| Title | Report on success of the communications actions based on strategies implemented for the pilot access calls, including recommendations and best practices |
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# Introduction

ATMO-ACCESS is the organised response of distributed atmospheric research facilities to develop a pilot model of integrating activities. The project strives to develop a series of recommendations to establish a comprehensive and sustainable framework for access to distributed atmospheric Research Infrastructures (RI), ensuring integrated access to and optimised use of the services they provide. ATMO-ACCESS mobilises extensive resources in the atmospheric RIs communities to engage into harmonising access procedures in relation to policies, financial regulations and conditions for access.

ATMO-ACCESS aims to develop and test innovative modalities of access to facilities and complementary and more advanced services, including digital services, developed as part of cross-RI efforts, largely through a series of open trans-national access (TNA) calls and training events:

- 1st call for access for access period December 2021 - December 2022
- 2nd call for access (specifically in support of the EU Green Deal objectives) for access period starting in October 2022
- Fast track access call continuously open for emergencies from December 2022
- Pilot call for international stakeholders to support Cal/Val of satellite observations starting in April 2023
- 3rd call for access for access period starting in March 2023
- 4th call for access for remote and hybrid trans-national access starting from June 2023
- Agora Aerosol Training Course on 12-17 June 2023
- 5th call for access starting November 2023
- 6th call for multidisciplinary access starting in April 2024
- 7th call for access starting in June 2024
- private sector access call as a continuous open call with access completion by March 2025
- NAOK pilot training on research infrastructures and measurements of air quality, aerosols, greenhouse gases and toxicology on 6 - 10 November 2023
- Autumn School on sensors and drones 11 - 15 November 2024
- Public authorities training webinars on 4 and 22 October 2024

In addition to the above mentioned TNA calls, specific activities towards piloting virtual access services have been developed during the project, which are described in detail in D10.2. and a Massive Open Online Course (MOOC), described in D4.3.

## Scope and objectives

This report is produced as part of Work Package (WP) 2: The aim of WP2 is to enhance user engagement and awareness and to ensure that the opportunities for physical, virtual and remote access are widely publicised to user communities as a whole, including users in the private sector.

The specific objectives of WP2 are:

- to monitor, throughout the project duration, the expectations, requirements and feedback from user communities using the targeted assessments and surveys and the performance of the pilot access strategy in WP9 and WP10;
- to further raise the awareness of different user groups (e.g. international, private sector, policy-makers, etc.) on opportunities offered within ATMO-ACCESS by a targeted communication, a more efficient use of the existing and the new innovative communication strategies developed within the project, and supporting actions to enhance dissemination of project results.

The goal of this report is to summarise the results of the open access calls, with a focus on the communications actions taken and feedback received, and suggest recommendations for future access projects.

# Target groups and communications actions taken

Engagement of the target audiences 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 uses its own official channels for promoting its messages and opportunities.

Throughout the project realisation, we undertook several activities to improve dissemination and attract new users. The communications strategy of advertising and spreading the information was described in detail in Deliverable 2.2, but the main target groups and key actions taken are summarised below.

**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 were used for enhanced dissemination of the project opportunities and obtained results.

The dissemination strategy for this group was to provide information and resources to them to promote ATMO-ACCESS, its opportunities, and its outcomes. It was done especially during international but also national conferences and events (booths, posters and oral

presentations), through publications in journals, and using their communication channels (website, social media, newsletters, working group meetings).

## Atmospheric research community

ATMO-ACCESS aimed to target the atmospheric research community from Europe and beyond. The dissemination strategy for this audience group was to enhance engagement and raise awareness of the project opportunities. This was mainly achieved through targeted online communication (by emails, social media posts, newsletters, and virtual meetings). Additionally, more effort was invested in promoting the ATMO-ACCESS opportunities 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. We prepared reusable promotional materials (roll-ups, posters) and interactive e-materials (e.g., available via the QR code).

A specific focus on engaging early career scientists, including PhD students was identified. This was realised through training opportunities organised jointly with WP4. For example, the organization of AGORA (in-person training, limited number of participants) and NAOK (training online, unlimited number of participants) training. For the AGORA training, 32 applications were received, while for the NAOK virtual training 137 registered. Some of the participant feedback was later highlighted as success stories. The Massive Open Online Course on Atmospheric research infrastructures attracted 810 registered participants during its first edition in January 2025 and 518 in its second edition in May 2025. WP4 activities have been advertised through social media channels, mailing lists, RIs and community newsletters (for example the GAW and ENVRI Community newsletters).

## Researchers from other scientific fields

ATMO-ACCESS offers opportunities for researchers beyond atmospheric science to conduct cutting-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.

Researchers from other scientific fields were the target group for the 6th ATMO-ACCESS call. 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 IRISCC project, as well as promotions at cross-disciplinary conferences such as the European Geosciences Union (EGU) General Assembly.

## International stakeholders

Fostering international stakeholders' participation in the access calls developed within the project is the objective of task T6.2. The international stakeholders that were targeted were mostly space agencies ie: European Space Agency (ESA) and EUMETSAT.

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 by the consortium and all were accepted for realisation. These pilots led to coordinated calibration and validation activities which were very well perceived by international stakeholders. Additional information about these activities is provided within the Work Package 6 deliverables (D6.2 and D6.5).

**Private sector and industry**

Fostering industry participation in the access calls developed within the project is the objective of task T6.3. The goal of this task was to foster new and customised transnational access modalities that are specifically adapted to innovators in industry.

WP2 supported the objective of the task via specific communication messages and social media posts (notably on LinkedIn) to raise this target group's awareness. Use of existing RIs innovation mailing lists was sought out. Interactions with the ENRIITC consortium – European Network of Research Infrastructures & Industry for Collaboration – were used to disseminate the main messages of the project. The communication strategy for engaging the industry representatives particularly stressed the added value of this project SMEs and the private sector.

Notably, industry and private sector users were identified as particularly interested in remote or virtual access to facilities. Therefore, the fourth call for applications was dedicated to remote and virtual access. Additionally, a specific continuous access call for the private sector was opened until the end of 2024.

**Funding agencies and policy makers including the 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, the communication actions expressed the importance of atmospheric observations and the project strategy itself.

Actions were developed by WP 3, 7, and 8 with WP2 helping to deliver unified messages.

# Results from the communications actions

The open calls and their application numbers are presented in the table below (Table 1).

**Table 1**. Summary of all the open calls and pilot training opportunities and the number of applications each call received.

| Name of the open call | Number of applications |
|---|---|
| 1st call for access | 75 |
| 2nd call for access (Green Deal) | 41 |
| pilot call for international stakeholders (cal/val) | 3 |
| AGORA Aerosol training course | 32 |
| 3rd call for access | 64 |
| 4th call for access (Remote and Hybrid) | 31 |
| 5th call for access | 51 |
| 6th call for access (multidisciplinary) | 18 |
| 7th call for access | 52 |
| Private sector call | 32 |
| NAOK pilot training on research infrastructures and measurements | 137 registered participants |
| Autumn school on senators and drones | 15 TNA applications |
| Public authorities webinars | 200 registered participants |
| Atmospheric Research Infrastructures MOOC | 810 and 518 registered participants (1st and 2nd edition respectively) |

Looking at the application numbers for the general TNA calls, the 1st Call for Access received the highest number of applications (75), likely due to early momentum and broad eligibility. 2nd Call (Green Deal Focus) had 41 applications, reflecting thematic specificity possibly narrowing the applicant pool. 3rd Call saw a rebound with 64 applications, suggesting sustained interest in core access opportunities. 4th Call (Remote and Hybrid) gathered 31 applications, possibly

impacted by the experimental format or niche technical readiness. 5th Call attracted 51 applications, showing consistent engagement from the research community. 6th Call received only 18 applications, indicating a dip—possibly due to the multidisciplinary goals attracting a narrower audience. 7th and final Call rebounded again with 52 applications, aligning with average levels seen in prior calls.

