



D7.4 – Final dissemination and communication plan and report

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Table of Figures and Tables

Figure 1. The updated Home page (December 2022).....	7
Figure 2. The Depositing datasets in a digital repository set of training resources.....	8
Figure 3. Summary website statistics	9
Figure 4. Page/session ratio.....	9
Figure 5. Average session duration.....	9
Figure 6. Bounce rate.....	9
Figure 7. Page views.....	10
Figure 8. Website traffic by source.....	10
Figure 9. Referral sources	11
Figure 10. Page views for the individual language sub-sites.....	12
Figure 11. The most viewed pages.....	12
Table 1. Twitter statistics.....	13
Figure 12. Most popular tweet from the last 12 months.	14
Figure 13. The new ARIADNEplus poster and leaflet.....	15
Figure 14. The two sides of the new A4 three-fold ARIADNEplus leaflet in detail.	16
Table 2. Newsletter statistics.....	17
Figure 15. The ARIADNEplus booth at EAA.....	20
Figure 16. The Final Event Programme	21
Figure 17. Portal visitor rate profile.....	24
Figure 18. Tweet from JOAD 15 th September 2022.	24
Figure 19. Traffic sources to the Portal.....	25
Figure 20. Geographical coverage Jan 2021 – December 2022	25
Figure 21. Geographical coverage Jan 2022 – December 2022	26
Figure 22. Top 10 visitor countries Jan 2022 – December 2022	26
Table 3. Indicators to be used for monitoring the dissemination impact.....	29

Table of Contents

1	Executive Summary	1
2	Reaching the stakeholder community	3
2.1	Resources amongst the consortium and externally	4
2.2	Information and news	4
2.3	Internal communication channels	5
2.4	Mailing lists.....	5
2.5	Social networks.....	5
3	Communication activities	6
3.1	The ARIADNEplus website	6
3.1.1	Website Usage Statistics	8
3.1.2	The individual translated sub-pages	11
3.2	The ARIADNEplus Twitter account	12
3.3	Slideshare	14
3.4	Zenodo.....	14
3.5	Promotional materials.....	14
3.6	Project newsletter	17
3.7	Other dissemination materials	18
4	Dissemination activities	19
4.1	Conferences and events	19
4.2	Publications	22
4.2.1	Scientific publications in academic journals	22
4.2.2	Training materials	22
4.2.3	Service specific brochures and fact sheets	22
4.2.4	Project brochures and leaflets	22
4.3	National Campaigns for the Portal	23
4.3.1	Visitors to the Portal	23
4.4	Transnational Access and Training	27
4.4.1	Transnational Access (TNA).....	27
4.4.2	Training events.....	27
4.4.3	The Training Hub.....	27
5	Monitoring and assessment	28
6	Recommendations from the Strategic Advisory Board concerning Dissemination and Communication	31
7	Conclusions	33
Annex A	34
	List of Project Outputs in Zenodo	34
Annex B	38
	Final year events attended and disseminated at by ARIADNEplus partners	38
Annex C	44
	Training Events Organised by Partners	44
Annex D	45
	Publications.....	45

1 Executive Summary

This deliverable presents the Final Dissemination and Communication Plan and Report for the ARIADNEplus project. The report covers the final 12-month period (M37-M48, i.e., January 2022-December 2022) for the dissemination and communication activities undertaken by the lead team at PIN Scrl and the (40+) partners involved in the project. As the deliverable D2.5 Final Report on Networking and Integration covers much of the dissemination activity for M37-M48, this deliverable mainly focuses upon the communication activity for the same period. Note that the figures used actually go to early M48 due to the holidays falling at the end of the deadline, so the report has been prepared a month early, to allow for review and submission prior to the start of the holidays.

The first Dissemination and Communication Plan identified the different stakeholders and described how these may be reached. During the first period, the project partners and their organisations were the main focus for dissemination and communication, with this policy continuing for the second period (M19-M36). Information and news continued to be published on the website, which is aimed at a wider audience, with other methods of communication which have included partner mailing lists, social media channels and the Project Newsletter. In the final period, the focus of the dissemination has been more on the Portal in order to build up a user base and to further build the community as part of the long-term sustainability of the network. This has been made easier with the easing of COVID-related travel restrictions which has enabled partners to participate in face-to-face events and for Transnational Access to resume.

The website homepage was slightly redesigned to give direct access to the Catalogue search landing page within the Portal, along with another section going to the services. The target of 30,000 unique visitors was met by M48. After the homepage, the most popular page was the Portal (link from the menu bar) followed by Trans-National Access (TNA). Social media referrals, along with partner websites and the site for the European Research Infrastructure for Heritage Science (e-rihs.eu) are important sources of visitors. Twitter has continued to grow and remains the key social media channel for ARIADNEplus. Both Slideshare and Zenodo have been effective channels, with the latter being significant as it is aimed at the project's key audience. With the return to physical events, a new leaflet was produced as well as a new poster. Both were used at booths at European Association of Archaeology (EAA), Budapest (31st August-3rd September) and the Conference on Cultural Heritage and New Technologies (CHNT), Vienna (10th-12th November). The project newsletter subscriber base has grown, albeit slowly, but the open rate has remained consistently high at around 40%.

The Partners have continued to participate in events with sessions being held at both EAA and CHNT. In addition, NARA presented at DH2022 in Tokyo, bringing the project to the attention of a new audience in Asia. They have also been active in terms of publications, achieving in excess of 15,000 downloads. In particular, the PARTHENOS Guidelines to "FAIRify data management and make data reusable" which has been translated into more languages by ARIADNEplus, including Czech (532 views and 315 downloads), Portuguese (573 views, 363 downloads) and Turkish (664 views, 447 downloads) has had 4,249 downloads in total to date (<https://doi.org/10.5281/zenodo.3937149>).

The new Portal (Catalogue and Services) has been in existence since January 2021, with updates happening along the way and more datasets being uploaded over this 24-month period. At the end of 2021 (M36), there had been around 7K visitors - by 9th December 2022, this had increased to 32K new users, an increase of 25K, (357%). The UK dominates in term of visitor source countries, due to ADS having a significant share of the datasets within the portal, as well as being the first organisation to upload their data. Looking at the top 10 sources, all except Australia (No. 10) have datasets in the

Portal which tends to suggest that the combined dissemination at project level and by the partners themselves is helping to attract new users.

Transnational Access resumed in 2022 as three Summer Schools and a Winter School which covered all the training on offer. A total of 37 places were offered, 34 either transferring from 2020 or applying for the first time in 2022. Of these 32 attended the Summer Schools, two candidates dropping out at short notice for personal reasons. Students came both from partners (and Associate Partners) within ARIADNEplus with a few external ones as well. Despite missing two years, the attendance targets were mostly close to being met. In addition, four training events were held during 2022, all having international audiences. All training received positive feedback from the participants.

The Monitoring and Assessment indicator targets were all met and in, most cases, well exceeded apart from the Newsletter which was slightly under at 85%. ARIADNEplus now has over 2,000 Twitter followers (with an effective audience of thousands more), a well-established Community on Zenodo with a download figure in excess of 10,000 and a growing affiliate programme in the form of Associate Partners and close links with the COST Action SEADDA.

Working hand in hand with WP2, WP7 has helped to build the ARIADNE Community to ensure the future sustainability of the Data Infrastructure, which has now been launched as the ARIADNE RI AISBL and will start operations in early 2023, once the registration has been finalised. The results of the dissemination activities and levels of engagement shown provide a solid foundation on which to continue and build on the project activities.

2 Reaching the stakeholder community

ARIADNEplus has a wide range of stakeholders¹ who have varying priorities and interests. By developing an understanding of the needs and interests of each group, the project aims to make its dissemination activities more relevant to the people and organisations interested in using the research infrastructure. Awareness of the needs of community helps to identify the best channels for contacting stakeholder groups (such as email lists, conferences, other means) and in the design and planning of dissemination materials and activities, thus helping to raise the visibility of the project and promote use of its outputs:

- internal stakeholders in the partner institutions who have an interest or involvement in archaeological research or management responsibilities relating to project activities;
- research institutions active in the field as represented by managers and senior researchers with management duties such as deans, directors etc.;
- scholars, researchers and students in archaeological disciplines and the wider scientific community;
- international networks and research infrastructures in related disciplines;
- policy makers and policy bodies, and funding agencies including the European Commission;
- cultural heritage institutions interested in activities such as data management and training;
- commercial organisations such as private companies involved in archaeology, cultural heritage and consultancy;
- semi-professional and amateur organisations and groups;
- media and the public at large.

For the purpose of this report, we will summarise how each of these stakeholders has been addressed by the current strategy and activities.

To date, the main focus of the project dissemination continued to be focussed on the internal stakeholders, keeping them up to date with the various activities going on in the different sub-groups, co-ordinating contributions to workshops and conferences and in turn, relying on them to forward and disseminate information within their own organisations and through their own media/social media channels. Basecamp has, therefore, been used as the main means of communication internally and all partners are signed up to the newsletters, mainly as a reminder to visit the website. Twitter is also widely used among the researchers. Likewise, research institutions are reached in these networks, as subscribers to newsletters and blogs and as followers on Twitter.

During the second period, nearly all events were virtual (or hybrid) which greatly reduces the opportunities for communicating the project activities informally, e.g. through stands, distributing literature and informal chats during breaks. However, the partners have managed to attend a number of these events and organise workshops, and the project has now increased by a further ten Associate Partners, in addition to the Heidelberg Academy of Sciences based in Heidelberg, Germany. As well as the work of WP7, dissemination activities also form part of the networking and integration activities described in D2.3 Interim Report on Networking and Integration. The most recent of these are reported in D2.4 Interim report on networking and integration.

ARIADNEplus continues to liaise with the SEADDA COST Action, the two having several members in common. This year, ARIADNEplus and SEADDA hosted a session (273) entitled “Fairly Front-Loading the Archive: Moving Beyond Findable, Accessible and Interoperable to Reuse of Archaeological Data”

¹ Please refer to D7.1 for detailed descriptions of each one of these identified stakeholders.

at the EAA Conference held in Budapest at the end of August. This session attracted around 50 participants. Full details along with the presentations can be found at: <https://ariadne-infrastructure.eu/ea2022-session-273/>.

In terms of communication, the website aims to reach all the stakeholders which also includes the public and third parties. Whilst English is used widely in the research community, this not always the case, so several website pages have been translated into the other main European Languages (Italian, Greek, English, Slovenian, Czech, Bulgarian, Polish, Hungarian, French, German, Spanish Swedish and Dutch) as well as Japanese to facilitate a wider understanding of the project aims, especially in central and eastern Europe where many of the countries have not been previously involved in ARIADNE. The website statistics (c.f. Section 3.3.2) illustrate the usefulness of these translations.

2.1 Resources amongst the consortium and externally

The ARIADNE consortium consists of 40 partners in 27 countries including Belgium, Sweden, Denmark, Norway, Finland, Iceland, United Kingdom, Ireland, Germany, Austria, Hungary, Czech Republic, Slovenia, France, the Netherlands, Italy, Spain, Portugal, Greece, Cyprus, Israel, Croatia, Romania and Bulgaria. In addition, the Project has acquired 14 Associate Partners who additionally cover Turkey, Serbia, the Slovak Republic, the Republic of North Macedonia and Croatia. From outside of Europe, there are partners from Argentina, the US and Japan. CARARE, as a membership organisation, also includes other countries within its membership such as Lithuania. The partners have been very active in disseminating news about the project throughout the project. Activities have included:

- Creating links to the ARIADNEplus website from the partners' own site (all partners)
- Giving presentations at national and international events
- Organising ARIADNE workshops at international conferences
- Distributing ARIADNE dissemination materials
- Distributing notices about ARIADNE activities to mailing lists
- Writing articles about ARIADNE activities for in-house newsletters
- Contributing articles to the ARIADNE website
- Contributing articles to local newspapers and television
- Disseminating news and information about ARIADNE via the social networks
- Participating in meetings organized by research infrastructures, projects and international initiatives and giving presentations about ARIADNE and/or distributing materials.

Some examples are:

- Promotion of the Visual Media Workshop by ICCU:
 - Twitter <https://twitter.com/iccu2/status/1508745785285951499>
 - Facebook <https://www.facebook.com/iccu2/posts/2322306844576322>
 - Newsletter <https://mailchi.mp/7cc033048b0c/newsletter-iccu-n-3-marzo-2022>
- Regular dissemination of ARIADNE News and Events through CARARE's monthly newsletters and Twitter to over 70 Archaeologists and Heritage Managers across Europe.
- Regular Tweets and Facebook posts by the ADS Media team.

2.2 Information and news

The project has communicated information and news about the project's activities and related areas via the project website, a project newsletter, social media channels and (to a more limited extent) to the press.

In addition, a new 'Features' section was added where longer articles on more general topics related to the project and archaeology can be found, these being aimed more at the general public and interested third parties. Following the first two articles published in period 1, and five articles in period 2, another five have been added as follows:

- Public finds in the ARIADNEplus Data Infrastructure
- Tooling for FAIR Data Management Plans
- Heritage Science for ARIADNEplus: the contribution of INFN-CHNet
- The ARIADNEplus Lab VRE
- The Impact of the ARIADNEplus Project on Italian Archaeology: the Standardisation and Data Sharing Process

These longer style articles illustrate the topics that the project covers in depth, the approaches used, and progress made in contrast to the shorter news items.

