



ADDRESS TO THE EUROPEAN SPACE AGENCY MINISTERIAL COUNCIL

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Chair

European Space Sciences Committee

“For if anyone should come to the top of the air or should get wings and fly up, he could lift up his head above it and see, as fishes lift their heads out of the water and see things in our world, so he would see things in the upper world; and if his hold were firm and he continued to watch he would perceive that that is the real sky, the real light and the real Earth.”

(attributed to Socrates)

Dear Chair, Ministers, Director General, Ladies and Gentlemen,

The ESSC provides an independent voice for the European space sciences community. Our views are framed through the lens of science.

Concerning the Director General’s proposed ambitions for ESA in the wider European context:

The planet is signalling Code Red. Wildfires, floods, extreme events, and heat stress are impacting Europe and the world. Lives are being lost, and costs are escalating. We need an urgent increase in the scale and pace of action to limit these threats and to manage their impacts. The European Green Deal, Green Transition Agenda, and Sendai Framework provide the policy superstructure. Space-based data and infrastructures will be a crucial enabler of societal action. With this in mind, we strongly endorse the plans to transform the Space for a Green Future and Rapid and Resilient Crisis Response accelerators from concepts to reality. To do so will require deeper penetration of Earth observation information into society than hitherto. ESA EO initiatives such as the Sectoral Task Forces and Green Transition Information Factories will provide the means. The ESA Earth Explorer missions and the Copernicus Sentinels will provide the content. Success will further consolidate Europe’s position at the forefront of the field. In doing so, it will help secure for European citizens the best chance to protect their wellbeing in a rapidly changing climatic future.

On launchers: A fundamental capability for the exploitation of space, whether for science, commerce or exploration, is guaranteed access. The revolution in access by commercial enterprises in the USA points the way to a new paradigm. With this in mind, the ESSC welcomes the initiative to rethink and revitalise the European launchers sector. The ongoing development of the Ariane and Vega launchers should be enhanced by novel routes to successor generations. Competition will be key. The aim is increased capability, reliability and (especially) reduced cost. We see this as a *sine qua non* for the future health of all aspects of European activities in space, but especially for science across the full ESA programme.

On exploration: we are entering an historic new era; the establishment of a permanent human presence, and potentially lucrative economy, off-planet. Nations that lead will be positioned to reap the greatest benefits. History shows that achieving a goal that stretches the limits of feasibility can transform workforce talent, technical and organisational capabilities, societal coherencies and worldwide prestige. With this in mind, the ESSC welcomes the report “Revolution Space”, which argues for an ambitious European programme of human and robotic exploration. The vision is for ESA to act increasingly as enabler, industrial partner, system architect, and anchor customer for future services. Intensified exploration will open new windows for ‘enabling’ and ‘opportunistic’ space science, with the potential to deliver transformative societal benefits.

We conclude by asking the question, where would the DG’s proposals be, without the heritage of a half century of European space science? The founding fathers, such as Pierre Auger and Sir Harrie Massey, recognised that a scientific underpinning for European space would drive a combination of discoveries and technological and programmatic capabilities inconceivable at the outset. The ESSC believes that this proven philosophy should be re-affirmed and re-invigorated. We make the strongest possible appeal that in the run up to the Ministerial in 2025 for the Delegations and ESA work together to ensure that funding for science across both the mandatory and optional programmes receives a substantial uplift. Present funding projections are insufficient for the needs. Given the decadal gestation times of major science missions, decisions made now and at CM25 will have long-term consequences. Your visionary commitments can ensure that European space science and ESA flourish in their second half-century as spectacularly as they have in the first.

Our supporting paper “Uplifting ESA Science Funding” makes the arguments for enhanced science funding in greater detail.

Thank you for your attention.

Chris Rapley



Chair, on behalf of the *European Space Sciences Committee*