

Earth Observation (EO) for smart cities – the SMURBS/ERA-PLANET EU Project and the contribution of EO to the SDG frame.

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According to the UN's "World Urbanization Prospects: 2014 Revision" in today's increasingly global and interconnected world, over half of the world's population lives in urban areas, while the continuing urbanization is projected to add 2.5 billion to the urban population by 2050. Under these circumstances, sustainable development challenges will increasingly concentrate in cities. Earth Observation (EO) is nowadays widely recognized for its major role for addressing these challenges. The efficient transformation of EO into information and services, for individual citizens and local governments, is highly prioritized, as reflected in the Intergovernmental Group of Earth Observations (GEO) and EU's Copernicus Programme, in alignment with the views of the UN-Habitat's and EU's Urban Agendas and the UN's Sustainable Development Goals (SDGs) frame.

SMURBS (Smart Urban Solutions) H2020 Project, within the frame of the ERA-PLANET "the European Network for Observing our Changing Planet" co-funded action of EU, aims at the integration of the still fragmented EO resources, to promote and coordinate the "smart city" concept, serving the need for a common approach to enhance environmental and societal resilience to urban pollution, natural/manmade disasters and uncontrolled city growth. For this, it employs multiple EO platforms (i.e. satellites, in-situ, modeling, UAVs, smart sensors, citizen observatories) for city scale applications and solutions.

The collected EO and geospatial information, combined with socio-economic and other data, has already shown great potential in contributing with novel and practical ways to support the achievement of the SDGs and the efficient monitoring of its specific indicators. Along this line, engagement and collaboration of stakeholders, with emphasis on key EO-players and National Statistics Offices (NSO), is imperative, to showcase effective uses of EO to monitor SDG indicators, to encourage pursuing use of such data in complementing traditional methods, and to gradually integrate EO into national development and monitoring frameworks.