we handle European contributions to an instrument, which is proposed from an American University to NASA with an American PI? What does ESA need from the European Co-Is and institutions?*

## **Answer**

The approach for contributions to an instrument is the same both for European and for non-European led Consortia, as explained in the JUICE Science Management Plan. At the present time of proposals, ESA does not require any statement/letter from the Funding Agencies supporting CoIs/CoPIs. It is however recommended to start discussions between the PI/LFA (Lead Funding Agency) and the other contributing agencies/CoIs/CoPIs as felt appropriate within the Consortia.

## Question

At the time of the DOI, there was a problem in providing the cost of the instruments and activities.

Whether this is still the case, what is the way to proceed ?

In the extreme case of no provision of the cost, is there any negative effect in the evaluation of an instrument proposal ?

## Answer

According to the SMP: "The instrument concept, feasibility, management scheme and funding will be assessed"; therefore the evaluation process will also look at "...details on technical, managerial or financial issues." It is then recommended that the proposals include cost information according to the provided templates. The lack of such information will be seen as a weakness point of the proposal.



## **Question on NASA financial commitment**

What formal financial commitment do we (APL) need to provide for the proposal concerning NASA funding?

## **Answer**

For PIs seeking NASA support, please have a look at the SALMON 2 Amendment: "Release of Jupiter Icy Moons Explorer Instrument" about the process

For contributions to European led proposals see previous Q&A @ Page 15

## **Question**

What is the status of bilateral discussions between ESA and NASA, ESA and JAXA, and ESA and Roscosmos

## **Answer**

For NASA see answer above.

Discussions between ESA and Roscosmos are ongoing

Discussions are presently ongoing between ESA and JAXA