

D2.2 Report on the integrated communication strategies

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1. Introduction

ATMO-ACCESS is the organized response of distributed European atmospheric research facilities for developing a pilot for a new model of Integrating Activities involving the 3 distributed Research infrastructures ACTRIS, IAGOS and ICOS. ATMO-ACCESS will deliver a series of recommendations for establishing a comprehensive and sustainable framework for access to distributed atmospheric Research Infrastructures (RIs), ensuring integrated access and optimal use of the services provided. Several access modalities (physical, remote and virtual access) are tested.

This document is sustaining the project's first strategic pillar (SP1) focused on harmonizing access procedures for users and stakeholders. SP1 addresses the challenge of elaborating references and guidelines for access in a way to be properly adopted by atmospheric RIs. This shall be based on an extended analysis of solutions used currently by different infrastructures, also including some of those that operate outside the environmental domain. At the same time, we aim to streamline the work to avoid duplication of efforts, by integrating experiences from past access programs.

The main challenge is the development of strategies to engage different user communities (academia, public and private sector), by identifying their needs, establishing targeted communication of the access offered, and evaluating the adequacy of ATMO-ACCESS. This is realized within WP2 Tasks, among which Task 2.2 addresses the targeted communication to raise user awareness on the pilot access offered. This document presents *Deliverable 2.2 "On the integrated communication strategies"*.

The core activities that have been done are to:

- a) efficiently communicate on different access opportunities, specifically
 - physical, hybrid, remote and virtual access opportunities;
 - cross-RI user training for the scientific community;
 - cross-RI facility training for RI operators;
 - training for non-specialists (public authorities, schools);
- b) <u>improve communication strategy for RI partners, academia, private sector, policy makers,</u> international organizations

Deliverable 2.2 is based on the two other deliverables in Task 2.2, i.e. *Deliverable 2.1: On the current user needs as related to the historically offered access ways*¹, and the *Deliverable 2.3: Report on the user feedback monitoring strategies*². Moreover, we also used as reference the ACTRIS IMP *Milestone 10.4: Analysis of the best practices to engage ACTRIS user groups*³ and ENVRI-FAIR

¹ ATMO-ACCESS Deliverable 2.2 (Deliverables and Milestones – ATMO-ACCESS)

² ATMO-ACCESS Deliverable 2.3 (<u>Deliverables and Milestones – ATMO-ACCESS</u>)

³ ACTRIS IMP Milestone 10.4 (ACTRIS IMP WP10 MS59 Analysis of the best practices to engage ACTRIS user groups)

Deliverable D2.2.: *ENVRI Community building, engagement and communication strategy*⁴. This revised version of D2.2 also builds on Milestone 8: *Evaluation of and recommendations for optimizing the strategies implemented for the pilot access calls*⁵. The current report presents the work towards building an integrated communication strategy based on the use and optimization of the existing communication activities at the Communication Offices of the three RIs of ATMO-ACCESS.

2. Scope and objectives

The integrated communication strategy outlines the scope of ATMO-ACCESS communication and dissemination activities, building on the knowledge of the well-established communication offices of the following three atmospheric RIs involved in the project: IAGOS, ICOS and ACTRIS. The main goal of the project's communication actions is to build the framework for access to distributed atmospheric RIs and successfully engage with relevant users and stakeholders. This is a crucial step to ensure that the solutions proposed in the project for the harmonization of national and European procedures of access provision to research infrastructures are fully understood and endorsed, when applicable, by all relevant groups. WP2 is a key WP and participates in the main WP meetings of the project to make sure the messages are adequately communicated. The strong relationship established between the three distributed atmospheric RIs will be valuable for future collaboration beyond ATMO-ACCESS' lifetime.

WP2 worked together successfully on access calls with other WPs. WP7 provided a definition and an initial wording for the call, WP2 worked on adaptation, attractiveness, clarification & communication, and WP9 dealt with the entire access management process, including follow-up with feedback collection. This collaborative cycle allows WP2 to know the timeline and scope of the upcoming calls to prepare the communication efficiently and properly for each call accordingly. The analysis is shown in Fig.1.

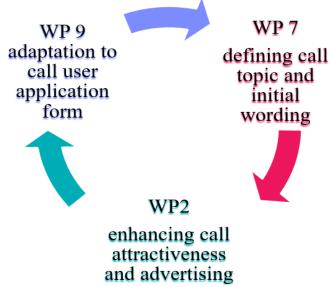


Figure 1. Successful process of joint effort on call preparation, communication and processing

⁴ ENVRI-FAIR Deliverable 2.2. (Documentation space of the ENVRI community)

⁵ ATMO-ACCESS Milestone 8 (ATMO-ACCESS WP2 Milestone8.pdf (core-cloud.net)

WP2 is also following closely the developments made in the pilot WPs (WP4-5-6) and WP10 where Virtual Access is implemented.

To sum up, the communication and dissemination activities detailed in this strategy are:

- supporting the ATMO-ACCESS project goals;
- provide project beneficiaries with information and material to perform communication and dissemination activities linked with the project;
- managing the information flow between the project and the extended community;
- managing the information flow within the people involved in this project, especially between different WPs, to establish strong connection, efficient liaison, and to keep them focused on the project's success;
- increasing the dialogue between atmospheric RIs to ease the exchange of knowledge and of experience;
- increasing awareness of the access opportunities offered by the 3 atmospheric RIs to a wider audience;
- engaging with stakeholders to develop an integrated plan for establishing procedures for access to atmospheric facilities;
- answering feedback by giving recommendations on improvements needed.

3. Target audience and action taken

The project addresses the different range of audiences and develops tailored messages for each group detailed below. The communication actions should be adjusted, depending on the target group, but can also have some similarities, especially in the core messages. Engagement of the target audience is crucial for the success of the project. ATMO-ACCESS not only makes use of the networks and channels from the individual RIs but also has its own official channels for promoting its messages and opportunities. Joint efforts of every RI and ATMO-ACCESS communities will for sure enhance the dissemination of the information and reach specific audiences, not only connected to the project, which is one of the main goals of the ATMO-ACCESS.

Throughout the project realization, we undertook several activities to improve dissemination and attract new users. The strategy of advertising and spreading the information was based mainly on the previously identified recommendations. The promotional and informing actions organized within WP2, exclusively tailored for every target group, are further described below.

a) ATMO-ACCESS Beneficiaries:

The project's beneficiaries are crucial internal stakeholders. This group consists of a total of 61 institutions (including beneficiaries and their linked third parties). The existing beneficiaries' networks are used for the enhanced dissemination of the project opportunities and obtained results.

The dissemination strategy for this group is to provide information and resources to them to promote ATMO-ACCESS, its opportunities, and its outcomes. It can be done especially during international but also national conferences and events (poster or oral presentation), through publications in journals, and using their communication channels (website, social media, newsletters, working group meetings, by word of mouth to acquaintance).

It is also worth noting that access providers for Virtual Access (VA) and Trans-National Access (TNA) have a clear obligation to advertise widely the access offered under the project and the eligibility criteria. They should be encouraged to give feedback about the realization of the project. It would show the problems that providers were facing, help to learn from the process of the project realization, and for future improvements.

For the ATMO-ACCESS beneficiary group, WP2's main focus was on creating the materials ready for publication (all of the graphics given in Appendix A). These materials were used for further dissemination, e.g., as a graphic added to social media posts meant to attract people (e.g., the official Facebook account of the Institute of the Geophysics University of Warsaw or LinkedIn profiles of ACTRIS-RI and ICOS-RI). Additionally, on the official ATMO-ACCESS social media profiles (i.e., LinkedIn, X, Instagram (from 2023), and Bluesky (from 2024), the announcements were published and could have been shared further by the other users. Due to the change in X policies, this platform hasn't been maintained since the end of 2024.