2.3 Internal communication channels

Two main forms of internal communication were used within the project: Basecamp and D4Science. Basecamp is the main platform used for "broadcasting" information and requests to all involved (there are now 223 people registered from all the partners, an increase of 7 people since M36), often with links to supporting documentation in the project depository which is held in D4Science. Within Basecamp, there are around 30 sub-groups (for targeted messaging). It appears that posts in Basecamp are continuing to meet the internal communication needs, especially as participants can interact and discuss topics of interest.

For those partners who are directly involved in the technical development of the Portal, D4Science is the preferred means of communication. Currently, there are two main VREs, each with their own messaging channel:

- ARIADNEplus_Mappings – this is the environment in which everything concerning mapping strategies and tools happens. From here is also possible to access the 3M and the Vocabulary mapping tools.
- ARIADNEplus_AggregationManagement – this is reserved to the small team in charge of coordinating the aggregation of the partners' metadata.

2.4 Mailing lists

Several partners have mailing lists, along with their own social media channels. When the project has an announcement that requires dissemination, the information is posted in Basecamp and the relevant partners will then forward this as appropriate.

2.5 Social networks

The main social network used by the project is Twitter, with a small Facebook presence for key postings. Many of the partners also have Twitter feeds which are used to retweet ARIADNEplus tweets. The project also has membership of a number of archaeology-related Facebook groups, and these were used to advertise both the TNA calls. ARIADNEplus discontinued uploading reports and presentations of wider interest to the Slideshare account as this became a subscription service. All reports etc. of interest are now put into Zenodo which also provides figures for views and downloads.

3 Communication activities

The ARIADNEplus website and Twitter are the two main communication channels for the wider stakeholder community with a presence also on Facebook in order to cover the more popular channels.

3.1 The ARIADNEplus website

The ARIADNEplus website (<http://www.ariadne-infrastructure.eu/>) aims to provide information about the project to all stakeholders and to related projects and provides a single point of access to the research infrastructure via the Portal. The graphic solution used for the website frontend is based on a responsive design that can adapt to the user's behaviour and environment based on screen size, platform and orientation. Since the launch in February 2019, some minor updates were made to the website with the addition of new content such as the Features section and the translations of the main information pages during the first period, as reported in the previous version of this report (D7.2). At the end of Period 1 and three months into lockdown, it was decided to reorganise the website due to its increasing importance as a communication and dissemination channel with the lack of physical interaction for the foreseeable future. This new design focused on the following four main areas of interest to end users:

- The ARIADNEplus Community – the landing page introduces the project and presents the two leaflets aimed at i) archaeological researchers and ii) professionals and heritage managers respectively, along with iii) a 24-page synopsis of the project and its activities. The sub-sections consist of:
 - Our Network – summary page of all the external organisations and Associate Partners involved in the project and their roles and activities
 - Consortium – short description for each partner (beneficiary) in the project
 - Associate Partners – summary page of all the Associate Partners (11 to date) which shows the name, logo, and locations. The name links to a description for each organisation and activity within the project
 - Join us – information for individuals, organisations and projects on how to get involved
 - What is ARIADNEplus – this leads to the sub-sites that have been translated into several European languages and Japanese
- Activities and Resources – this section includes the existing resources (short reports, deliverables etc.) plus some new outputs from the project:
 - Workshops and seminars – links to two workshop videos, one organised by ARIADNEplus and one jointly with Inception and the European Commission
 - Deliverables – from ARIADNEplus
 - Other publications – outputs such as the ARIADNE Impact booklet, the FAIR Guidelines in various languages and reports
 - ARIADNE Legacy – link to the previous project website content of interest.
 - ARIADNE 2014-2018 Deliverables – from the previous project
- Portal – this is the same but is being updated with more data and additional services as planned by the project.
- Training & TNA – this was a new section added to the website following feedback from the Community Needs Survey. After a soft launch (with the partners), this section was redesigned to reflect the new approach.

With the project concluding, a further update was made to the home page in order to bring the Portal to the fore:

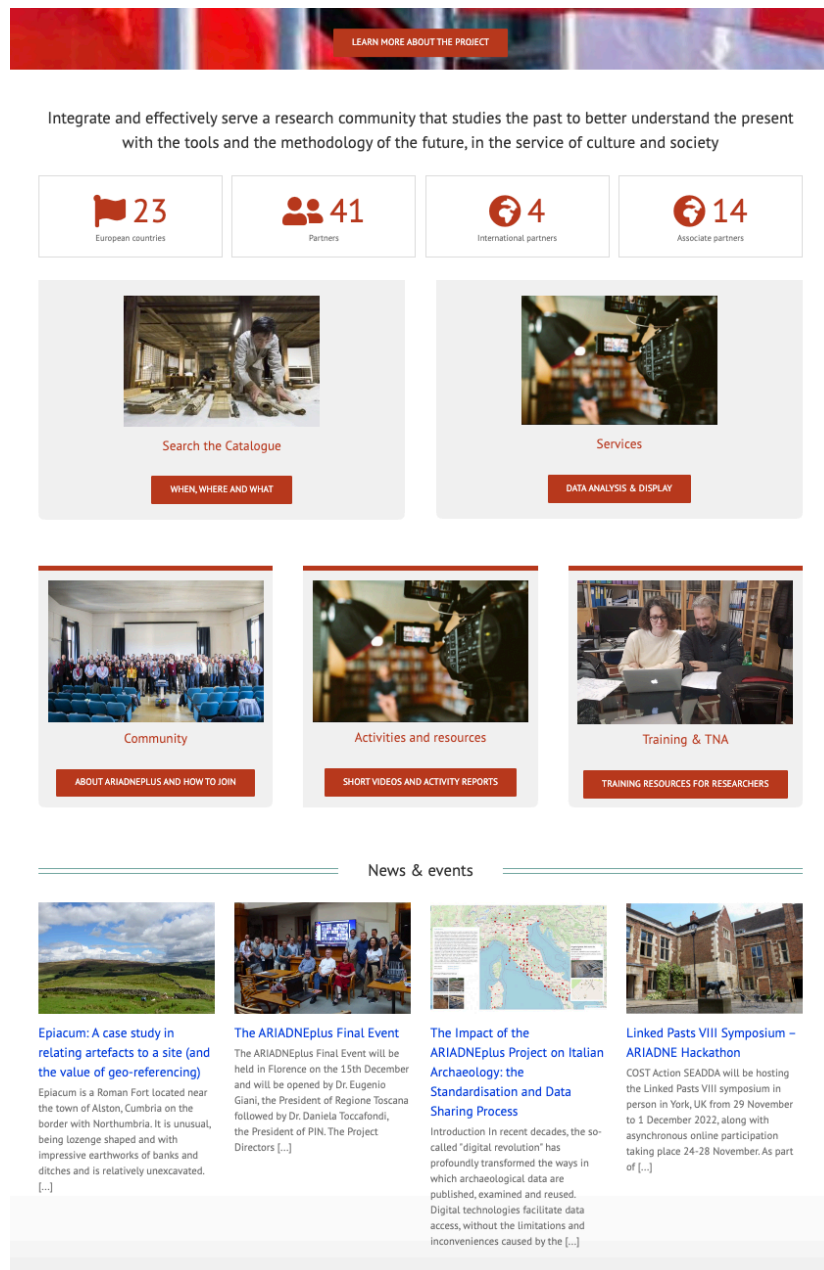


Figure 1. The updated Home page (December 2022).

New sections were added for “Search the Catalogue” and “Services” near the top of the homepage. New & Events may be removed eventually, leaving just the link in the horizontal menu, as this will become out of date (unless the website is kept updated as part of the sustainability plan).

The News and Events pages have continued to be updated regularly. Since M36, 12 more events have been posted along with 12 news items and five features.

The Associate Partners page contains details for 11 organisations in total.

The Training Hub originally had 8 sections with an additional section, *Other Useful Sources* being added in M33. Each section links to a separate page with the resources listed with short descriptions, the learning level addressed and format of the resource. The source is also indicated.

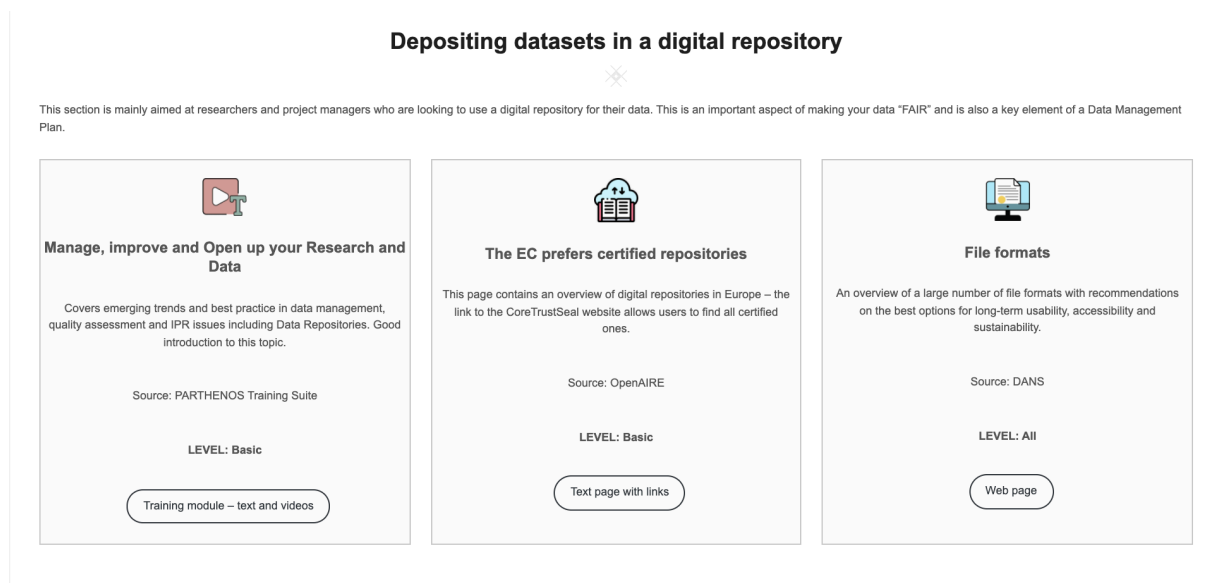
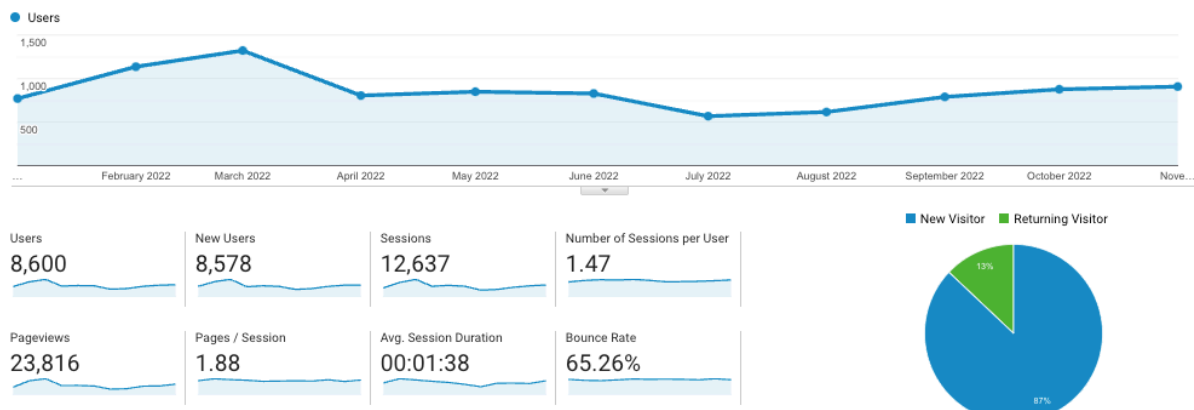


Figure 2. The Depositing datasets in a digital repository set of training resources page.

3.1.1 Website Usage Statistics

The website usage is carefully monitored via Google Analytics. The following analysis covers the period from January 2022 to Nov 2022 (M37 – M47), with the same custom filter applied during the previous reporting period.

The website attracted about 8,600 visitors during year 4, for a total of 23,861 pages viewed (Fig. 3). Except for the months of July 2022, when the number of visitors was slightly lower, there has been a steady rate of visitors, between 600-800 per month, with around 13% being return visitors. The average number of visitors per month has increased from 588 to around 780 per month.



Language	Users	% Users
1. en-us	3,188	36.67%
2. en-gb	1,328	15.28%
3. it-it	524	6.03%
4. zh-cn	468	5.38%
5. fr-fr	289	3.32%
6. es-es	264	3.04%
7. fr	256	2.94%
8. de-de	178	2.05%
9. el-gr	174	2.00%
10. de	173	1.99%

Figure 3. Summary website statistics.

The overall performance analysis has remained positive, as the metrics show a slight improvement in usage compared to the same period in the third year, illustrating that the project website has increased in relevance. The Page/Session ratio shows two pages per visit (Fig. 4) and the average session duration is 1m 38s (Fig. 5). The Bounce Rate (Fig. 6) stands at around 60% on par with the results recorded in the previous reporting period.



Figure 4. Page/session ratio.

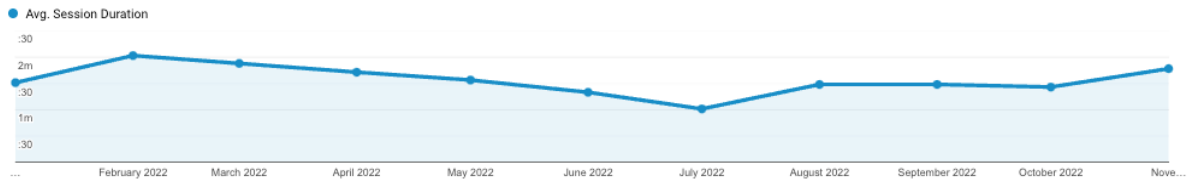


Figure 5. Average session duration.

