

SURE ANNOUNCEMENT OF OPPORTUNITY “FREQUENTLY ASKED QUESTIONS”

We have tried to reply in the most concise possible way to some of the basic questions we have been asked so far. The objective of being concise conflicts with that of being complete; therefore this paper may not provide to you all details you wish to have. An accurate reading of the SURE Announcement of Opportunity remains the best answer.

1. What is the European Space Agency (ESA)?

The European Space Agency (ESA) is an inter-governmental organisation established in 1975 to provide for and to promote, for exclusively peaceful purposes, co-operation among European States in space research and technology and their space applications. It is independent from the European Union and today, 17 European Countries are ESA Member States: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

2. What is the International Space Station (ISS)?

The International Space Station (ISS) is the largest space science and technology venture ever undertaken in human history. It is a co-operative programme between Europe (10 out of 17 ESA Member States), the United States, Russia, Canada, and Japan (the International Partners) for the joint design, development, operation and utilisation of a permanently inhabited space station in low Earth orbit (at circa 400 Km above Earth). Assembly of the ISS began in November 1998 and it has been continuously manned since late 2000. The ISS, which provides a large set of research facilities, represents a unique world-class research environment and offers a platform for experimentation in conditions of weightlessness.

More information about the ISS and its utilisation can be found in the Users Guide available at: <http://spaceflight.esa.int/users/file.cfm?filename=adv-ug>)

3. What is the SURE Announcement of Opportunity (SURE AO)?

SURE (acronym for the International Space Station: a Unique Research Infrastructure) is a 4-year project of the European Space Agency (ESA), starting in January 2006, funded by the European Commission under the Sixth Framework Programme for Research and Technological Development Framework Programme (FP6).

The SURE Announcement of Opportunity is the mechanism under which ESA has formalised and released to the public (<http://www.spaceflight.esa.int/sure>) the opportunity to Scientists and SMEs from all EU Member States and Associated States to make use of the ISS and its facilities for research and development (R&D) purposes.

4. What activities are covered by the funds of the European Commission?

The EC funds have been allocated to support Scientists and SMEs in making use of ISS and its facilities for R&D purposes. The EC funds cover the costs related to the flight to the ISS and execution of the experiment on board.

The funding scheme of a specific project in the context of the SURE AO also varies depending if the user of the ISS is a Scientist or an SME. The table below summarizes the overall funding scheme:

	SCIENTISTS	SMEs
Payload Development	No EC funds	No EC funds
From reviews of payload qualification and safety acceptance to the flight to the ISS and return of data/samples	100 % EC funds	50% EC funds

The conceptualisation of the experiment and the preparation of its related specific payload prior to the flight to the ISS as well as all costs related to the analysis of the results of the experiment after the completion of the project remain the responsibility of the Scientists or SME concerned. All Scientists and SMEs will therefore have to identify their funding for those activities not covered by EC funds.

(For more information refer to section I.3 at page 14-15 of the SURE AO).

5. Who could I contact to obtain additional funding?

Scientists and SMEs may obtain additional forms of funding from their local institutions (such as Ministries, Regional Development Agencies, Innovation Relay Centres, local authorities) in accordance with applicable European and national laws. Another form of funding may be represented by the private sector (e.g. bank loan). The national SME Association is often a valuable source of information in this respect.

6. What is the benefit of performing R&D activities on board the ISS?

Scientists and SMEs exploit the unique condition that exists in space for conducting research which would not be possible to perform on ground, and to improve and optimise processes on Earth. The weightless environment of the ISS represents a strategic tool for application-oriented and industrial research for the benefit of Society and Industry.

The facilities and resources available onboard not only allow scientists to carry out groundbreaking research, but also offer companies the opportunity to increase their competitive advantage by using the space environment as a platform for developing and testing new products and innovative technologies.