Apart from creating the materials for dissemination, several surveys were conducted on the TNA Providers involved in the ATMO-ACCESS. Slido polls were launched during ATMO General meetings (virtual or physical ones). Furthermore specific questionnaires were developed to gather more substantial data. One was conducted between 7 June - 7 July 2023 to gather feedback on the implementation of access within the programme and potential bottlenecks (based on the 35 answers collected). A second survey was open between 23rd February - 8th March 2024. The form consisted of several questions focusing on the main project components (widely understood access organization, user attraction, terms of use of the data, publication co-authorship). The main aim of this action was to gather feedback that could help shape the future calls for access to the RI of the atmospheric domain. It would also enable the pre-editing of the recommendations to the European Commission for future access programmes (Horizon Europe INFRA-SERV). The answers from 32 respondents allowed for presenting the feedback during the ATMO-ACCESS General Assembly on 19th-21st March 2024.

b) Atmospheric research community:

ATMO-ACCESS aims to gather the atmospheric research community from and outside Europe. These pursuits are for exchanging the knowledge and the experience of researchers from all over the world. The dissemination strategy for this audience group is to enhance engagement and raise awareness of the project opportunities for atmospheric science researchers. Up to

now, the communication actions have mainly been done online (by emails, social media posts, newsletters, and virtual meetings). As we suggested, more effort was invested in promoting the opportunities offered by ATMO-ACCESS at international conferences and workshops. It was advertised mainly through setting up promotional stands, spreading leaflets about the project to the conference's participants, and with short oral announcements of the offered opportunities during one of the sessions. For a complete list of events where the project was presented, refer to Appendix B of this report. In the case of this kind of advertisement, we recommend preparing reusable promotional materials (roll-ups, posters) and interactive ematerials (e.g., available via the QR code), while limiting the number of promotional products and flyers to avoid wastage. If possible (e.g., one of the project beneficiaries is a conference host) - ask the local organizational committee to prepare the ATMO-ACCESS stand using their human resources (to avoid unnecessary travel and lower the project's carbon footprint). If local staff are not available to set up the ATMO-ACCESS booth, it is presented by those ATMO-ACCESS beneficiaries who are already attending the conference. This approach significantly reduces the travel-related carbon footprint.

A specific focus on engaging early career scientists, including Ph.D. students is crucial. That was made jointly with WP4, in charge of developing innovative training accesses or science project realization during the TNA. The effectiveness of this approach can be assessed thanks to the organization of the AGORA⁶ (in-person training, limited number of participants) and NAOK⁷ (training online, unlimited number of participants) pieces of training. For the AGORA training, 32 applications were received, while for the NAOK virtual training 137 registered. What is more, every RI can advertise the project to the science institutions (Universities, Academies, and Polytechnics) focusing on the atmosphere or climate studies onside.

For the audience of the ECIs, the communication strategy should consider the generational separation between young and experienced scientists. They have different scientific interests, levels of self-confidence, ways of thinking/speaking, and they use modern communication channels more widely. In many cases, they prefer online interactions instead of face-to-face meetings. The younger generation is often attracted to catchy images or even memes. They use various channels for searching the information, especially social media, which is still not well-established in the scientific communities. To involve the young generation of scientists, we used up-to-date professional social media channels for publishing eye-catching photos, short, witty/funny movies about the project or for presenting motivational success stories respectively. To this end, an Instagram channel was set up in the spring of 2023, reaching an audience of 109 users. This number might enlarge while disseminating further via the project and RI web pages and by word of mouth of people involved. Only one RI (ICOS) is on this platform so the leverage effect is limited compared to the other platforms used by the project

⁶Andalusian Global ObseRvatory of the Atmosphere (AGORA) <u>Aerosol Training Course: Characterization of atmospheric aerosol using in-situ and remote sensing techniques.</u>

⁷ Atmospheric and environmental research infrastructure online training hosted by National Atmospheric Observatory Košetice (NAOK)

like Linkedin and X. It may be beneficial to consider hiring an expert to manage social media dissemination. A Youtube channel was also opened in RP3 to upload short success stories videos, short tutorials on TNA tools and videos from the public authorities webinars.

To more effectively attract young and/or new users, WP2 actively supported the dissemination of information about the Massive Open Online Course (MOOC)⁸, which was available free of charge and without any prerequisites. The course was promoted as highly flexible and easy to follow, with multiple reminders sent shortly before registration opened, at the start, and during its run. Offering the course online, without a strict schedule, and without access restrictions made it a valuable opportunity for young and busy researchers. Its interactive videos, which allowed for further knowledge development, proved to be a strong asset. WP2 also took the opportunity to help improve the course by providing the authors with suggestions for potential enhancements.

Some of the satisfied users provided success stories⁹, either as short written descriptions or as recorded interviews enriched with photos and short videos taken during the TNA realization. These materials are stored both on the official webpage as well as at the YouTube channel. Short notification about publishing the videos were announced on social media (e.g. LinkedIn and BlueSky). It was another way to attract new users.

Real engagement ensures through the collaboration with the three main atmospheric RIs communication offices involved in WP2, which disseminate project information within their communities afterward. Monthly virtual meetings and emails have proven efficient, notably for dissemination access opportunities (refining the content of the announcements, brainstorming of possible improvements, and proposing new solutions, and spreading the information further).

It is worth noting not all users from the various communities have equal knowledge about an offered access and others' interest. It might be necessary to take actions targeting particular platforms or variables. Specific emphasis to attract users from outside Europe while adhering to the Horizon 2020 rule which imposes that user groups dominated by non-EU affiliated organisations are restricted to 20 % of access units. Clear and straightforward language—free from EU research infrastructure jargon—was essential for engaging these users, who may not be familiar with such terminology. In total, users from 41 countries, both within and outside the EU, were granted access. Non-EU countries represented included Albania, Argentina, Brazil, Canada, China, Colombia, India, Morocco, Moldova, Pakistan, Senegal, South Africa, South Korea, Tunisia, Turkey, and the USA. Among these users, training and remote access activities were the most popular types of access.

⁸ Massive Open Online Course (MOOC): https://www.atmo-access.eu/massive-open-online-course-mooc/

⁹ Success stories – ATMO-ACCESS

c) Other scientific field researchers:

Researchers from other scientific fields are the next target group for the ATMO-ACCESS project. ATMO-ACCESS offers opportunities for researchers beyond atmospheric science, to conduct leading-edge, multidisciplinary research, thereby addressing scientific questions and societal issues in an innovative manner. ATMO-ACCESS provides opportunities for cross-disciplinary research, addressing scientific inquiries and societal concerns, e.g., by conducting joint experiments focusing on the health impact of the air-pollutants or the actions leading to recommendations for the local policymakers to improve living conditions in the cities. Notably, trans-disciplinarity, that's to say the degree to which a project identifies and builds/enables trans-disciplinary developments beyond atmospheric science, is part of the evaluation criteria of the TNA selection process. Trans-disciplinarity, as part of the TNA selection process, is a crucial evaluation criterion.

These users were the target defined by ATMO-ACCESS 6th call for access¹⁰, which aimed at delivering non-atmospheric science objectives and to encourage access to user groups from outside the atmospheric science domain. The dissemination activity towards this target group focuses on the opportunities offered by ATMO-ACCESS, either through direct contact with RIs or clusters of RIs like the ENVRI Community (cluster of European ENVironmental Research Infrastructures) or the IRISCC¹¹ newly approved Horizon Europe project related Climate Change risks. Communication actions via unconventional channels, such as the Slack Channels for RIs communicators, are also used to disseminate project information to the broader audience (ricomms.slack.com). To properly enlarge the user database and to advertise the 6th call, the conveners of transdisciplinary sessions at the EGU conference, as well as the networks of educators (e.g. Edu4ClimAte¹²) were asked to disseminate further.

