



European Union

**EU Statement at the 64th Session of the
Committee on the Peaceful Uses of Outer Space (COPUOS)**

United Nations Office for Outer Space Affairs (UNOOSA)

Vienna, 25 August - 3 September 2021

Mr. Chair,

I have the honour to speak on behalf of the European Union and its Member States. The following countries align themselves with this statement: the Republic of North Macedonia*, Montenegro*, Serbia*, Albania*, Bosnia and Herzegovina*, Norway+, Ukraine, the Republic of Moldova and Armenia.

Please allow me to welcome you as Chair of this COPUOS session and to thank Director Di Pippo and the Office for Outer Space Affairs (UNOOSA) for the excellent preparations. The EU and its Member States remain committed to actively contributing to the work of COPUOS and its Subcommittees and reiterate their full support for the recently submitted application of Slovenia to become a member of COPUOS. We also underline the role and the contributions of permanent observers to the work of the Committee, and we are glad that the European Union is amongst them, in accordance with the related UN General Assembly Resolutions of 2011 and 2018.

Mr. Chair,

The EU and its Member States strongly support a multilateral approach to international affairs including with regard to cooperation on outer space issues, in particular in the context of the United Nations. We reiterate that COPUOS and its Subcommittees are unique platforms for international cooperation in the peaceful uses of outer space, including on the development of international space law, international norms and standards, guidelines, best practices, and other transparency and confidence building measures regulating space activities. We

* Candidate Countries the Republic of North Macedonia, Montenegro, Serbia and Albania as well as potential Candidate Country Bosnia and Herzegovina continue to be part of the Stabilisation and Association Process.

+ Norway is a member of the EFTA and of the European Economic Area.

also recognize the important role of the UN Office for Outer Space Affairs in supporting the work of COPUOS and its Subcommittees.

We believe that the space treaties developed in the UN framework constitute the cornerstone of international space law. This UN framework is complemented by other space relevant documents and resolutions adopted by the UN General Assembly. As a responsible space actor, the European Union is considering taking steps towards the acceptance of the rights and obligations contained in the relevant UN treaties on outer space.

We continue to promote the preservation of a safe, secure and sustainable space environment and the peaceful use of outer space. We continue to stress the importance of transparency and confidence-building measures, the need to ensure responsible behaviour in outer space, and the need to strengthen commitments to avoid potentially harmful interference with the peaceful exploration and use of outer space.

We underline the need to foster increased international cooperation, sustainability of space activities, and to preserve access to outer space.

Mr. Chair,

We reaffirm our strong satisfaction that COPUOS, and consequently the UN General Assembly, adopted the preamble and the 21 Guidelines for the **Long-term Sustainability of Outer Space Activities**. The establishment of a five-year Working Group on the Long-term Sustainability of Outer Space Activities under the Scientific and Technical Sub-Committee (WG-LTS) was yet another positive step. This will facilitate the sharing of information, experience, good practices and lessons learnt from the implementation of the adopted guidelines, help to raise awareness and capacity building, and address new challenges for the long-term sustainability of outer space activities, such as mega-constellations. The EU and its Member States welcome the agreement on the designation of Mr. Umamaheswaran as Chair of the Bureau of the Working Group on the Long-term Sustainability of Outer Space Activities reached at the 58th session of the Scientific and Technical Subcommittee. We hope that consensus on its terms of reference, methods of work and work plan will be reached during this session of COPUOS so that the Group can start its important work in addressing challenges in outer space, including the concrete implementation of the 21 Guidelines.

The EU and its Member States believe that space science, applications and technologies have great potential to help address major challenges of our time and realize the global agendas. Space technologies contribute to combatting COVID-19 and play a crucial role in the economic recovery after the pandemic and in tackling the global climate crisis. In this respect, we attach great importance to the **Space2030 Agenda** and Implementation Plan. We appreciate the progress made so far by the Working Group under the leadership of Jordan, Italy and Romania and encourage all COPUOS Member States to engage constructively and in a spirit of flexibility on the two pending paragraphs, thus allowing to promptly finalize the document and enabling the Committee to deliver on the mandate received by the General Assembly. This will further demonstrate the continued effectiveness and relevance of the Committee's work.

The EU and its Member States welcome the establishment of the new Working Group on **Space Resources** with Ambassador Misztal from Poland as Chair and Professor Freeland from Australia as Vice Chair. We thank all delegations which have submitted inputs to advance this important work and in particular we greatly appreciate the Conference Room Paper (CRP) submitted by Austria, Belgium, the Czech Republic, Finland, Germany, Greece, Poland, Portugal, Romania, Slovakia and Spain. We look forward to early agreement on the Working Group's mandate, terms of reference, methods of work and work plan during this session, based on the revised proposal by the Chair and Vice Chair of the Working Group on Space Resources.

