





SURE ANNOUNCEMENT OF OPPORTUNITY "SUMMARY"

SURE (acronym for the International Space <u>Station</u>: a <u>Unique RE</u>search 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).

1. Background information

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, 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.

Research on board ISS is a strategic activity for the European Space Agency (ESA). In the frame of the Life and Physical Sciences in Space Programme (ELIPS) and the ISS Commercialisation Programme, ESA has provided access to ISS for both fundamental and applied research to scientists and private industries.

However, the opportunity to perform research on-board the ISS has been traditionally limited to *Users* from those European countries that are Member States of ESA and are directly funding the development, operation and utilisation of the ISS.

In order to give access also to the other European countries, ESA has therefore proposed the SURE Project to the European Commission (EC) in order that the EC would allocate funds as part of the EU Sixth Framework Programme (FP6) for that purpose.

The SURE Project was selected, and as a result ESA has launched this SURE Announcement of Opportunity (AO) to Scientists¹ and Small and Medium-sized Enterprises² (SMEs) from European Union (EU) Member States and Associated States, with priority given to the new EU Member States (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia) and the two acceding ones (Bulgaria and Romania).

Under this SURE AO, Scientists and SMEs (collectively referred to as *Users*) can submit proposals covering 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; health; and food).

2. Funding aspects

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 table below summarizes the SURE AO funding structure:

	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

¹ **Scientists** mean scientific representatives of universities, research centres or other publicly funded research bodies.

² Small and Medium-Sized Enterprises - SMEs mean enterprises which meet the criteria set out in the European Commission Recommendations 2003/361/EC.

The conceptualisation of the experiment and the preparation of experiment specific payload³ 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 secure their funding for those activities not covered by EC funds.

In this respect, 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.

As <u>general guidelines</u>, a typical ISS experiment requiring resources in the range of 1 to 5 hours of in-flight astronauts' time and 1 to 3 kilos of payload to be uploaded to ISS may consume already a significant amount of resources, depending on its complexity in terms of integration into a mission to ISS and execution in flight. In view of the available funding within the SURE project, proposals should therefore preferably fit within these ranges.

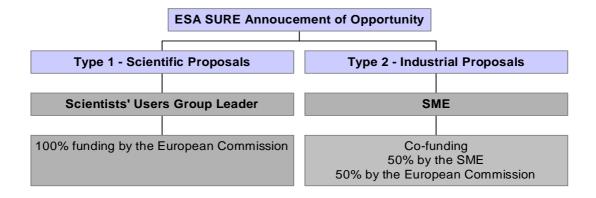
3. Types of proposals

Taking into account the portion of activities covered by EU funds; two types of proposals can be submitted to ESA in response to this SURE AO.

Type 1 - Scientific Proposals fully funded by the European Commission within the SURE project and submitted by Scientists acting as *User Groups Leaders*, on behalf of his *User Group* members.

Type 2 - Industrial Proposals being submitted by a SME, acting as a unique *user*, with access being funded 50% by the European Commission within the SURE project and 50% by the SME itself (directly or through other sources of finance it may secure).

³ **Payload** means the Scientist or SME provided equipment necessary to perform a proposed experiment in space.



Type 1 - Scientific Proposals are submitted by Scientists acting as *User Group* **Leaders on behalf of their** *User Group* **Members.** They benefit from access to the ISS being fully funded by the European Commission. The User Group members will have 12 months right of prior access to the data resulting from the performed experiment. After this period of 12 months or prior access to data, the data will in principle become open and official for use by ESA. Indeed, the involvement of public funds makes necessary that scientific and technical information resulting from experiments shall be secured by ESA and ultimately made available by ESA to the entire scientific community to facilitate the exchange of data and share of knowledge.

Types 2 – Industrial Proposals are submitted by a SME representative who wants to use the ISS and its facilities for its own purposes. The SME shall secure its financial capability to match at least 50% of the EC funds made available to the project for access to the ISS and in return will have full ownership of the scientific and technical information, data, and intellectual properties (e.g. patents) resulting from the performance of the experiment. In other words, the SME can use the unique environment of the ISS to achieve its own competitive advantage.

The table below shows the main characteristics of the two different regimes for Scientific Proposals and Industrial Proposals concerning Intellectual Property Rights (IPR) and publication of scientific and technical information/data resulting from the project.

