

European Space Sciences Committee (ESSC)

Editorial

As a result of the Implementation and Financial Plans set up this year, the ESSC now finds itself in a much healthier situation. The agreement of all ESSC Funding Organisations (EFOs) on the need to support the minimum and vital level of activity for the Committee has led to a 25% budget increase in 2008 (including the new contribution from Italy) and to a 6% foreseen increase in 2009. Over the period of the financial plan (2008-2012) the raise agreed to in principle by the EFOs will amount to 50%. This will still not fully consolidate the budgetary situation though, and all agree that ESSC will only be able to live up to expectations once its core expenses are adequately and fully supported. Through new funding institutions as well as a series of visits in 2008 (CNES, ASI) which will be continued in 2009 (UK, Germany), we aim at solving this problem and providing ESSC with the capability to engage in pro-active tasks.

ESF-ESSC will manage two important Research Announcements (RAs) for ESA in 2009. This is a major project starting between ESF-ESSC and ESA.

The final report on the third evaluation of ESA's ELIPS programme is in print and served ESA D-HSF to prepare its proposal to the upcoming Ministerial Council. The final updated report on Funding of European Sciences will be published in October. Finally, ESSC recommendations for the November ESA Ministerial Council are being delivered to ESA and national delegations. This meeting represents a major moment for European space sciences and we want to make sure we are up to speed when advising European policy makers.

ESSC remained focussed on delivering advice and policy. Today the Committee is making more and more use of the ESF instruments to further its goals.

Two Forward Look proposals are thus in the pipeline for discussion (and hopefully approval) by the ESF Science Advisory Board in March 2009.

The novelty with these two proposals is the fact that ESA is offering to co-fund and support them. There is obviously interest outside the ESF for these foresight instruments that should be met with efficient action on our part.

As of next year the Space Sciences Unit will be boosted up with two new staff members and an increase in the ESSC-related activity share of a third one. 2009 looks very promising indeed for ESSC!

Jean-Pierre Swings
Chair of ESSC

Jean-Claude Worms
Head, Space Sciences Unit

Highlights

CAREX

CAREX has been very active since its launch in January 2008. The project's website is now finalised and includes 3 databases (experts, projects and infrastructures) to network scientists interested in research on life in extreme environments. The project also awarded Transfer of Knowledge grants to four young scientists. These grants will allow them to visit a CAREX partner institution and acquire new knowledge on specific technologies and methodologies. The coming months will also be busy as the project will organise two strategic workshops focussed on the identification of model ecosystems in extreme environments and the priorities for environment-specific technological developments and infrastructures in November and December 2008. It will also provide a forum for European funding agencies to discuss scientific and technological priorities and interact on potential synergies (January 2009).



For more information, see www.carex-eu.org

ELIPS evaluation

ESA asked the ESSC-ESF to organise a broad scientific consultation of the user community in preparation of the Ministerial Conference to evaluate the achievements and define future strategic and scientific priorities of their life and physical sciences in space (ELIPS) programme (see Newsletter n°2). The ESSC-ESF had already conducted such assessment studies in 2000 and 2004-2005. The final report has now undergone external peer-review and is about to be published. It will be delivered to ESA in October 2008.



ESA Ministerial Conference

As is the case since 1999 ESSC has recently been invited to attend the November 2008 ESA Ministerial Conference with an observer status. The ESSC delegation will consist of J.P. Swings and J.C. Worms. The Committee has prepared and approved related recommendations to be sent to



Ministers, ESA and national delegations in October. The Chair will make a short oral statement during the meeting.

Peer-review for ESA

At the HME Programme Board meeting of 11-12 February 2008, the ESA delegates for that science programme unanimously approved outsourcing the peer review in life and physical sciences in space to ESF. This followed a request made at the end of 2006 by ESA D-HME, which asked ESF to prepare a proposal to conduct the scientific peer-review process of proposals received in reply to their Research Announcements. The corresponding proposal to ESA was prepared with all concerned ESF units and supervised by the Space Sciences Unit. This request is a very good opportunity to further advance our recognition as a reference point for quality in scientific peer-review in Europe.

This activity will start with the management of an International Research Announcement, where ESA, NASA, JAXA (Japan), and CSA (Canada) scientists will submit their proposals to ESF for review. Another act will be the management in parallel of a

European Research Announcement in physical sciences. Official negotiations have started with ESA to initiate a contractual procedure over the period 2009-2011.