We appreciate Austria's presentation of its initiative **Space4Climate Action**, aimed at further promoting the use of space technology in contributing to climate action. The new EU Space Programme contributes to similar goals, as for example through the Copernicus Climate Change Service.

Mr. Chair,

The European Union and its Member States, together with the European Space Agency (ESA), and the European space industry, have developed strong and unique space capacities in Europe, which benefit all countries. Among the EU space flagship programmes, **Copernicus** is the most advanced Earth observation system in the world. It helps save lives at sea, improves our response to natural disasters, and allows farmers to better manage their crops. **Galileo**, the EU's global navigation satellite system, provides highly accurate global positioning and timing for autonomous and connected cars, railways, aviation and other sectors.

EGNOS, provides safe critical navigation services to aviation, maritime and land-based users throughout the EU. These programmes are instrumental in addressing and mitigating the impact of the global COVID crisis¹ and they contribute to the implementation of the UN Sustainable Development Goals. Further information on their services can be found in the written version of the EU statement.

The European Geostationary Navigation Overlay Service - EGNOS Europe's satellite-based augmentation system, improves the accuracy and the reliability of basic existing satellite navigation signals in Europe. The EGNOS system is composed of transponders installed on three geostationary satellites along with an interconnected ground network of about 40 positioning stations and 2 mission control centres. EGNOS Safety-of-Life service is certified by civil aviation and offers excellent performance in all EU Member States with the exception of certain places located in the northern, southern, and eastern extremes of the EU territory.

Galileo is the European Union's Global Satellite Navigation and Timing System (GNSS), which provides accurate positioning and timing information. The Galileo programme is funded and owned by the EU and its services can be used for a broad range of applications, such as transport, agriculture, fisheries, energy or banking. It is autonomous, but also interoperable with existing satellite navigation systems. Galileo currently has 22 operational satellites in orbit and is supported by an extensive ground infrastructure. The system is in its final stage of deployment, offering already three services to users.

The first is the Open Service, which is a free, mass-market service for positioning, navigation and timing. It allows for a below 1-meter positioning worldwide. The estimated number of Galileo-enabled smartphones in use has already reached 2 billion units. 26 car brands in the European Union already sell Galileo-enabled models and 85% of new tractors use today satellite navigation to optimise agriculture.

The second service is the Public Regulated Service, which is dedicated to government-authorized users, such as civil protection services, customs officers and the police. This system offers increased robustness to provide service continuity for government users during emergencies or crisis situations.

¹ <https://www.copernicus.eu/en/coronavirus>

The third service is the Search and Rescue Service, which can be used to locate and help people in distress. Galileo is the first Global Navigation Satellite System offering global Search and Rescue operations a return link signal that acknowledges to those in distress that their signal has been received. The Search and Rescue Galileo service is Europe's contribution to the upgrade of COSPAS-SARSAT, an international satellite-based Search and Rescue distress alert detection and information distribution system.

In the coming years, the next batches of Galileo satellites will be launched to enlarge the whole constellation, which will further improve Galileo signal availability and performance worldwide and provide new services like signal authentication and high accuracy positioning (below 20 centimetres). The final and usual constellation will include 24 operational satellites and 6 spare satellites in three orbital planes.

Galileo has important trade and economic aspects. Many sectors of the European economy rely on accurate timing and/or positioning information. The market for satellite navigation services has been growing steadily and this market is expected to be worth 250 billion euros in 2022. The European Union is therefore committed and prepared to competitively position our GNSS vis-à-vis other world-class GNSS such as the next GPS generation, the Russian Glonass or the Chinese Beidou.

Copernicus is the European Union's Earth Observation and Monitoring programme. Thanks to a variety of technologies, from satellites in space to measurement systems on the ground, in the sea and in the air, Copernicus delivers operational data and information services in a wide range of application areas.

In the Earth Observation domain, Copernicus has become the reference; the leading global programme on Earth Observation. It has adopted a Full, Free and Open data policy. Copernicus is delivering data and services to Europe and to the world. These are setting today new global standards and are offering accurate climate and environmental information.

The Copernicus programme is supported by a family of dedicated, EU-owned satellites - the Sentinels, specifically designed to meet the needs of the Copernicus services and their users. The Sentinels fulfil the need for a consistent and independent source of high-quality data for the Copernicus services. Copernicus also builds on existing space infrastructure: satellites operated by ESA, and the European Organisation for the Exploitation of Meteorological Satellites

(EUMETSAT) and other satellite missions, called “contributing missions”. Copernicus is a result of fruitful cooperation between the EU and ESA, EUMETSAT and many other key partners in Europe and in the world.

