

Ambitions of the Association of the European Space Research Establishments (ESRE)

The world, and Europe, is facing new challenges, such as sustainable economic growth and social inclusion, employment skills and human capital, environment and resource security, digitalization, global infrastructure resilience, climate change and civilian security.

The space sector provides technologies, information services and products that in turn enable the development of direct and indirect solutions to address these challenges, as well as aspects related to Europe's Common Security and Defence Policy (CSDP). Space-based solutions contribute also towards a number of the United Nations Sustainable Development Goals (SDGs).

The global space context is however evolving at an unprecedented pace. New actors, new technologies and new applications are changing the way in which the global community interacts with, operates in and benefits from space activities. Uses and users of satellite data and services are diversifying very fast. The global demand for space data and services and resilience of its infrastructures and services continues to grow exponentially.

The global space sector is a major economic sector in itself, but also increasingly vital as an enabler of growth in many other sectors, in particular as space enables also a wide array of services and applications. The European space economy thus is a vital and strategic contributor to the overall European economy. Without space activities many new societal applications would not be possible and our dependence on the space sector means that disruption in services would lead to major societal issues affecting our daily lives.

European countries have been coordinating and consolidating their resources and funding to actively pursue common programmes in every space domain. This 50-year cooperation in space has established European research organisations and companies among the world's best. Europe enjoys a prominent position in many space markets and domains, and the benefits deriving from its space activities are evident at both social and economic level for all European countries. Europe is also a world leader in space science and space exploration and inspires generations.

Space is furthermore a highly strategic sector for European public institutions and businesses as also recognised by the "Space Strategy for Europe", which was adopted by the European Union in 2017. However, with the growing internationalisation and globalisation of the space sector European public authorities should not stay still but continue supporting the space sector through appropriate ways and means.

The role of the European Union in this context is of paramount importance. Investments made over the years for the Galileo and Copernicus programmes and the space research part of the framework programme for research and innovation (FP) have made critical contributions to strengthening the European position in space. As proposed by the European Commission in the Space Strategy, in the next Multiannual Financial Framework (MFF), the EU should continue supporting Galileo and Copernicus and space research at appropriate levels, similar at least to the current MFF, while allowing also launching additional new programmes (e.g. GovSatCom, Space Situation & Tracking, Space JTI).

With the rapid technological changes on-going such as artificial intelligence and deep learning, Internet of Things, industry 4.0, quantum computing, miniaturization etc. the EU must guarantee that the European space ecosystem will be able to leverage the new developments and support these new technological trends so that Europe does not cede its leadership to other global innovation hubs.

The overall European ecosystem should thus be involved from academia and research organisations to industrial partners. Research organisations like the members of the Association of the European Space Research Establishments (ESRE) are the backbone of the RT&D progress that allows the European space innovations of today and tomorrow, guaranteeing that Europe continues to develop cutting-edge space solutions.

In the light of the above, ESRE intends to contribute actively to the implementation of the “Space Strategy for Europe”, bringing in a common voice of European institutional space research organisations.

By regularly providing to European stakeholders, and here in particular to the European institutions, ESA and Eurospace, the consolidated views of public “Space Research and Space Technology Development” in Europe, ESRE aspires to become an acknowledged partner in the consultative dialogues organised by the European Commission and ESA.

On the present occasion, ESRE would like to provide to the strategy implementation process its views on

“Selected Trends and Technologies Expected to Shape the Next Decade”

as well as

“General Recommendations to the EU’s Research Framework Programme 9”