Notably, virtual access is a great asset for this target group. Therefore, the communication of the call must focus on advertising the capabilities of offered databases such as the ACTRIS database.

Training like the MOOC can also be an engaging and valuable activity for this target group. Such courses help participants organize their existing knowledge, refresh outdated information, or acquire new insights. Thanks to their more popular-science-like approach and broad accessibility, they can play an important role in raising awareness about aerosols—especially among those not directly involved in atmospheric physics—and highlight the significance of research infrastructures dedicated to atmospheric studies.

¹⁰ A 6th Call for Trans-National Access – Beyond Atmospheric Science! – ATMO-ACCESS

¹¹ Integrated Research Infrastructure Services for Climate Change risks - GA n°: 101131261

¹² Edu4ClimAte - consortium web page: https://edu4climate.cyi.ac.cy/

d) International agencies:

Fostering international stakeholders' participation in the access schemes developed within the project is the objective of task T6.2. The international stakeholders such as large space agency interested in atmospheric science, such as European Space Agency – ESA, EUMETSAT, World Meteorological Organization – WMO, Copernicus Atmosphere Monitoring System – CAMS, or other intergovernmental organizations, might be highly influencing groups of audiences while being engaged. Collaboration with such meaningful organizations may even extend the project's impact to a global scale and beyond the project's lifetime. Additionally, these organizations could spread the information about the project on their websites, social media channels, or newsletters (ie: GAW newsletter), which would also set the opportunity of reaching a new audience, especially outside the atmospheric sciences community.

The possible way of attracting such an audience such as WMO or CAMS— is the possibility of remote access or VA to the facilities, which enables an almost near real-time access to the data collected on the measuring stations or tailoring the measurement scheme for their needs/special requirements. For this group, the communication strategy has to focus on the benefits for both sides (e.g. exchanging knowledge and expertise) and the new opportunities coming from the collaboration (spreading the information, upgrading the models, or consulting the problems).

From 15th July to 12th September 2022, ATMO-ACCESS opened a dedicated call for pilot TNA for this specific group. Three pilot applications for international stakeholders—the ESA EarthCare Cal/Val, EUMETSAT-Aerosols, and EUMETSAT-Clouds— were proposed and all accepted for realization. Additional information about these activities is provided within the Work Package 6 deliverables: D6.2 *Proposed pilots for international stakeholders* ¹³ and D6.5 *Report on evaluation of the TNA pilots and future recommendations*.

The lesson learned from this TNA activity is that the best form of communication with this group of recipients is to propose information meetings with well-known experts associated with or delegates of the involved RIs. Conducting preliminary parleys and, in the long run, negotiations give a high probability for the involvement of international stakeholders. Results of the ATMO-ACCESS cal/val activities have been presented at Earthcare ESA workshops making the community better known by space agencies experts.

e) Industry:

Fostering industry and notably small and medium enterprises' (SME) participation in the access schemes developed within the project is the objective of task T6.3. The new and customized transnational access modalities specifically adapted to innovators in industry —thus fostering an exchange of interest between RI partners and the private sector— are envisaged by this task.

WP2 will support the objective of the task via specific communication messages and social

¹³ WP6, D6.2 deliverable: <u>Proposed pilots for international stakeholders</u>

media posts (notably on LinkedIn) to raise this target group's awareness. Interactions with the ENRITC consortium ¹⁴ – European Network of Research Infrastructures & Industry for Collaboration, are used to disseminate the main messages of the project. To effectively engage industry representatives, the communication strategy should focus on highlighting the project's value proposition to businesses, particularly small and private companies. By emphasizing how the project can help them enhance developments at minimal costs as access is provided free of charge, the strategy can resonate with these key stakeholders and demonstrate the project's relevance and benefits. Another way of engaging with industry is taking part in or even organizing exhibitions or trade shows where ATMO-ACCESS was widely exposed such as the EGU (to check where the ATMO-ACCESS presented its booth, refer to Appendix B). The strategy of promotion will include not only printed materials but also word of mouth. This activity may be conducive to building connection and trust and likely making new contacts for future collaboration.

As mentioned above, private sector users have been identified as being interested in having remote or virtual access to facilities. Therefore, the fourth call for applications¹⁵ was dedicated to them. Additionally, a special dedicated call for TNA for private sector¹⁶ users began just after the end of the 4th call. This call was conducted without a specific schedule, with the only requirement being that all granted TNAs shall be completed by the end of 2024. In total, 46 projects were submitted by 31 different companies.

When using social media channels to engage stakeholders from the private sector and the broader industry landscape—particularly the e-industry— the most effective platforms are those associated with professional and business-oriented communication. LinkedIn, for example, is widely used for networking, industry news, and company updates, while platforms such as X (formerly Twitter) or Bluesky are often used to share insights, innovations, and engage with professional communities.

In contrast, platforms like Instagram, TikTok, or Facebook are more commonly associated with personal content and are primarily used by younger audiences for entertainment or lifestyle sharing. These channels are therefore less suitable for targeted, professional outreach to industry stakeholders in this context.

f) Funding agencies and policy makers including public authorities:

This target group includes both funding agencies and policymakers at international, European, and national levels. The engagement of these users is key to finding possible funding opportunities in the future and addressing the access sustainability issue. To achieve these targets, communication should express the importance of atmospheric observations and the project strategy itself. Additionally, policymakers and public authorities need to understand the climate system and the importance of atmospheric studies. They need the expertise provided

¹⁴ European Network of Research Infrastructures & Industry for Collaboration

^{15 &}quot;Call for Remote and Hybrid Trans-National Access"

¹⁶"Trans-National Access for private sector"

by communities involved in this project, so they can make decisions to help with reducing pollution, improving air quality and, as a result, improve the health of citizens. It is also crucial for the sustainable development of society, which will be ready for reducing the carbon footprint.

Dedicated actions have been developed by task leaders of WP 3, 6, and 8 with the aim to engage further in the discussions with these actors. The role of the WP2 leaders was to deliver unified messages to those actors. Key outcomes and messages from these work packages have been communicated through the website and social media. For this target group, a single communication strategy has been established, as key messages, tools, and communication channels have remained consistent (newsletters, X, LinkedIn, and invitations to direct meetings with their representatives).

Given the time constraints typically faced by policy makers, direct communication—whether through physical or online meetings— has proven to be more effective. It is often more efficient for stakeholders to receive information directly from a person responsible for communication or access provider, rather than navigating a website, which can be time-consuming and potentially frustrating. Meetings conducted in stakeholders' native languages have further enhanced communication by making it easier to convey information in an accessible manner, respond to questions, and clarify uncertainties.

An example of the project dissemination to policymakers and national stakeholders during direct meetings was a presentation of ATMO-ACCESS activities during the Polish National Stakeholders meeting organized by University of Warsaw. It took place in a hybrid format in Warsaw in February 2023. The talk of Eleni Athanasopoulou, the organizer of the ATMO-ACCESS Trans-National-Access (TNA) for public authorities, aimed to show the possibilities offered with particular emphasis on the new public authorities call. It focused on examples of the different types of possible access to the RI facilities all over Europe available within the TNA. As stated in the RI-Urbans Milestone M35 (M5.7.) ¹⁷, during the discussions following the mentioned presentation, participants showed interest in the co-designed call.

The pilot for public authorities, organised as a series of webinars related to the new Air Quality directive as described in D6.4¹⁸, drove the interest of 200 users among the environmental agencies and local authorities. The announcement was picked up by UN networks such as BreatheAir2030 and included in their newsletter.

