Milestone 6.7: Enhanced user strategy with recommendations to ACTRIS facilities

Authors: Sabine Philippin, Rosa Maria Petracca Altieri, Ariane Dubost, Giulia Saponaro, Simone Gagliardi, Giuseppe Gargano, Carmela Cornacchia

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Table of Content

1. Introduction

The Aerosol, Clouds, and Trace Gases Research Infrastructure (ACTRIS) is the fundamental European research infrastructure (RI) for short-lived atmospheric constituents, for increasing excellence in Earth system observation and research, and providing information and knowledge for developing sustainable solutions to societal needs. ACTRIS is a distributed RI that aims a providing effective access for a wide user community to its unique portfolio of resources and services, including open access to data and physical/remote access to its services and facilities.

Within the Implementation project ACTRIS IMP, ACTRIS aims at implementing the user access to the services provided by its National Facilities (NF) and Central Facilities (CF), requiring an efficient and effective user strategy and strategic tools to coordinate and structure the user access system. The user strategy is evolving and is developed within a cyclic process for continuous optimization and improvement to ensure alignment with the overall ACTRIS strategy. Starting from (and including) the available information on the user approach, the present document gives an overview of the planned user strategy by describing its key elements and approach that has been adopted, while also incorporating the advancements developed within the ACTRIS Preparatory Phase Project (ACTRIS-PPP) and within ACTRIS IMP to date in relation to the implementation of the user access and the interactions with the users. The document is structured in six sections, as follows:

- Section 2 describes the overall concept of the user strategy and underlying approach to achieve its objectives.
- Section 3 addresses the scope of the ACTRIS user communities, describing the target users and benefits provided to them.
- Section 4 reviews the overall user strategy cycle including strategies for promoting user attraction and outreach, understanding and gather the user needs, mapping the user experience and proposing ACTRIS values, the ACTRIS services and their user-oriented design and development process, the performance monitoring and user feedback.
- Section 5 propose major recommendations and draws conclusions.
- Section 6 provides a list of underlying reference material and information.

2. Context and ambition

The ACTRIS user strategy defines the goals, priorities and plan of action required for a provision of services to its users that effectively satisfy their needs and meet their expectations. A large variety of high-quality resources and services are offered by ACTRIS facilities to a wide range of users and needs, for scientific, technological, and innovation-oriented usage. It requires a holistic approach which considers the evolving user needs but also the technical capabilities within ACTRIS while ensuring alignment with the overall scientific strategy and mission of ACTRIS (see figure 1).

ACTRIS mission → The ACTRIS user strategy supports the RI's vision and goal to contribute to excellence in Earth system observation and research through the provision of high-quality resources, services, knowledge, and information offered to its users.

ACTRIS user needs → ACTRIS aims to place its users at the centre of ACTRIS operations and strategic development. A systematic approach is taken to understand and engage the users, identify their needs, and create experiences that meet their expectations.

ACTRIS technical capabilities → A user strategy involves researching, designing, and developing adapted services for efficient use, and evaluating the performance of the user access system in a continuous effort to find a suitable combination of evolving user needs and necessary scientific and technical capabilities to be developed, allowing to service a widest possible (and most diverse) community of users.
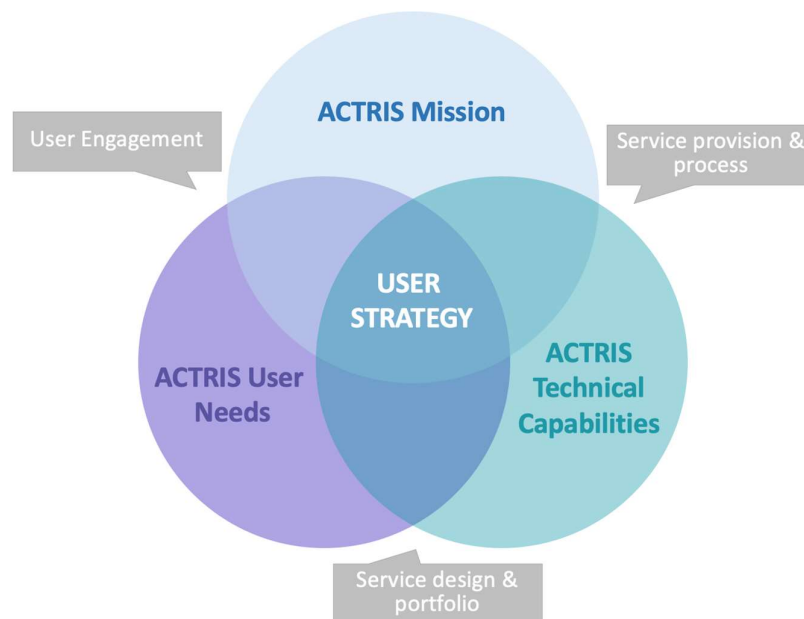