(For more information refer to Annex II of the AO and the leaflet “Space Environment – A tool for Industrial Research”)

7. For which fields of research and development (R&D) can the ISS be used?

The ISS has several facilities that allow the performance of experiments in different areas of R&D, including both basic and applied R&D. The various sectors of research cover the multiple facets of life and physical sciences, from renowned areas (human physiology; biology; material sciences; fluid interface and combustion physics; fundamental physics; and planetary exploration) to emerging ones (nanotechnologies; quantum physics; heat exchange; health; and food).

(For more information refer to section I.4 at page 16 and Annex II of the SURE AO).

8. Who can respond to the SURE Announcement of Opportunity?

This SURE Announcement of Opportunity is open to Scientists and Small and Medium Enterprises (SMEs) from EU Member States and Associated States with

priority given to Scientists and SMEs from Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia (EU10), and Romania and Bulgaria.

9. What is the definition of Scientists and Small Medium Size Enterprises (SMEs) in the context of the SURE AO?

Scientists mean scientific representatives of universities, research centres or other publicly funded research bodies.

Small and Medium-Sized Enterprises - SMEs mean enterprises which meet the criteria set out in the European Commission Recommendations 2003/361/EC.

Among others the main criteria listed in this EC Recommendation are:

- 1) Number of employee: less than 250 (full time staff);
- 2) Annual turnover: not exceeding 50 Million Euro (excluding VAT and other taxes);
- 3) Annual balance sheet: not exceeding 43 Million Euro;
- 4) Capital investments: autonomous (i.e. max 25 % of the capital or voting rights can belong to another enterprise - holding company; or to a public body).

10. What should I do to respond to the SURE Announcement of Opportunity?

The only valid response to the SURE AO is the submission of a Scientific or Industrial Proposal to ESA, in one single document, by April 15th, 2006, 17.00 CET.

Scientific Proposals are to be submitted by Scientists and Industrial Proposals by SMEs. The contents and the information required vary between a Scientific Proposal and an Industrial Proposal. Forms and guidelines to complete such proposals are available at: <http://www.spaceflight.esa.int/sure>

In preparation of the proposal, Scientists and SMEs are encouraged to send a Notification of Interest by 31st January 2006 (also available at the same web address) and specially to attend the information meetings and workshops that will be organized and dedicated to the SURE AO.

(For more information refer to section II.1 at page 27 and Annex 1 of the SURE AO).

11. What is a Scientific or Industrial Proposal?

A Scientific Proposal is a proposal that makes use of the ISS for R&D purposes, which is submitted by a Scientist alone or on behalf of a group of scientists (also called User Group members).

An Industrial Proposal is a proposal that makes use of the ISS for R&D purposes, which is submitted by a SME alone (acting as a unique user).

The contents and the information required vary between a Scientific Proposal and an Industrial Proposal. Dedicated guidelines to complete such proposals are available at: <http://www.spaceflight.esa.int/sure>

12. Who evaluates the submitted proposals in response to the SURE AO?

ESA and independent experts will evaluate all received proposals according to an established process. The main criteria of evaluations in addition to the Technical Feasibility Assessment are:

For Scientific Proposals

- Scientific Merit, with only the best scientific proposals being selected;
- Space relevance, in other words the rationale for making the experiment under microgravity conditions.

For Industrial Proposals

- Application potential: the competitive advantage and added value of the innovation created for terrestrial products and processes;
- Ethical acceptability: on the basis of internationally accepted provisions and also internal rules concerning the use of the personal image of an ESA staff member, the ESA official emblem, and/or the ISS image for promotion purpose, if so required as part of the proposal;
- Financial viability: with regard to the capability of the SME to co-fund the 50% of the proposed access.

All Scientists and SMEs that will submit a proposal on time will be informed in writing of the outcome of the evaluation.

(For more information refer to section II.2 and II.3 at page 28 and 34 of the SURE AO).