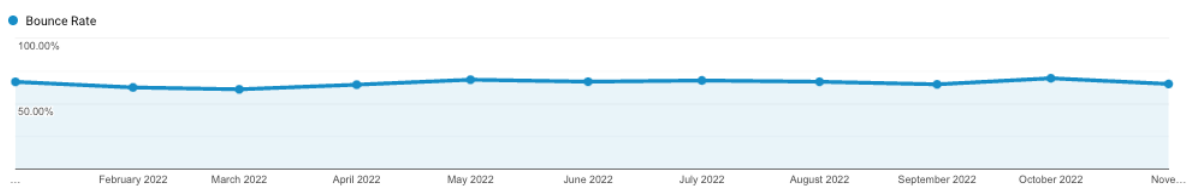


Figure 6. Bounce rate.

In terms of the page views (Fig. 7), the website’s homepage stays firmly in first place, with 7,478 views. In terms of contents, the most visited pages (/portal, /transnational-access, /about-ariadne, /workshop-semantic-mapping-of-excavation-data) showed the results of the previous homepage restyling, where the attention of the visitor is drawn to the project and to the services and products offered.



Page	Pageviews	% Pageviews
1. /	7,478	31.40%
2. /portal/	3,213	13.49%
3. /transnational-access/	658	2.76%
4. /about-ariadne/	528	2.22%
5. /workshop-semantic-mapping-of-excavation-data/	500	2.10%
6. /transnational-access/how-to-apply/	488	2.05%
7. /community/	447	1.88%
8. /resources/	396	1.66%
9. /resources/ariadneplus-deliverables/	384	1.61%
10. /our-network/	382	1.60%

Figure 7. Page views.

Analysing the overview of the acquisition channels leading users to the ARIADNEplus website, it was found that “Direct” traffic stands at 42.3%, “Organic Search” at 37.5%, “Referral” and “Social” at 11.2% and 9% respectively.

Compared to the previous period, social traffic increased significantly. The growth of users over the last year entering the ARIADNEplus website through social channels can primarily be attributed to a wider dissemination of content through our partner network and to a more effective use of our social media channels.

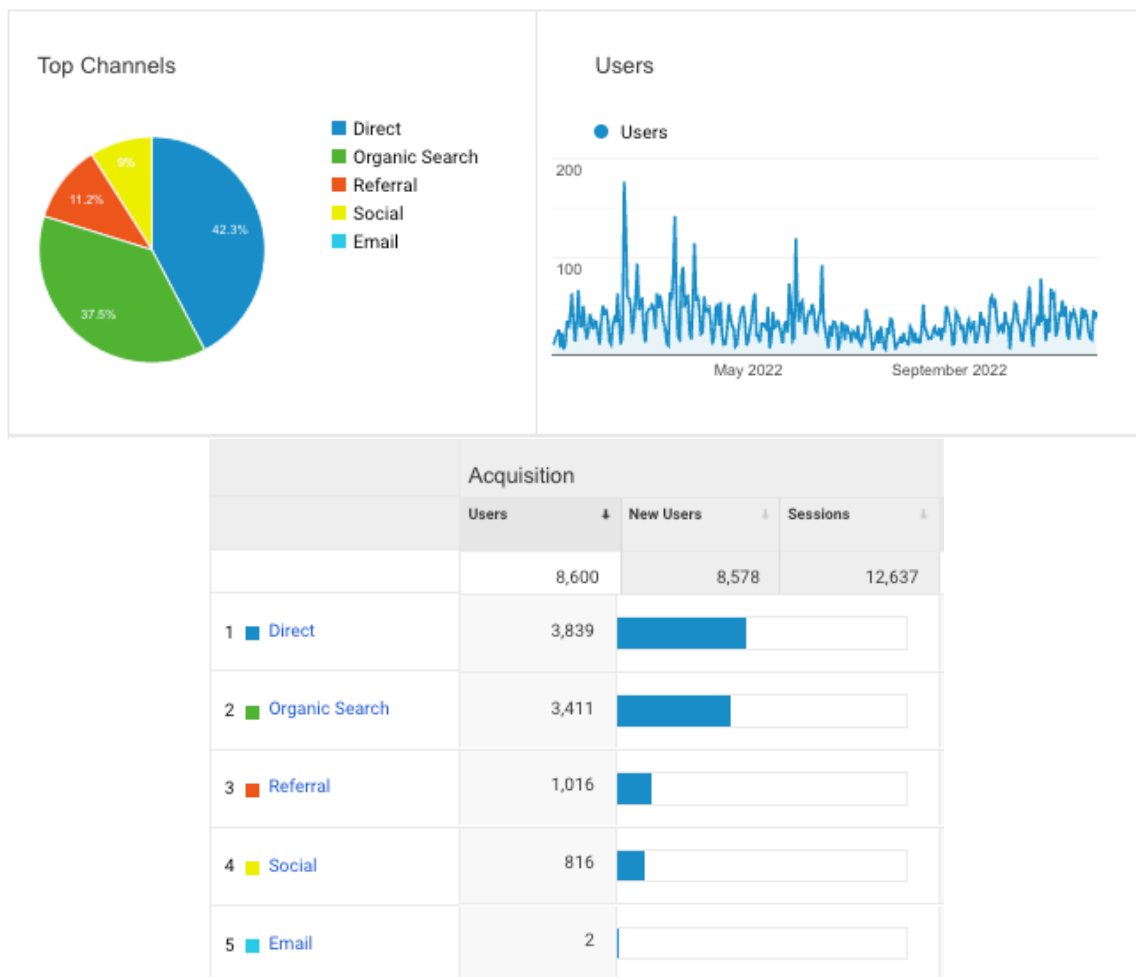


Figure 8. Website traffic by source.

The Referrals diagram (Fig. 9) show the websites that “referred” visitors to the ARIADNEplus website by clicking a link (within another website, for example). The highest number of referral links are from partner websites or services (<http://www.ha.upatras.gr/>, <https://archaeologydataservice.ac.uk/>, <https://archeodatabase.hnm.hu>).

At position seven is the site for the European Research Infrastructure for Heritage Science (e-rihs.eu) which is an important sub-domain for many archaeologists.

Source ?	Acquisition		
	Users ? ↓	New Users ?	Sessions ?
	1,016 % of Total: 11.81% (8,600)	879 % of Total: 10.25% (8,578)	1,443 % of Total: 11.42% (12,637)
1. ha.upatras.gr	57 (5.48%)	55 (6.26%)	62 (4.30%)
2. archaeologydataservice.ac.uk	56 (5.38%)	46 (5.23%)	76 (5.27%)
3. archeodatabase.hnm.hu	53 (5.09%)	51 (5.80%)	58 (4.02%)
4. cultureelerfgoed.nl	41 (3.94%)	40 (4.55%)	43 (2.98%)
5. hadw-bw.de	31 (2.98%)	29 (3.30%)	35 (2.43%)
6. ariadne2.isti.cnr.it	30 (2.88%)	28 (3.19%)	32 (2.22%)
7. e-rihs.eu	29 (2.79%)	29 (3.30%)	34 (2.36%)
8. mail.google.com	27 (2.59%)	18 (2.05%)	55 (3.81%)
9. vcg.isti.cnr.it	25 (2.40%)	19 (2.16%)	32 (2.22%)
10. dhcr.clarin-dariah.eu	23 (2.21%)	20 (2.28%)	67 (4.64%)

Figure 9. Referral sources.

3.1.2 The individual translated sub-pages

The translated sub-pages are available from www.whatis.ariadne-infrastructure.eu. From the main page is possible to choose the desired language through the corresponding flag.

The Google Analytics Audience Overview report (Fig. 10) covers the period from January 2022 to November 2022.

The sub-site has attracted 1.303 visitors with a total of 3,009 pages viewed. The percentage of returning visitors is around 17%.

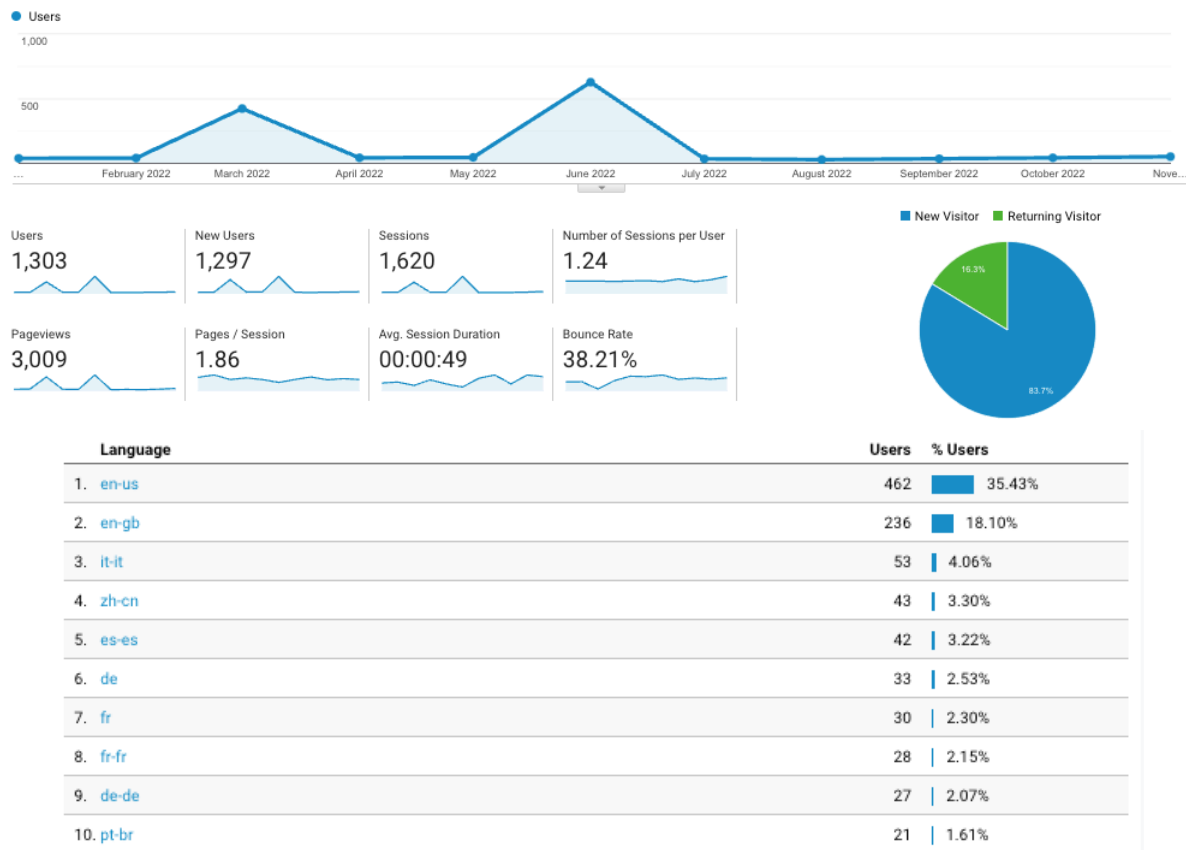


Figure 10. Page views for the individual language sub-sites.

The analysis of the most viewed pages shows that the most visited section remains the one in English, followed by Spanish. The other languages with more views are Italian, French and German.

Page	Pageviews	% Pageviews
1. /	2,238	74.38%
2. /en/	161	5.35%
3. /es/	47	1.56%
4. /en/researchers/	42	1.40%
5. /it/	42	1.40%
6. /fr/	32	1.06%
7. /de/	26	0.86%
8. /el/	26	0.86%
9. /pt/	25	0.83%
10. /es/investigadores/	21	0.70%

Figure 11. The most viewed pages.

3.2 The ARIADNEplus Twitter account

At the end of the ARIADNE project, the associated Twitter account @ARIADNE_Network had about 900 followers, with a few additions during the period between the two projects. The ARIADNEplus project used the same Twitter account by modifying the profile reference in @ARIADNEplus, in order

to maintain continuity with the old project and to keep the existing followers. The profile was reactivated at the end of January 2019. From the end of January to the end of May 2020, the number of followers grew to 1,727 users by 1 June 2020. By November 2021, the number of followers had further increased by 162 to 1,889, a 9% increase. By the beginning of December 2022, ARIADNEplus had 2,082 followers, a further 10% increase in numbers.

The following table summarises the monthly activity for the ARIADNEplus Twitter account over the last 12 months.

Month	No. of Tweets	Views ¹	Profile visitors	Mentions	New followers
Dec-22	1	1,439	848	11	13
Nov-22	6	9,438	798	15	7
Oct-22	3	3,593	456	8	11
Sept-22	6	6,539	2,206	9	16
Aug-22	1	379	463	4	6
Jul-22	1	1,444	567	0	15
Jun-22	2	22,400	1,530	5	36
May-22	2	4,917	789	2	12
Apr-22	1	4,167	920	5	10
Mar-22	5	8,939	2,248	18	34
Feb-22	2	5,927	2,017	15	24
Jan-22	4	3,995	629	1	11
Total	34	73,177	13,471	93	195
Average	3	6,098	1,123	8	16

Table 1. Twitter statistics.

Notes

1 – Views include figure for Retweets and mentions (@ARIADNE_Network) that Twitter users click on. These figures will also appear in the Profile visitors and Mentions.