Figure 1. Conceptual illustration of the ACTRIS user strategy.

The enhanced user strategy within ACTRIS is a user-focused approach that constantly evolves, building on the knowledge of the evolving user needs and experience. It actively engages the users throughout the process in the service design for developing a comprehensive catalogue of services, implementing an efficient organisation and management of the user access and service provision system, while constantly gathering the user feedback and identifying areas for continuous improvements and optimisation. The goal of the ACTRIS user strategy is to ensure that users have a positive experience that meets their needs to support and facilitate high-quality Earth system research.

3. Target users

3.1 Historical perspective

Users are the primary focus of the ACTRIS user strategy. Knowledge of the ACTRIS target audience builds on extensive experience of services provision to and interaction with users gathered within the last few decades, starting with the initial clustering of the ACTRIS scientific communities in the 90s' and particularly through the integrating initiatives supporting research infrastructure as part of the different EU framework programmes in early 2000 to date (see figure 2), enabling the provision and streamlining of user access to its services, resources and information provided by the ACTRIS scientific and technical facilities.
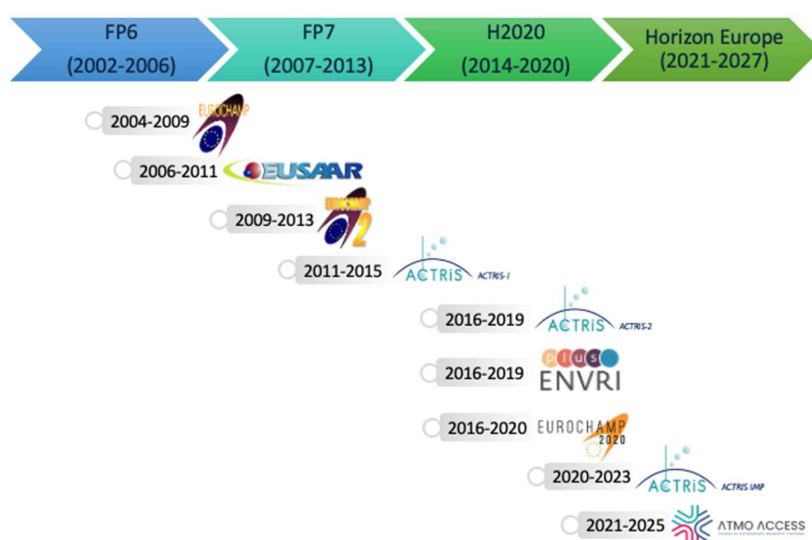

Figure 2. Trajectory of ACTRIS-related service provision to users supported by European funding via integrated activities for transnational access in framework programmes FP6, FP7, and H2020.

To date, most ACTRIS users have predominantly originated in the academic domain to carry out scientific experiments and conduct research. However, ACTRIS user communities have also included some limited numbers of users from the public sector (educators, international organisations, operational services, government organisations) to gain access to high-quality and specialised data, and users from the private sector (industry and private companies) allowing to support technological development and innovation. A recent survey conducted within the ATMO-ACCESS project[1] in 2021 on past user access to atmospheric research facilities indicates that on average more than 90% of the 'historical' users of ACTRIS-related services have originated from the universities, public and private research organisations, and public sector, while only 8% were private sector users. Although a solid basis for efficient and successful engagement particularly with the private sector has already been made in previous projects, the barriers appear challenging, and particular focus should therefore be placed on attracting more users from the private sector for which ACTRIS can provide clear value and benefits.

