

Statement by the European Science Foundation's European Space Sciences Committee to the CM25 ESA Delegations

Prof. Chris Rapley CBE, MAE - ESSC Chair Bremen, November 2025 (Revision II)

Space is hard. It is unforgiving. It is the ultimate test of our technical prowess and collective resolve.

Yet its rewards are transformative: a strategic vantage point on our Universe, Solar System, and home planet; a laboratory freed from gravity; a gateway to new resources and economic frontiers; and a pivotal domain for global power, influence and security.

At this time of historic geopolitical shifts, the imperative for Europe is clear; we must seize the moment, build upon our robust foundations, and move decisively to secure our autonomy, technological sovereignty and self-reliance. In this endeavour, guaranteed, independent access to space - including the European Astronaut Corps - is not a luxury, but a strategic necessity.

For over 50 years, the European Space Agency's success has been powered by the critical interplay between technological advance and scientific discovery - the push of innovation and the pull of the unknown - yielding benefits that cascade back to Earth, fuelling prosperity and security. The CM25 programme proposals for Mandatory, Exploration, and Earth Observation offer the means to build upon this legacy.

Having served as an ex-officio member of the Space Science, Human Spaceflight and Exploration, and Earth Observation advisory committees for the past five years, I can attest first-hand to the exceptional competence, professionalism, and dedication of the ESA teams.

Without doubt: ESA delivers.

With this in mind, and in a world of accelerating competition and global challenges in which Europe must secure its place, the European Space Sciences Committee emphatically urges all Delegations to "fully support the science-driven elements of the ESA CM25 programme proposal" ¹.

By investing boldly in ESA's science programmes today, Europe will position itself as a global leader at the frontiers of discovery, a guardian of our planet, a pioneer of the new space economy, a partner of choice for joint space ventures, and a beacon of inspiration for generations to come.

This strategic commitment will sow the seeds of future economic prosperity, create high-skilled jobs, drive cutting-edge innovation, and secure the competitive strength of European industry in the burgeoning space marketplace².

The future is not a destination to be reached, but one to be built.

The science community is eager to play its part.

Our full Report and Recommendations and supporting documentation are available at https://www.essc.esf.org/essc-documents-for-cm25/

² The World Economic Forum estimates a global turnover for the space domain of \$1.8Tn by 2035; see https://www3.weforum.org/docs/WEF_Space_2024.pdf