With regards to the more specialised pilot calls, the Private Sector Call received 32 applications, a strong result for industry-focused access, suggesting private sector interest in atmospheric RI services. On the other hand, the call for International stakeholders specifically for calibration and validation of remote observations saw 3 applications. Taking into account that this call was specifically designed for a small set of international stakeholders from the satellite community, the participation number is notable, indicating good communication to the satellite cal/val sector.

Finally, concerning more training and community activities, the AGORA Aerosol Training Course had 32 applications, showing good demand for technical skill development. The Autumn School yielded 15 TNA applications, a reasonable number considering its more academic or student-focused profile. Impressively, the MOOC on Atmospheric research infrastructures attracted 810 and 518 registered participants in their two editions, suggesting high interest in atmospheric research from the wider community. Lastly, the Public Authorities Webinars drew 200 registered participants, suggesting strong interest from policy or regulatory audiences, even if not applying directly for TNA.

## Website and Social Media reach

**ATMO-ACCESS website and social media channels**

Specific Key Performance Indicators (KPIs) related to communication and dissemination activities have been used to assess the effectiveness of the communication measures. They were built in collaboration with the communication offices of the 3 RIs involved in the project and introduced in the communications plan (D2.2). These are summarised in the table below (Table 2), with the most significant results analysed further in the text.

Table 2. Communications and dissemination key performance indicators

|  | Performance Indicator | Definition | M20 | M36 | M50 (May 2025) | Target |
|---|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| | Number of pages views on the website | Measure of visibility and web presence | 3046 | 7630 unique page views (cumulative) | 11520 unique page views (cumulative) | assessed year-to-year target 10000 at the end of project |
| | Time spent in exploring the website pages | Measure of relevance of information displayed on the website | 2 minutes 40 sec | Average time spent on pages of 2 minutes 58 sec | Average time spent on pages of 2 minutes 49 sec | |
| | Number of followers on social media | Measure of visibility in social media | Twitter/X: 441 LinkedIn:72 Instagram: NA | Twitter/X: 728 LinkedIn: 263 Instagram: 76 | Twitter/X: 750 Bluesky (launched Nov 2024): 181 LinkedIn: 688 Instagram:107 | Twitter/X 1000 Linkedin 300 Instagram 100 |
| | Number of impressions on project social media posts | Measure of visibility in social media | Twitter: Average of 2009 impressions per tweet Linkedin: 150 per post Instagram: non available | Twitter: Average of 4763 impressions per tweet Linkedin: 716 per post Instagram: non available | Twitter: n/a as no longer in use Linkedin: 834 per post Bluesky / Instagram: non available | Twitter 8000 LinkedIn: 300 |
| | flyers | Measure of visibility during events and conferences | n/a | Number of flyers distributed: 200 | 200 flyers and 200 business cards (paperless initiative) | 800 flyers |
| **Visibility** | mailing lists | number of people registered in: community associated partners | Numbers of recipients: Community: 167 associated partners: 19 new call: 0 | Numbers of recipients: Community: 198 associated partners: 19 new call: 65 | Numbers of recipients: Community: 197 associated partners: 21 new call: 119 | Target for outreach: 300 users |

Over the monitored period, the ATMO-ACCESS website has demonstrated steady and significant growth in user engagement. In Month 20, the website recorded a total of 3046 unique page views. This figure increased to 7630 by Month 36 and reached 11520 by Month 50. This represents a 279% increase in unique page views over the duration of the project so far, indicating a growing interest in the project and improved visibility among its target audiences. In addition to increased traffic, the average time spent by users on the website also remained consistently strong (above 2 minutes and 40 seconds per page on average), suggesting that visitors continue to find the website content engaging and relevant.

Social media performance varied across platforms, not least due to changes in social media use throughout the project. For example, despite the ATMO-ACCESS Twitter/X account showing initial growth, increasing from 441 followers in Month 20 to 728 followers by Month 36, the change in the platforms ownership and political landscape at the end of 2024 meant that the project communicators, with support from the project coordination and the participating RIs, decided to move away from X by the end of 2024. An account in BlueSky was created in November 2024 and it has gathered an audience of 181 followers in 7 months.

More significantly, the LinkedIn channel exhibited strong and sustained growth throughout the reporting period. From just 72 followers in Month 20, the number increased to 263 in Month 36 and rose significantly to 688 by Month 50. This represents an overall increase of 855%, making LinkedIn the most dynamic and rapidly growing social media platform for ATMO-ACCESS.

In addition to the follower growth, the number of impressions on LinkedIn posts was monitored over the course of the project. Impressions, defined as the number of times a post is displayed to users, provide a useful measure of the visibility and reach of the project's content on social media.

In Month 20, ATMO-ACCESS LinkedIn posts averaged 150 impressions per post. By Month 36, this figure had increased significantly to 716 impressions per post, indicating a substantial rise in visibility and audience engagement. The upward trend continued through to Month 50, where the average number of impressions per post reached 834. This sustained growth in impressions demonstrates the increasing effectiveness of ATMO-ACCESS's communication strategy on LinkedIn. It reflects both a growing follower base and improved content resonance with the professional audience targeted through the platform.

In summary, the social media data confirms that LinkedIn has become an impactful channel for ATMO-ACCESS communications. The consistent rise in post visibility suggests that the project's messaging is effectively reaching and engaging its intended audiences, contributing to broader awareness and dissemination of project activities and outcomes.

In addition to digital communication metrics, specific performance indicators related to user access were monitored to evaluate the effectiveness of the ATMO-ACCESS communication and dissemination strategy. These access indicators focused on two key measures: the number of service applications submitted during open calls and the total number of users requesting access through those applications (Table 3).

Table 3. User access performance indicators.

| 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 |

By Month 20 of the project, a total of 120 service applications had been submitted in response to three open calls for access. This figure rose significantly to 339 applications across ten open calls by Month 36, demonstrating both growing awareness of the access opportunities provided by ATMO-ACCESS and the increasing reach of the project's communication efforts. By the conclusion of the project in Month 50, a cumulative total of 426 applications had been received across thirteen open calls, indicating continued interest and participation from the user community.

Similarly, the number of individual users requesting access saw consistent growth over the project duration. In the first 20 months, 340 users submitted applications. By Month 36, this number had nearly tripled, with 950 users participating across ten calls. By the end of this reporting period in Month 50, a total of 1243 users had requested access through thirteen open calls. Significantly, these users came from 41 countries suggesting a broad geographical reach of the open access calls.

These figures reflect the growing effectiveness of the ATMO-ACCESS communication strategy in raising awareness of available services and successfully mobilising interest among potential

users. The steady increase in both the volume of applications and the number of users involved demonstrates that the project's dissemination efforts effectively supported its core objective of broadening access to atmospheric research infrastructures.

While they did not reach the targets set in the Grant Agreement (GA), overall, the upward trends in both submitted applications and user participation serve as strong indicators of the communication strategy's success. It's worth noting that the numbers reported in the GA were estimated by each access provider based on the available budget and weren' set centrally. They confirm that the project's messaging and outreach activities effectively reached and interested the target audiences, fostering engagement and enabling widespread utilisation of the services offered.

