ESTRACK Services

ESTRACK is designed to provide global space link connectivity coverage for a wide range of space missions, such as:

- Deep Space missions (DS)
- Near-Earth missions (NE)
- Low Earth Orbit (LEO) missions
- LEOP and Launcher Tracking support

Today the ESTRACK Core Network encompasses 7 antennas on 6 different sites with a safe loading capacity of around 40.000 Units of Service (corresponding to short passes or tracking hours).

The ESTRACK Core Network presently encompasses Near-Earth Stations (typically 15m antennas) in Redu (Belgium) providing mainly support to Galileo, Salmijaervi/Kiruna (Sweden) and Kourou (French Guiana) providing dedicated support to launcher tracking, and the three Deep Space Stations (35m) in Cebreros (Spain), New-Norcia (Australia) and Malargüe (Argentina).

This ESTRACK Core Network is augmented through separate frame contracts for provision of External TT&C Services to ESA from SSC, KSAT, ASI, GES, and INTA.

Furthermore, additional institutional stations are made available under cooperative agreements with other Space Organizations (CNES, DLR, JAXA, and NASA).

Overall, ESTRACK NOC is interfacing with 15 different sites hosting around 35 terminals to coordinate around 13.000 hours of support on behalf of ESTRACK users.

The global TT&C facilities are following internationally agreed standards and recommendations. The evolution of the ESTRACK network capabilities is pursued and adapted to changes in the mission model and the resulting load plan for the network.

The ESTRACK stations are monitored and controlled remotely on a 24h/7d basis and the operations rely on a very high degree of automation.

Network Operations Centre (NOC) Services

The Network Operations Centre provides the 24h/7d remote operations services of the ESTRACK ground station network, the Wide-Area and Local Area Network operations and the first line MOI-IT operations & maintenance as well as first line Operations Control Centre (OCC) maintenance & operations services at ESOC.

It further provides the second line daytime ground operations engineering, station engineering and supporting services including long-term planning and scheduling of tracking services and tracking resources.

Operations Control Centre & Mission Operations IT Services

The Operations Control Centre (OCC) facilities and related services support all ground-based flight operations for ESA unmanned spacecraft using the OCC provided facilities and tools (e.g. voice intercom, video distribution, timing system, consoles).

The OCC facilities at ESOC are deployed in Common Operations Areas, like the Main Control Room used typically in preparation of, and during critical operations (e.g., LEOP) and in mission Dedicated Operations Areas used for routine operations.

The Mission Operations IT infrastructure services provide all the required IT equipment, interconnecting Local-and Wide Area Network, the two redundant Data Centres at ESOC and the IT security systems.

Maintenance and operations services of the operational computers and communications infrastructure comprises first line (24h/7d) and second line support to the technical workstations, storage systems, local area networks and wide area networks deployed for use by missions in preparation and in operation.

The MOI-IT services interface with the ESA Cyber Safety and Security Operations Center (C-SOC), providing security event information and consuming C-SOC alerts for immediate assessment and response.

Service delivery is governed by industry standard processes (ITIL), which cover for example incident, problem, change and configuration management. The associated service integration process covers the first and second line support services resulting from this procurement action as well as those services provided by third party service providers (e.g., externally provided cloud services, externally provided IT maintenance and operations services for specialized IT installations).

Logistics for the Industry Day

Date: Thursday the **11th April 2024, 13h00 - 17:00 CEST**

Location: **ESOC, Darmstadt, Germany**

The initial presentation will be followed by an open Question & Answer session. The presentation material will be distributed together with the Question & Answer to the participants who have registered to the meeting.

The Industry Day will be held in English.

Industries interested in attending shall register themselves by indicating their contact details (name, company, telephone number, email address) on esacontact

https://esacontact.esa.int/event/sessions?id=Industry_Day_for_ESTRACK_NOC_service1246461622

The deadline to register is: 28th March 2024, 13:00 CEST

There will also be the possibility to connect online via WEBEX. Your registration should indicate whether you will attend in person or online.

An email with the connection instructions will be sent to the registered online participants prior to the event.

Protection of personal data

Furthermore, with respect to the personal data protection for the purpose of organisation of the ESS Information Session, the collected personal data will be handled in accordance with the "ESA Personal Data Protection Framework" applicable to ESA and available at the following URL:
http://www.esa.int/About_Us/Law_at_ESA/Highlights_of_ESA_rules_and_regulations
The information collected for registration and participation to the Information Session will be retained for the duration necessary to fulfil the objectives of the Information Session as announced herein.
By submitting your registration request, you thereby consent to the collection of personal data for the purpose of the Industry Day.

Contact
For further information about the Industry Day, please contact:

Karol.Sienkiewicz@esa.int, with copy to martin.unal@esa.int