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[1] ATMO-ACCESS Deliverable 2.1 – Report on current user needs as related to the historically offered access ways

3.2 ACTRIS user communities and benefits

Knowledge about target users is essential for ACTRIS to deploy an effective user strategy. The current ACTRIS user communities are various and have been identified and are being followed up on in continuous manner. A description of the ACTIRS user communities and the benefits provided to them is given in the ACTRIS Technical and Scientific Description (see chapter 6) and are depicted in the following, for the sake of completeness:

ACTRIS users originate from academia, public and private non-profit research organisations, other non-profit organisations, as well as from business, industry, national and regional authorities and public services, and private citizens, from ACTRIS members and observers and from countries outside ACTRIS, inside and outside Europe. ACTRIS users comprise researchers in atmospheric, environmental sciences and other fields (hydro-marine, bio-ecosystem, geosciences, space physics, energy, health, and food domain), operational and climate services, national weather services, space agencies, national and regional air quality monitoring networks, environmental protection agencies, instrument manufacturers and sensor industries.

ACTRIS has developed a specific value proposition for the specific user communities to ensure that services are positioned around what users value and need, targeting the scientific research community, private sector, policy makers, public authorities, and the society.

ACTRIS value proposition for the scientific research community

- Enhancement of research performance due to easy access to high-quality data and specific services
- Increased opportunities for access to research platforms for conducting excellent research and creating new scientific knowledge
- Increased efficiency through centralized access and streamlined processes and interfaces to ACTRIS data and services
- Increased possibilities for international collaboration and large-scale research projects
- Improved training opportunities, capacity building and technical support

ACTRIS benefits to Europe and to the international community

- Facilitating cutting edge science and excellence in European research
- Contribution to further development of the European Research Area enhancing cross-border collaboration
- Improved provision of data and services as the European part of international networks.

ACTRIS value proposition for the private sector

- Enhancement of R&D performance and increased efficiency due to facilitated access to ACTRIS facilities, data, tailored and specific expert services
- Improved access to an innovation portfolio comprising state-of-the-art scientific and technical platforms, tools and services for prototype testing and industrial applications

- Improved quality for support to development and standardization of novel technologies and products through participation in the European Centre for Normalization activities

ACTRIS value proposition for policy makers

- Support for policy-driven networks established under EU-directives and UN-directives (local and European air-quality networks)
- Evaluation of environmental (air quality and climate) policies in relation to regulation strategies and emission abatement through direct evaluation of atmospheric trends at regional / European scale
- Decision-making regarding environmental issues by provision of high-quality and long-term data for predicting climate scenarios from local and regional up to national and international level
- Support to atmospheric hazard management and risk mitigation via the knowledge base of ACTRIS expert teams and monitoring of extreme atmospheric events

ACTRIS value proposition for ministries and funding organisations

- Establishment of a unique research infrastructure for atmospheric sciences within Europe to improve efficiency of operation and coordination among the European research institutions avoiding the duplication and fragmentation of research efforts
- Providing better value for money via strong pan-European dimension and coordinated access to data and services; added value for research, innovation, and society through efficient use of ACTRIS resources
- Internationalization of the areas in which ACTRIS NF are located, increasing their attractiveness being part of pan-European RI

ACTRIS benefits to society (e.g., general public, national and international media)

- Improved weather, climate and air quality predictions resulting from ACTRIS
- Enhanced awareness on the environmental challenges that society is facing, e.g., climate change and air quality issues
- Promotion of dialogue between researchers and society to translate scientific knowledge into practical applications

4. ACTRIS User strategy

The user strategy is a continuous engagement with the users in a process to identify the user needs, to design and deploy solutions to meet those needs, and to track the results. It involves collecting feedback from users, analysing the data, and adjusting the services within an interactive cycle intended to optimize the process and ensure that the developed services meet the user needs and expectations. The user strategy cycle is illustrated in figure 3 and its different steps are described in the following subsections.