	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

The Scientific and Industrial Proposals in response to this SURE AO shall be submitted no later than April 15th, 2006, 17.00 CET.

All proposals will be evaluated by ESA, as the sole interface within the SURE project

4. Additional information

More details are in the table attached herewith and additional information about the SURE Project can be found at: http://www.spaceflight.esa.int/sure

ESA SURE ANNOUNCEMENT OF OPPORTUNITY SUBMISSION DETAILS – SUMMARY TABLE

Eligibility	Scientists and SMEs of the following Countries can respond to the SURE AO: EU Member States and Associated States with priority given to Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia (BG, CY, CZ, EE, HU, LV, LT, MT, PL, RO, SK, SI)		
Notification of Interest due date	• 31 January 2006, no late than 17h00 CET		
Notification of Interest Contents checklist (NoI)	 Indication of choice between Scientific or Industrial proposal; Names and function, University/Research Centre/SME addresses, and telephone numbers of the single User Groups leader or SME (as applicable) and User Group Members (as applicable); A title descriptive of the intended proposal; Indication of area of research and related 6 keywords A brief summary (10 lines maximum) describing the project and its objectives Download NoI template here (template download), to be submitted in PDF) Notification of Interest must be submitted by email at 		
Notification of Interest submission addresses	 SUREAO2006@esa.int Or (if not possible by email) by fax at: 		
Information Workshop	Fax: +31.71.565.36.61 • Early 2006		
Proposal due date	 15 April 2006, no later than 17:00 CET 		
Proposal contents checklist	 Proposal Cover Page (template download) Proposal Abstract Form (template download) Proposal Description including scientific and/or industrial aspects, technical aspects. Please refer to the Proposal Description Guidelines as appropriate. (template download – Scientific Proposal Guidelines; Industrial Proposal Guidelines) (Scientific proposals shall be limited to 15 pages, excluding Biographical References and Annexes) 		

	 ANNEXES: Complete Annexes as required in the Scientific or Industrial Guidelines 4. Proposal Checklist (template download)
	The following rules apply to the submission of both Scientific and Industrial Proposals:1. A proposal must be submitted in its electronic version AND paper version;
	2. The <u>electronic version</u> must be submitted in one (1) single file including all various forms required as part of the 'Proposal Contents check-list' above. Such single file must be in Adobe Acrobat PDF format and must not exceed the total size of five megabytes (5 MB); Proposals submitted in word versions and/or Proposals sent in separate parts will automatically be rejected.
Proposal submission procedure	3. The <u>paper version</u> must be submitted in one (1) original copy and must be identical to the electronic version. In case of discrepancy between the two versions, the paper version shall prevail over the electronic version;
	 Upon receipt of the electronic version (or paper version, whichever comes first) ESA assigns a consecutive registration number to the received proposal and acknowledges such receipt in writing to the Scientist or SME concerned;
	5. In case of the need of the Scientist or SME to add information or make amendments to an already submitted proposal, the additional information/amendments shall be submitted as original paper version stating the assigned registration number by ESA and the areas where the proposal is modified, if any. In addition a <u>complete</u> , <u>updated electronic</u> <u>PDF version with all the additional information/amendments</u> <u>being integrated</u> shall be sent to ESA. Both a) the original

	 paper version with the additional information/amendments and b) the complete, updated electronic PDF version <u>must be</u> received by ESA not later than the formal deadline stated below; 6. The electronic and paper version of the proposal must be submitted at the ESA addresses stated below and <u>must be</u> received by ESA not later than 15 April 2006, at 17.00 (CET-Central European Time). 	
	For the electronic file Email: <u>SUREAO2006@esa.int</u>	
	For the original proposal	
Proposal submission	Mailing address:	
addresses at ESA	European Space Agency	
	Secretariat HME/GA	
	Announcement Identifier: <u>ESA-SURE-AO-2006</u>	
	P.O. Box 229, NL-2200 AG Noordwijk,	
	The Netherlands	
Tentative Evaluation	• Review by July 2006 (TBC)	
Schedule	• Notification of Results in September 2006 (TBC)	
	For any questions regarding this SURE Announcement of	
	Opportunity, please contact ESA at:	
Point of Contact at	E-mail: <u>SUREAO2006@esa.int</u>	
ESA	Tel: +31.71.565.60.78	
	Fax: +31.71.565.36.61	
For more information on the SURE AO	http://www.spaceflight.esa.int/sure	