13. What about the results of the R&D experiment and possible Intellectual Property Rights (IPR)?

ESA will deliver the data directly resulting from the performed experiment to the Scientist or SME concerned. However the ownership/use/publication of data and the related Intellectual Property Rights (IPR) fall under two different regimes for Scientists and SMEs. These regimes reflect the differences in terms of funding scheme and ultimate objectives: share of information/knowledge between Scientists; return of investments and protection of competitive advantage for SMEs. The table below shows the main characteristics of these two different regimes:

	Type 1 - Scientific Proposal	Type 2 - Industrial Proposal
Knowledge/ownership	Ownership of ESA ESA is entitled to protect knowledge as Intellectual Property	Ownership of SME SME is entitled to protect knowledge as Intellectual Property
Knowledge/use	Right of prior access/use to the <i>User group</i> members for 1 year. After 1 year, ESA provides, under certain conditions access to other persons and bodies under the jurisdiction of ESA Member States and maybe others.	Exclusive and unlimited right of access and use by the SME.
Publication	<i>User Group</i> members must publish the results achieved	SME decides according to its own industrial interest

(For more information refer to section II.4 at page 37 of the SURE AO).

14. What is a Payload?

The equipment necessary to perform a proposed experiment in space is called 'payload'. The Scientist or SME concerned must provide such equipment. In general terms, the more dedicated equipment an experiment requires and the more costly the experiment will be. An ideal experiment in this respect makes use of facilities already available on board the ISS and requires a few samples to be flown. Overall, an ideal payload should have a mass of between 1 and 3 kilos.

15. Who can support me in the payload development?

The development of a payload in compliance with the specific requirements of space flight in general and the ISS in particular is usually a task for specialized companies acting in the aerospace sector. ESA will help Scientists and SMEs that require help to get in contact with such specialized European space companies, if needed.

Once the proposal has been selected these European space companies will then support Scientists and SMEs in the development or modification of the required payload to perform the selected experiment in compliance with the safety and interface requirements of the ISS.

16. What is the SURE Information Campaign?

In order to inform both the scientific and SME communities, about the SURE Announcement of Opportunity, ESA, in collaboration with local institutions within the new EU Member States (EU 10) and the two acceding ones (Romania and Bulgaria), is organising an Information Campaign which will include two types of events: General Information Meetings and Detailed Information Workshops.

17. What are the dates, locations and the agenda of the SURE General Information Meetings and/or the Detailed Workshops?

Dates, locations, and agenda of the General Information Meetings and the Detailed Workshops will be published soon at: <http://www.spaceflight.esa.int/sure>

18. Why should I attend a SURE General Information Meeting and/or a Detailed Workshop?

The participation at a General Information Meeting and/or the Detailed Workshop should be of benefit to you in having a better understanding of the ISS opportunities and the way a proposal should be submitted.

The General Information Meetings are aimed at informing Scientists and SMEs about:

- The SURE AO and research opportunities onboard the International Space Station;
- The various research areas, technology fields and emerging disciplines;
- The financial support that may be obtained for the execution of the selected experiments.

The Detailed Information Workshops aim at providing assistance to Scientists and SMEs in:

- Submitting a more complete proposal;
- Answering questions related to the SURE AO and evaluation process;
- Addressing technical issues related to the ISS or its facilities offered;
- Clarifying scientific and industrial matters;
- Identifying potential partners working in the same domain with whom a joint proposal could be prepared (for Scientists only).

19. Where could I find additional information about SURE and to whom should I address my additional questions?

Additional information is available at: <http://www.spaceflight.esa.int/sure>

Questions can be addressed to the only official point of contact at ESA, which is:

European Space Agency

Secretariat HME/GA

Announcement Identifier: ESA-AO-SURE

P.O. Box 229, NL-2200 AG Noordwijk,

The Netherlands

Tel: +31.71.565.60.78

Fax: +31.71.565.36.61

E-mail: SUREAO2006@esa.int

20. Is there any national point of contact available to whom I may talk to in my national language?

Yes, Scientists and SMEs can contact their usual national points of contact for activities related to space in Countries that are ESA Members States.

Scientists and SMEs from NON-ESA Member States should contact the national point of contacts listed at section III.2.3 at page 45 of the SURE AO.