## Participant feedback

A generic frame for feedback collection was developed in D2.3 Report on the user feedback monitoring strategies targeting mainly TNA and VA activities. However, across the different pilot calls and training opportunities, there was not a unified feedback template. Instead the feedback from the participants was collected in various surveys coordinated by different project partners based on the specific call. For example, some of the pilot activities undertaken in WP4 (Training at AGORA, MOOC, Training at NAOK, Hybrid training at EMPA and CyI), in WP6 (Pilot for international stakeholders, Pilot for public authorities),  and WP9 (call for fast track access) used different feedback collection forms than the one used in the open calls coordinated through the PASS system. This is due to the specific nature of those pilots. Unfortunately, this meant that most of the feedback gathered by other WPs did not include questions about the communications actions taken. This was an oversight on our side and we have proposed suggestions on how to improve that in future access projects in the recommendations chapter further in this report.

Nevertheless, the results below are a summary of the feedback on communications actions taken. They may not include all calls or users, but hopefully provide a snapshot on how successful the communications and outreach activities have been.

**Trans-National Access call feedback**

The main tool for gathering feedback from the users was a post-TNA survey sent to the successful participants of the open calls through the PASS platform. The feedback form was part of the post-access documentation requirements. The survey included questions on communications activity such as ease of application, but also specific questions about the facilities visited. For the purpose of this report, we have focused on the results from the

questions related to the communications activities. The full evaluation of user feedback has been carried out in WP 9, and will be included in the final project report.

The average communications activity scores from the PASS user survey are summarised in table 5 and figures 1-5.

Table 5. User feedback for the communications activities measures as average score out of 5.

| Call Group | Number of replies | Publicity, and information about the access (average score out of 5) | Practical information provided on how to apply (documentation, FAQs, etc.) (average score out of 5) | Application form (length, information required, easiness) (average score out of 5) | Interaction with and support by the TNA Team (average score out of 5) | The overall service provided by the ATMO-ACCESS TNA (average score out of 5) |
|---|---|---|---|---|---|---|
| 1st Call | 36 | 4,22 | 4,25 | 4,28 | 4,64 | 4,69 |
| 2nd Call | 14 | 4,14 | 4,07 | 3,86 | 4,50 | 4,57 |
| 3rd Call | 32 | 4,09 | 4,47 | 4,22 | 4,53 | 4,69 |
| 4th Call | 13 | 4,23 | 4,69 | 4,38 | 4,62 | 4,85 |
| 5th Call | 28 | 3,93 | 4,07 | 3,82 | 4,50 | 4,57 |
| 6th Call | 5 | 3,60 | 3,80 | 4,00 | 3,80 | 4,60 |
| 7th Call | 23 | 4,17 | 4,43 | 4,35 | 4,70 | 4,78 |
| Private Sector | 10 | 4,10 | 4,70 | 3,90 | 4,70 | 4,50 |

Across all evaluated TNA calls, including the 1st to 7th open calls, and the private sector call, feedback from the users who had submitted the form indicates a consistently high level of satisfaction with the ATMO-ACCESS programme. There were no significant differences in the user satisfaction scores across the different calls, however it is worth noting that the scores from the 6th call are a little lower than the others. It only includes replies from 5 users, and could be due to the nature of the call (multidisciplinary) attracting external users who were not familiar with these types of access calls in atmospheric research.
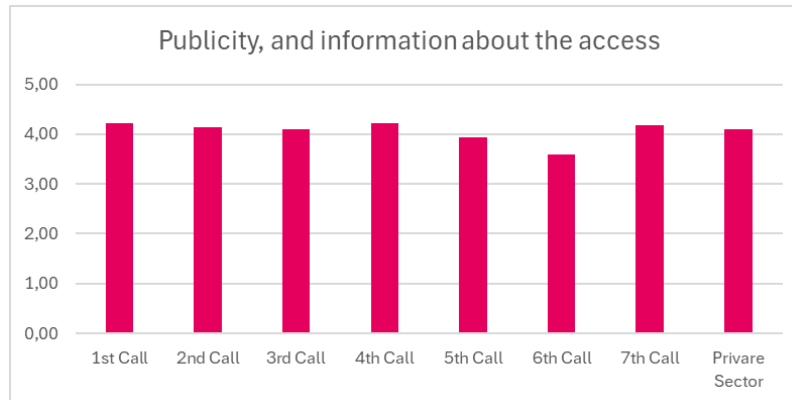
Figure 1. User feedback about the access call publicity
and information provided (average score out of 5)

Respondents rated the publicity and initial information about the access opportunities at an average of 4.06 out of 5, indicating generally effective outreach and visibility, though suggesting room for continued improvement in reach and clarity (Figure 1).
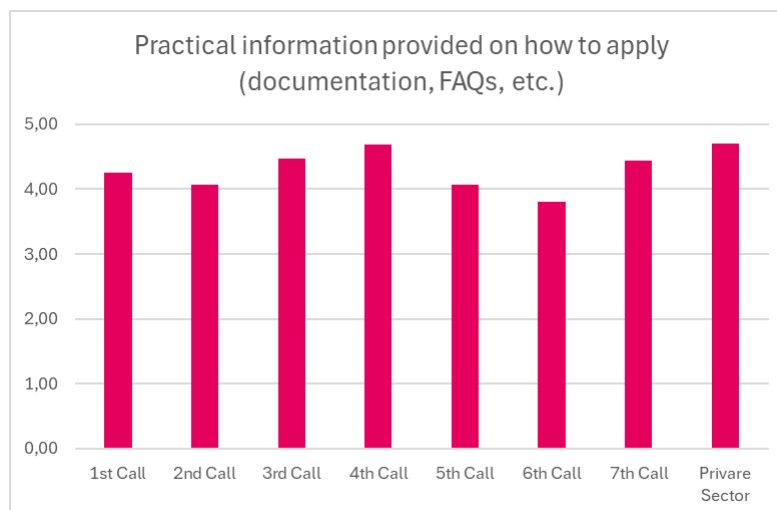


Figure 2. User feedback about the practical information
provided on how to apply (average score out of 5)

The practical information provided on how to apply, including documentation and FAQs, was rated higher, with an average score of 4.31, reflecting users' appreciation for the clarity and usefulness of the support materials provided (Figure 2).
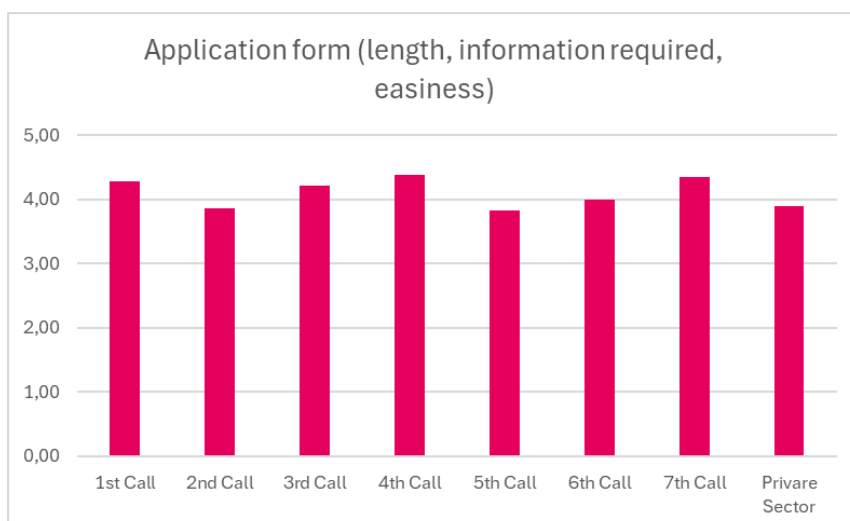
Figure 3. User feedback on the usability of the application
form (average score out of 5)