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Page **7**

Figure 3. User strategy cycle

4.1 User attraction and acquisition

Successfully and widely reaching out to different user communities requires continuous dialogue with the target users and is based on an efficient user outreach approach. A user outreach strategy aims at (i) ensuring effective user interaction and wide user base, (ii) promoting the attractiveness and increasing the visibility of the ACTRIS services, (iii) promoting successful access and service provision, (iv) properly advertising the access opportunities, (v) constantly attracting and engaging new users, and (vi) exploring solutions for reaching out to new and wider user communities and for increasing the user base.

The user outreach must be embedded withing a consolidated communication strategy by implementing efficient communication practices, channels, and tools: ACTRIS website, social media, mailing lists, newsletters, brochures, announcement at scientific conferences and events, and conveying appropriate messages and content to the target audience. Detailed information about the ACTRIS communication and dissemination strategy is comprehensively described in dedicated and detailed reports as part of the communication activities developed within ACTRIS IMP[2].

A solid user interaction is a continuous effort to create a strong relationship between the users and the ACTRIS services, to ensure constant user interest, engage new users and help building a reliable and diverse user network (figure 4).

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[2] ACTRIS IMP Milestone 57 – Report of the communication means used and success, Milestone 60 – Analysis of the best practices to engage ACTRIS user groups, D10.1 Updated plan for communication within ACTRIS

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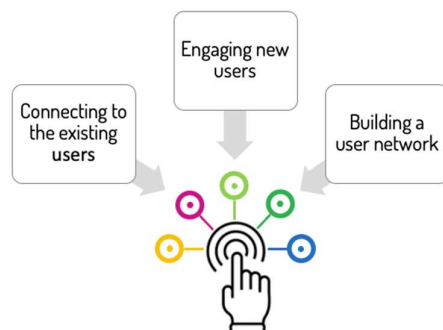
Page **8**

Figure 4. User engagement and interaction

Interactions with users are furthermore strengthened by the establishment of a service-oriented user support system that includes an online science and user access forum to exchange and discuss the user needs and expectations and a user helpdesk that provides assistance and support to users regarding the access and user of the services[3]. Frequent survey assessments and user feedback on scientific and technical user support, user training, on the provision and quality of the services and access, particularly to specific target groups such as the private sector users furthermore help to engage in a quality relationship with the ACTRIS users.

4.2 User needs

Knowledge about the evolving user needs requires a detailed understanding of its user communities and requirements. A user needs analysis for identification of user needs is based on four steps:

1) Defining the methodology and process to prepare the user needs analysis.
2) Designing tools and technique for analysing the user needs: using a suitable support, e.g., surveys, polls, questionnaires and interviews, and developing the required content.
3) Ensuring wide dissemination by contacting a representative number of users/ user groups using effective communication channels. Representativeness is hereby crucially required to have statistical value from the analysis; however, representative feedback can be very challenging.
4) Realising the user needs analysing and assessing the results.

A user needs analysis should focus on the multiple aspects as listed below:

- User origin and size of the user communities (number of users)
- User professional profile and level of expertise: early career scientist vs technical personnel vs expert scientist
- Gender
- User type: i) academic, public, private sector, ii) internal, national, European, international users
- User background and scientific activities/interest: i) physics, chemistry, life sciences, earth sciences and environment, engineering and technology, information and communication,

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[3] ACTRIS IMP Deliverable 6.2 – Report on the ACTRIS User support system

material sciences, energy, food domain, health, social sciences, … ii) atmospheric researchers, scientists from the environmental and other fields (hydro-marine, bio-ecosystem, geosciences, space physics, energy, health, and food domain), users representing operational and climate services, national weather services, space agencies, national and regional air quality monitoring networks, environmental protection agencies, instrument manufacturers and sensor industries, etc.