On average, there were three Tweets with an average of 6,098 views per month and a gain of 16 new followers per month. This level of activity is higher than the previous period, possibly helped by the return to physical events. Overall, the results are positive with a further increase in followers.

The most popular Tweet during this period was in June 2020, receiving 9,557 views and 204 clicks on the link:

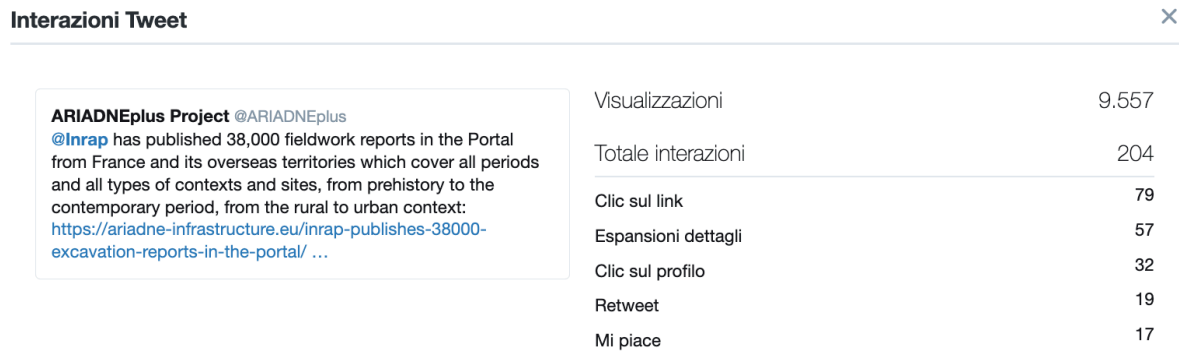


Figure 12. Most popular tweet from the last 12 months.

Other tweets concerning the project, such as the Visual Media Service Workshop and Call for the TNA Summer Schools usually have between 2,000 to over 3,000 views.

3.3 Slideshare

From the start of the project to M35, presentations were uploaded to the “ariadnenetwork” account following the 2021 CAA and EAA Conferences. Since Slideshare changed ownership and introduced a subscription, which reduced access, it was decided to upload all outputs to Zenodo and use the figures provided there. By M35, there had been a total of 1,061 views of the ARIADNEplus presentations. By M48 this had increased and included presentations from the previous ARIADNE Project. Over the last year, there was an additional 4,962 views in total. When compared to Zenodo, the viewing figures are nearly as high but the downloads far lower. This may be because Slideshare tends to have a much wider audience whilst Zenodo is targeted towards research and academia.

3.4 Zenodo

There are currently 66 project outputs from ARIADNEplus in the Zenodo ARIADNE Infrastructure Community as follows:

- 34 presentations
- 29 publications (project deliverables and reports, some with annexes)
- 2 datasets
- 1 poster (from Session 273 at EAA 2022).

The viewing and download figures are:

Views	Downloads
5,074	3,428

The high ratio of downloads compared to views (68%) is very encouraging as Zenodo users are a key target group for ARIADNEplus (i.e. researchers). The full list of Project outputs and individual viewing and download figures can be found in Annex A.

3.5 Promotional materials

Several promotional materials were produced for the project during M1 and M2 including two leaflets, banners and branded items such as pens, pads and a back-pack bag. No further materials were made due to the lack of physical events during years two and three. With the return of travel during the last

period, new promotional materials were produced for display and distribution at major events such as EAA 27 in Budapest and CHNT in Vienna. These consisted of an updated leaflet about the project and a new poster.



Figure 13. The new ARIADNEplus poster and leaflet.

Technology and Services

The underlying technology supports Linked Open Data along with inter-disciplinary, collaborative working. Several services are available in the Portal, ranging from tools for data analysis (e.g. for data mining and Natural Language Processing) and for data synthesis, (e.g. visualization of images and 3D, locating data on a map or in time, browsing the data using Linked Open Data) as well as dedicated Virtual Research Environments (VREs) which provide access to popular applications such as JupyterHub and Rstudio, and GIS services. Several Pilot applications demonstrate the various services in use.

Such tools will enable researchers to effectively re-use the data made accessible through the ARIADNEplus Catalogue. It will be possible, for example, to search for data on a specific topic, refine the search by restricting the time and space scope, then collecting the search results in a VRE for further processing using the ARIADNEplus services, in order to re-purpose them according to the re-user's research. It will also be possible to share this virtual environment to carry out collaborative research. Thus, the ARIADNEplus cloud will become the first implementation of the European Open Science Cloud (EOSC) in the archaeological and cultural heritage domain.

Join the ARIADNE Community

Institutions and research teams wishing to join ARIADNEplus and add their datasets to the Catalogue are most welcome: there is a specific programme, called ARIADNEplus Associates, to support them and to extend the ARIADNEplus coverage to new repositories of archaeological datasets, expanding the ARIADNEplus collaborative network within the archaeological research community.

Contact us

Further information is available on the web site: www.ariadne-infrastructure.eu

You may contact the project coordinator Franco Niccolucci directly at: coordinator@ariadne-infrastructure.eu

He will direct you to the most appropriate partner(s) in charge of the activity or activities that best correspond to your request. Updated news is available from the web site and on Twitter.

 @ARIADNEplus

ARIADNEplus is a project funded by the European Commission under the H2020 Programme, contract no. H2020-INFRAIA-2018-1-823914.



Advanced Research Infrastructure for Archaeological Data Networking in Europe







ARIADNEplus has extensively expanded the ARIADNE Portal which contains a searchable catalogue of archaeological datasets including unpublished reports, images, maps, databases and other kinds of archaeological information accessible online as well as providing several services for the documentation, analysis and presentation of data. It is the continuation of the successful ARIADNE project (2013-2017) for the integration of European archaeological repositories.

The Catalogue

The ARIADNE catalogue is searchable according to the three facets of “when” (time), “where” (space), “what” (object) and keywords drawn from controlled Vocabularies such as the Getty Arts and Architecture Thesaurus and PeriodO which enables multi-lingual searches. Searching provides a list of the datasets corresponding to the selection criteria with summary information about their content and a link to the source data, which can thus be accessed by the user according to the rules established by the content owner.



The Aim

The project does not aggregate or move data, but only the metadata of the datasets, which are maintained and controlled by their owners. ARIADNEplus has updated existing data in the ARIADNE Portal and extended their geographic and temporal coverage.

At present, about three million datasets are available via the ARIADNE catalogue corresponding to a huge amount of information as each dataset may comprise, for example, an entire report with related images, drawings, or a complete database including thousands of individual records. The period covered is from around one million years ago to the present day. The catalogued content types range from individual finds to monuments and site inventories and from the report of one single intervention to the results of a long-term archaeological mission.

Moreover, ARIADNEplus takes care of the conceptual specifications of the various archaeological data types in its data application-profiles that are modelled based on the project-ontology that connects to international standards.



Policies and Strategies

ARIADNEplus includes activities dedicated to documenting and proposing relevant policies and strategies for data such as the application of the FAIR principles and the certification of repositories. It also addresses some fundamental issues, for example development of guidelines for the creation, management and sustainability of archaeological repositories.

ARIADNEplus provides guidelines and other useful material, such as, for example, a Data Management Plan (DMP) on-line template, designed for use by archaeologists, simplifying its preparation with the provision of pre-compiled menus with the most common options used in the archaeological domains.

Networking and Training

Consolidating a comprehensive, active and informed community is one of the goals of the ARIADNEplus project, which envisages a large number of initiatives, such as workshops, sessions at events, meetings and dedicated communication channels. Particular attention has been dedicated to regions or countries where archaeological dataset creation, processing and management may be less advanced compared to the others.

Many of the networking activities include a substantial training component and because a large part of the project took place during the pandemic, training materials for remote participation, e.g. webinars, have been particularly important. This includes tutorials on the use of the ARIADNEplus platform. All are available via the website. Despite the pandemic a number of summer schools took place in the final year of the project, in which small teams were directly supported by ARIADNEplus experts to develop their own research projects.



Partners

The 41 ARIADNEplus partners come from 23 European countries, plus 4 international partners. ARIADNEplus is funded to support researchers but is important and useful also for heritage agencies and managers.

Figure 14. The two sides of the new A4 three-fold ARIADNEplus leaflet in detail.

3.6 Project newsletter

Four issues of the project newsletter were published during Period 1 with five more in Period 2. MailChimp is the tool used to create and distribute the newsletters. The newsletters highlight articles and items from the website with the purpose of allowing recipients access at a click to items of interest to them, whilst also bringing ARIADNEplus to their attention on a regular basis. The Newsletters are distributed via an email list and notices about the newsletter are posted on Twitter. Initially, the Newsletter was distributed to the project participants who are encouraged to forward them to colleagues and other stakeholders. External readers can sign up via the website to be added to the mailing list. The motivation behind publishing a summary version of the newsletter with links to the full articles is to send traffic to the project website. The first newsletter was sent out in May 2019, after the CAA meeting with subsequent ones published on a 3-monthly basis. The campaign statistics are as follows:

Newsletter No.	No. of subscribers	No. of opens	No. of clicks on links
1	156	70 (46.4%)	13 (8.6%)
2	171	79 (46.2%)	23 (13.5%)
3	178	70 (39.8%)	13 (7.4%)
4	183	76 (41.8%)	17 (9.3%)
5	190	77 (40.7%)	15 (7.9%)
6	195	81 (43.3%)	23 (12.3%)
7	205	89 (44.5%)	19 (9.5%)
8	212	91 (43.5%)	11 (5.3%)
9	222	95 (42.8%)	12 (5.5%)
10	235	93 (40.1%)	21 (9.1%)
11	255	96 (38.9%)	16 (6.5%)

Table 2. Newsletter statistics.

During the last period, two newsletters were published (there was a hiatus mid-year due to updates to the Portal) with each Newsletter is opened by over 90 people (approx. 40%) with a click-through rate of around 8%. The current subscriber list stands at 226, an increase of 33 (15%). One final Newsletter (No. 12) will be sent out after the Final Event in Florence just before the holidays.

3.7 Other dissemination materials

A basic set of promotional materials was also prepared and made available for use. These materials include:

- a set of project logos for use in printed materials and online resources, with branding guidelines and instructions for printers;
- templates for fact sheets, presentations etc.;
- a project description sheet (condensed version from the DoW);
- an ARIADNEplus Essentials PowerPoint presentation.

These materials are made available to members of the project for download from the Intranet of the ARIADNEplus project website.

4 Dissemination activities

4.1 Conferences and events

This Task concerns the planning of regular dissemination and communication at events aimed at increasing awareness about ARIADNEplus, showcasing project achievements and fostering the meeting of the ARIADNEplus community with stakeholders. Events organised by the project are generally co-located with major conferences and symposia and planned according to favourable opportunities.

For ARIADNEplus, there are major archaeology conferences, the EAA and the CAA which are of key importance to the project. The EAA, the European Association of Archaeologists annual conference, was where the annual ARIADNEplus General assembly was held for 2022, as many partners were present for this conference (others joined remotely via Zoom). The EAA represents the main body of European archaeologists and has had over 11,000 members from 60 countries worldwide working in prehistory, classical, medieval and later archaeology. The EAA also sets professional and ethical standards for archaeological work. CAA (Computer Applications and Quantitative Methods in Archaeology) and CHNT (Cultural Heritage and New Technologies) are organisations for the more digitally inclined archaeologists, each representing smaller communities, but still a main target group for ARIADNEplus activities. In 2022, the usual date for CAA (Easter) was moved to 8th-11th August and very few partners were able to attend due to being away on vacation or undertaking fieldwork. Consequently, it was decided to focus on EAA (31st August-3rd September) and CHNT (10th-12th November) the final year. Sessions were organised at both conferences and a booth was also present throughout EAA and for Visitors Day on Friday 11th at CHNT.

During 2022, most partners returned to physical events although virtual events continue to be organised as well, with several following a hybrid approach. At least 820 people were reached at the following 22 events that partners attended and presented. In some cases, where the event is held online, it wasn't always possible to see how many people were in attendance. However, with an average of 43 people per event (based on 19 from 22 events in total), it can be assumed that around 900 people were reached in total.

Notable highlights for 2022 were:

DH2022, Tokyo, Japan

The paper given by Yuichi Takata and Peter Yanase of NARA, "Integrating the Japanese Archaeological Dataset into the ARIADNEplus Data Infrastructure" at DH2022 in Tokyo highlighted the fact that Japan was the first Asian country to provide their data to ARIADNE, and helped bring the Portal to the attention of this geographic area of end users.

EAA 2022, Budapest, Hungary

ARIADNEplus hosted a full-day session, “Fairly Front-Loading the Archive: Moving Beyond Findable, Accessible and Interoperable to Reuse of Archaeological Data” (No. 273), on Friday, 2nd September as part of Theme: 6. A Decade after the ‘Third Science Revolution in Archaeology’ which was organised and hosted by Edeltraud Aspöck (Austrian Centre for Digital Humanities and Cultural Heritage, Austrian Academy of Sciences), Keith May, (Historic England) and Holly Wright, (Archaeology Data Service, Department of Archaeology, University of York). The Session consisted of 22 papers of around 15 minutes each plus two posters with discussion slots after regular intervals (1.5-2 hours). The full programme along with presentations can be viewed on the website here: <https://ariadne-infrastructure.eu/ea2022-session-273/>

In addition, the project had a booth with the poster, leaflets and laptop (for demos) for the 3 days of the conference.



Figure 15. The ARIADNEplus booth at EAA.

