

Statement by AUSTRIA

24 October 2016

Space is becoming more and more a place of economic and strategic interests to an increasing number of nations. At the same time space technologies provide invaluable information that supports understanding of some of the burning challenges of our times. These facts indeed call for new approaches to global space governance.

Austria fully supports the initiative of this *1st International Space Forum on "Space Science and Academy for global challenges"*, as it contributes substantially to the roadmap leading to the 50th Anniversary of the first UN Conferences on Outer Space to be marked by the 4th UN Conference on Outer Space "UNISPACE+50" in 2018, which will again take place in Vienna.

Concerning the conference topic, let me underline that Austria attaches great importance to the **interface between science and business**. In this respect the Austrian government is among the first nations having adopted a national "open innovation"- strategy involving all interested organisations, sectors and scientific disciplines to generate new knowledge, new products, services or processes. Dedicated online tools and platforms provided by the *Federal Ministry of Science, Research and Economy* and the *Federal Ministry for Transport, Innovation and Technology* support the process of creating an open innovation culture.

On the topics of Climate Change / Big Data Management and Earth Protection Austria is very active in cooperating with other institutions to develop applications:

Like the **Earth Observation Data Centre (EODC)** founded with the support of the *Ministry for Transport, Innovation and Technology* as a commercially operating company in 2014. Main partners are the *Austrian National Meteorological Service ZAMG*, the *University of Technology in Vienna* and the companies *Geoville* and *Catalysts*. The *Data Centre EODC* operates a satellite data archive and provides computing resources for scientific and operational applications with regard to water resources, land monitoring, agriculture, humanitarian aid and civil protection. Central task of EODC is the facilitation of collaborative development processes in joint research and development projects. The possibility to use the operational resources of the *Austrian National Meteorological Service ZAMG* with Austria's largest computer system (*The Vienna Scientific Cluster*) and a multi-Petabyte archive system allows efficient algorithm to data solutions in Earth Observations. With the application of soil moisture analysis tools and the forecasts provided by the *European Centre for medium Range Weather forecasts (ECMWF)*, planning in the agricultural and food industry sector can be improved and critical situations like draughts leading to food shortage can be predicted at an early stage and thus enable effective mitigation.

Another very successful application is the **Sentinel National Mirror for the near-real-time distribution of ESA Sentinel data** by Austria. The amount of data provided by the Sentinel satellites exceeds those of previous satellite generations exponentially and thus provides completely new levels of quality concerning spectral frequency and also resolution and thereby enhances interpretation possibilities tremendously. This service, hosted by the *Austrian National Meteorological Service ZAMG* and funded by the *Austrian Ministry for Transport, Innovation and Technology*, is open to everyone and gives access to earth observation data free of charge via high-

speed internet. The open data policy will help to generate added value from the Sentinel raw data by facilitating downstream applications from different service providers. The Sentinel National Mirror programme demonstrates Austria's ambitions as an active part of the Copernicus program. Furthermore, negotiations with ESA are on the way on the establishment of a **Data Relays Hub** at the *Austrian National Meteorological Service ZAMG* as part of the Sentinel data distribution system.

The *Austrian National Meteorological Service ZAMG* is also actively involved in projects using earth observation data from other satellites, like the **Copernicus Global Land Service**, operational since January 2013 and providing a series of products describing the status and the evolution of the land surface at global scale, the **ESA Project on GlobPermafrost**, which develops products and climate services within the Data User Element of the Copernicus Space component or the **pilot project to use Spire STRATOS earth observation data** to improve weather forecasting models. With a planned fleet of 100 "cube sat" satellites, this Spire network will be a new large data source improving the understanding of the atmosphere.

Austria demonstrates its support for and cooperation with European and international space activities through the **Austrian Space Applications Programme (ASAP)**. Initiated in 2002 by the *Austrian Ministry for Transport, Innovation and Technology* and managed by the *Austrian Research Promotion Agency* this bottom-up research funding programme is open for Austrian and international scientists, scientific and research institutions and industrial enterprises including SMEs located in Austria. It allows for projects in the area of "Scientific Excellence", "*Economic Benefits*" and "*Benefits for Society*". In principle, the programme is open for cooperation with any foreign partner on a no exchange of funds basis and concentrates in this year's edition on German and Swiss partners; it also calls on new actors in the space sector. In addition to the strategic aim of the programme special emphasis is given to the UN Sustainable Development Goals in order to align this programme with the objectives of the Agenda 2030.

In conclusion, let me assure you of Austria's full support to this endeavour of finding common ground on the issue of global space governance with the support of Space Science and Academy. I am looking forward to fruitful discussions hopefully paving the way to the sustainability of the future space programs for peaceful purposes.

Thank you!

Links:

<http://openinnovation.gv.at/>

<https://open4innovation.at/de/>

https://www.bmvit.gv.at/en/innovation/space_technology.html

<http://www.spacetechnology.at/>

https://www.bmvit.gv.at/en/service/publications/innovation/space_strategy_bmvit.html

<https://www.ffg.at/en/space>

<https://www.ffg.at/en/austrian-space-applications-programme>

<http://www.zamg.ac.at/cms/en/news>

<https://www.eodc.eu/>

<https://www.sentinel.zamg.ac.at/>