



European Science Foundation - European Space Sciences Committee Address to the ESA Council at Ministerial level

Professor Athena COUSTENIS, European Space Sciences Committee Chair
Seville, Spain, 27-28 November 2019

Statement of the European Space Sciences Committee of the European Science Foundation.

Dear Chairs, Dear Ministers, Mr Director General, Ladies and Gentlemen,

The European Space Sciences Committee of the European Science Foundation, representing the scientific community and acting as advisors and users of ESA's programmes, wishes to also express its congratulations to ESA for its recent outstanding scientific and technological successes that you heard about in the Director General's presentation and for the well-balanced strategy of the Space 4.0 program.

The ESSC recognises that ESA has been efficiently federating European scientific and technological know-how, transcending international cooperation and enhancing the benefits for European citizens. In so doing, ESA managed to capitalize on bold choices and strong multi-national commitments. ESA has thus enabled Europe to develop cutting-edge missions that cover the full range of space activities and maintain Europe at the forefront of space exploration, greatly appreciated by the scientists and inspiring young generations.

The ESSC notes that despite significantly lower funding compared to NASA, Europe nevertheless accomplishes extraordinary feats. Overall, we also note that the reasonable levels of resources requested at this meeting come with a significant gain in programmatic efficiency.

Looking to the future, the ESSC welcomes the increased ambitions of the new Space19+ science programme proposals while ensuring the timely and safe delivery of all the missions.

We recognise that Europe has all the required expertise, knowledge, infrastructures and facilities to pursue and implement bold, decade-spanning science programmes. ESA should exploit this and also take advantage of opportunities in international cooperation, consider partnerships with the commercial sector and fully then come on board in the new space arena, always in tight consultation with the European scientific community, in order to maximise science impact and return on investment.

We would like to emphasize that subscription to ESA's structuring and inspiring **Mandatory Science Programme** should never be perceived as a forced entry fee, but as an opportunity to invest in an endeavour which plays a key role as a driver for excellence in science and ground-breaking technology development in Europe.

The ESSC also recognises the strong European position established by ESA's contribution to essential elements in all aspects of spaceflight and exploration within the **European Exploration Envelope Programme**. We strongly recommend full funding of the E3P programme in its Phase 2, and notably of its scientific component SciSpacE and MSR project.

The ESSC further acknowledges the value of the visionary FutureEO proposal as a fundamental basis for new achievements in the worldwide-recognised **Earth Observation program**. It will reinforce the Earth Explorers suite of missions and the scientific exploitation of data.

The ESSC encourages ESA to continue the coordination with the **European Commission**, and calls for a reinforced ESA/EU mechanism with improved tactical and operational capacity. Given the proposed new approach, this would also advance the Earth system science.

After a dedicated study, the ESSC concluded that regarding the Space Weather cornerstone, a key aspect in the **Safety and Security pillar**, there is an urgent need to define an operational space- and ground-based network that measures essential space weather parameters. This will in turn drive the space weather predictions required to protect our society's infrastructure. The ESSC urges the Member States to provide support for the next-generation space missions and the maintenance and augmentation of the ageing ground-based infrastructure.

As further comments, we would like to note that

As concerns Global Competition: having achieved recognition as a reliable and desired partner, the ESSC encourages ESA to pursue its intense efforts for international collaboration whenever possible and to work at aiming to better promote common development and partnerships.

Finally, the ESSC supports the **extension of the ESA Membership** to all interested EU states, provided the establishment of the appropriate process and industrial policy measures.

As a result of the above considerations, we, the European space sciences Committee acknowledge the value of the Space19+ science programme proposals submitted by the European Space Agency at the Ministerial Council 2019 and strongly encourage subscription by its Member States. This will allow Europe to achieve its full potential in scientific excellence and for Member States to accrue the socio-economic benefits inherent to space research.

Athena Coustenis,

Chair, on behalf of the European Space Sciences Committee