CHNT 2022, Vienna, Austria

The workshop “Preservation of Cultural Heritage Data: Challenges and opportunities during the life cycle of archaeological data” was organised by Edeltraud Aspöck (OeAW), Guntram Geser (SRFG) and Julian Richards (UoY-ADS) at CHNT 2022, Vienna on Friday 11th November. It followed on from the Keynote speech given by Julian on the topic of “Joined Up Thinking: The challenges of large-scale data integration. The full programme can be viewed on the website at:

<https://ariadne-infrastructure.eu/preservation-of-cultural-heritage-data-challenges-and-opportunities-during-the-life-cycle-of-archaeological-data>

There was a booth for the Friday afternoon in the same venue (Visitors Day) with a short presentation of the project given by Sheena Bassett.

The ARIADNEplus Final Event, Florence 15th-16th December 2022



The poster for the ARIADNEplus Final Event is divided into two main sections for the dates 15 and 16 December 2022. At the top left is the ARIADNEplus logo, and at the top right is a red banner that says 'FINAL EVENT'. Below this, a red banner reads 'FINAL CONFERENCE PROGRAM'. To the right of this banner, the location is given as 'Palazzo Guadagni Strozzi Sacratini, Piazza del Duomo, 10, Firenze, SALA PEGASO (g.c.)' with a location pin icon. The 15 December 2022 section lists a series of events from 15:00 to 18:00, including welcome speeches by Dr. Eugenio Giani and Dr. Daniela Toccafondi, a presentation by Julian Richards, a talk by Carlo Meghini, a break, a talk by Guntram Geser, and a closing talk by Franco Niccolucci. The 16 December 2022 section features a 'Business meeting' from 10:00 to 13:00 at 'PIN, PIAZZA CIARDI 25, PRATO, SALA BLU', also with a location pin icon. At the bottom left, there is a European Union flag and text stating the project is funded by the H2020 Programme. At the bottom right, it says 'Con il patrocinio di REGIONE TOSCANA' with the regional logo. The bottom of the poster features logos for '30 ANNI 1992 - 2022', a colorful geometric logo, 'PIN POLO UNIVERSITARIO CITTÀ DI PRATO', and the 'REGIONE TOSCANA' logo.

Figure 16. The Final Event Programme.

The ARIADNEplus Final Event was organised for the 15th December and featured a programme which highlighted the project achievements. A summary can be viewed here: <https://ariadne-infrastructure.eu/ariadne-lives-on-final-event-round-up-and-announcement/>

4.2 Publications

MiBAC-ICCU leads Task 7.4 which concerns the publication of materials by the project including:

- scientific publications in academic journals;
- training materials;
- service specific brochures and fact sheets;
- project brochures and leaflets.

To date, the project has produced the following publications:

4.2.1 Scientific publications in academic journals

The full list of academic publications (which include the “FAIRify data management and make data reusable” Guidelines) are to be found in Annex D. The majority of papers have metrics, and to date, these are summarised as follows:

Metric description	Number
Views	21,842
Downloads	15,675
Accesses (Altmetrics term = views)	3,633
Reach (website site visitors p.a., circulation) where previous metrics not specified.	122,000

The download figure of > 15,000 is the strongest indicator of interest as the end user is presumed to have looked at a preview (as provided on Zenodo) or read the article abstract prior to downloading the file to study further. This would suggest that the Archaeology Community is highly engaged with the work and outputs of ARIADNEplus and exceeds the target of 10,000 for User Involvement, for example.

4.2.2 Training materials

The PARTHENOS Guidelines to “FAIRify data management and make data reusable” have been translated into more languages by ARIADNEplus, including Czech (532 views and 315 downloads), Portuguese (573 views, 363 downloads) and Turkish (664 views, 447 downloads) with 4,249 downloads in total to date (<https://doi.org/10.5281/zenodo.3937149>) by M48.

4.2.3 Service specific brochures and fact sheets

A technical guide with examples was produced for the Lab VRE where it may be accessed online: <https://tinyurl.com/2yz88nma> (login is required for the ARIADNEplus VRE).

4.2.4 Project brochures and leaflets

In addition to the two brochures produced at the start of the project, a new brochure was designed for 2022, as previously described in Section 3.5.

4.3 National Campaigns for the Portal

During the first two years of the ARIADNEplus project, the activities focussed on the preparation of a new, improved, inclusive data model which can accommodate datasets from many new archaeological sub-domains which require specific vocabularies and specialised data models (called Application Profiles). Examples include Ancient DNA (aDNA) and Heritage Science. Moreover, the new Portal caters for individual data records as well as collections. Consequently, the remapping of existing datasets and addition of new ones has seen the first datasets being uploaded into the Portal during Period 2 onwards. Many of the collections of datasets have come from national providers, so it was agreed that the best approach at this stage (whilst the Portal itself is being updated) would be for each provider to carry out a national dissemination campaign (mainly via social media) to encourage their archaeological community members to visit the Portal and explore their datasets, along with all the others already there. This approach ensured that the Portal Infrastructure would have a growing number of visitors without there being a sudden massive increase (which could potentially cause performance problems) and that matching the newly available data to visitors would not lead to disappointment, putting off future users. At this point in time, there are no new services as the focus has been on upgrading the Portal and data and the search and display facilities.

The national campaigns started with ADS in M27 who ran a week-long Twitter campaign, published blog posts and had an article published on a key UK website popular with archaeologists, the British Archaeological Jobs Resource (BAJR). Slovenia (ZRC-SAZU) followed around 3 weeks later and Bulgaria (NAIM-BAS) another 3 weeks after that in M28, both also choosing Twitter to promote examples of their datasets. After this, the next dataset to be uploaded was in M33 by ROCEEH who are based in Germany (but the datasets are geographically related to Africa). They also conducted their own dissemination campaign, but their user base is more widely geographically spread.

During the final period, the most significant datasets uploaded related mainly to ‘Finds’ data, the first of these being the DIME database from Denmark (Aarhus University). This was also the first dataset to include images of the artefacts. This was followed by the British Museum’s Portable Antiquities Scheme (provided by ADS), the Archaeological Information System of the Czech Republic, the Portable Antiquities Scheme of the Netherlands and resources from the FindSampo collection from the Finnish Heritage Agency. The DIME data upload to the ARIADNE Catalogue was widely disseminated and a feature article, “Public finds in the ARIADNEplus Data Infrastructure” was also published to bring attention to the increasing number of artefacts being made available. One other dataset of note was the two collections provided by IDACOR (Instituto de Antropología de Córdoba), Argentina and is notable for being the first time this data has been made available online. The first collection is from BADACOR (Base de Datos Arqueológica de Córdoba) and is based on fieldwork from the Province of Córdoba (in central Argentina). The second collection (Colección Alemandri) consists of artefacts from the Patagonia region. Both the Danish and Argentinian datasets were disseminated nationally by the publishers.

4.3.1 Visitors to the Portal

The statistics for the new Portal start from January 2021 which is when the upgraded version was implemented with the enhanced search facilities following in early February when the Portal became available to the public. The statistics for the first 11 months (January 2021-November 2021) were examined in detail in the previous report, especially with respect to the impact of the National Campaigns. From 1st January 2021 to 27th November 2021, there was a total of 7,165 visitors to the Portal. By 9th December 2022, this had increased to 32K new users (Fig. 17), an increase of 25K, (357%). Dissemination focussed on bringing users to the Portal and this appears to have succeeded, as there are three times more visitors to the Portal compared to the website.

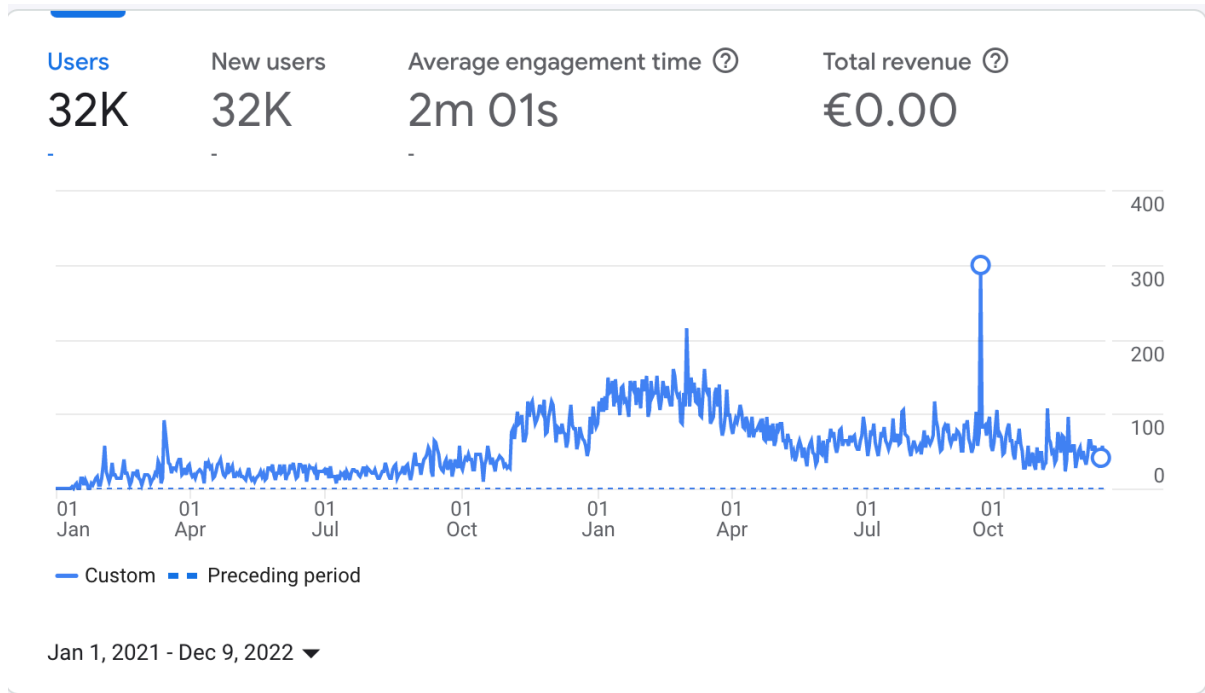


Figure 17. Portal visitor rate profile.

There is no direct explanation for the spike of users in March, although this coincides with when the 4CH **Save the Ukraine Monuments** (SUM) initiative was launched. The second obvious spike in user activity occurs on the 15th -16th September when there were 300 visitors in one day. This can mostly likely be attributed the Journal of Open Archeology (JOAD) who tweeted:

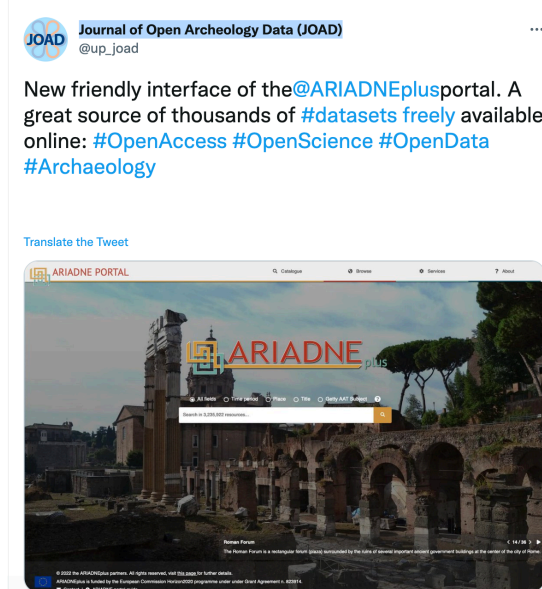


Figure 18. Tweet from JOAD 15th September 2022.

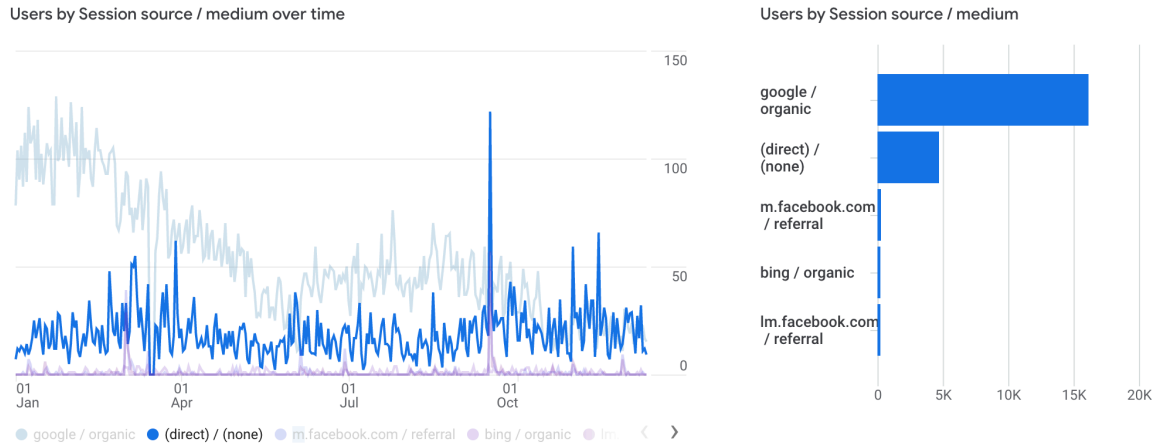


Figure 19. Traffic sources to the Portal.

Over the last year (Fig. 19), over 60% of the traffic has originated from searches made through Google – the 16th September spike corresponds to a matching increase in Organic Social referrals, i.e. Twitter. Most of the remaining referrals are likely to be bookmarks with some direct URL entry as well. Other search engines such as Bing and Facebook have also contributed to the Portal traffic.

