



International Cooperation for Sustainable Space Exploration



# SPACE EXPLORATION & GLOBAL PARTNERSHIP

## The Global Exploration Strategy: the Framework for Coordination

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# **Global exploration strategy:** **the framework for coordination**

- Since August 2006, 14 space agencies discussed the definition of a vision for globally coordinated space exploration.
- The 14 space agencies are: ASI, BNSC, CNES, CNSA, CSA, CSIRO, DLR, ESA, ISRO, JAXA, KARI, NASA, NSAU and Roscosmos.

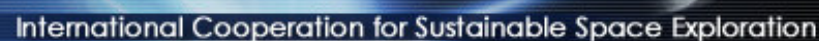
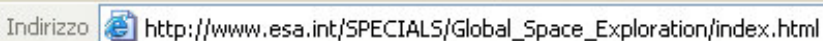


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These discussions led to the finalisation of a document entitled “The Global Exploration Strategy: The Framework for Coordination” (otherwise called the Framework Document). This document has been released on the 31<sup>o</sup> of May, 2007 in connection with the 3<sup>o</sup> ESA/ASI workshop on International Cooperation for Sustainable Space Exploration.

The Framework Document is an important step for these 14 agencies in an evolving process toward achieving a global, strategic, coordinated and comprehensive approach to space exploration.



19-Jun-2007

### Workshop convenors

- Simonetta Di Pippo

- Daniel Sacotte

Jointly organised by:



agenzia spaziale  
italiana



Figure 1



**30 May 2007** Fourteen space organisations from all over the world will gather in Italy to discuss further coordination for long-term space exploration efforts.

[Full story ▶](#)



**Welcome statement Mrs Di Pippo and Mr Sacotto**

[www.globalspaceexploration.org](http://www.globalspaceexploration.org)



are conducting collectively on the issue of space exploration from a global and international cooperation perspective.

[Full story ▶](#)

### 3rd Workshop on International Cooperation for Sustainable Space Exploration

ESA and ASI have the pleasure of welcoming representatives of the international space agencies and organisations to the 3rd Workshop on International Cooperation for Sustainable Space Exploration to be held in



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The Framework Document provides an extended rationale for Exploration.

The Framework Document identifies a common set of exploration themes and values.

This Framework is not a proposal for a single global programme but it recognizes that individual space exploration activities can achieve more through coordination and cooperation

The Framework Document calls for a voluntary, non-binding coordination mechanism among interested space agencies.



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Such a mechanism could provide participating agencies:

- a forum to discuss their interests, objectives and plans in space exploration;
- a forum to promote space exploration

Such a mechanism, through which nations can collaborate, could help to strengthen both individual projects and the collective effort related to Exploration.



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## **Space exploration in service of society - Themes**

Global-scale space exploration represents the sum of many projects undertaken nationally and internationally. But it also signifies a collective will to find answers to profound scientific questions, to create new economic opportunity and to expand the boundaries of human life beyond Earth. These goals of space exploration in the service of society are embodied in the recurring themes of the Global Exploration Strategy.



# **Space exploration in service of society - Themes**

- Theme 1: New knowledge in science and technology
- Theme 2: A sustained presence – extending human frontiers
- Theme 3: Economic expansion
- Theme 4: A global partnership
- Theme 5: Inspiration and education



# **Moon, Mars and Beyond**

## **The Moon – “a second home in the Solar System”**

- Science of the Moon, science from the Moon and science on the Moon
- The Moon as a place to develop capabilities to journey to Mars and beyond
- Sustain human presence beyond Earth
- The Moon to appeal human imagination

## To Mars and beyond

- To increase our knowledge of Earth history and evolution also in relation with the appearance and evolution of life
- Mars has similarities with the Earth that makes it a destination for future sustained human presence
- Asteroids and comets have also high scientific interest

**Given the enormous challenges, human exploration of the Moon and Mars may only be achievable through sustained international cooperation**



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# Implementing the Global Exploration Strategy

Through the definition of an international coordination mechanism for space exploration based on the following four principles:

- Openness and inclusiveness
- Flexibility and evolutionary approach
- Effectiveness
- Establishment of mutual interest

The decision to set up an “**International Space Exploration Coordination Group**” (**ISECG**) was taken and the relevant Terms of Reference were sent out to all participating Space Agencies by ESA and ASI as convenors of the Spineto Workshop.



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# ISECG

The approval of the ISECG Terms of Reference was made official by those fourteen Space Agencies at the GES meeting co-chaired by ESA and DLR in Berlin last November.

The purpose of ISECG is to work collectively towards the further development and implementation of the Global Exploration Strategy.

The expected benefits of establishing the ISECG are to increase robustness, safety and cost effectiveness of individual and collective exploration goals, and to facilitate the ability of Participating Agencies to engage in productive bilateral or multi lateral discussions, while preserving their autonomy. This will contribute to strengthening the sustainability of global space exploration.



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## **ISECG (con't)**

The ISECG will focus on developing non-binding findings, recommendations and other outputs as necessary by Participating Agencies.

The ISECG will also assist Participating Agencies by identifying the need for and benefits of establishing further elements of the international coordination mechanism, such as ad hoc working groups or workshops; or whether an issue should be referred to existing “experts” groups, for the purposes of providing analysis and advice to the ISECG.

## ISECG (con't)

Currently, the group is finalizing its Workplan for 2008 and related products to be delivered.

Some activities have been already started:

- 2007 Annual Report drafting (teleconf scheduled on February 20°)
- Requirements definition for INTERSECT (**INTER**national **S**pace **E**xploration **C**oordination **T**ool) (1° meeting of the Tiger Team held on February 15° in Rome)

## ISECG (cont'd)

Whereas others activities will start soon:

- Definition of the Secretariat ToR
- Relationship with other already existing WGs
- Public engagement
- Code sharing
- Architecture interfaces

Next plenary ISECG meeting is scheduled in Montreal (Canada) next July.





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## **Considerations of a European:** **a lesson learned**

The Framework Document exercise saw the active involvement among the others of both ESA and the major European national space agencies. The recently concluded STS-120 / Esperia mission put in evidence that synergy of national vision and opportunities with ESA's structure can lead to great results.

This is the approach followed with the Global Strategy, paving the way to present and future exploration endeavours.

National ambitions, when supported by a vision and relevant resources, provide a strong basis from which initiating bold European undertakings in a global environment.

Europe is demonstrating in these very days its commitment and interest to space exploration. This is a journey started back in 2001, confirmed in 2005 with the Aurora programme whose goals and objectives are even more relevant and sound today.