The application form itself scored an average of 4.10, showing it was generally well-received in terms of structure and usability, though continued simplification and user testing could enhance accessibility further, especially for first-time applicants (Figure 3).
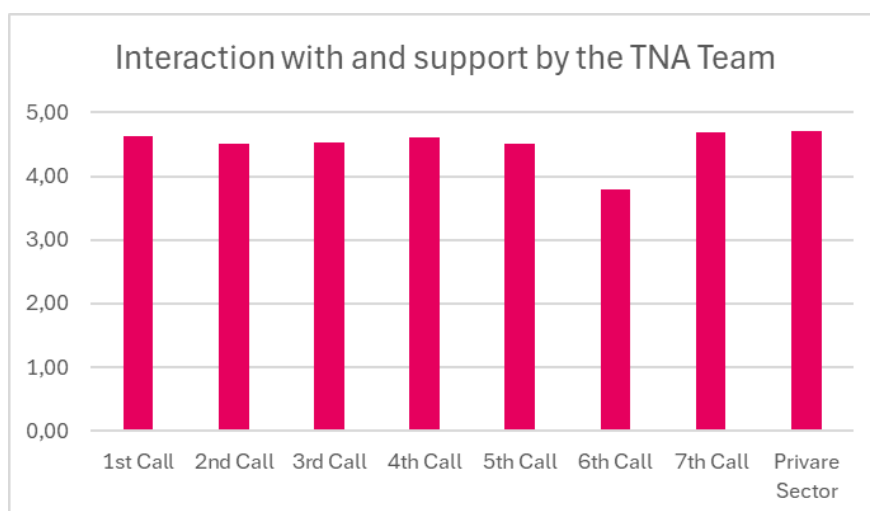


Figure 4. User feedback on the communications and support provided
by the TNA team (average score out of 5)

Interaction with and support from the TNA team was among the highest-rated aspects, with an average of 4.50 (Figure 4). This underscores the strong value users place on personal communication, guidance, and responsiveness throughout the process.
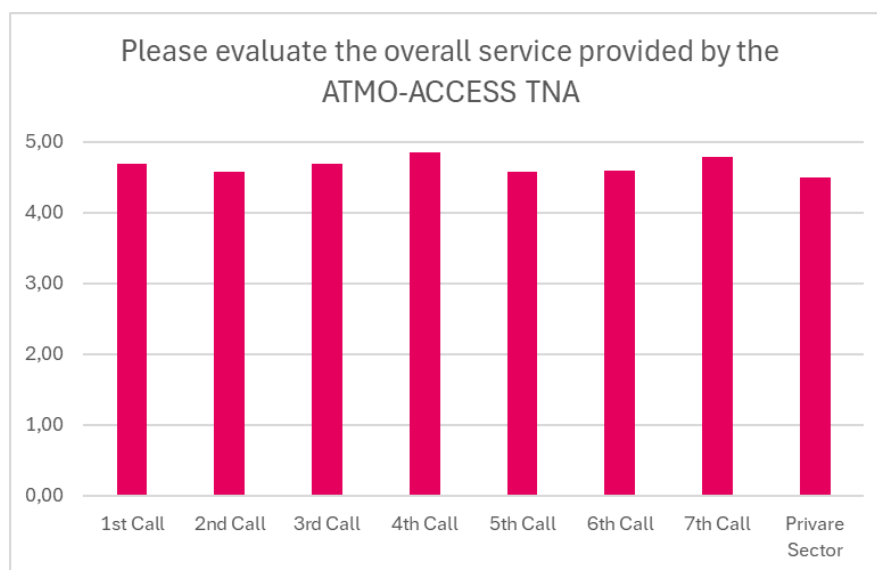
Figure 5. User feedback on the overall service provided by the project

Finally, the overall service provided by ATMO-ACCESS received an impressive average rating of 4.66, confirming a high level of satisfaction and trust in the programme across the full spectrum of users, including those from the private sector (Figure 5).

**How users heard about the open calls and training opportunities**

To assess the effectiveness of ATMO-ACCESS outreach efforts, two feedback surveys included questions about the user engagement, the aforementioned post-TNA survey and a survey that was sent to the attendees of the public authorities training webinars. The responses provide insight into which outreach methods were most successful and are presented below (Figures 6 and 7).

The results from the post-TNA survey are summarised in Figure 6 and show that the most common source of information was through colleagues or personal contacts, with 127 respondents selecting this option. Throughout the project we have demonstrated the key role access providers play in disseminating the access opportunities within their networks. This highlights the critical role of peer networks and informal communication within the scientific community in raising awareness about access opportunities.

How did you first find out about the possibilities of access supported within the ATMO-ACCESS project?
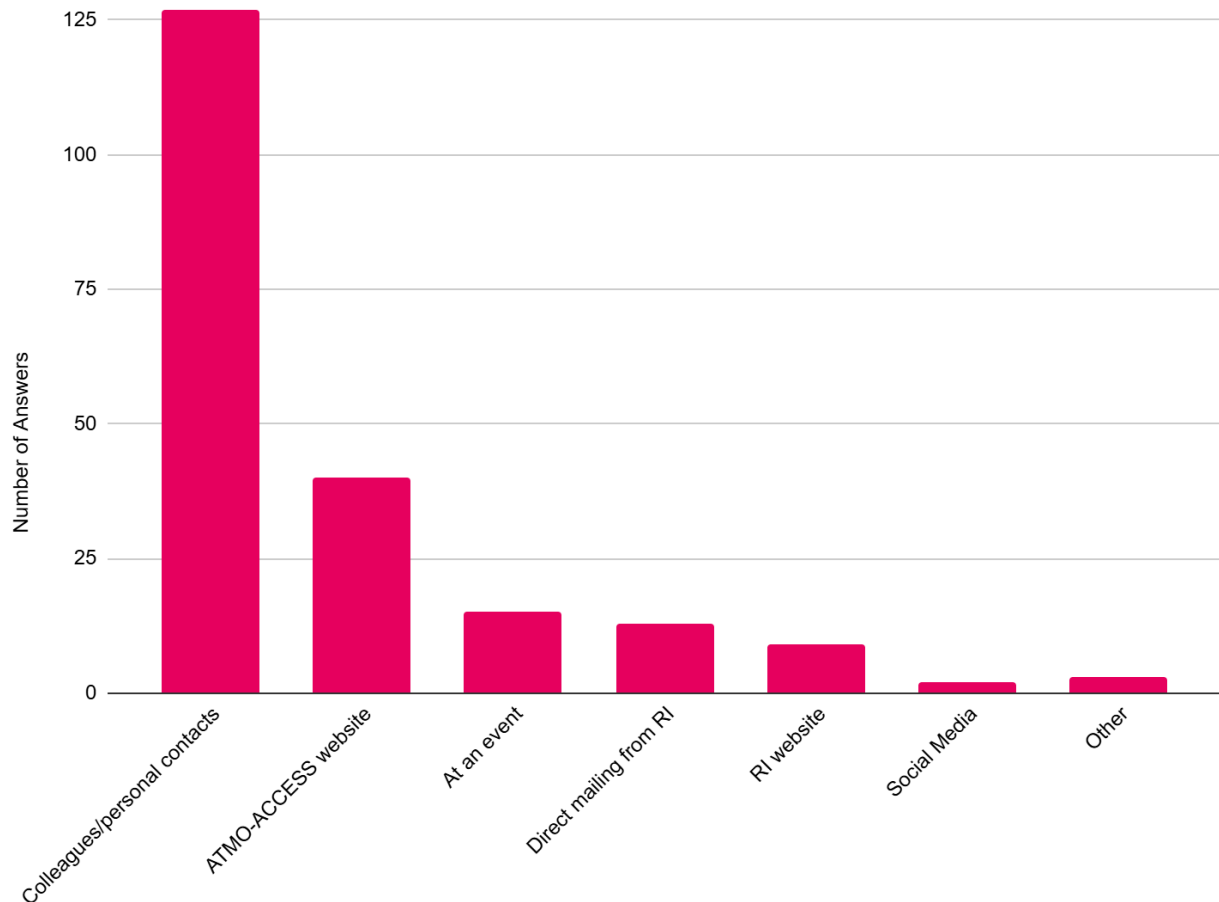


Figure 6. User feedback on how they learned about the ATMO ACCESS opportunities from the TNA feedback form.

