UN/Austria Symposium- abstract (deadline June 19)

Title: User-centric satellite solutions for effective climate actions

Space systems ranging from meteorological to telecommunication, navigation and earth observation satellites proved to be an effective tool to measure and monitor climate change, help mitigate its consequences, and reduce the uncertainties surrounding future projections on resources management at local, national, regional, and international level. Although over half of the Essential Climate Variables (atmospheric, oceanic, terrestrial, etc.) identified by the United Nations Framework Convention on Climate Change (UNFCCC) depend on satellite information, satellites are often still considered as technology demonstrators, rather than components of a critical communication and information-based infrastructure providing core data to optimize decision-making processes in modern societies.

Eurisy, a European non-profit association of space agencies, works as a facilitator and catalyst for innovation, stimulating the uptake of space-based solutions and supporting collaboration between public institutions, SMEs, industry, and academia.

Eurisy included in its strategy the SDGs and it strives to promote the use of satellite solutions for the benefit of a number of professional communities in many sectors of application from transport to risk management, from habitat protection to energy, from climate change to the Internet of Things, to name a few. Eurisy does this through a unique bottom-up approach, putting at the centre the end-users, understanding their needs and challenges, leveraging his network providing relevant fora to share experiences and expertise and tapping into its repository of good practices, the biggest in Europe. To guarantee an effective result this process has been designed to engage policy makers and to provide them feedback on possible measures to overcome obstacles to the diffusion of space-derived innovation in society.

Over the years, the work of Eurisy addressed climate change as a transversal topic by highlighting how operational satellite-based solutions support public authorities to <u>preserve cultural heritage sites</u>; to guarantee a <u>balanced presence of green areas and thus safe air quality in cities</u>, to <u>ensure plant health</u> <u>and food security</u>, mitigating its potentially devastating impact.

In addition, from 2018 Eurisy is one of the 55 partner organizations in the Horizon2020 funded project: Strengthening the benefits for Europe of the Global Earth Observation System of Systems (GEOSS) - e-shape. The project brings together a vast range of actors among industry, national institutions and research centres to develop 27 cloud-based pilot applications under 7 thematic areas agriculture, renewable energy, disasters, water, ecosystem, health and climate. It aims at addressing societal challenges, breaking through barriers, helping to scale up services to reach a critical mass of users across borders and sectors to foster entrepreneurship and support sustainable development, in alignment to the three main priorities of GEO (SDGs, Paris Agreement and Sendaï Framework).

The Un/Austria Symposium would provide an excellent platform to promote the adoption of the 5 pilot projects developed within the climate showcase enlarging the pool of available solutions and illustrating how they can be accessed and used. The solutions mostly relying on seasonal forecast information from the Copernicus Climate Change Services, will present operational services to potential users having a variety of cases from local city scale to global focus.