Another example of a good practice of direct advertising (by word of mouth) is an organization of guided visits to measuring sites. It allows the policymakers or representatives of the founding agencies, a.o., to see how such a station works and what kind of measurements we take. This kind of activity is a regular one for the University of Warsaw. The purpose of such an open-door approach is to advertise the scientific capabilities and to attract and inform policymakers that scientific recommendations for improving living standards in the city arise from knowledge.

¹⁷ RI-Urbans Milestone M35 (M5.7.)

¹⁸ ATMO-ACCESS D6.4 v3 Proposed TNA pilots for public authorities

As outlined above in the context of private sector and industry stakeholders, communication via business-oriented social media platforms is also the most effective approach when targeting policy makers and funding agencies. Channels such as LinkedIn, X, and Bluesky provide an appropriate environment for professional engagement, enabling the delivery of strategic messages and ensuring visibility among institutional audiences. These platforms align better with the communication preferences of policy-level stakeholders than more informal or entertainment-focused networks.

4. Communication Tools and pathways

To support ATMO-ACCESS communication and dissemination activities, a visual identity has been created from the project's start. The visual identity is composed of a logo, a branding manual (including colors and fonts to be used in communication materials of the project), a presentation, and a poster template. These materials are available at the internal project management platform <u>ATMO-CONNECT</u>¹⁹ and upon request at the Project Office. It helps strengthen the ATMO-ACCESS common identity and makes the project easy to recognize.

The logo and project color charter use the colors from the 3 RIs involved as shown in Figure 2 (placed below). The graphic elements used are an asterisk created by various paths that guide the users to information, data and infrastructures. Flyers (available in pdf and for printing) and specific images announcing each call have been developed and can be found in Appendix A of this document. The flyer and logo are also available online (check the Outreach Material – ATMO-ACCESS²⁰). The external project website²¹ and social media channels (X²², LinkedIn²³, Instagram²⁴, Bluesky²⁵) have been set up from the beginning of the project (or during its realization - Instagram, Bluesky) to largely communicate the project objectives, opportunities, events, news and documentation.



Figure 2. ATMO-ACCESS logo inspiration sources

¹⁹ ATMO-CONNECT platform: https://extra.core-cloud.net/collaborations/ATMO-CONNECT/Pages/Templates.aspx

²⁰ Direct link to the outreach materials of the project: https://www.atmo-access.eu/outreach-material/

²¹ ATMO-ACCESS official webpage: https://www.atmo-access.eu/

²² Official ATMO-ACCESS profile at X (formerly Twitter): https://twitter.com/atmo_access

²³ Official ATMO-ACCESS site on LinkedIn platform: https://www.linkedin.com/company/atmo-access/?viewAsMember=true

²⁴ Official ATMO-ACCESS profile on the Instagram: https://www.instagram.com/atmo access

²⁵ Official ATMO-ACCESS profile on the Bluesky: https://bsky.app/profile/atmo-access.bsky.social

All materials developed within the project must acknowledge European Commission funding by displaying the European logo and using the statement: *This project has received funding from the European Union's Horizon 2020 research and innovation programme through the ATMO-ACCESS Integrating Activity under grant agreement No 101008004.*

One of the WP2 aims is to provide new solutions for enhancing the liaison between facilities engaged within the project and attracting new users by disseminating the project's objectives and advertising the opportunities it gives (the TNA access, VA, knowledge, and experience exchange). For this purpose, a comprehensive communication strategy must be employed. The initial overview of communication pathways in ATMO-ACCESS is in Figure 3.

Project communication channels

- •ATMO-ACCESS website
- ATMO-ACCESS social media (LinkedIn, X formerly Twitter, Instagram)
- ATMO-ACCESS flyer
- •ATMO-ACCESS mailing lsts (community, associated partners, scientific advisory board)
- Direct e-mails to ATMO-ACCESS beneficiaries and access providers

RI official communication channels

- Official websites of RIs and newsletters requesting sign-up
- Social media sites and exchange for arun by RIs
- Materials and flyers at conferences' booths
- Multi-RIs' projects communication channels (for instance: ENVRI, ENRIITC)
- Direct advertising at RIs working groups meetings

Other possilbe communication channels

- •Websites of RIs Data Centers
- Direct communication to access providers
- Exchange of information within scientific community
- Organization/ taking part in the meetings with national stakeholders, public authorities, and policymakers;
- Organization of a dedicated calls for access;
- •Organization of dedicated calls for specific user groups with adjusted terms of application (e.g., a call for the public sector without a specified schedule);
- Widely used social media (X formerly Twitter, Facebook, Instagram, Tiktok, LinkedIn)

Communication channels to be improved

- Advertising of RIs' newsletters to wide audience (boost messages to universities, institutes, companies, public authorities, funding agencies...)
- · Creation and use of hashtags in social media
- •Immediate pop-up window I banners attracting to sign up to RI's' newsletters
- Short advertising videos with ATMO-ACCESS relevant information including music, nice graphics)
- •Eye-catching pictures I photos with short bullet-messages published in social media
- Enhance the national contact points for project dissemination within RIs and national facilities.

Figure 3. Existing and possible for creation communication pathways proposed within the ATMO-ACCESS project.

The communication strategy cannot only point out possible channels of information distribution. It should also consist of a kind of action plan. These are necessary for introducing more detailed information about planned activities, such as when they will be implemented, by whom, and to whom. Table 1 shows the generic communication plan timeline, illustrating the communication strategy, focusing on announcing the calls and sending reminders.

Table 1. The generic communication plan timeline

Comms Action	Description	Action Owner	Audience
Announcing open call	 Announcing to the ATMO-ACCESS community (including TNA providers, national contact points and Scientific advisory board members) that the call is planned to be open Announcing the actual open call text using Email, Social media, project Website and Newsletter 	ATMO-ACCESS Office	ATMO-ACCESS community
	 Announcing the open call to RI communities: target RI facilities using Email, and RIs social media, Websites and Newsletters 	RI Comms officers	RIs community, networks
	 Announcing the TNA call during the conferences and/or workshops closest to the actual date of opening. 	ATMO-ACCESS Office	Atmospheric domain community / RIs communities / networks
Reminders	 Remind the community that the call is still open until certain date Email to community / scientific board Specific message to National access contact points to disseminate the call information in their national communities Reminders sent over Social media channels, on Websites, and using RI Comm slack channel 	ATMO-ACCESS Office RI Comms officers	ATMO-ACCESS community RIs communities
	 Contact facility users to advertise the TNA opportunities 	TNA PIs	Facility User community
	Reminding about the opened TNA call during the conferences/workshops organized while the call is opened.	ATMO-ACCESS Office Representativ es	Atmospheric domain community / RIs communities

4.1 Improving communication

After exposing the current communication channels, WP2 analyzed some possibilities for improvement of the communication to fill in possible future expectations. Proposed actions and solutions are discussed in more detail below.

4.2 Improving the content of communications

a) Work on a clearer definition of the services offered through access

As the users of TNA are typically interested in physical or remote services linked to direct access to facilities, instruments, or test and experimental activities, there is a lack of integrated catalog of available services for all the facilities. This issue is currently managed at the level of each RI, not within the project itself. We recognize the need for such services catalogs, which development will surely improve the ATMO-ACCESS communication on such services, e.g. by adding acknowledgments to them in the resulting publications or conference presentations.

In the case of virtual access to services, the main task is to provide a transparent virtual access portal where available data products would be easy to find. Such a portal could advertise access to data as well. The access itself should be monitored by RIs Data Centre's operators and show how the access is used by virtual users to attract more of them. We should put more effort into expressing how much effort the RIs put into data production to build the necessity of appreciation and the need for proper acknowledgment by the users.