The ATMO-ACCESS website was the second most frequently cited source, with 40 responses. This indicates that the website served as a key informational hub and played an important role in direct outreach to potential users. Fewer respondents learned about access through events (15), direct emails from Research Infrastructures (13), and Research Infrastructure websites (9). While these channels had a smaller individual impact, they still contributed meaningfully to the overall awareness effort. Social media was cited by only 2 respondents, suggesting limited influence among this user group.

With regards to the feedback from the public authorities training webinars, figure 7 shows that the most common source was colleagues or personal contacts, cited by 76 participants. This

underscores the strength of professional networks and word-of-mouth in reaching target audiences. Social media was the second most frequent source, mentioned by 49 respondents, highlighting the growing role of platforms like LinkedIn in promoting engagement. Direct emails from Research Infrastructures were also effective, with 46 participants indicating they learned about the webinars this way. This shows the value of targeted institutional communication. The ATMO-ACCESS website was noted by 27 participants, suggesting it served as a useful supporting channel for information. Fewer participants learned about the opportunity via Research Infrastructure websites (8 responses) or event announcements (4 responses), though these still contributed to the overall outreach effort.
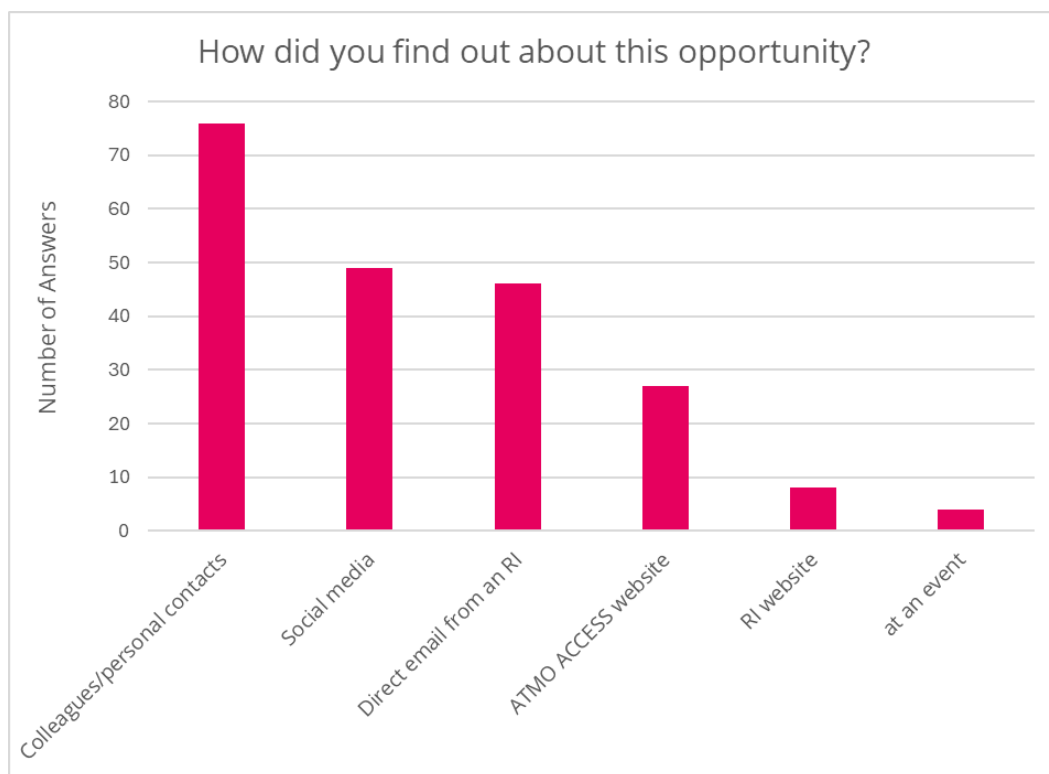


Figure 7. User feedback on how they learned about the public authorities training webinars.

In summary, the data shows that interpersonal connections, the ATMO-ACCESS website and social media were the most effective outreach tools for informing potential users about access opportunities. While formal communication channels such as email and institutional websites played a supporting role. These findings reinforce the importance of multi-channel communication strategies that balance relational, digital, and institutional outreach.

**Additional feedback on ATMO-ACCESS communication and application process**

In addition to the feedback described above, we felt that gathering more specific feedback on the communications actions would gather more insights. A targeted survey was conducted in

May 2025 to assess user experiences with the communication and application process for access calls. Respondents were asked to rate the clarity and accessibility of information, as well as the overall ease of applying. The survey was sent through the PASS system to the database from the post-TNA surveys, therefore it was not sent out to all users, but we did receive a small sample of 31 responses which are summarised below (Figures 8-11).
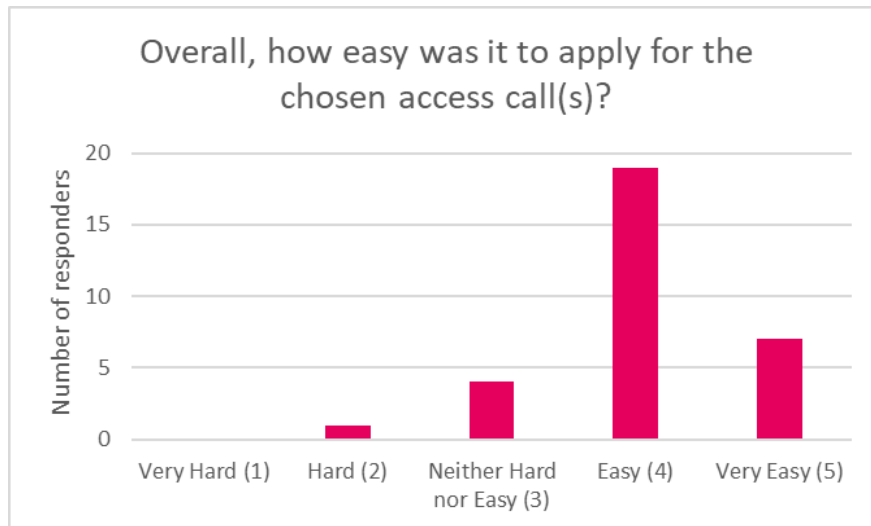


Figure 8. User feedback on the ease of application process

When asked how easy it was to apply for the chosen access call(s), the majority of respondents reported a positive experience (Figure 8). Specifically, 19 users rated the process as "Easy" and 7 as "Very Easy", with only one respondent finding it "Hard" and none reporting it as "Very Hard". This indicates that the application process was generally well-structured and user-friendly.