Users ▾ by Country



Figure 20. Geographical coverage Jan 2021 – December 2022.

In terms of geographical coverage, the map above (Fig. 20) covers the whole reporting period, i.e. the last two years. The following map shows geographical coverage for the last year and does not differ in terms of leading countries.

Users ▾ by Country

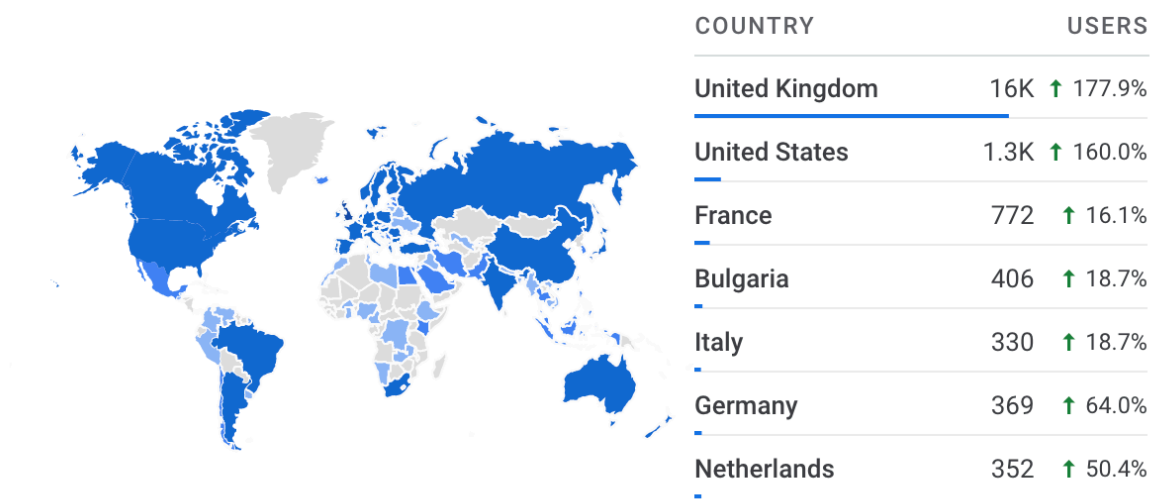


Figure 21. Geographical coverage Jan 2022 – December 2022.

All the visitor rates for the top seven countries have continued to increase for the last year.

The top 10 countries from which visitors come to the Portal are shown in Figure 22. All, except Australia (No. 10) have datasets in the Portal which tends to suggest that the combined dissemination at project level and by the partners themselves is helping to attract new users.

Country	Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user
	22,810 vs. 9,705 ↑ 135.03%	22,597 vs. 9,660 ↑ 133.92%	19,248 vs. 2,810 ↑ 584.98%	61.84% vs. 31.82% ↑ 94.38%	0.84 vs. 0.29 ↑ 191.44%
1 United Kingdom	15,831	15,733	12,526	61.65%	0.79
2 United States	1,334	1,311	821	54.59%	0.62
3 France	773	756	937	66.6%	1.21
4 Bulgaria	408	399	453	74.02%	1.11
5 Cyprus	406	403	189	38.97%	0.47
6 Germany	369	355	412	66.45%	1.12
7 Hungary	359	345	212	48.74%	0.59
8 Netherlands	352	340	311	63.34%	0.88
9 Italy	331	305	962	69.56%	2.91
10 Australia	271	270	219	73.99%	0.81

Figure 22. Top 10 visitor countries Jan 2022 – December 2022.

4.4 Transnational Access and Training

4.4.1 Transnational Access (TNA)

Transnational Access resumed in 2022 in the form of three Summer Schools and a Winter School which covered all the training on offer. A total of 37 places were offered, 34 either transferring from 2020 or applying for the first time in 2022. Of these, 32 attended the Summer Schools, with two candidates dropping out at short notice for personal reasons. Students came both from partners (and Associate Partners) within ARIADNEplus with a few external. Full reports for each of the four TNA Training provided are reported in:

- D8.1 – Quantity of Access Offered: Mapping existing datasets to CIDOC CRM
- D9.1 – Quantity of Access Offered: Data Stewardship
- D10.1 – Quantity of Access Offered: Implementing Interoperability
- D11.1 – Quantity of Access Offered: Visual Media for the Documentation of Fieldwork and Artefacts

4.4.2 Training events

Four training events were held during 2022 (See Annex C). All these had international audiences and received positive feedback from the participants.

4.4.3 The Training Hub

The Training Hub, launched in Period 1, has continued to grow with the addition of some new modules following the training workshops undertaken by DANS Data Trail on FAIR Data management and the DMP Tools.

5 Monitoring and assessment

The dissemination programme is monitored and assessed to review:

- what messages (communication of benefits) are going out and who is seeing them;
- whether those messages are being understood and remembered;
- whether the messages are influencing opinions, attitudes, and behaviours.

This information will help in planning subsequent phases of the marketing strategy, in developing future marketing activities, and in order to make revisions of the marketing strategy plan. It ensured that the marketing strategy is effectively reaching the target audiences and they are acting on the messages they receive.

Success indicators:

- stakeholder involvement;
- number of institutional stakeholders involved e.g. by becoming associates, participating in bilateral meetings, sending researchers to participate in TNA and training events, taking part in user surveys and other activities;
- user involvement;
- number of users participating in project training activities, attending workshops and presentations etc.;
- project website developed;
- number of unique visitors;
- research infrastructure online services;
- number of unique users;
- number of ARIADNEplus Twitter followers, reach (number of people who see messages and retweets);
- number of people reached via other media channels e.g. newspapers, YouTube, interviews;
- number of presentations at relevant conferences and events;
- number of presentations and project publications downloaded from Slideshare;*
- number of readers of ARIADNEplus email newsletter.

* Transferred to Zenodo after Year 2.

The following target figures were produced by looking at the numbers achieved by ARIADNE as reported in the final Dissemination report [3], using these as guidelines to obtain realistic targets.

Description	Measure	Month 48 Target	Month 48 Actual	Comments
Stakeholder involvement	Number of institutions	150	>300	Survey (150) + 15 Associate Partners, 200+ data providers
User involvement	Number of participants	10,000	>10,000	E.g. 700 survey respondents, 3000+ Twitter views, 1,700+ reached via events, 32K Portal visitors
Project website	Visitors	30,000	30,035	Google Analytics figure 01/01/2019-19/12/2022
Research infrastructure online services (Portal)	Anonymous users	10,000	32,000	Since January 2021.
Social networks (Twitter)	Number of members	2,000	2,082	Dec 2022
Social networks (Twitter)	Number of people reached	15,000	22,400	Max. views for a single tweet/retweet
Communication via other channels	Number of people reached	5,000	>10,000	Slideshare & Zenodo views, publications
Presentations at international events	Number of people reached	300	>1,400	Total audience, may contain multiple attendances
Downloads from Slideshare*	Number of people reached	1,000	1,061 views.	Download rate about 1% of views.
Downloads from Zenodo	Number of people reached	1,500	3,428	M36 onwards
Newsletters	Number of readers	300	~96 actual readers per edition.	255 subscribers, Approx. 43% opened.

Table 3. Indicators to be used for monitoring the dissemination impact.

By M48, most of the indicator targets have been met, and in most cases, well exceeded. The Slideshare download figures are on the low side, but the replacement service used, Zenodo, easily exceeded the target in only 24 months. The newsletter target has also been missed in terms of readers (85% on

target but an open rate of 43% is very good so this is small but effective communication channel. Twitter, on the other hand, has proved to be as popular as ever with a very wide reach (to a self-selecting audience). The visitor numbers to the Portal are also very encouraging. Finally, the academic publications figures are also very positive with over 21,000 views and 15,675 downloads to date indicating a high level of interest within the target community.

In conclusion, the indicators show that by the third and final period, ARIADNEplus has been effective at building its community and disseminating information about the project. Promotion of the key output, the Portal, only begun in January 2021 but has increased with a steady visitor rate.

6 Recommendations from the Strategic Advisory Board concerning Dissemination and Communication

A number of recommendations were made by the Strategic Advisory Board regarding WP7, which were included in the first report (Appendix 1). The current status at M48 is as follows:

Dissemination

- Network with as many other similar projects with the ARIADNEplus website
- Networking with other projects has taken place through meetings and events and our new associated members and allies such as SEADDA will be highlighted
- Besides creating own channels, ARIADNEplus should exploit existing local projects to improve public dissemination. Among others, the following were mentioned:
 - Heritage Information Access Strategy by Historic England, Local Authority Historic Environment Records in England;
- Several liaisons of this type are described in D2.3 Interim Report on Networking and Integration and D2.5 Final Report on Networking and Integration.
- Printed materials continue to be a useful means to broadcast project results. Leaflets or other materials that can be taken away by conference attendees would magnify the project's resonance within the community.
 - The leaflets as described in section 3.6.2 of D7.2 were designed for this purpose but made available electronically only due to the COVID travel restrictions.
 - A new, updated leaflet was produced for 2022 as described in Section 3.6.
- Print-on-demand: Archaeolingua continues to publish, for example, the EAC's Annual Meetings Extended Abstracts with links to the full online versions of the papers. Libraries and archives request the published paper copies, which are kept for consultation:
 - Archeolingua published the book "The ARIADNE Impact" in 2019 following the successful session at CAA, Krakow.
 - A project summary leaflet for both downloading and a print-ready version was available by August 2022. Partners can produce their own language versions (either send text to MIBACT-ICCU for typesetting or can get this done themselves with original files, Adobe InDesign).
- Webinars: some of the presentations given during the ARIADNEplus kick-off were excellent and could easily be converted into webinars.
 - The Workshop & seminars section on the website has published five webinars, as well as presentations from workshops from key conferences.
- Media coverage is an aspect that has not been fully developed. Appointing a media expert to follow the project and interact with the media (television, radio, newspapers, and so on) would be of great advantage.
 - Some coverage has taken place, e.g. NARA.
- Museums: at this stage, the project is only involved with a few museums that have a research section. One of the project's implementation pilots was led by the Moesgaard Museum (MOMU) in Denmark. The pilot can be disseminated through NEMO, the Network of European Museum Organisations:
 - To be organised when the pilot is ready.
 - Note that several museums have now provided data to the Portal.

Conferences

- There are many new fields of research (Bio-Archaeology, aDNA, Environmental Studies, and so on) that are unaware of the ARIADNEplus project. The project must therefore increase its presence in specialised conferences/events with the aim of reaching these different academic communities.
 - BSA Upper House Virtual Seminars. Invited lecture on "Excavation archives in 3D: Digital documentation and curation workflows". Dec 2020
 - Computer Applications and Quantitative Methods in Archaeology, Greece. 'Big Data in Archaeology', Oct 2021".
 - At present, we are building up a contacts database, part of which is focussing on the 13 specialist areas covered by the project for targeted communications.
- The EAC Annual Symposium is another venue to take advantage of to get the government angle on what ARIADNEplus is doing. It would be a good idea to have another symposium, such as the one that took place in Brighton in 2016.
- The project needs to be more present at events where computer scientists are involved. This audience is not fully aware of the problems related to the integration of archaeological research, and vice-versa.
- Other means of addressing this issue are in development. These include:
 - Publication of reports by the sub-domain groups (done),
 - Preparation of training materials which will cover this issue,
 - Guest feature on website to illustrate this. The VRE Lab feature falls into this category.

In summary, the project has already adopted many of the recommendations and the ongoing success of the ARIADNEplus Community and the Portal validate the dissemination strategy pursued.

7 Conclusions

Periods 1 and 2 have focussed on disseminating the project and its initial results to the more immediate stakeholder community of researchers and academics, achieving most of the targets set for this. In the final Period, the dissemination and communication activities concentrated more on bringing end-users to the Portal, which is the ultimate goal and major output of the project. This has proved highly effective with a visitor rate that exceeds that of the website. Nearly all the indicators have been met with many far above target (only the Newsletter was slightly below target). More specifically, ARIADNEplus now has over 2,000 Twitter followers (with an effective audience of thousands more), a well-established Community on Zenodo with a download figure in excess of 10,000, and a growing affiliate programme in the form of Associate Partners and close links with SEADDA.

Working hand in hand with WP2, WP7 has helped to build the ARIADNE Community to ensure the future sustainability of the Data Infrastructure which has now been launched as the ARIADNE RI AISBL, and will start operations in early 2023 once the registration has been completed. The results of the dissemination activities and levels of engagement shown provide a solid foundation on which to continue and build on the activities undertaken within the ARIADNEplus project.

