

Symposium Programme Committee

Co-Chairs

- Bernhard Hufenbach (ESA)
- James Carpenter (ESA)

Members

- Ian Crawford (Birkbeck University of London, UK)
- Kip Hodges (Arizona State University, USA)
- Ralf Jaumann (DRL, Germany)
- Katherine Joy (Manchester University, UK)
- Michelle Lavagna (Politecnico di Milano, Italy)
- Dan Lester (University of Texas, USA)
- Igor Mitrofanov (IKI, Russia)
- Clive Neal (University of Notre Dame, USA)
- Armin Wedler (DLR, Germany)

Organisation Committee Co-Chairs

- Markus Landraf (ESA)
- Alessandro Bergamasco (ESA)

Calendar of Events

- 4 August - Symposium Announcement and Call for Abstracts
- 25 September - Abstract Deadline
- 2 November - Announcement of Draft Programme
- 16 November - Registration Deadline
- 27 November - Publication of Final Programme
- 15-16 December - Symposium

Venue

The symposium will be held at the European Space Research and Technology Centre of the European Space Agency (ESA/ESTEC) in the Netherlands. For more information please check the symposium website.

Submission of abstracts

Please submit your abstract by 25/09/2015 following the instructions given on the symposium website.

Registration

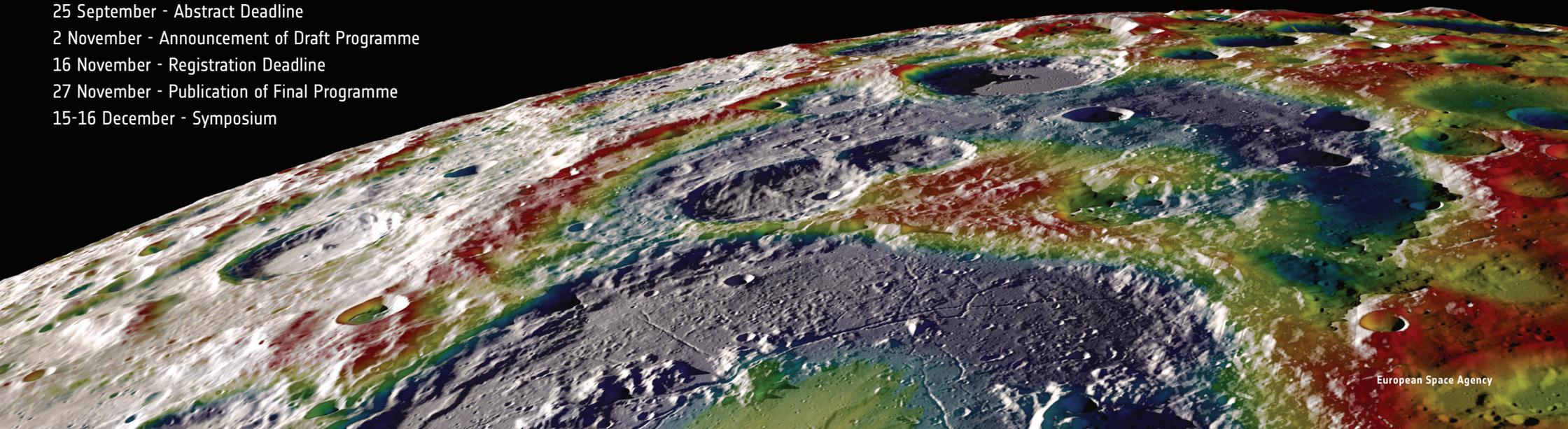
Register by 16/11/2015 via the symposium website. There is no symposium fee.

Website: <http://humanrobotics.spaceflight.esa.int>

Email address: humanrobotics@esa.int

→ **MOON 2020-2030**

A new era of human and robotic exploration



Next stop: the Moon

The decade 2020-2030 will see a renewed and sustained international effort to explore Earth's only natural satellite.

The ESA exploration strategy considers the Moon as the next destination for humans venturing beyond Low Earth Orbit and an integral element of the roadmap towards humans missions to Mars.

This will be a shared journey. New and bold ambitions for lunar exploration call for a new era of coordinated human and robotic missions. Humans and robots are set to explore the Moon together. The ISECG Global Exploration Roadmap underlines the strategic significance of the Moon in a global space exploration endeavour, calling for a shared international vision on how to best accomplish common lunar exploration goals.