Regarding ease of finding information on the ATMO-ACCESS website, feedback was similarly positive (Figure 9). A total of 23 respondents rated the experience as either "Easy" or "Very Easy", compared to only one who found it "Hard" and none who found it "Very Hard". Seven respondents rated the experience as neutral. These results suggest that the website was effective in providing access to relevant information, although there remains room for improving clarity or navigation.
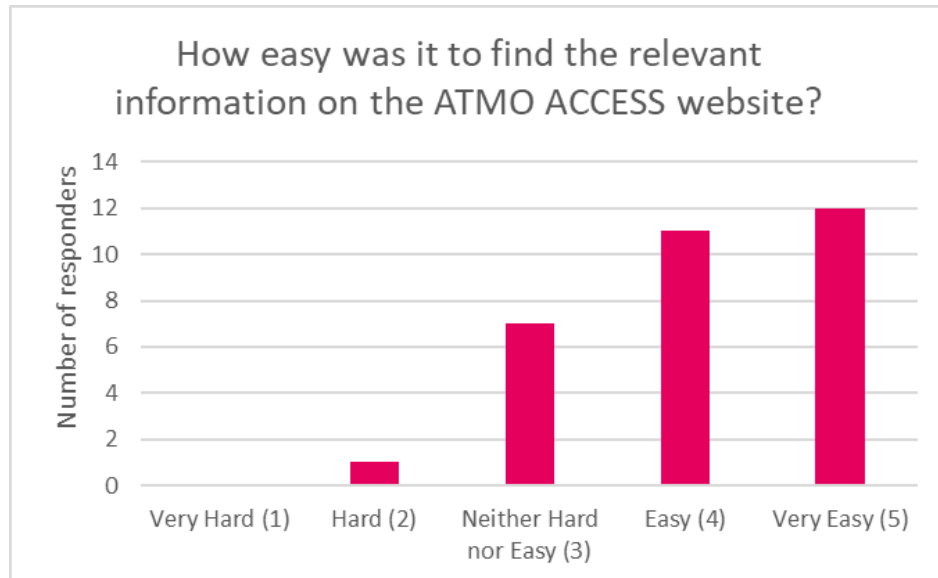
Figure 9. User feedback on ease of website navigation and content

On the question of whether users received enough information during the application process (Figure 10), 18 respondents indicated they received "enough information", and a further 9 selected "somewhat enough information". Only one respondent felt that information was somewhat lacking, with two others expressing a neutral view.
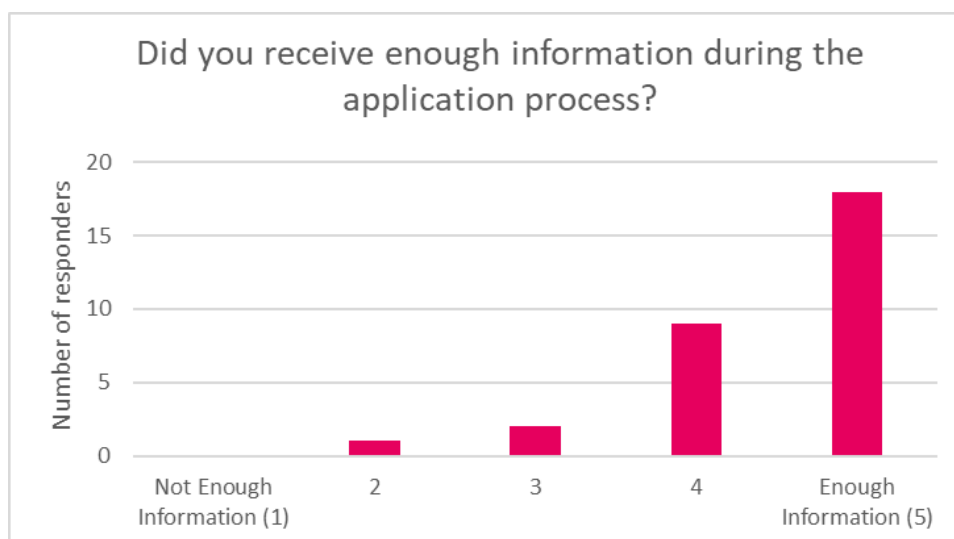


Figure 10. User feedback on whether they received enough information during the application process

Finally, the respondents were asked which communication channels would be most effective in reaching them for future access opportunities. Participants could select multiple options.

The ATMO-ACCESS mailing list emerged as the most preferred channel, selected by 31 respondents (Figure 11). This suggests a strong preference for direct and targeted email communication from the project itself, likely due to its reliability and relevance.

The ATMO-ACCESS website was the second most cited option, with 19 users indicating it as a key source of information. This reflects continued trust in the website as a central hub for up-to-date and comprehensive details.

Other channels received comparatively fewer selections, including project or community mailing lists (9 responses), university or host institution mailing lists (8), and social media (7). While these methods play a supplementary role, the data suggests they are not the primary means by which users expect to receive updates.
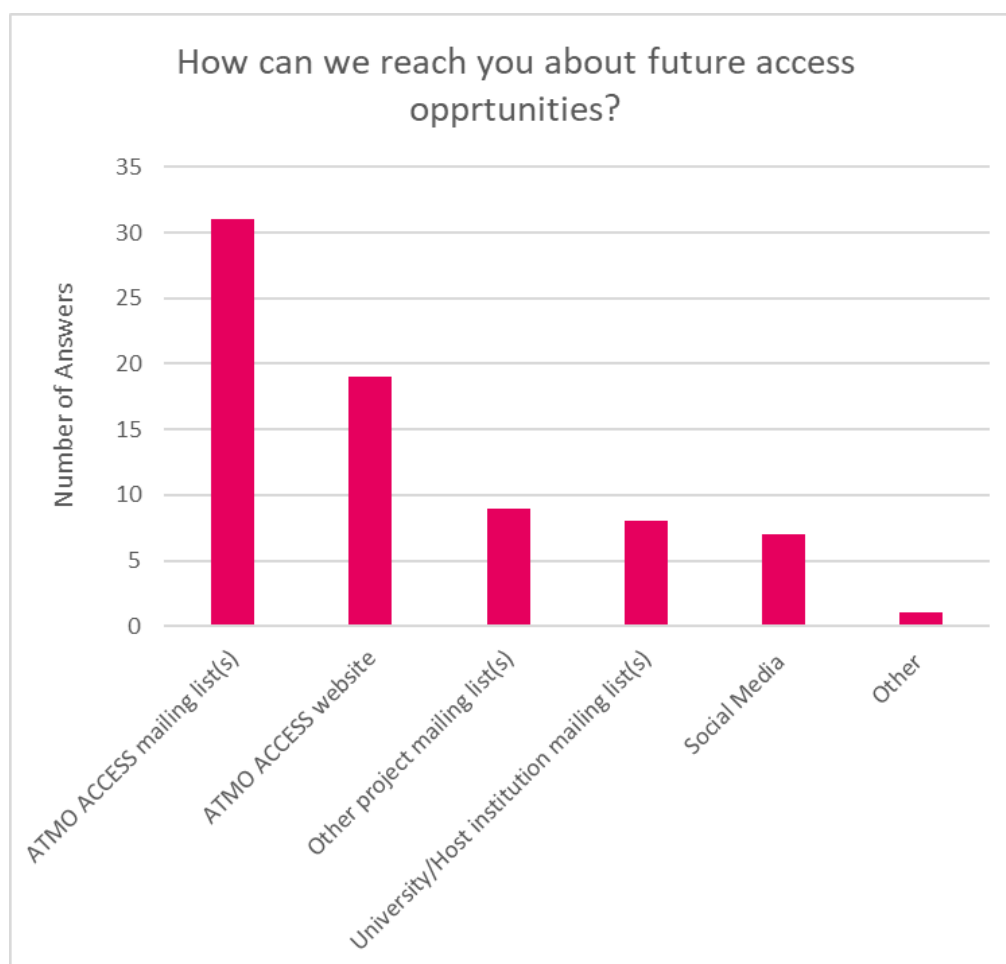