- Type of services: research, technical and innovation services, innovation services, data services, training services
- Required support or assistance from ACTRIS, e.g., training, scientific and technical support, logistic and administrative support, financial support
- Targeted type of ACTRIS facility: observational platform, atmospheric simulation chamber, mobile platform, central facility (ACTRIS Data Centre or Topical Centres)
- Type of access required: physical, remote/hybrid or virtual access

A user strategy requires flexibility to be able to adjust to evolving, emerging and future needs. ACTRIS, therefore, must monitor its user needs constantly by regularly reconducting the user needs analysis and building and maintain an inventory of user needs. To date, ACTRIS has conducted two user needs analyses: a first user survey was carried out in 2017[4] during the ACTRIS preparatory phase project (ACTRIS-PPP) and an updated analysis of user needs was performed in 2021[5] during ACTRIS IMP.

4.3 User experience and value proposition

The user experience is its overall experience when accessing the facilities and benefitting from the service or products within ACTRIS and includes all aspects from the initial contact to the outcome. The user experience includes the user's perceptions, emotions, and thoughts throughout the process, as well as the user's satisfaction level, and encompasses all the factors that influence how a user experiences the process, the service provision, or environment. An example of the user experience process is illustrated in figure 5 and a detailed description of the survey results and a current and future experience of access, highlighting the critical points and areas of improvements, is summarised in the document of the ACTRIS user experience map[6], with the aim identifying bottlenecks and maintaining a positive user experience, satisfaction, and commitment.

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[4] ACTRIS-PPP Milestone 23 – Definition of user requirements
[5] ACTRIS IMP Milestone 35 – Updated analysis of user needs
[6] ACTRIS IMP Milestone 6 – ACTRIS User experience map

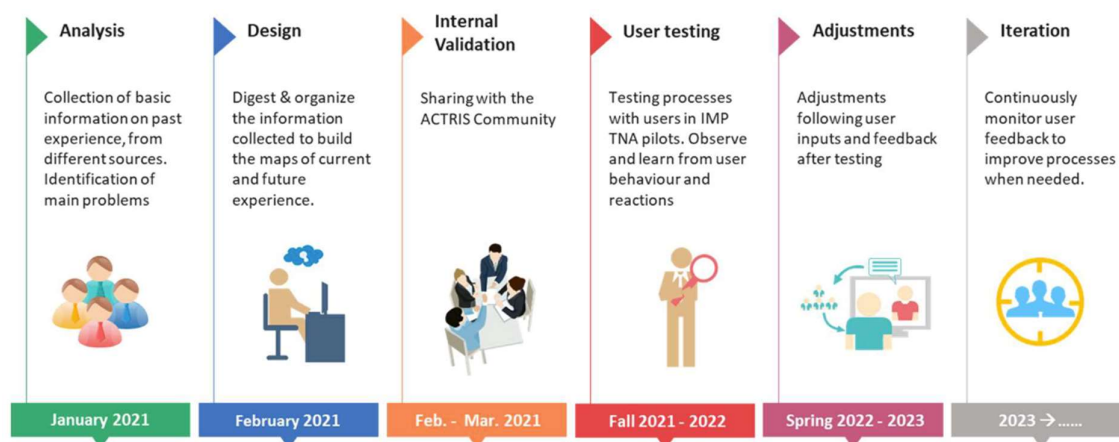| Analysis	Design	Internal Validation	User testing	Adjustments	Iteration
Collection of basic information on past experience, from different sources. Identification of main problems	Digest & organize the information collected to build the maps of current and future experience.	Sharing with the ACTRIS Community	Testing processes with users in IMP TNA pilots. Observe and learn from user behaviour and reactions	Adjustments following user inputs and feedback after testing	Continuously monitor user feedback to improve processes when needed.
January 2021	February 2021	Feb. - Mar. 2021	Fall 2021 - 2022	Spring 2022 - 2023	2023 → ......

