Earth Observation, Satellite Technologies

for real-time information access and more informed decision making

UNOOSA and UNITAR/UNOSAT Mandates

- UNOOSA – making space technologies (Earth Observation, Satellite Navigation and Satellite Communications) easier to use and access for all Member States' actors, including for disaster Management and Crisis Response (UN-SPIDER), Secretariat for UN COPUOS, ICG, Space Law capacity strengthening

- UN Satellite Centre (UNOSAT part of United Nations Institute for Training and Research) To provide the United Nations funds, programmes and specialized agencies with satellite analysis, training and capacity development, at their request, as well as to continue supporting Member States with satellite imagery analysis over their respective territories and to provide training and capacity development in the use of geospatial information technologies

Contributions to the One UN Situation Room

- Strengthening and coordinating UN System cooperation with government space agencies and specialized bodies (such as GEO, CEOS) for improved access to satellite technologies and in-situ observations in crisis
- Build on and continue to develop long-term agreements with all commercial satellite imagery providers (such as Maxar, Airbus, Planet, MDA, ICEYE, Satellogic, SatelliteVU and others) for discounted data access
- Expanding open and free access to commercial data from the same providers in times of crisis, with clear licensing conditions negotiated
- Develop new agreements with new state actors operating government-owned very high resolution imaging satellites (such as Thailand, Azerbaijan, Armenia, Nigeria and many others) for standby data access and licensing
- Improve infrastructure and develop online service to the above data for automating real-time or near-real-time feeds into the situation room as implemented
- Dedicated capacity strengthening track offered for use of satellite-based information, geospatial technologies and rapid mapping for all UN entities and Member State specialized agencies

Cont.

- Improved telecommunications abilities leveraging new communications satellite constellations, in partnership with the commercial providers and based on existing agreements through UNOOSA
- Provision of UN System requirements in the further development of international standards in geospatial data management (OGC) and satellite navigation technologies interoperability (ICG)

CAPACITY DEVELOPMENT

HIGH QUALITY TRAININGS AND SKILLS DEVELOPMENT IN THE APPLICATION OF GEO-INFORMATION TECHNOLOGIES AND EARTH OBSERVATION

UNOSAT

SERVICE OVERVIEW

Our team has more than a decade of remarkable practical experience in the design, development and delivery of innovative and tailor-made geospatial services and learning solutions for UN member states, UN agencies, international organizations and academia.

By leveraging science and innovative technologies such as Earth observation, artificial intelligence, machine learning and big data analytics, countries will have better tools and solutions to inform policies, planning and decision making. It is therefore very important to build technical capacities and to establish robust, evidence based and predictable mechanisms to access datasets and open data platforms which will enable least developed countries.

ONLINE COURSES

Browse our catalogue of courses or contact us at unosat@unitar.org for more information.
https://www.unitar.org/event/full-catalog?programme=51

HOW WE BUILD CAPACITY

Expertise in designing and delivery of innovative learning solutions to equip training beneficiaries with technical skills in the use of geospatial information technology relevant to different application domains including the know-how of using scientific information and spatial datasets into decision support products.

Implementation of in-country capacity development programmes to enhance capacity of governments and national or regional stakeholders through ad-hoc technical training and awareness raising events including technical backstopping.

Robust quality assurance framework: all learning-related events are assessed against a set of over a dozen standards prior to delivery in accordance with the Institute's Quality Assurance Framework certification process.

Implementation of geospatial solutions for improved DRR and climate change resilience such as early warning systems, spatial decision support platforms, multi hazard risk assessment tools, etc.

AWARENESS BUILDING

ONLINE WEBINARS

IN PERSON TRAINING

Other Potential Benefits for UN System Pillars

- Satellite imagery and in-situ data access and standards-based services accessible to UN entities can also be used in various other domains, such as:
- Regular SDG indicators calculation and monitoring at subnational levels
- Environmental impact assessments
- Climate Change mitigation and preparedness measures
- Other statistical indicators measurements, population modeling and census support
- Improving in general the data landscape globally by leveraging new satellite constellations and daily repeat imaging capabilities coming
- …