The analysis of the responses to the survey on historical use (conducted for Deliverable 2.1) revealed scant feedback from VA users. It likely shows that there is no access to those users, there was no proper communication on the data policy, or users were unaware that they should respond to the feedback questionnaire in the future. In this case, we need improvements because, without a proper response from users, it is impossible to measure the effectiveness of the communication strategy.

b) Communicate on the benefits of access

It is crucial to stress the attractiveness of the calls in financial terms. The users need to clearly understand that in most of the access provided, users will not have to pay for the data or the service provided. However, this does not mean the users carry no cost at all. In fact, in the ATMO-ACCESS pilot, the user subsistence and transport support are limited (reimbursement of ~30-40% only). Thus, the users need to be informed about this properly before submitting their proposal.

For clarity purposes and to gain an appreciation of the service offered, it would be good to have a list of each service cost provided within each infrastructure. Such a list would allow users to include such service costs, e.g. in the grant applications, the research-performing organization, or private company budget. There could be indications about fee-free services proposed as well.

The reporting needs of the access should be lowered to a minimum, especially concerning reimbursement procedures (if any). At the same time, we should provide the users with more information about the requirements of "after-access reporting" and access acknowledgment.

Although the reimbursement is proceeded at the facility level, some general rules for reimbursing the subsidence and travel cost should be clearly defined at the level of the TNA call announcement and in the application form.

Sharing success stories from TNA users and/ or providers on the ATMO-ACCESS website is a way of making access more concrete to new users and show the benefits of access in practice. Several users have started sharing their experiences as reported on the project's website (https://www.atmo-access.eu/meetourusers/). The success story collection has been intensified in the last part of the project. Short videos showcasing users' experiences were produced and can be found on the ATMO-ACCESS website and Youtube channel²⁶.

c) Raising awareness on the variety of access modes

Much more effort should be put into advertising non-physical access to the facilities, instruments, and services by raising awareness of the advantages of such access. The goal of reducing carbon footprint while realizing the project should emphasize the benefits coming through different access modes. We still suggest that even bearing in mind that physical access to facilities and instruments (experimental activities, testing and validation of quality/standards compliance of both the apparatus and processes) will always remain the most popular access mode. On the other hand, in the case of remote access, where the economic or ecological footprint arguments may seem to the users to be practically invalid (except for the instrument calibration and simple testing), communication of the benefits of this form of access is difficult. However, it is still beneficial, specifically if the user's remote access is required later on to take part in conducting the experimental work.

d) Improving calls' text and advertisements contents and forms

To target the dedicated audience (e.g., private sector), the call and advertisements form should be adjusted for the straight delivery of the information. Each target group needs tailored communication channels, strategies, and language applied. Due to sociological studies, even the vocabulary used may influence the reception of the announcements depending on gender (Gaucher et al. 2011) or personality (Haumer et al. 2021).

Writing the announcements and call adverts with feminine-coded language could improve the number of women applying for a TNA. Gaucher et al. found that gender-coded language impacts women's sense of belonging more than men's. The difference between feminine- and masculine-coded languages relies on the competitiveness and strength of the phrases used. To improve communication, one can make use of various tools such as Gender Decoder27. When engaging with the community, these techniques were employed to ensure effective and inclusive communication. The advantages of remote/hybrid access for better work/life balance were also stressed. Additionally, during the collection of success story videos, a conscious effort was made to achieve a good gender balance, resulting in 8 out of 16 stories featuring women, thereby providing sufficient representation and promoting inclusivity.

²⁶ Official ATMO-ACCESS YouTube channel - https://www.youtube.com/@ATMOACCESS/playlists

²⁷ Gender Decoder - an online tool for checking the gender-code language used: https://gender-decoder.katmatfield.com/

4.3 Improving the outreach to the right audience

Historically, the best communication channel regarding information about TNA opportunities is through suggestions from a colleague/acquaintance or directly invited by service providers to answer the application calls. These "informal" channels and contacts in arranging access are important ones. However, it shows that more should be done at the level of official communication channels related to each RI or ATMO-ACCESS project alone, as these are the only channels allowing for attracting new users and therefore increasing the user base. What could be done is to improve the website design to be more eye-catching and intuitive. It might be a good idea to implement a kind of advertising bar containing attention-grabbing pictures of facilities engaged in the project and a pop-up question about subscribing to the newsletter on the official ATMO-ACCESS website. For time management and better/proper advertising of the calls, a public list of the topics for future/intended calls within ATMO-ACCESS, including the target audience, is being finalized and will be beneficial for both providers and users.

It is specifically challenging to find ways of attracting non-traditional users to the services offered within the TNA programs. Traditional users are scientists (mid-career and experienced) who originate from research-performing organizations (typically Universities or Research Institutes). The largest group of non-traditional users would be scientists in the early-stage career and students, who often cannot alone find the TNA opportunity, nor define what and how they would like to use the TNA. Therefore, it may be a good idea to test TNA calls that are provider-defined and to seek for best students and early-stage career scientists to join such predefined TNAs. Additionally, the new trends observed in social media could be hired for such actions, e.g. posting short movies and eye-catching pictures, setting up a broadcasting channel, which would disseminate the success stories of historical users, and publishing as an interview or a podcast. In this activity, we could also put more effort into enhancing the female scientist's success to motivate other women to apply for a TNA.

While using social media for promotional and information purposes about the project and access opportunities offered, one should try to use the various potential and diversity in which the portals offer information sharing. Portals offer different forms of communication, the good use of which plays a key role in promoting and informing about the project. The collected information about possible use of different social media channels, combined with the age group of predicted recipients, is provided in Table 2.

It is equally hard to reach private sector users since companies do not see the benefits of using TNAs. They do not understand the message behind TNAs, which (for them) seem to be a time-consuming and heavy-effort activity. To attract this audience, channels such as LinkedIn or X would be crucial for the dissemination of the specific calls and adverts of the project. Another solution is to set up an advertising booth in trade markets or invite companies' representatives

to join technical or scientific conferences. Good practice shows that direct meetings with representatives of the private sector combined with word-of-mouth from expert scientists would persuade them more than online adverts.

	Performance	D - 6''4'	1400	Mac	MEO	T
	Indicator	Definition	M20	M36	M50	Target
	Number of					assessed year-
	pages views					to-year
	on ATMO-	Measure of				target 10000 at
	ACCESS	visibility and		7630 unique	11520 unique	the end of
	website	web presence	3046	page views	page views	project
		Measure of		Average time		
	Time spent in	relevance of		spent on		
	exploring the	information		pages of 2	Average time	
	ATMO-	displayed on	2 minutes 40	minutes 58	spent on pages of	
	ACCESS pages	the website	sec	sec	2 minutes 49 sec	
					Twitter/X: 750	
			Twitter/X: 441		Bluesky (launched	assessed year-
				Twitter/X: 728	Nov 2024): 181	to-year
						target for
			LinkedIn:72			Twitter/X 1000
	Number of	Measure of		LinkedIn: 263	LinkedIn: 688	target for
	followers on	visibility in	Instagram:			LinkedIn 300
	social media	social media	NA	Instagram: 76	Instagram: 107	target 100
			Twitter:	Twitter:	Twitter: n/a as	
			Average of	Average of	analytics aren't	
			2009	4763	available any	
	Number of		impressions	impressions	longer	
	impressions		per tweet	per tweet		
	on ATMO-				Linkedin: 834 per	assessed year-
	ACCESS		Linkedin: 150	Linkedin: 716	post	to-year
	related		per post	per post		target for
		Measure of				twitter 8000
	LinkedIn	_	Instagram:	Instagram:		target for
	posts	social media	non available	non available	available	Linkedin: 300
		Measure of				increase of 5%
		visibility		Number of	200 flyers and 200	each year
		during events		flyers	business cards	target for
Visibil	ATMO-	and		distributed:	2 small table roll	distribution:
ity	ACCESS flyer	conferences	n/a	200	ups	800