Figure 5. Example of user experience process in ACTRIS

ACTRIS aims a providing key values to users as they help ensure user satisfaction and trust. ACTRIS' user strategy is based on the principles of reliability, integrity, productivity, and quality. The principles give users the assurance that the services, data, and products they are using are accurate and reliable, and that their efforts are being utilized in a productive and effective manner. They also help to ensure that quality standards are met and maintained and provide users with the confidence that the services they are using are of the highest quality. Compliance with these four key principles helps to ensure that users have trust that they are getting the most out of their efforts. The four key elements described hereunder contain the valuable advantages proposed to ACTRIS users:

- *Reliability*, to ensure that users have access to services in a consistent manner: ACTRIS enables its users to conduct reliable research by accessing ACTRIS world-class facilities and by taking advantage of our extensive catalogue of high-quality services. With ACTRIS services, users from the private sector can explore their possibilities for instrument synergies and novel innovative research capabilities, optimizing their processes to achieve the best result.

- *Integrity*, to ensure that the access and service provision system and its features are secure and reliable: ACTRIS' commitment to excellent research and scientific results is the backbone of our research infrastructure. ACTRIS applies the principle of FAIR data and communicates, disseminates, and exploits results and information backed up by scientific evidence.

- *Productivity*, to ensure that users can use the services efficiently: ACTRIS strives at leveraging its resources to the best results. For example, ACTRIS Data Centre provides users with free and open access to all ACTRIS data, complemented with comprehensive, clear, and mature metadata to maximize the uptake of ACTRIS observations and their successful application. For SMEs and industrial companies, innovation, and development of innovation capabilities through technology transfer and knowledge-sharing activities depends on dedicated facilities for testing, quality assurance, and calibration. ACTRIS has a history of joint collaborations with the private sector for calibrating commercial instruments, testing new instrumentation, and developing

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Page **11**

novel methods and equipment, as it provides a platform for exchange between those marketing the products and software related to ACTRIS and its leading experts.

- *Quality*, to ensure that users have a positive and enjoyable experience when accessing and using services: High-quality data, digital tools and services have always been at the core of ACTRIS, but it is equally important that ACTRIS users can ensure the quality of their own end-products and operations with the help of the technologies and expertise that ACTRIS provides. For example, ACTRIS observational platforms provide reliable and comparable observations that likewise support reliable weather forecasts and climate projects. Accurate guidance and monitoring of user's instrument calibration and set-up help to guarantee high-quality products.

ACTRIS instrumented facilities and services are key to supporting scientific advances in the field of atmospheric research. Our observations deliver unique information on short-lived climate forcers with the required level of precision, coherence, and integration essential for their use in forecast models, satellite validation. By using ACTRIS data, our users can deepen their understanding of atmospheric physical and chemical processes.

4.4 ACTRIS services, process design, and development

ACTRIS offers a large variety of high-quality services to a wide range of users and needs, for scientific, technological and innovation-oriented usage:

- **Data services**: ACTRIS provides data, data products, and digital tools through a single entry point via the ACTRIS Data Centre to ACTRIS data from both observational and exploratory covering a comprehensive set of variables (comprising calibrated, quality-assured and quality-controlled data, raw data, and metadata associated with the data products documenting the data, data traceability and data flow, citation service, and data attribution, including version control), and data curation services for campaigns and dedicated research projects and initiatives.

- **Research services**: ACTRIS provides access to ACTRIS observational and experimental platforms that are equipped with state-of-the-art instrumentation and equipment for realisation of scientific experiments under ambient or controlled conditions.

- **Technical services**: ACTRIS provides access to technical platforms (Topical Centres) TCs for instrument-specific calibration, testing, and inter-comparison with a reference instrument.

- **Innovation services**: ACTRIS provides innovation-driven and market-oriented opportunities to the private sector for testing and developing commercial instrumentation and for developing novel methods and equipment.
- **Training services**: ACTRIS provides opportunities for training and capacity building of RI staff and users, e.g., training on data and tools, targeted atmospheric training courses.

