



Cyprus enters the space arena with "Excelsior " H2020 Teaming project and the Eratosthenes Centre of Excellence: Why Cyprus? Why Excelsior? What are the needs and opportunities?

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Cyprus enters the space arena with the 'EXCELSIOR' project. 'EXCELSIOR' is expected to bring change in many aspects, including new opportunities for researchers, enhanced skills development for future experts in the Earth Observation and Geoinformation sector on a local, national, European and global level. Due to its geographical proximity, 'EXCELSIOR' can become a hub for partners in Middle Eastern and Northern African countries. Cyprus's unique geostrategic position can support Earth Observation from satellites programmes in three continents and provide valuable services in the processes of satellite calibration and validation. The ERATOSTHENES Centre of Excellence (ECoE), with its expertise and infrastructure, could further complement the existing network of international ground stations. Cyprus is ideally located to host the ECoE, due to its climate, which is characterized by 300 days of sunshine a year, providing excellent weather conditions for cloud free satellite images.

There are some distinct needs and opportunities that motivate the establishment of an Earth Observation Centre of Excellence in Cyprus. The needs include: i) to establish a Supersite for aerosol and cloud monitoring in the Eastern Mediterranean, Middle East and North Africa (EMMENA); strong demand for EO monitoring to provide data to evaluate the extent of pollution and climate change, especially in the EMMENA region; ii) to observe droughts and water shortages in the EMMENA region; iii) to adopt Rehabilitation programmes in EMMENA; iv) to reduce Disaster Risk and v) to create a Regional Digital Innovation Hub for Earth Observation in Cyprus. The foreseen opportunities include: i) the ECoE has the potential to become a catalyst for facilitating and enabling Regional, European and International cooperation; ii) the Eco E can capitalise on the favourable environmental, weather and climatic conditions of Cyprus to conduct cutting-edge

research with impact in various sectors, including climate change, marine, solar energy, etc.; iii) the development of the Cyprus Space Strategy, which can be exploited for further Earth observation research and applications; iv) create a unique European capacity in Cyprus by mobilizing internal national assets and consolidating European EO capabilities in Cyprus to serve EMMENA. The ECoE will procure and develop the European Satellite Ground Stations covering the EMMENA region; v) accessing funding instruments for Earth Observation at the national and European Level and vi) the development of Big Data management and analytics.

The EXCELSIOR project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 857510 and from the Government of the Republic of Cyprus through the Directorate General for the European Programmes, Coordination and Development.