			Numbers of	Numbers of		
		number of	recipients:	recipients:	Numbers of	
		people	Community:	Community:	recipients:	
		registered in:	167	198	Community: 197	target for
A	ATMO-	community	associated	associated	associated	outreach: 300
A	ACCESS	associated	partners: 19	partners: 19	partners: 21	users in project
r	mailing lists	partners	new call: 0	new call: 65	new call: 119	mailing lists

Another specific target group is policymakers and research infrastructure founders, who might not be experts in atmospheric science, so the TNA calls need to be specifically formulated for them. A good channel for advertising the calls is X (Twitter) which is popular in the public authorities community. For this target group, direct meetings combined with presenting the measuring stations (even on national level) improve their understanding of the (not only) scientific purposes of the TNA. For a better engagement of policymakers, the TNA providers could/should be obligated to organize such informing meetings.

Regardless of the specific target group, a fundamental component of the overall communication strategy is the design and content of the project's website. It should be clear, user-friendly, and accessible, even to individuals who are not experts in the atmospheric sciences domain. This can be achieved by minimizing technical jargon, avoiding overly complex English, and adopting a popular-science, easy-to-understand communication style, thereby ensuring that key messages are comprehensible to a wider audience. Additionally, the use of a tailored glossary—such as the above-mentioned feminine-coded language— can further enhance clarity and engagement.

Besides it is recommended that all recurring or significant questions raised during the project be compiled in a dedicated <u>Q&A section</u>. This section is regularly updated, as new issues or inquiries can arise throughout the course of the project.

According to MS10.4 of ACTRIS IMP, three recommendations were given for improving stakeholder engagements in ACTRIS: First recommendation: *Implement best practices for engagement via Best Practices* (Build the foundation, Led by example, Tailor unique messages, Build an engagement network). Second recommendation: *Evaluate the success of engagement activities*. Third recommendation: *Incorporate retention strategies*. All of them are used within the ATMO-ACCESS.

4.4 Performance measures

Specific Key Performance Indicators (KPIs) related to communication and dissemination activities will be used to assess the effectiveness of the communication measures. They have been built in collaboration with communication offices of the 3 RIs involved in the project and have been assessed periodically throughout the project.

^{*}Mind that Bluesky is a mirror of X, thus the given numbers can be regarded as the same audience.

Specific indicators on access were also developed to assess the effectiveness of the communication strategy. They are summarised in the table below.

Category	Performance Indicator	Definition	M20	M36	M50	Target (from GA)
	Number of services requested by users	Measure of user demand	120 projects submitted across 3 calls for access	339 projects submitted over 10 calls for access	426 projects submitted over 13 calls for access	850
	Number of users requesting access	Measure of user demand	340 users across 3 calls for access	950 users across 10 calls for access	1243 across 13 calls for access	1748
Access statistics	Origin of users	Measure of the origin of users per country	Users originate from 28 countries	Users originate from 35 countries	Users originate from 41 countries	35
Satisfaction	Level of users' satisfaction of access process and interactions	Measure of users satisfaction: not satisfied (1), slightly satisfied (2), moderately satisfied (3), very satisfied (4), extremely satisfied (5)	n/a (very few users completed the survey)	4,2 out of 5 satisfaction rate on the access process, 4,5 out of 5 on the service received	4,33 out of 5 satisfaction rate on the access process, 4,66 out of 5 on the service received	4,5/5

To evaluate whether access provision meets its objectives across short-, intermediate-, and long-term horizons, a set of strategic performance indicators is recommended. These metrics measure the impact of the project on communication, outreach, research, innovation, technology, and training, guiding ongoing improvements and strategic decisions. The framework is further refined in Deliverable 2.4 ²⁸, which analyses the success of the communication strategies. Below we give a short description of each impact group.

Communication impact is assessed by quantitative metrics including the increase in communication activities (dissemination capacity), citations of ATMO-ACCESS-related publications (scientific audience growth), and media communications (public visibility). **Outreach impact** is measured by growth in user requests, services provided, and the diversity and number of users served, reflecting expansion of the user community and service capacity. **Research impact** includes the number of users from atmospheric sciences and other disciplines (cross-disciplinary engagement), new services offered (adaptability), citations of

²⁸ <u>ATMO-ACCESS D2.4</u>: Report on success of the communications actions based on strategies implemented for the pilot access calls, including recommendations and best practices

ACTRIS-related publications, and peer-reviewed papers resulting from service use. **Innovation impact** focuses on attracting users from the private sector, indicating potential for industrial collaboration and technology transfer. **Technology impact** is evaluated qualitatively through improvements in measurement quality, using a standardized scale from very low to very high. **Training impact** is measured by increases in young users, early career scientists, and new users from underrepresented regions, highlighting expanded training reach and inclusivity.

5. Way forward

The following recommendations are made for future improvements in access communication strategies. It should be clearly communicated both to the users and providers that:

- ✓ for access applications, a mix of physical and remote access with expected direct handson user engagement is recommended.
- ✓ potential users of the access must be very well informed on the benefits they get with each access type —economic, ecological, time-saving, etc.
- ✓ a minimized and simplified application process has been developed, especially regarding the access pathway related to the calibration of instruments;
- ✓ all contributions to the published results (i.e., articles, letters, conference presentations, and posters) need to be acknowledged;
- ✓ feedback forms are required to be filled in to improve the future TNA application and realization procedures;
- ✓ taking photographs during the physical access is warmly welcome, especially from the point of view of the future success story creation;
- ✓ TNA providers are required to advertise the project, particularly the open calls, through their website or social media channels, using either original or shared posts from ATMO-ACCESS;
- ✓ users are expected to be part of a comprehensive User-Database that will help to advertise the access opportunities within and outside Europe;
- ✓ short story-telling video and/or interviews (written or recorded for the podcast) to be published for advertising on TNA on social media should follow up on the granted applications;
- ✓ asking people/institutions/companies to use the created hashtags (e.g., #atmoaccess, #tna, etc.) and project visual identity in their social media accounts for cross-advertising;

The final recommendation is to use the already existing activities of the Communication Offices of the three pilot RIs as a primary strategy and to develop joint communication action with them. Secondly, it is necessary to define, as much as possible, the activities to be communicated. Thirdly, it is important to remain flexible and grant Communication Offices some freedom for fast reactions and a change of strategy from call-to-call, to fit with the different topics.

6. Conclusions

A properly developed communication strategy can highly boost access to research

infrastructure services. This communication must address the potential user demands, the optimal service provision, and the clear after-access user-related and provider-related actions.

To monitor and optimize the success of the communication strategy of access, the periodical analysis of user content (with access and service providers) should be done. The user feedback is systematically collected after TA or VA completion and corrective measures are taken when necessary either on access process or dissemination strategies.

There is a need to better communicate to the users the value of the service they are offered (in scientific, technical, and monetary terms). Secondly, they should be aware that the new TNAs schemes are framed simply and clearly to facilitate the expected application, reporting, and advertising of access. This could be pursued using official communication channels.

Official communication channels need to be strengthened and tailored to the up-to-date structure to attract new users (e.g. the modeling community for virtual access) from and outside Europe and increase the ATMO-ACCESS user base.

The transnational physical, remote and virtual access is seen by users as a necessary tool for scientific and technical developments, hence it is essential to research infrastructures. While, in the meantime, the interest in using the combined and mixed access seems to increase significantly.