ACTRIS' services are accessible through an interactive and online catalogue of services that provides detailed information about a variety of its services offered. The ACTRIS catalogue of services has user-friendly search options, cross-search functions and filters that allow users to explore the service data base quickly find the suitable services. The interactive nature of the catalogue allows users to search for specific

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Page **12**

services or to browse through the available services. Each service is sufficiently (but concisely) described comprising contact information and location, geographical environment and atmosphere type, type of service, research area, service status and availability, type of access, service provision procedure and expected duration, on-site user support, potential user fees, and other information related to the services being offered. The catalogue of services will ultimately be connected to:

→ The ACTRIS Data Centre for providing atmospheric composition data produced within ACTRIS and other data services and tools, widely available through virtual access; and

→ The online ACTRIS management platform "PASS" for requesting a service for physical and remote/hybrid access in a competitive access process management by SAMU (Service and access management unit).

User needs evolve continuously and require constant developments of services and suitable capacities withing ACTRIS to meet these needs. ACTRIS needs to not only maintain and improve the service portfolio and quality of its services, but also constantly explore and develop new service concepts and components. New services will have to be launched, tested and their performances be assessed to allow for adjustments in alignment of the user requirements and needs.

4.5 Performance monitoring

Performance monitoring is an important part of the ACTRIS user strategy as it allows to track user behaviour, measure engagement, and identify areas of improvement. Performance monitoring also helps to ensure that users are having a positive experience and that ACTRIS can serve their needs. By monitoring performance, organizations can quickly identify any issues and take action to address them.

4.5.1 Key performance indicators

An efficient user strategy requires a constant monitoring of the users and service provision activities based efficient monitoring and analytics tools. Key performance indicators (KPIs) ensure increased transparency to evaluate the performance and allow to monitor progress, communicate on results and achievements, develop future strategies, evidence-based decision-making and contributed to financial stability and sustainability.

The monitoring activities aim to provide access statistics and metrics for quantitative and qualitative performance evaluation of the access and service provision to users:

- Organisational metrics, to evaluate the quality of organising and managing the access process and service provision, interactions between the key players, and of reporting and disseminating the results.
- Operational metrics, to evaluate the quantity of the services offered and access provided.
- User metrics, to evaluate the size and extent of the user community, the user interest and satisfaction.
- Strategic metrics, to evaluate the progress as well as the relevance and impact of the service provision.

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Page **13**

- Financial metrics, to evaluate the cost effectiveness of the service provision and relevance to the RI's financial sustainability.

The success, relevance, and impact of the service provision to users is demonstrated by the resulting scientific publications, availability of high-quality data, advances in scientific research and development and new research findings. Performance monitoring contributes to making the scientific excellence and progress visible.

4.5.2 User feedback

An essential element for evaluating the user satisfaction is given through feedback directly from the user to whom the services have been provided. User feedback is an efficient tool to gather information from user after service provision and is crucial for assessing the quality of the service provision and is the key basis for continuous improvement of the ACTRIS access and service process.

User feedback can easily be collected through concise questionnaires addressing the facilities accessed and services received, how information on access opportunities where obtained, whether the service provision has been essential to perform the research activities. The user feedback furthermore allows users to evaluate in a quantitative and easy manner the different aspects of the process including the advertisement and call for access, the application process, the access to the facility and user support, the quality of the services provided, the post-access process and other pertinent aspects: information about potential benefits of the access, new discoveries and breakthroughs, suggestions for improvements, lessons learnt. User feedback and opinions helps to identify user trends and behaviours and give insights into how to better design and develop and optimize the user strategy.

5. Recommendations for an enhanced ACTRIS user strategy, conclusions, and next steps

The document describes the overall user strategy and its elements developed within ACTRIS. To remain successful, a user strategy requires continuous enhancements to ensure effective provision of services to its users. The major recommendations on how to further optimize and implement the user strategy within ACTRIS, together with its facilities, are given below:

- **ACTRIS should persistently strive to reach different target audiences**, using multiple channels. Communication is the key driver for promoting successful access to ACTRIS services for the user. Efforts should particularly be made towards users from the private sector for whom ACTRIS provides a large innovation potential, by offering high-level facilities and expert innovation services in alignment with the ACTRIS innovation strategy[7].

