

PHYSICAL AND REMOTE ACCESS TO ACTRIS SERVICES DURING THE IMPLEMENTATION PHASE: THE DEVELOPMENT OF ACTRIS CATALOGUE

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INTRODUCTION

ACTRIS is currently in the implementation phase of its life-cycle aiming at constructing and upgrading the Central and National Facilities, both within Europe and at selected global sites, and setting up the user access and service provision as well as the governance and management structures. The eight Central Facilities - six Topical Centres, the Data Centre and the Head Office – ensure the compliance of the measurements with standard operation procedures and data analysis. The National Facilities, which include observational and exploratory platforms, are responsible for the acquisition of high quality, reliable and accurate data to document the 4-D distribution and variability of aerosol, clouds and trace gases and their complex interactions.

ACTRIS promotes the provision of access to the large variety of high-quality resources and services offered by the highly specialized facilities in order to conduct excellent research for the advancement of knowledge and technology, to foster collaborations and exchanges of experience, encouraging open science. ACTRIS services can be classified as:

- research services (e.g. access to instrumented observational and exploratory platforms for the realisation of experiments under ambient or controlled conditions, etc.)
- technical services (e.g. provision of measurement quality assurance and quality control procedures and tools, etc.)
- innovation services (e.g. design and co-design of instrumentation, equipment and procedures, etc.)
- training and expertise (e.g. training of users of ACTRIS data, products and tools and training of young scientists and users from new regions world-wide, etc.)
- outreach services (e.g. outreach to the general public to explain the importance of the atmospheric constituents, etc.)
- data services, training services and other virtual tools provided by the Data Centre.

User access to ACTRIS services is a function of access type (Virtual, Physical, Remote) and access mode (Excellence-driven, Technical need driven, Market-driven), and of the ACTRIS policy concerned.

Access to ACTRIS data, data products and digital tools provided through communication networks is virtual access, which is wide and free, and does not require a selection process because the resources can be simultaneously used by an unlimited number of users.

Physical or Remote access to the ACTRIS services or resources depend on the facilities' availability and require a competitive process. The access is managed by the Service and Access Management Unit (SAMU)

of the HO to select most promising users and projects following defined procedures and criteria defined in the ACTRIS access and service policy with details of rules, procedures and workflows described in the ACTRIS Access Management Plan.

User access to ACTRIS services and resources is channelled through the Catalogue of Services (CoS), a single point of reference for users to search for, view and get all relevant information about the offered services. Services are presented in a consistent and standardized way that include a description of each service, the specific process and estimated duration of the selection procedure (if any), the available logistic and on-site support, costs and fees (if any), duties and responsibilities of the users for using the facility's resources, etc.

The CoS is integrated in the ACTRIS website and managed by the SAMU as part of the operational tools and procedures designed and implemented to interacting with users and providing effective physical and remote access to the ACTRIS services. It is connected to the ACTRIS PASS (Platform for managing user access to ACTRIS Services), a web-based tool which manages the access of users to services available via physical and remote access, and to ACTRIS DVAS (Data discovery, Virtual Access and Services), the web portal which manages the virtual access of users to ACTRIS data and digital tools and services.

The methodology to develop the CoS and onboard the services during the ACTRIS implementation phase is briefly presented in the following.

METHODOLOGY

The CoS has been designed and developed, during and with the support of ACTRIS Implementation project (under Horizon 2020), paying special care to plan content organization, structure and labelling, with the study of:

- how to categorize and organize the services, ensuring that relevant and key information is collected for all the services in a coherent manner (structure and service profile);
- what labels and keywords use to represent the information (tags);
- how users browse or move through information (navigation);
- how users look for information (search options);
- how to be compatible with the Catalogue of Research Infrastructure services (CaTRIS) and interoperable the EOSC Portal Catalogue and Marketplace (integration).

Onboarding the ACTRIS services in the CoS is on-going through the provision of the needed information by the relevant providing facilities. The collection of the needed information is carried out through the template and service profile specifically set for this purpose.

During the implementation phase, the feeding of the CoS will include all the services provided by Central Facilities and National Facilities as soon as they will become operational and ready for provision. In particular, services by National Facilities will be onboarded only when the ACTRIS label is gained by the providing facility. As a transient solution toward the conclusion of the planned labelling process and the starting of the operation phase, the services provided by the ACTRIS National facilities in the context of Trans National Access programs will be onboarded in the CoS, even if without label. Proper solutions are adopted to give evidence in CoS of those services and relevant projects.

To ensure maximum use and access and to improve the visibility and discoverability of all the relevant services, updates of the CoS during the implementation phase to include new services and update or

complete missing information of the existing ones. This work of feeding the CoS with service information shall also be facilitated through dedicated events and workshops organized by SAMU for ACTRIS services providers.

At the end of the implementation phase, the CoS will contain all the services operational and ready to be provided by Central Facilities and National Facilities.

The CoS is intended and maintained as a living tool to follow developments in the ACTRIS services, and regular updates will be planned during the operation phase.

CONCLUSIONS

The ACTRIS Catalogue of Services is one of the efforts be made by SAMU, as specific Head Office outreach service, and ACTRIS community to connect with new users and attract new member countries, develop further strategies within ACTRIS and for international collaboration and partnerships, and integrate ACTRIS at different strategic levels (national, European and internationally).

Following the Implementation Phase, ACTRIS will be operational, offering the full and unique portfolio of services for short-lived atmospheric constituents research including open access to data and physical and remote access to Central Facilities and National Facilities services.

Fostering the services' visibility, a transparent, user-friendly and complete CoS is also an optimal tool on which to pave the development of innovative services also in collaboration with other RIs in atmospheric domain, as well as new trans-national access modalities to support research, technology and innovation.

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