Figure 11. User feedback on how to inform them about future opportunities

Overall, the survey responses indicate that ATMO-ACCESS communication efforts were largely successful in supporting users throughout the application process. The application system was seen as accessible and the website as a generally effective tool for disseminating necessary information. The positive ratings demonstrate that the communication strategy effectively met user needs, while also pointing to some areas for refinement to ensure an smoother experience in future initiatives. Additionally, the results highlight the importance of maintaining a strong and active ATMO-ACCESS mailing list and website as the core communication tools for any future initiatives.

# Recommendations

In this chapter we have compiled all the recommendations gathered from past deliverables and milestones (D2.2 v2 and v3, D4.3, D9.1, D9.2, D9.3, D10.2 and Milestone 35), user feedback surveys, as well as insights gathered through detailed discussions in ATMO-ACCESS WP2 meetings throughout the duration of the project. The goal is for these communications and outreach recommendations to be included in the general recommendations to the Commission (deliverable D8.1: A strategic access plan for access provision to atmospheric RIs) by WP8 at the end of the project to form a set of guidelines for future TNA projects.

## Recommendations for content

**Clearly define the services offered through access calls**

A central aspect of improving the communication of TNA opportunities is providing a clear and accessible definition of the services offered through access. To achieve this, the project consortium could develop a visual and user-friendly service catalogue that also categorises offerings by type - physical, remote, and virtual. In ATMO-ACCESS it was decided not to build this and utilise each RIs existing catalogues, however a future project may wish to have this. Each facility involved in TNA should have a concise, standardised profile that outlines available instruments, technical capacities, scientific areas, and practical information on how the services can be used. Visual aids such as icons, diagrams, and service maps can enhance clarity and accessibility, particularly for new or early-career users. Additionally, the use of short illustrative examples of "use cases" or "success stories" will help contextualise the types of research or activities that are possible at each facility.

**Highlight the benefits of access**

Communications should place a strong emphasis on the unique benefits that TNA provides to users. This includes not only logistical and financial support, such as covered travel, accommodation, and access to high-end instrumentation, but also intangible benefits like collaboration with leading scientists and RI staff, access to harmonised data and procedures, and opportunities for career development. These advantages should be communicated through authentic and relatable content, such as user testimonials, short case studies, and

infographics that narrate the user journey from application to research outputs. A particular focus should be placed on demonstrating the downstream impact of access, for example, highlighting research published, new partnerships formed, or skills gained through participation in a TNA call.

**Raise awareness on the variety of access modes**

Given the diversity of access modes available, ranging from traditional physical visits to facilities, to remote control of instruments, and fully virtual data-based services, it is essential to raise awareness about these options and their respective advantages. Communication materials could include an explainer video or visual content that contrasts these modes and provides real-life examples of each. Clear guidance on how remote and hybrid access work in practice should be made available, including expectations for data delivery, communication with host institutions, and turnaround times. FAQs, comparison tables, and flow charts can be helpful tools for helping applicants understand which access mode best suits their project needs, particularly as remote and hybrid models become more common.

**Keep the open call texts and application forms simple**

To support a broader and more diverse applicant base, the text of TNA calls and the structure of application forms should be kept simple and clear. All communications should undergo plain language editing to ensure they are understandable to users across disciplines and language backgrounds. Complex jargon should be avoided in favour of concise, accessible language. Providing sample applications, checklists, and tooltips within the online submission interface can further reduce user confusion and improve proposal quality. Additionally, harmonising the structure and language across different calls will help returning users navigate the process more easily. Offering downloadable, two-page summaries of each call with essential information, deadlines, and contact points can also support dissemination through institutional networks, newsletters, and social media channels.

## Recommendations for outreach to the target audiences

Effective outreach to target audiences is a cornerstone of successful TNA calls. Future access projects should adopt a multi-tiered, audience-specific communication strategy that reflects the diverse backgrounds, disciplines, and geographic locations of potential users. Researchers at different career stages, institutional support staff, policymakers, and private sector actors all require tailored messaging and outreach tactics to engage meaningfully with the TNA opportunities.

A key recommendation is to segment the target audiences and develop specific outreach plans for each group. For instance, early-career researchers can be reached effectively through social media, university research offices, doctoral training networks, and young scientist associations

such as the EGU's Early Career Scientists (ECS) groups. Mid-career or senior researchers may respond better to outreach through scientific events, journal newsletters, and peer-to-peer recommendations. Targeting underrepresented institutions, particularly in widening countries and non-EU member states, should involve collaboration with national contact points and regional networks to ensure inclusive access to information and support.

Outreach should also leverage existing communication infrastructures across the European Research Infrastructure landscape. This includes newsletters, mailing lists, and social media accounts operated by partner RIs (e.g., ACTRIS, ICOS, IAGOS), the ENVRI community, and relevant European projects. Cross-promotion of calls through these platforms not only broadens reach but also reinforces the integrated nature of initiatives like ATMO-ACCESS.

Another recommendation would involve working with user providers, "user champions" and former access beneficiaries. These individuals and their "success stories" can serve as ambassadors who share first-hand experiences and promote the value of TNA through testimonials, informal webinars, and institutional presentations. Their engagement adds authenticity to outreach efforts and helps demystify the application process for newcomers.

Finally, future access projects should invest in developing clear analytics and feedback mechanisms to evaluate the effectiveness of its outreach efforts at the start of the project. Metrics such as website traffic, event attendance, and user surveys can provide insights into which channels and messages are most effective for different audiences, allowing for continuous improvement in future calls.

## Recommendations for participant feedback gathering and evaluation

Robust feedback gathering and evaluation processes are essential to ensuring that the services offered through TNAs meet the evolving needs of the research community. Future access projects should implement a systematic, multi-stage approach to collecting input from participants at key points throughout the access process—before, during, and after the access period. This will not only help assess user satisfaction but also provide actionable insights for improving the quality, relevance, and accessibility of future calls and services.

A baseline recommendation is the implementation of a standardised feedback form that all TNA and VA  users complete at the end of their access. This form should assess several dimensions: clarity of the application process, effectiveness of communication, the quality and usability of the facilities or services provided, interactions with host staff, and overall satisfaction. Including both quantitative (e.g., sliding scales) and qualitative (open-ended) questions allows for structured analysis while also capturing nuanced perspectives.

To gain deeper insights, future projects may also consider conducting follow-up interviews or short surveys several months after access is completed. This can help assess the longer-term

impact of access, such as whether it led to publications, collaborations, or further project proposals. These outcome-oriented evaluations are particularly useful for reporting to funders and for communicating the value of TNA to prospective users.

Feedback should also be solicited from unsuccessful applicants, particularly regarding the accessibility and clarity of the application process. This group offers valuable insight into barriers to entry, such as unclear eligibility criteria, complex documentation requirements, or a lack of information about available services. Improving understanding of these challenges can help refine both the communication and procedural aspects of TNA calls.