The TNA programmes obviously contribute much less efficiently to support scientific careers in developing countries, as the access support to subsidence and travel cost is highly limited in ATMO-ACCESS. Still, it has strong potential to strengthen academic and scientific collaborations across Europe and outside its borders.

7. References

- 1. ATMO-ACCESS Deliverable 2.2 (<u>Deliverables and Milestones ATMO-ACCESS</u>)
- 2. ATMO-ACCESS Deliverable 2.3 (Deliverables and Milestones ATMO-ACCESS)
- 3. ATMO-ACCESS Deliverable 2.4 (Deliverables and Milestones ATMO-ACCESS)
- 4. ATMO-ACCESS Milestone 8 (Evaluation of and recommendations for optimizing the strategies implemented for the pilot access calls)
- 5. ACTRIS IMP Milestone 10.4 (<u>ACTRIS IMP_WP10_MS59_Analysis of the best practices to engage ACTRIS user groups</u>)
- 6. ENVRI-FAIR Deliverable 2.1 (https://envri.eu/wp-content/uploads/2019/10/ENVRI-FAIR_D_2-1_Dissemination-strategy.pdf)
- 7. RI-Urbans Milestone M35 (M5.7., https://riurbans.eu/wp-content/uploads/2023/03/RI-

URBANS_M35.pdf)

- 8. Gaucher, D., Friesen, J., and Kay, A. C., (2011), Evidence that gendered wording in job advertisements exists and sustains gender inequality, Journal of Personality and Societal Psychology, Vol. 101, No. 1, 109-128, DOI: 10.1037/a0022530
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- 10. Gender Decoder an online tool for checking the gender-code language used: https://gender-decoder.katmatfield.com/
- 11. Social Media Demographics to Inform Your 2024 Strategy, last access 04/03/2024
- 12. Social Media Use in 2021 | Pew Research Center, last access 04/03/2024
- 13. Social Media Demographics: The Definitive Guide in 2024, last access 04/03/2024

8. List of acronyms

- ACTRIS Aerosol Clouds and Trace Gases Research Infrastructure
- AGORA Andalusian Global ObseRvatory of the Atmosphere, Granada, Spain
- ECI Early career investigator, including PhD students
- Edu4Climate consortium working towards the establishment of a European Higher Education Institutions Network for Climate and Atmospheric Sciences
- EGU European Geosciences Union
- ENRIITC European Network of Research Infrastructures & Industry for Collaboration
- ENVRI-FAIR the connection of the Cluster of Environmental Research Infrastructures (ENVRI) to the European Open Science Cloud (EOSC)
- ESA European Space Agency
- EUMETSAT European Organisation for the Exploitation of Meteorological Satellites
- IAGOS In-Service Aircraft for a Global Observing System
- ICOS Integrated Carbon Observation System
- IRISCC Integrated Research Infrastructure Services for Climate Change risks
- KPI Key Performance Indicator
- MOOC Massive Open Online course
- NAOK National Atmospheric Observatory Košetice, Košetice, Czech Republic
- PI Principal Investigator
- RI Research Infrastructure
- SME Small and Medium Entreprises
- SP Strategic Pillar
- TNA Trans-National Access
- VA Virtual Access
- WP Work Package

Appendix A: Communication material created to promote ATMO-ACCESS (up to M36)

Flyer



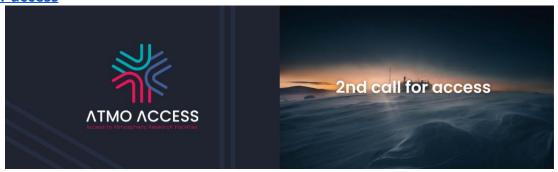
Calls announcements

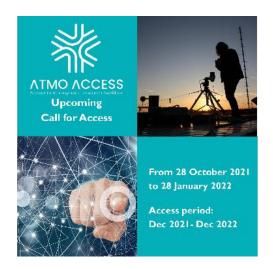


1st call for access



2nd call for access





3rd call for access







4th call for access



5th call for access



6th call for access



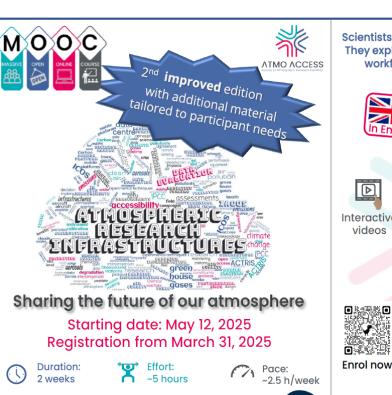
Private sector access call



7th Call for Access



Massive open online course (MOOC)



Scientists depict the issues of air pollution & climate change. They explain the importance of atmospheric research & the workflow of three key Research Infrastructures (RIs): **ACTRIS, IAGOS & ICOS**



Summaries



Easy & quick learning with:









Interviews























Air pollution & climate change are two critical atmospheric issues that have become global concerns. In this MOOC, scientists will explain their complex interconnections, highlight the importance of atmospheric research, & outline the workflow of atmospheric Research Infrastructures (RIs).

Enrol to discover how three RIs, ACTRIS, IAGOS & ICOS, take care of the future of our atmosphere



Course from May 12 to June 8, 2025 Registration from March 31, 2025 Commitment of about 2.5 hours/week



By the end of the course, you will be able to:

- assess the role & interest of atmospheric research
 - describe different means of monitoring the atmosphere
 - summarise the goals & framework of the 3 RIs
 - explain the workflow of an atmospheric RI
 - access & process the 3 RIs data on your own





Prerequisites

Undergraduate level in science Basic level in general chemistry

MOOC plan

Week 1: Air Pollution (AP) & Climate Change (CC), what is happening in our atmosphere & what should we do?

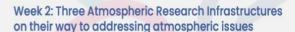
Part 1: Air pollution vs Climate change

Part 2: Aerosols & Clouds

Part 3: Trace gases & Greenhouse gases

Part 4: Atmospheric Research Infrastructures

Part 5: In-depth Questions & Answers on AP & CC



Part 1: ACTRIS (Aerosol, Clouds & Trace Gases Research Infrastructure)

Part 2: IAGOS (In-service Aircraft for a Global Observing System)

Part 3: ICOS (Integrated Carbon Observation System)

Part 4: The workflow & benefits of a coordinated approach

Part 5: MEET the Atmospheric Simulation Chambers

To go further: How to access & process the RIs data



www.atmo-access.eu/massiveopen-online-course-mooc/



Training at NAOK call





Virtual access announcements



Appendix B: Events where ATMO-ACCESS opportunities were disseminated (up to M51)

Event title	Date	Location
European Geosciences Union (EGU) General Assembly 2021	19–30 April 2021	Virtual
Workshop on innovation in atmospheric sciences	18 May 2021	Virtual
ENVRI-FAIR WP8: Atmospheric Workshop	22 Jun 2021	Virtual
ACTRIS Week 2021	27-29 Oct 2021	Virtual
IAGOS General Assembly 2021	19 Nov 2021	Virtual
ESA ATMOS 2021	22-26 Nov 2021	Virtual
ENVRI week 2022	31 Jan – 4 Feb 2022	Virtual
ACTRIS IMP Spring meeting	20-21 Apr 2022	Virtual
ACTRIS 1st Science Conference	11-13 May 2022	Virtual
European Geosciences Union (EGU) General Assembly 2022	23-27 May 2022	Vienna, Austria / hybrid
6th EAI International Conference on Future Access Enablers of ubiquitous and Intelligent Infrastructures	4 May 2022	Croatia / hybrid
Workshop on innovation in atmospheric measurement techniques	2 Jun 2022	Virtual

