

Promoting Space Sustainability. Implementation of the Guidelines for
Long-Term Sustainability (LTS) of Outer Space Activities of COPUOS
United Nations Office for Outer Space Activities
Virtual event - Space Agency Operators – February 25, 2021

Romanian Space Agency



Marius-Ioan Piso, Ulpia Botezatu, Oana Neagu
Romanian Space Agency

ROSA — Romanian Space Agency

- * National Space Agency of Romania established 1995
- * Space programme management
- * International representative — bilateral and multilateral; COPUOS rep since est.
- * Govt rep for the European Space Agency and EU Space programmes
- * 3S Strategy (Science, Services, Security) (2018 –)



ROSA — Romanian Space Agency

Compliance with LTS Guidelines (examples)

* POLICY AND REGULATORY FRAMEWORK

* National Space Agency of Romania established 1995

* National Space Law under preparation — RO ; Space Committee in RO Parliament; compliance with UN Space Treaties and EU regulations

* Space systems — critical infrastructures (national law)

* SAFETY OF SPACE OPERATIONS

* ROSA COSST — Centru Operational Space Surveillance and Tracking

* Space Weather data centre in development; participant in ESA SW missions / projects

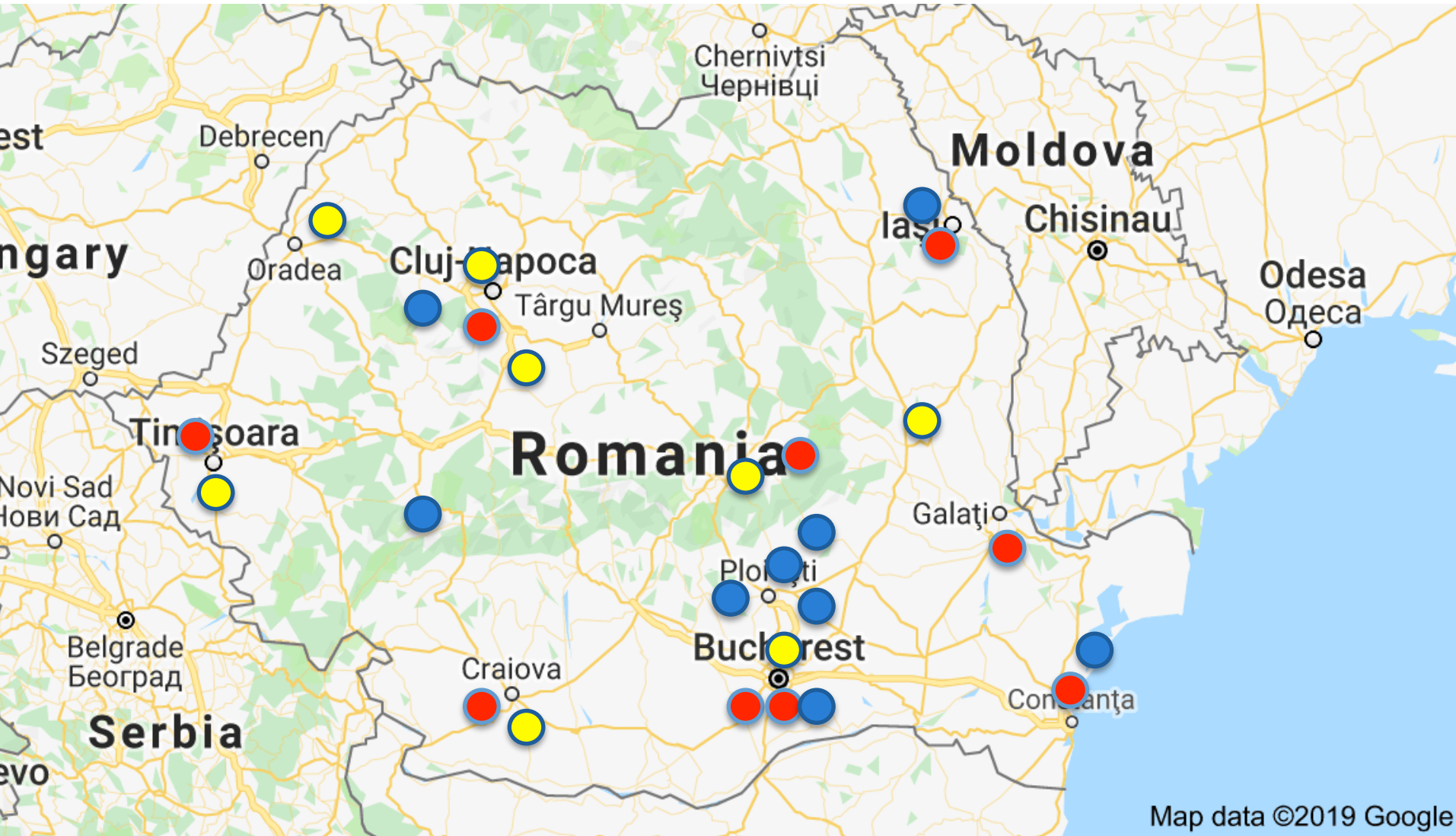
* INTERNATIONAL COOPERATION, CAPACITY BUILDING AND AWARENESS

* Wide international cooperation; Building space infrastructure; Creating awareness by national, ESA — ESERO, UN-SPIDER offices;

* SCIENTIFIC AND TECHNICAL RESEARCH AND DEVELOPMENT

* National Space RTD Programme; More than 170 participant Institutes, Universities, Industry, SME's; 14 Centres of Competence; participant in ESA and EU RTD programmes





University



Industry



Institute / Facility



agentia spatiala romana - romanian space agency

ROSA — Romanian Space Agency

Case study: COSST

ROSA Operational Space Surveillance and Tracking Centre

National SST facility built and operated by ROSA

- * Included in the EU and other international networks
- * Participant in the EU SST Consortium (DE, ES, FR, IT, PL, PT, RO)
- * Participant in the ESA SSA Programme (SST, SW, NEO)

Optical and radar capabilities

- * 4 optical sites in country (2018) and 3 overseas (2021) — sites t.b. upgraded for QKD operations
- * Radar quasi-monostatic facility in Cheia — op 2021

Space debris, tracking, re-entry, fragmentation

Operational since 2019



Lessons learned

- * Establish national coordination (space office, centre, agency)
- * Build national RTD space programme and infrastructure, regulations, inter-agency structures
- * Participate to international space missions/projects (regional, inter-governmental, bi- / multilateral, global actions and organizations)
- * Invest in national specificities and needs — niches — technical, geographic, ideatic
- * Build centres / capacity / competence /





Thank you for your attention!