Annex A

List of Project Outputs in Zenodo

Title	Type	Upload date	Views	Download
Preserving Heritage through Publishing Archives; The North African Heritage Archives Network (NAHAN)	Presentation	07/12/2022	7	5
Joining it All Up – new research questions combining site and artefact data in ARIADNE	Presentation	07/12/2022	5	6
ARIADNE infrastructure: Benefits and requirements of data providers	Presentation	07/12/2022	4	4
Archaeological Excavation Modelling Working Group: WP 4.4.12 excavation data	Report	24/11/2022	27	36
Impact of COVID-19 on Archaeology and Cultural Heritage	Report	29/11/2021	7	7
The Aggregation of ROAD Data in the ARIADNE Pipeline: Successes and Pitfalls	Presentation	16/11/2022	7	11
Integrating data on early medieval graves: Mapping the THANADOS database to the ARIADNE infrastructure with the ARIADNE Mortuary Data Application Profile	Presentation	16/11/2022	8	6
The ARIADNE Mortuary Data Application Profile	Presentation	16/11/2022	8	4
Joined Up Thinking: The challenges of large scale data integration	Presentation	16/11/2022	12	9
Introduction to session Preservation of Cultural Heritage Data: Challenges and opportunities during the life cycle of archaeological data	Presentation	16/11/2022	9	7
Making Old Data New – Obstacles and Opportunities in the Re-Use of Data for Constructing a Bog Butter Database	Presentation	07/11/2022	8	7
FAIRly data, further knowledge: the 2ArchIS database and pottery analysis	Presentation	07/11/2022	7	6
Improving the reusability of relative and absolute chronological information by automating and archiving the Bayesian chronology construction process	Presentation	07/11/2022	6	6
Reusing Field Survey Data for New Questions: A Case Study from The Sibaritide Region (Calabria, Italy)	Presentation	07/11/2022	6	3

Title	Type	Upload date	Views	Download
Dealing with digitally born legacy data and lessons for the future. Project Urdar and Swedish contract archaeology	Presentation	04/11/2022	22	23
Retaining Roots While Hard Pruning Data: Context and Collaboration in Digitisation and Data Modelling in South Asia	Presentation	27/10/2022	8	6
ARIADNEplus questionnaire responses for metadata aggregation	Dataset	18/10/2022	3	3
D12.3 Interim report on JRA activities	Deliverable	21/12/2021	10	10
D7.3 – Interim Dissemination and Communication Plan and Report 2	Deliverable	04/10/2022	3	15
D5.3 Interim Report on Data Infrastructure update and extension	Deliverable	20/12/2021	14	14
D2.4 Interim Report on Networking and Integration	Deliverable	20/12/2021	10	10
Monitoring the Conservation Of Open-Air Mesolithic Sites Using Spatial Data Infrastructures: Implications for Cultural Heritage Studies	Presentation	28/10/2022	15	11
What Does Usability Mean and How Can it be Achieved? Online Celtic Coinage (OCC) as a Case Study	Presentation	27/09/2022	12	10
Argentinian Digital Archaeological Data Going FAIR. Opportunities, Strengths and Challenges for the Reuse of Information Available in Open Access	Presentation	27/09/2022	12	13
Reuse of Research Data for GIS-Analyses. Use Case of Bronze Age Mining in The Lower Inn Valley and Pinzgau (Austria)	Presentation	27/09/2022	9	11
The Matrix: Connecting and Re-Using Digital Records of Archaeological Investigations	Presentation	27/09/2022	12	3
Bringing Excavation Data Together. Are We There Yet and Where is That?	Presentation	27/09/2022	18	16
Data Fragmentation, Complexity, and the Case Of Swedish Archaeology in the Mediterranean. The Common Grounds Project	Presentation	27/09/2022	31	17
Virtual Workshop on Semantic mapping of archaeological excavation data	Report	26/09/2022	38	42
Archaeological Interactive Report: a trait d'union between data management and semantic publication	Presentation	23/09/2022	11	18
597 Norwegian excavation databases and CIDOC CRM - a practical exercise	Presentation	23/09/2022	13	13
Reworking aged excavation mappings with new models and tools	Presentation	23/09/2022	35	33
Modelling Archaeological Excavations. Theoretical Patterns and Practical Recipes	Presentation	23/09/2022	12	10
OpenArchaeo: a semantic Web platform for archaeological data	Presentation	23/09/2022	39	35

Title	Type	Upload date	Views	Download
An approach to model archaeological data and create RDF from spreadsheets	Presentation	23/09/2022	14	14
The X3ML toolkit: How to map excavation data to CIDOC CRM	Presentation	23/09/2022	16	16
From modelling to mappings: how to appropriate the CIDOC CRM	Presentation	23/09/2022	10	12
Semantic Data Modelling and Archaeological Research Data - Why, How and Where We are Now	Presentation	23/09/2022	22	22
Creating Fair Archaeological Data in Norway	Presentation	20/09/2022	10	8
The ROCEEH Out of Africa Database: A Case Study in Reusing Archaeological Data Sensibly	Presentation	20/09/2022	10	11
Data Discovery and Data Re-Use in ARIADNE	Presentation	20/09/2022	8	9
Sharing and Reuse of Open and Fair Data: Insights from the ARIADNE Surveys	Presentation	20/09/2022	7	11
Whither GIS? – Some Challenges of Using and Reusing Spatial Data from Archaeological Fieldwork	Presentation	20/09/2022	8	1
D3.2 Interim report on policies and strategies	Deliverable	23/03/2022	25	18
Recommendations and Application Profile Proposal for archaeological remote and near-surface sensing data in ARIADNEplus	Report	15/03/2022	61	40
Zbiva, Early Medieval Data Set for the Eastern Alps. Data sub-set	Dataset	06/12/2021	142	101
D2.3 Final Report on Community Needs	Deliverable	29/10/2021	138	65
D6.2 Initial Report on the Project Impact	Deliverable	03/07/2021	338	76
D16.1 – Mid-term interim report on ARIADNEplus pilots	Deliverable	22/01/2021	102	41
D15.1 – Mid-term interim report on ARIADNEplus services	Deliverable	22/01/2021	99	32
D14.1– Mid-term interim report on the ARIADNEplus knowledge management system	Deliverable	27/01/2021	100	35
D13.2 – VREs Operation Mid-term Activity Report	Deliverable	26/01/2021	78	19
D13.1 – Software Release Procedures and Tools JRA2	Deliverable	20/06/2019	92	22
D12.2 – Mid-term report on data integration	Deliverable	20/01/2021	105	35
D12.1 Initial report on JRA activities	Deliverable	28/06/2020	84	20
D7.2 – Interim dissemination and communication plan and report 1	Deliverable	23/06/2020	100	48
D7.1 – Initial Dissemination and Communication Plan	Deliverable	31/03/2019	85	34

Title	Type	Upload date	Views	Download
D6.1 Initial Report on the Innovation Strategy and Targeted Activities	Deliverable	29/03/2020	93	24
D5.2 First Report on Data Infrastructure update and extension	Deliverable	08/06/2020	79	23
D4.2 – Initial report on ontology implementation	Deliverable	22/12/2020	168	116
D4.1 Initial report on dataset integration	Deliverable	08/06/2020	114	52
D3.1 Initial report on policies and strategies	Deliverable	24/06/2020	95	31
D2.2 Initial Report on Networking and Integration	Deliverable	08/06/2020	86	37
D2.1 Initial Report on Community Needs	Deliverable	31/10/2019	153	84
The ARIADNE Impact	Report	07/01/2019	2,137	1,901
ARIADNEplus and community data repositories. Innovative solutions for sharing open archaeological data	Paper	06/10/2020	47	40
Figures as of 6th December 2022:			Totals	5,074
				3,428

Annex B

Final year events attended and disseminated at by ARIADNEplus partners

Date	Event Title (and URL if available)	Town, Country	Event or part of it (co-) organised by A+ partner? (organisation)	Who gave a presentation on or mentioned A+ (name, organisation)	International?	Target Audience	Estimated number of researchers / people reached	Outcomes (feedback, results...)
24 March 2022	Cultural heritage protection studies (Eötvös Loránd University)	Budapest, Hungary	No	Réka Péter	Yes	archaeologists, students	5	knowledge dissemination
04 April 2022	Workshop: The Visual Media Service (https://ariadne-infrastructure.eu/workshop-the-visual-media-service-monday-4th-april-2022)	Online	MiBACT - ICCU and CNR	Sara Di Giorgio (MiBACT - ICCU) M. Callieri, F. Ponchio, M. Potenziani (CNR)	Yes	Museums, (creative) industries, heritage conservators/managers, archaeologists, software developers, web3d community	~70	Greater awareness of A+ Visual Media Service among stakeholders and users beyond the consortium.

Date	Event Title (and URL if available)	Town, Country	Event or part of it (co-) organised by A+ partner? (organisation)	Who gave a presentation on or mentioned A+ (name, organisation)	International?	Target Audience	Estimated number of researchers / people reached	Outcomes (feedback, results...)
08 April 2022	Dipylon Seminar: Mapping Cultural Heritage: Exploring Places	École française d'Athènes, Athens, GR & online	No	M. Katsianis (PP)	Yes	Archaeologists, heritage managers, web-mapping community	40+online	Greater awareness of A+ Visual Media Service among stakeholders and users beyond the consortium.
05 May 2022	ARIADNEplus for Archaeological Sites and Built Structures @ ARA Symposium	Online. Documentation: https://ariadne-infrastructure.eu/ara-symposium-2022-ariadneplus-for-archaeological-sites-and-built-structures/	Yes, organised by A+, SRFG	G.Geser (SRFG), E.Patsatzi (Carare), B.Sandric et al. (INP), A.Iancu et al. (INP), P.Ronzino (PIN), M.J.Correia (LNEC), T.Vasilescu (IAVP)	No, focused on Romania	archaeologists, heritage conservators, architects	41	Greater awareness of A+ among researchers and professionals working for different organisations in Romania.

Date	Event Title (and URL if available)	Town, Country	Event or part of it (co-) organised by A+ partner? (organisation)	Who gave a presentation on or mentioned A+ (name, organisation)	International?	Target Audience	Estimated number of researchers / people reached	Outcomes (feedback, results...)
31 May 2022	CAA Czechia/Slovakia Annual Conference	Kostelec nad Černými Lesy (Czech Rep.)	Yes	O. Lečbychová, Z. Kosarová, P. Pajdla (ARUB-CAS), D. Novák (ARUP-CAS)	No	archaeologists, heritage managers	60	
03 June 2022	SHARE Archaeological Dialogues. Open lecture	Online	DARKLab, Lund University	M. Katsianis (PP)	Yes	archaeologists, digital archaeology specialists	~20	Presentation online via https://www.darklab.lu.se/share/
10 June 2022	ARIADNE portal: Building a common resource infrastructure for archaeologists worldwide	IASSIST 2022, @SND, Gothenburg, Sweden, 7-10 June 2022 (and online)	No	P.Millet, J.F.Marberg (SND)	Yes	social science IT and data community	~20	The portal presented to social science target community
15 June 2022	ARIADNEplus Workshop on Semantic Mapping of Excavation Data	Online	Yes, organised by A+, PP	Several ARIADNEplus partners	Yes	Archaeologists, software engineers, data modellers	57	Open dissemination of workshop results, presentations
01 June 2022	PAS - Portable Antiquities Scheme Lunchtime Talk @ British Museum	Online	No	J. Richards (ADS)	Yes, European Public Finds Recording Network	Archaeologists and museum staff making public finds accessible online		

Date	Event Title (and URL if available)	Town, Country	Event or part of it (co-) organised by A+ partner? (organisation)	Who gave a presentation on or mentioned A+ (name, organisation)	International?	Target Audience	Estimated number of researchers / people reached	Outcomes (feedback, results...)
25 July 2022	DH2022	Tokyo, Japan (online)	No	Yuichi Takata (NARA), Peter Yanase (NARA), Franco Niccolucci (PIN)	Yes	archaeology, heritage specialists	700	Dissemination of ARIADNE Portal to Asian audience
09 August 2022	CAA International conference, Oxford	Online	Yes, ADS	Julian Richards	Yes	Archaeologists	c.20	new collaborations
##### ##### ###	EAA session: Fairly Front-Loading the Archive: Moving Beyond Findable, Accessible and Interoperable to Reuse of Archaeological Data	Budapest, Hungary	Yes, OeAW, UoY-ADS	Many talks on A+: Geser, Richards, Kandel, Uleberg, Izeta, Wigg-Wolf, Nenova	Yes	Archaeologists	40 + online	discussion of data reuse
6 Sept 2022	Open Science South Asian Network, India	Online	Yes, ADS	Julian Richards	Yes	Open science specialists in arts & Humanities and Social Sciences	c.30	new collaborations
13 Sept 2022	DANS Seminar: Can Bert dig it? Named Entity Recognition for Information Retrieval in the Archaeology Domain	The Hague	Yes, DANS	Alex Brandsen	Yes	Archaeologists, developers, data modellers, information scientists	18 + 7 online	future perspectives

Date	Event Title (and URL if available)	Town, Country	Event or part of it (co-) organised by A+ partner? (organisation)	Who gave a presentation on or mentioned A+ (name, organisation)	International?	Target Audience	Estimated number of researchers / people reached	Outcomes (feedback, results...)
13 Sept 2022	International Symposium on Digital Transformation of Archaeological Information, South Korea	Online and in person	Yes, ADS	Julian Richards	Yes	Archaeologists		new collaborations
15 Sept 2022	International Numismatic Congress	Warsaw, Poland	Yes, RGK	David Wigg-Wolf	Yes	Numismatists	40 + online	knowledge dissemination
Sept 2022	International Symposium on Digital Transformation of Archaeological Information, South Korea	Online and in person	No	Yuichi Takata (NARA) ,Soyeon Ho (NARA)	Yes	Archaeologists	40 + online	new collaborations
10 October 2022	CAA Norway	Oslo and online	Yes	Espen Uleberg	Yes	archaeologists	40	
04 Nov 2022	Norsk arkeologmøte (Norwegian archaeologist meeting)	Trondheim	No	Espen Uleberg	No	archaeologists	177	
07 Nov 2022	Training Workshop on Data Management in Cultural Heritage (7-8 November 2022).	Institute of Nanoscience and Nanotechnology at N.C.S.R. "Demokritos", Athens	No, Demokritos, CAA-GR, MSCA ITN PlaCe	Markos Katsianis, PP	Yes	post-docs, PhD students	25 + online	discussion on data stewardship, outreach for A+, SEADDA, PARTHENOS