The Copernicus services address six thematic areas: land, marine, atmosphere, climate change, emergency management, and security. They support a wide range of applications, including environment protection, air pollution monitoring, management of urban areas, regional and local planning, agriculture, forestry, fisheries, health, transport, climate change, sustainable development, civil protection, or tourism.

The Copernicus Climate Change Service is one of six thematic information services provided by Copernicus, which supports users by providing information about the past, present and future climate in Europe and in the rest of the world. The Copernicus Climate Change Service mission is to support the EU’s adaptation and mitigation policies by providing consistent information about climate change. It offers free and open access to climate data and tools based on the best available science. The Copernicus Climate Change Service is implemented by the European Centre for Medium-Range Weather Forecast on behalf of the European Commission.

Copernicus will continue to contribute to international initiatives such as the Committee on Earth Observing Satellites - CEOS and the Group on Earth Observation. During the European Commission’s year as CEOS chair, Copernicus laid the foundation for an international carbon and greenhouse gas monitoring system to support the implementation of the Paris Agreement. Through international cooperation, we strive to shape a common view towards tackling our global societal challenges and expand the reach of Earth observation data and products. The follow up to the Paris Agreement and the Sustainable Development Goals needs strong international alliances based on full, free, and open data.

Mr. Chair,

Let me take this opportunity to inform you about latest developments concerning the EU space activities. In April this year, a regulation establishing the new EU Space Programme was adopted, with a budget of 14.8 billion EUR for the years 2021-27. The new Space Programme improves and brings together existing EU programmes such as Copernicus, Galileo and EGNOS under one umbrella. It also introduces new components, such as the **Space and Situational Awareness**

(SSA) component to monitor space hazards and to show the commitment towards long-term space sustainability, or the new **Governmental Satellite Communication (GOVSATCOM)** initiative to provide national authorities with access to secure satellite communications. It will support a European 'New Space' paradigm, with the adoption of a more user-centered approach, and with innovative SMEs, scale-ups, start-ups, small mid-caps and knowledge institutions, fostering increased technological autonomy as well as the procurement and aggregation of reliable and cost-effective launch solutions.

Regarding SSA, I would like to highlight two other relevant developments:

Since 2016, through the Space Surveillance and Tracking framework, EU-SST, a Consortium of EU Member States has been providing 24/7 services on Collision avoidance, Re-entry analysis and Fragmentation analysis to European users. These services contribute to ensuring safety and sustainability in space. EU-SST is now evolving from a framework into a fully-fledged programme as part of the SSA component of the new EU Space Programme and will extend its services to users beyond Europe. The upcoming EU SST Partnership will also develop activities in preparation of future space safety services, in the realm of space debris mitigation and remediation.

In terms of development of space weather services, the EU is collaborating with ESA to select essential space weather services to be provided by industry and academia as a first set of operational space weather services. Space weather forecasting will enable industries and user groups to become more resilient and mitigate the impact of all levels of space weather-related geophysical events. Ionosphere forecasting can help mitigate the impact of significant space weather-related geophysical events on the final performance of specific GNSS-based applications, but potentially to other space applications and satellite communications as well. The EU funded Ionosphere Prediction Service (IPS) is an example of preparatory work that has already set up the base for such services.

The European Commission has adopted an ambitious strategy to transition to a sustainable economy – the **European Green Deal**. The EU Space Programme will provide an important contribution to these objectives by addressing broader political priorities, such as fighting climate change, a transition to a low-carbon economy, smart mobility and digital economy. It will contribute to the development of a space economy by offering openly and freely available data for further development in a variety of space applications, and by enhancing uptake of space

services, inter alia through the promotion of capacity building across the European Union, with a particular focus on EU Member States with emerging space capabilities.

Furthermore, the new EU Space Programme Regulation establishes the **EU Agency for the Space Programme (EUSPA)** that replaces and expands the European Agency for Global Navigation Satellite Systems (GSA).

At the same time, the EU programmes for research and innovation and financial investment, respectively **Horizon Europe** and **InvestEU**, will support space research and space technology innovation and promote the use of financial instruments. These objectives will be pursued in a mutually supportive and coherent approach with ESA and national space programmes in Europe.

The EU and its Member States are closely following the progress made in COPUOS and its Subcommittees, as well as in both working groups on LTS and on Space Resources. Let me assure you that all EU initiatives are developed in a similar spirit of international cooperation for the peaceful uses of outer space.

Thank you for your attention.