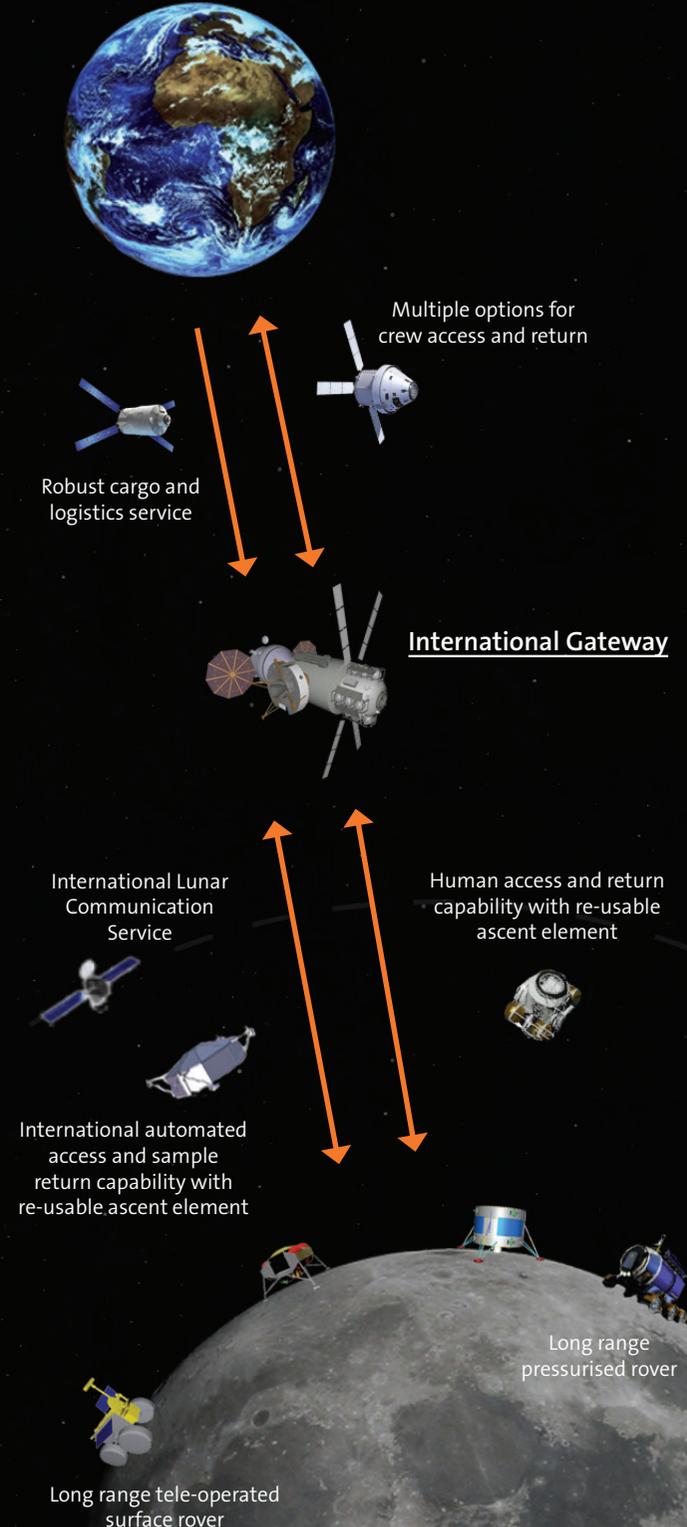
The International Space Station programme has demonstrated the importance of a robust international partnership for ISS development, assembly, operations and effective utilisation. Now is the time to build on this partnership and open it to new partners to continue the journey beyond low Earth orbit.

The symposium "Moon 2020-2030" will be a key step in advancing the international approach for lunar exploration together with key players from agencies, academia, and industry.

Join us on this exciting voyage.

Vision 2030

The purpose of the symposium is to consolidate an international vision for lunar exploration by 2030, and discuss approaches and innovative ideas for realising this vision.



Key to realizing the Lunar Exploration Vision 2030 is the step-wise deployment of an international exploration architecture. This vision envisages access for robots and humans to previously unexplored regions.

To enable this vision a change of paradigm is required:

- From separate planning of automated and human missions to fully integrated mission planning;
- From nationally and private sector driven missions to a truly multilateral effort, including both institutional and private sector partners;
- From single missions to an open architecture, enabling repeated missions of increasing complexity.

Symposium Objectives

The symposium "Moon 2020-2030" challenges the space agency, academic and industrial communities to engage in a new era of coordinated human and robotic exploration in the interest of science and human expansion.

ESA encourages contributed presentations and open discussions about the future of lunar exploration and invites contributions on the following topics:

- Contributions of planned missions and capabilities
- Innovative capabilities for lunar exploration
- Innovative mission concepts
- Recommended focus areas for near-term technology investments and preparatory activities
- Knowledge gaps and related scientific research
- Fundamental scientific research
- Operational aspects, including human roles
- Opportunities and recommended actions to enhance relevance of lunar exploration to society