Importantly, all feedback gathered should be systematically analysed and translated into concrete improvements. Future projects should consider producing an annual internal evaluation report summarising key trends, user satisfaction levels, recurring challenges, and recommended actions. Findings from this report can inform updates to communication materials, access procedures, and staff training. Where appropriate, summary results can also be shared publicly or with stakeholders to demonstrate transparency and responsiveness.

Finally, a feedback loop should be established, ensuring that participants see how their input has contributed to changes. Even a short annual message or webpage update outlining "What we changed based on your feedback" can significantly increase user engagement and trust in the process.

## Recommendations from other projects

Successful access fair, which both invested in simplifying their messaging and tailoring content for non-specialist audiences. For future access calls, this means ensuring that call texts, eligibility criteria, and technical service descriptions are not only accurate but accessible to researchers from diverse scientific and language backgrounds.

Several other projects have emphasised the value of interactive and engaging outreach formats. OSCARS and IRISCC, for instance, have hosted online Q&A sessions and webinars, providing a platform where potential applicants could interact with access coordinators and providers. These types of sessions help demystify the application process and create a sense of transparency. Future access projects could benefit from adopting similar practices, using short explanatory videos, virtual tours, and live events to engage more dynamically with prospective applicants.

From the EOSC and its related projects, one key insight is the use of multi-channel, data-driven communication. EOSC initiatives have employed targeted newsletters, analytics-informed social media campaigns, and partnerships with research infrastructures to ensure their messages reach the right communities. Future access projects should similarly make use of data analytics

to track user engagement across its website and campaigns, adapting its outreach strategy based on real-time insights into what content and channels perform best.

Another common recommendation from transnational access projects is the implementation of a helpdesk or user support hub. Projects like INTERACT (International Network for Terrestrial Research and Monitoring in the Arctic) have shown that having responsive, human-centred support (via email, chat, or help portals) significantly improves application quality and user satisfaction. Future access projects could consider enhancing or centralising its user support services to offer consistent guidance across access calls.

Many projects have also adopted community-building approaches to grow their applicant base organically. For instance, past ENVRI projects developed "user communities" around thematic clusters (domains), supporting ongoing collaboration beyond the access period. This not only helps in sustaining engagement but also encourages return applications and peer-to-peer promotion of the access programme.

## Conclusions

To conclude, in terms of successful open call promotion, the general access calls averaged around 50 applications, with fluctuations based on theme and modality. Thematic or remote formats showed lower engagement, while broader, less restrictive calls performed best. Training events and stakeholder engagement were successful in numbers, especially for community-building rather than access alone.

The overall results from the user feedback demonstrate a successful implementation of the TNA process, with clear improvements over time, particularly in guidance materials and application usability. The consistently high ratings for team support and overall service highlight ATMO-ACCESS's strong commitment to user experience and responsive communication.

The recommendations outlined in the second part of the report aim to support future TNA / VA projects such as ATMO-ACCESS in enhancing their communications, outreach, and user engagement strategies. Central to this is the need for clear, user-friendly communication of what is offered through access calls. This includes well-defined descriptions of services, visual catalogues, and accessible formats that help researchers easily understand and navigate the options available. Emphasising the benefits of access, including scientific, logistical, and professional development opportunities, can significantly increase participation and uptake, particularly when communicated through authentic user stories, infographics, and case studies.

Raising awareness of the diverse access modes (physical, remote, and virtual) remains an important priority. Many potential users may be unfamiliar with these formats, so targeted communications, such as visual explainers, flow charts, and FAQs, can help them choose the

best access facility for their needs. Likewise, improving the application materials and processes is essential. Using plain language, sample templates, and user checklists can lower the barriers to entry, especially for early-career researchers or those from underrepresented regions.

Effective outreach strategies must take a segmented approach, tailoring messages and channels to different audiences such as young researchers, international applicants, and private sector users. Leveraging networks, hosting interactive sessions, and building partnerships with related research infrastructures and EU projects can broaden the reach and impact of calls. Drawing on lessons from other European access projects, initiatives such as live webinars, user support hubs, and community-building efforts have proven to be particularly valuable in sustaining user engagement and inclusivity.

Finally, embedding robust feedback and evaluation mechanisms across the TNA lifecycle will enable continuous improvement. Standardised feedback forms, outcome tracking, and transparent reporting will help ensure that services evolve in response to user needs. Ultimately, by adopting a communications approach that is inclusive, interactive, and responsive, future TNA projects can increase their visibility, improve user experience, and enhance their scientific and societal impact.

# References

All public deliverables and milestone reports referenced in this document can be found on [the ATMO-ACCESS Deliverables and Milestones page](#).

- ATMO-ACCESS Deliverable 2.2 Report and updated report on the integrated communication strategies
- ATMO-ACCESS Deliverable 2.3 Report on the user feedback monitoring strategies
- ATMO-ACCESS Milestone 8 Evaluation of and recommendations for optimising the strategies implemented for the pilot access calls
- ATMO-ACCESS Deliverable 4.3 Multidisciplinary MOOC implemented and publicly available
- ATMO-ACCESS Deliverable 9.1 First assessment of TNA provided to ATMO-ACCESS facilities
- ATMO-ACCESS Deliverable 9.2 Second assessment of TNA provided to ATMO-ACCESS facilities
- ATMO-ACCESS Deliverable 9.3 Third assessment of TNA provided to ATMO-ACCESS facilities
- ATMO-ACCESS Deliverable 10.3 Report on long-term strategy of VA activities and the new services in ATMO-ACCESS, taking into account the tools developed in WP5 and their best usage for science, management and outreach

# Abbreviations

- ACTRIS – Aerosol Clouds and Trace Gases Research Infrastructure;
- AGORA – Andalusian Global ObseRvatory of the Atmosphere, Granada, Spain;
- ATMO-ACCESS - Solutions for Sustainable Access to Atmospheric Research Facilities;
- CAMS - Copernicus Atmosphere Monitoring System;
- Cal/Val - Calibration and Validation;
- CyI - Cyprus Institute;
- ECI –  Early career Investigator, including PhD students;
- ECS - Early Career Scientists;
- Edu4Climate – consortium working towards the establishment of a European Higher Education Institutions Network for Climate and Atmospheric Sciences;
- EGU – European Geosciences Union;
- EMPA - Swiss Federal Laboratories for Materials Science and Technology;
- ENRIITC – European Network of Research Infrastructures & Industry for Collaboration;
- ENVRI - Cluster of European ENVironmental Research Infrastructures;
- ENVRI-FAIR – the connection of the Cluster of Environmental Research Infrastructures (ENVRI) to the European Open Science Cloud (EOSC);
- EOSC - European Open Science Cloud;
- ESA – European Space Agency;
- EUMETSAT - European Organisation for the Exploitation of Meteorological Satellites;
- GA - Grant Agreement;
- GAW - Global Atmosphere Watch programme
- IAGOS – In-Service Aircraft for a Global Observing System;
- ICOS – Integrated Carbon Observation System;
- ICOS ERIC - Integrated Carbon Observation System - European Research Infrastructure Consortium;
- INTERACT - International Network for Terrestrial Research and Monitoring in the Arctic;
- 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;
- OSCARS - Open Science Cluster's Action for Research and Society
- PASS - Project Access Support System;
- PI – Principal Investigator;
- RI – Research Infrastructure;
- SME – Small and Medium Enterprises;
- SP – Strategic Pillar;
- TNA – Trans-National Access;

- VA – Virtual Access;
- WP – Work Package;
- WMO - World Meteorological Organization.