- **Together with its facilities, ACTRIS should maintain and foster a trusting and human relationship** with the users and be available to rapidly respond to their user needs when demand arises. An

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[7] ACTRIS IMP Deliverable 3.1 – Draft innovation strategy

effective and optimal access provision process, management and support including the continued development of a user-friendly access platform should ensure facilitated and timely-optimized user access to the services and assistance from the providers for successfully carrying out their projects.

• **ACTRIS should leverage data-driven insights to monitor the evolving user needs and preferences** by continuously collecting and analysing data on user engagement, access and service provision, and to identify trends and improve processes and develop a personalized user experience. ACTRIS should explore tailored access modalities to further exploit ways how ACTRIS facilities can be more attractive to users from the non-academic domain.

• **ACTRIS should keep and maintain current and historical documentation** of access and easily provide statistics on access. Accurate records of service provision support service development and provision and helps to design services consistent and high-quality services in the future.

• **ACTRIS should efficiently analyze user feedback and communicate the responses to the ACTRIS facilities**, to improve the quality of the service provision and support by the facilities, and to better streamline and improve the access process.

• **Together with its facilities, ACTRIS should explore ways to meet the evolving user needs** for novel and innovation services by continuously developing their scientific and technical capabilities.

• **Together with its facilities, ACTRIS should update the service catalogue** and regularly refine and develop their service portfolio to have the most precise description of ACTRIS services available to users. ACTRIS should regularly provide updates and new content to keep users engaged and interested.

• **Together with its facilities, ACTRIS should** encourage users to provide open access to their research findings that are enabled by the user access. ACTRIS should document the scientific outcome by tracking and collecting the resulting scientific data and publications. Open access increases the visibility, utility, and impact of research by providing free and unrestricted access to novel scientific knowledge.

• **Together with its facilities, ACTRIS should** develop and maintain a user-centric approach that prioritizes the users' requirements and put the needs of the users first.

This document describes the objectives and approach of the ACTRIS user strategy and stipulates the major recommendations for an effective provision of services to its users. A successful user strategy is based on a cyclic approach that requires continuous information on the users and their needs. The user strategy is expected to evolve over time as conditions, user needs and preference, capabilities and resources change. ACTRIS should develop solutions to develop its capabilities to optimally meet the needs. The successful user strategy should be aware its unique value propositions that a user will gain by benefitting from the services. The user strategy should focus on providing the best possible user experience by optimizing user engagement and creating a user-friendly design. The user strategy should consider the best way to reach out to and interact with users, taking factors into account such as user feedback, functionality, usability,

and accessibility. User feedback can also help to adjust existing user strategies to ensure they are continually meeting the needs of the user. Finally, the user strategy should be regularly evaluated and updated to ensure that the access and service provision to users remains effective and relevant.

An updated user strategy will be delivered at the end of the ACTRIS IMP project in the deliverable D6.4 which will comprehensively consider the achievements and outcome of the implementation of the user access and service provision system including the supporting pilot activity for provision of access to the users.

6. Reference documents

ACTRIS IMP D6.2 – Report on the ACTRIS User support system

ACTRIS IMP D10.1 – Updated plan for communication within ACTRIS

ACTRIS IMP Grant Agreement (N° 871115)

ACTRIS IMP MS6 – ACTRIS User experience map

ACTRIS IMP MS34 – 2nd Draft of the ACTRIS Management Plan

ACTRIS IMP MS35 – Updated analysis of user needs

ACTRIS IMP MS39 – Definition of the pilot access process to ACTRIS facilities

ACTRIS IMP MS57 – Report of the communication means used and success

ACTRIS IMP MS60 – Analysis of the best practices to engage ACTRIS user groups

ACTRIS Technical and Scientific Description

ACTRIS-PPP D1.6 – ACTRIS Business Plan

ACTRIS-PPP MS23 – Definition of user requirements

ACTRIS-PPP MS26 – Definition of Key Performance Indicators related to ACTRIS service provision

ATMO-ACCESS D2.1 – Report on current user needs as related to the historically offered access ways

European Charter of access for research infrastructures (2016, EU DG for Research and Innovation)

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Page 16