Conference on Industrial Technologies IndTech2022	27-29 Jun 2022	Grenoble France
IAC 2022: 11th International Aerosol Conference	4-9 Sept 2022	Athens / hybrid
IAGOS Annual Workshop	Sept 2022	Toulouse
ICOS Science Conference	13-15 Sept 2022	Netherlands / hybrid
ICRI 2022 (International Conference on Research Infrastructures)	19-21 Oct 2022	Czech Republic
-		·
RI-URBANS 1st Science Meeting	19-20 Oct 2022	Spain
ACTRIS Week 2022	24-27 Oct 2022	Prague / online
Workshop on Remote Access	7 Dec 2022	online
ENVRI Week	30 jan-2 Feb 2023	Leipzig / online
RI-URBANS POLISH STAKEHOLDERS MEETING	23 Feb 2023	Warsaw /online
NOSA symposium 2023	13-15/03/2023	Oslo / online
ICLEI Meeting	16 Mar 2023	Online
ATMO-ACCES Annual Meeting	29-31 Mar 2023	Valencia, Spain
EGU 2023	23-28 Apr 2023	Vienna / online
eRImote Workshop Governance, Policy, Funding, and Impact	26 April 2023	London
3rd Workshop on "Innovation in Atmospheric Measurement Techniques"	8 June 2023	Online
European Aerosol Science Conference 2023	2-8 Sept 2023	Malaga
European Lidar Conference (ELC)	13-15 Sept 2023	Cluj, Romania
EOSC Conference	20-22 Sept 2023	Madrid / online
RI-URBANS 2nd Science Meeting	18-19 Oct 2023	Delft
ACTRIS Week 2023	24-27 Oct 2023	Heraklion / online

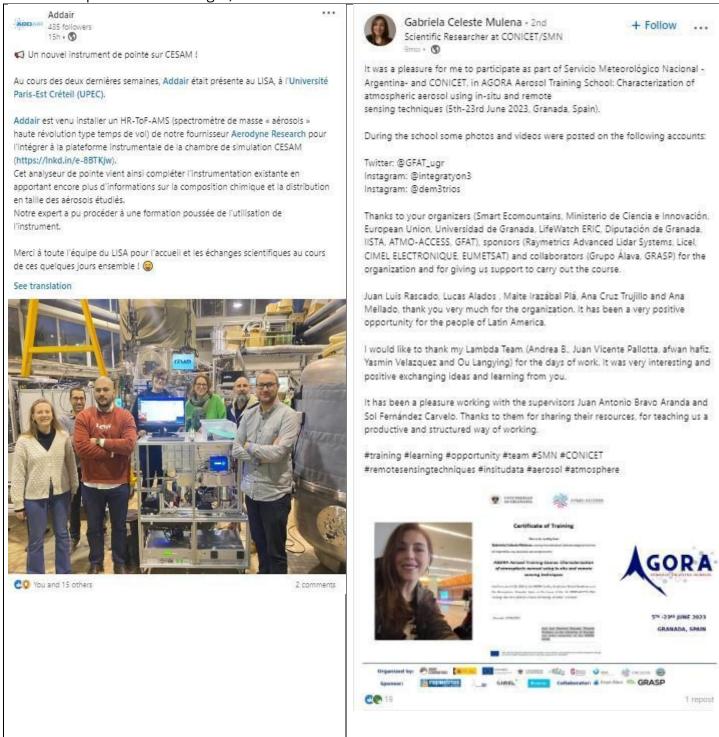
Svalbard Science Conf	31 Oct-1Nov 2023	onsite
ESA-JAXA Pre-Launch EarthCARE Science and Validation Workshop	13-17 Nov 2023	Frascati (Rome), Italy
IAGOS User meeting	14-16 Nov 2023	Brussels
ICOS Nordic symposium 2023	22-23 Nov 2023	Bergen, Norway / online
ATMO-ACCESS Annual Meeting	19-22 Mar 2024	Wuppertal, Germany / online
ACTRIS Science Conference 2024	May 13-16, 2024	Rennes, France
International Laser Radar Conference (ILRC)	23-28 Jun 2024	Landshut, Germany
<u>ATMOS 2024 - ESA</u>	1-5 Jul	Bologna, Italy
Quadrennial Ozone Symposium	15-19 Jul	Boulder, USA
EAC Conference 2024	25-30 Aug 2024	Tampere, Finland
ICOS Science Conference	10-12 Sep 2024	Versailles, France
IAGOS is turning 30	19 Sep 2024	Toulouse, France
RI Urbans Science meeting	26-27 Sept 2024	Helsinki, Finland
ACTRIS-FR Workshop	15-18 Oct 2024	Oléron, France
Invited ACTRIS Session Ochrona during "Powietrza w teorii i praktyce"	16-17 Oct 2024	Zakopane, Poland
ACTRIS Week	5-7 Nov 2024	Matera, Italy
8th Sino-French Joint Workshop on Atmospheric Environment	November 6th - 10th, 2024	Bordeaux, France
ICRI 2024	3-5 Dec 2024	Brisbane, Australia

		Washington DC,
<u>AGU</u>	9-13 Dec 2024	USA
DG RTD Workshop on RI Access Models	30 Jan 2024	online
MI-TRAP Kick off meeting	6-7 Feb 2024	Athens
ITINERIS - ACTRIS Access Opportunities Workshop	19 Feb 2025	Online
	10-12 March	
workshop "Bioaerosols: Impacts on Health and Climate"	2025	Lyon, France
	'	Geneva
	31 Mar – 2 Apr	Switzerland /
ATMO-ACCESS Annual Meeting	2025	online
	27 Apr – 2 May	
<u>EGU 2025</u>	2025	Vienna, Austria
5th edition of the European Lidar Conference	10-12 Sep 2025	Warsaw, Poland
	31 Aug – 5 Sep	
EAC Conference 2025	2025	Lecce, Italy

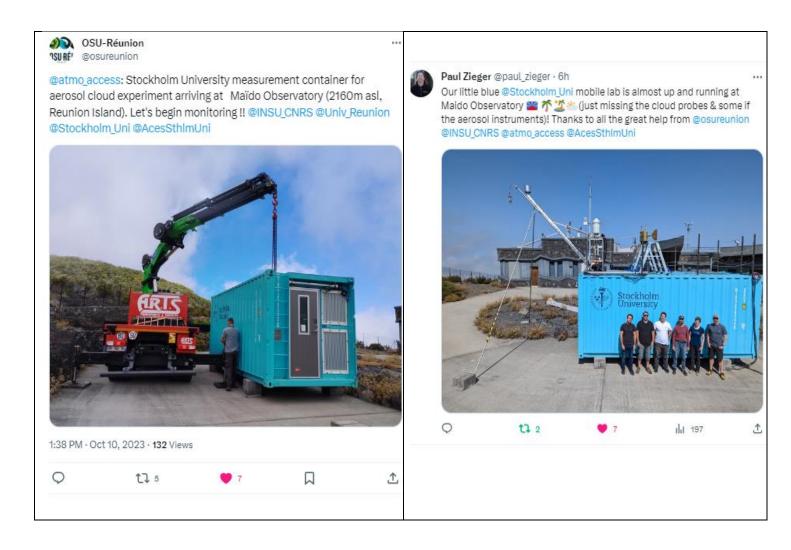
Appendix C: Examples of the use of social media to communicate on access

Below are listed several examples of sharing experiences on access on social media.

- LinkedIn posts from one company (Addair on the left) and one user (on AGORA training experience on the right):



- X / Twitter (insights on the same TNA. Access provider on the left side, user on the right):



Facebook (insights on the two different TNAs, post from access provider, text in Polish):