Forward Look n°1

Humans in Outer Space. ESSC and the ESF Humanities Standing Committee (SCH) launched an INIF activity in 2007 to reflect on the humanities-related aspects of space exploration. One workshop was held in Genoa in March 2007 and a final conference was held in Vienna in October 2007. This activity provided a unique perspective by identifying various needs and interests of humanities and social sciences linked to space exploration. A joint position paper was published in April 2008, aimed at expressing the main results from this original ESF initiative. Following this SCH and ESSC decided to launch a Call for Expressions of Interest in order to identify key challenging topics from any discipline in this area and investigate the best ways to explore them. 21 replies were selected out of 51 and their authors were invited to an ESF –and possibly– ESA-sponsored conference in April 2009. It is planned to use this conference as a starting point for an ESF Forward Look aiming to provide a social sciences and humanities-based framework for decisions and events that are expected to happen in the next decades in solar system exploration by humans.

www.esf.org/activities/forward-looks.html

Forward Look n°2

Technological breakthroughs for scientific progress. This comes as a request from ESA (DG Cabinet) and from the HiSPAC committee. The development of innovative technologies opens new fields of research and provides sophisticated new tools for scientists, but a conservative approach to technology is too often followed and self-censorship is often applied regarding technologies that are not yet fully proven, perhaps for fear of losing in competitive assessment phases. The result is that evolution is gradual and breakthroughs do not happen as frequently as they could.

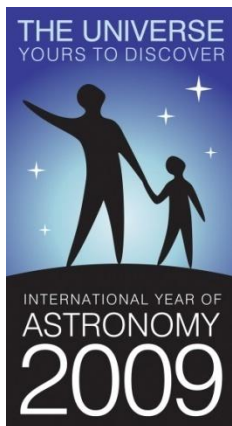
This goes much beyond space sciences and addresses various fields of physics and engineering. The objectives of this proposal could include establishing breakthrough scientific objectives, identifying the associated technology development, considering forecast for technologies that would enable the achievement of these scientific objectives, identifying partnership schemes (space/non-space), and facilitating the spin-in of

top non-space technologies. Space actors often do not have the knowledge of non-space domains and vice-versa.

The Forward Look format would enable such interactions. A preparatory (“scoping”) workshop will take place on 3 December 2008 in Paris.

International Year of Astronomy

The International Astronomical Union has offered ESF the possibility to become an official partner of IYA 2009 as an Organisational Associate, which was agreed by the Chief Executive. ESF will be fully involved in the IYA 2009 with outstanding rights and benefits, i.e. ESF or its committees may use the IYA 2009 logo and slogan for the purposes of advertising and market promotions; ESF may have its logo on IYA 2009 marketing and promotional materials, may use IYA 2009 corporate materials, and participate in IYA 2009 opening, closing and other global events. In addition ESF will work with the IYA 2009



project to create specific events, activities, products, etc. Ideas were already discussed within ESF, through its PESC, ESSC and CRAF committees and a leaflet was produced detailing potential activities. This activity will be supervised through the Chief Executive’s Unit.

Contact: [Thibaut Léry](#)

Events 2008-2009

- **Space Days 2nd edition**
6-7 October 2008 – Liège (BE)
- **ISLSWG meeting & symposium**
27-29 October 2008 – Gengenbach (DE)
- **ILEWG-LEAG-ICEUM-SRR annual meeting**
28-31 October 2008 – Cape Canaveral (USA)
- **SSB-NRC space policy workshop**
18-20 November 2008 – Irvine (USA)
- **ESA Ministerial Council**
25-26 November 2008 – Den Haag (NL)
- **ESF Conference & General Assembly**
26-28 November – Stockholm (SE)
- **CAREX Model Ecosystems workshop**
30 Nov-2 Dec 2008 – San Feliu (ES)
- **GIR Symposium**
2 December 2008 – Liège (BE)
- **CAREX Technology workshop**
3-5 December 2008 – San Feliu (ES)

- **Technology Forward Look workshop**
3 December 2008 – Paris (FR)
- **37th ESSC plenary meeting (extraordinary)**
29 January 2009 – Brussels (BE)
- **5th annual EFO meeting**
second half of February 2009 – Brussels (BE)
- **Humans in Outer Space conference**
2-3 April 2009 – La Palma (ES)

Unit and Committee

- **Nicolas Walter** will share his time of Science Officer in the Space Sciences Unit on the basis of 80% managing the CAREX project and 20% working for ESSC development.
- As of next year, we expect that three new positions will be filled in the Space Sciences Unit: (1) a **Science Officer on peer-review** dealing with the ESA contract; (2) an **Administrator** on CAREX and ESSC; and (3) an **Administrator** on peer-review. The first two positions could start in January and the third one in April.
- The Committee now has **26 members** coming from **12 European countries**.