Date	Event Title (and URL if available)	Town, Country	Event or part of it (co-) organised by A+ partner? (organisation)	Who gave a presentation on or mentioned A+ (name, organisation)	International?	Target Audience	Estimated number of researchers / people reached	Outcomes (feedback, results...)
11 Nov 2022	CHNT keynote https://chnt.at	Vienna, Austria	Yes, OeAW	Julian Richsrds	Yes	archaeology, heritage specialists, ICOMOS	50+ online	
11 Nov 2022	CHNT Session: Preservation of cultural heritage data: challenges and opportunities during the life cycle of archaeological data	Vienna, Austria	Yes, OeAW, UoY-ADS, SFRG	All talks will on A+: Geser, Richards, Kandel, Uleberg, Wigg-Wolf, Aspöck, Felicetti, Theodoridou, Takata, Yanase, Vassallo, Hiebel	Yes	archaeology, heritage specialists, ICOMOS	30 + online	
17 Nov 2022	New Approaches to Old Questions in Archaeology Symposium, 17-18 November, Organized by Trakya University, Edirne, Turkey	Online	No	Georgi Nekhrizov, Ivo Cholakov, Nadezhda Kecheva	Yes	archaeologists, heritage specialists	30 (only online)	

Annex C

Training Events Organised by Partners

Date	Event Title (and URL if available)	Location	Training or part of it (co-) organised by A+ partner	Topics covered by training	Target Audience	Number of participants
29-Mar-22	DANS Data Trail Workshop: Data Management Tools for Archaeologists https://ariadne-infrastructure.eu/data-management-tools-for-archaeologists/	Online	DANS and PIN	Data Management Plan and Domain Protocol for archaeologists	ARIADNE+, SEADDA, data managers, archaeologists, Everyone interested in Open Science and FAIR research data	89
10-May-22	Webinar: Step by Step one travels FAIR	Online	CARARE: DANS and Digital Repository of Ireland	Introduce some of the ways in which cultural heritage datasets are becoming FAIR	Partners form ARIADNE+ and SEADDA: archaeologist, researchers, , cultural heritage sector professionals.	50
09-Jun-22	Workshop on Future challenges and trends in the archaeological and digital domains	The Hague	DANS	Discuss the challenges effecting change on digital archiving by FAIR enabling repositories	Partners form ARIADNE+ and SEADDA: archaeologists, researchers, cultural heritage sector professionals.	14
30 Nov - 2 Dec 2022	Linked Pasts ARIADNE Hackathon	York, UK	UoY-ADS & CNR	Use of portal; use of ARIADNE Lab VRE	Linked Pasts, SEADDA participants (archaeological and heritage data users and producers)	25 plus online

Annex D

Publications

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2019	OpenArcheo for Usable Semantic Interoperability	Open Data and Ontologies for Cultural Heritage (ODOCH) workshop, Rome, 3 June 2019. CEUR Workshop Proceedings, Vol.2375	Marlet , Olivier; Francart, Thomas; Markhoff, Béatrice; Rodier, Xavier;	Researchers and practitioners in digital archaeology	
Link	https://ceur-ws.org/Vol-2375/paper1.pdf			Open Access (Yes/No)	Yes
2019	ARIADNEplus and community data repositories. Innovative solutions for sharing open archaeological data	CHNT'24 - International Conference on Cultural Heritage and New Technologies, Vienna, 2019	Geser, Guntram (Salzburg Research)	Researchers and practitioners in digital repositories and research infrastructures	48 views, 41 downloads Zenodo 2022-12-22
Link	https://doi.org/10.5281/zenodo.4067245			Open Access (Yes/No)	Yes
2019	Innovation and Impact of the ARIADNE Initiative, pp. 187-199, in:	Richards J. & Niccolucci F. (eds.): The ARIADNE Impact. Budapest: Archaeolingua	Geser, Guntram (Salzburg Research)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	1,915 (Zenodo figures: 2022-12-16: 1,915 downloads, 2,151 views)
Link	https://doi.org/10.5281/zenodo.3476712			Open Access (Yes/No)	Yes

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2019	Prospects and potential for the comprehensive database of archaeological site reports in Japan, pp. 175-185, in:	Richards J. & Niccolucci F. (eds.): The ARIADNE Impact. Budapest: Archaeolingua	Yuichi Takata,Akihiro Kaneda , Dessislava Veltcheva (NARA)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	1,915 (Zenodo figures: 2022-12-16: 1,915 downloads, 2,151 views)
Link	https://doi.org/10.5281/zenodo.3476712			Open Access (Yes/No)	Yes
2019	Crossing mountains and digging tunnels from our own backyard to our neighbours	Richards J. & Niccolucci F. (eds.): The ARIADNE Impact. Budapest: Archaeolingua	Gilissen, Valentijn, Hollander, Hella (DANS)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	1,915 (Zenodo figures: 2022-12-16: 1,915 downloads, 2,151 views)
Link	https://doi.org/10.5281/zenodo.3476712			Open Access (Yes/No)	Yes
<u>2019</u>	<u>The ADED project – a Norwegian infrastructure for excavation data, pp. 123 - 133, in:</u>	<u>Richards J. & Niccolucci F. (eds.): The ARIADNE Impact. Budapest: Archaeolingua</u>	<u>Smith Ore, Christian-Emil; Uleberg, Espen (University of Oslo)</u>	<u>Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures</u>	1,915 (Zenodo figures: 2022-12-16: 1,915 downloads, 2,151 views)
Link	https://doi.org/10.5281/zenodo.3476712			Open Access (Yes/No)	Yes

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2019	The ARIADNEplus program integrating European archaeological datasets was launched	Hungarian Archaeology E-Journal 2019 Spring	Attila Kreiter (Hungarian National Museum)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	1500
Link	http://www.hungarianarchaeology.hu/?page_id=8019; http://files.archaeolingua.hu/2019TA/Upload/Ariadne_KreiterE191.pdf			Open Access (Yes/No)	Yes
2019	Elindult az európai régészeti adatbázisokat integráló ARIADNEplus program	Magyar Régészet Online Magazin 2019 tavasz	Attila Kreiter (Hungarian National Museum)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	1500
Link	http://files.archaeolingua.hu/2019TA/Upload/Ariadne_KreiterE191.pdf			Open Access (Yes/No)	Yes
2019	Moving towards an open archaeology: Projects, opportunities and challenges	Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare, 72(2), S. 538-554. doi: 10.31263/voebm.v72i2.3249.	Edeltraud Aspöck (OEAW)	Open Science community, Librarians, Digital Humanist	72 downloads since Nov. 2019 - 500
Link	https://journals.univie.ac.at/index.php/voebm/article/view/3249			Open Access (Yes/No)	Yes
2019	ARIADNE and ARIADNEplus in Austria	Richards, Julian and Franco Niccolucci (eds.), The ARIADNE Impact. Budapest, p. 51-62.	Edeltraud Aspöck (OEAW)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	1,915 (Zenodo figures: 2022-12-16: 1,915 downloads, 2,151 views)
Link	https://doi.org/10.5281/zenodo.3476712			Open Access (Yes/No)	Yes

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2019	Intensive Collection of Japanese Cultural Heritage Data and the Sharing of Data Infrastructure through Multinational Collaboration ,pp 16-17	BULLETIN Nara National Research Institute for Cultural Properties 2019	Sadakatsu Kunitake, Yuichi Takata, Dessislava Veltheva. (NARA)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	500+
Link	https://www.nabunken.go.jp/english/bulletin/2019.html			Open Access (Yes/No)	No
2019	Funneling: A New Ensemble Method for Heterogeneous Transfer Learning and Its Application to Cross-Lingual Text Classification	ACM Transactions on Information Systems, 37(3), Article 37.	Esuli, A., Moreo, A., Sebastiani, F.	Researchers in machine learning and NLP	
Link	https://openportal.isti.cnr.it/data/2019/403485/2019_403485.postprint.pdf			Open Access (Yes/No)	Yes
2020	ARIADNEplus: l'avventura continua	Digitalia, 2-2020, 88-95.	Niccolucci, Franco	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	
Link	http://digitalia.sbn.it/article/download/2631/1838			Open Access (Yes/No)	Yes

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2020	From Digital Archaeology to Data-Centric Archaeological Research	magazén, 1(1): 35-53.	Niccolucci, Franco	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures.	70 downloads, 509 views - 2022-12-16
Link	https://edizionicafoscari.unive.it/it/edizioni4/riviste/magazen/2020/1/from-digital-archaeology-to-data-centric-archaeolo/			Open Access (Yes/No)	Yes
2020	An Aegean History and Archaeology Written through Radiocarbon Dates	Journal of Open Archaeology Data 8: 5	Markos Katsianis (PP, GR), Andrew Bevan (UCL, UK), Giorgos Styliaras (PP, GR), Yannis Maniatis (NCSR Demokritos, GR)	Researchers and practitioners in archaeology, prehistory, radiocarbon studies, digital archiving	Published 17/8/2020: 955 Views, 226 Downloads, 9 Twitter on 16/12/2022.
Link	https://openarchaeologydata.metajnl.com/articles/10.5334/joad.65/			Open Access (Yes/No)	Yes
2020	Representing quantitative documentation of 3D cultural heritage artefacts with CIDOC CRMdig.	International Journal on Digital Libraries, 21: 359–373.	Catalano, C.E., Vassallo, V., Hermon, S. et al.	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	334 Accesses
Link	https://doi.org/10.1007/s00799-020-00287-3			Open Access (Yes/No)	No

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2020	One Archaeology: A Manifesto for the Systematic and Effective Use of Mapped Data from Archaeological Fieldwork and Research	Information 11 (4), 222	McKeague, P., Corns, A., Larsson, Å., Moreau, A., Posluschny, A., Daele, K. V., Evans, T.	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures.	4,991 views (16/12/2022)
Link	http://doi.org/10.3390/info11040222			Open Access (Yes/No)	Yes
2020	File Formats for the Long-term Digital Storage of Cultural Heritage Data ,pp.71-76	Recording and Utilization of Cultural Property Information via Digital Technologies Vol. 2 Open Science, Data Preservation, Intellectual Property	Yuichi Takata (NARA)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	Page view : 6,228 File download : 4,527 (16/12/2022)
Link	https://doi.org/10.24484/sitereports.69974			Open Access (Yes/No)	Yes
2020	A Critical Reassessment of the Saerens-Latinne-Decaestecker Algorithm for Posterior Probability Adjustment	ACM Transactions on Information Systems, 39(2), Article 19.	Esuli, A., Molinari, A., Sebastiani, F.	Researchers in machine learning and NLP	337 views, 150 downloads (16/12/2022)
Link	https://zenodo.org/record/4468009			Open Access (Yes/No)	Yes
2020-2021	PARTHENOS Guidelines to FAIRify data management and make data reusable	Different languages; English, French, German, Czech, Greek, Italian, Hungarian, Portugese & Turkish.	PARTHENOS, ARIADNEplus	Archaeologists; Researchers and practitioners in digital archaeology, cultural heritage	>4,500 downloads in all languages to date.
Link	https://doi.org/10.5281/zenodo.3368858			Open Access (Yes/No)	Yes

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2021	Documentation of Archaeology-Specific Workflow for Airborne LiDAR Data Processing	Geosciences 11 (1), 26	Lozić, E., Štular, B.	Researchers and archaeologists	3,278 views (16/12/2022)
Link	http://doi.org/10.3390/geosciences11010026			Open Access (Yes/No)	Yes
2021	Reconfiguring the 3D excavation archive. Technological shift and data remix in the archaeological project of Paliambela Kolindros, Greece	Journal of Archaeological Science: Reports, Vol.36, 102857	Katsianis, M., Kotsakis, K., Stefanou, F.	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	Published 3 March 2021 - 29 readers (16/12/2022)
Link	https://doi.org/10.1016/j.jasrep.2021.102857			Open Access (Yes/No)	Yes
2021	Heterogeneous Document Embeddings for Cross-Lingual Text Classification	36th ACM/SIGAPP Symposium on Applied Computing (SAC'21), Virtual Event, Republic of Korea, 22-26 March 2021	Moreo, A., Pedrotti, A., Sebastiani, F.	Researchers in machine learning and NLP	Published March 2021. 263 views & 150 downloads (16/12/2022)
Link	https://zenodo.org/record/4467989			Open Access (Yes/No)	Yes
2021	Ontological Modeling for Excavation Documentation and Virtual Reconstruction of an Ancient Egyptian Site	Journal on Computing and Cultural Heritage Volume, 14(3), Article 32	Hiebel, G., Aspöck, E., Kopetzky, K.	Archaeologists	01/07/2021. 219 downloads (16/12/2022)
Link	https://doi.org/10.1145/3439735			Open Access (Yes/No)	No

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2021	<u>Assessing Visual Perception in Heritage Sites with Visual Acuity: Case study of the Cathedral of St. John the Theologian in Nicosia, Cyprus</u>	<u>Journal on Computing and Cultural Heritage, 14(1), Article 1</u>	<u>Polig, M., Papacharalambous, D.G., Bakirtzis, N., Hermon, S.</u>	<u>Researchers and practitioners in digital cultural heritage and archaeology</u>	<u>01/02/2021 - 321 downloads (16/12/2022)</u>
Link	https://doi.org/10.1145/3417710			Open Access (Yes/No)	No
2021	Adding Japanese Periods to PeriodO	Recording and Utilization of Cultural Property Information via Digital Technologies Vol. 3 Copyright, Cultural Resource Videos, GIS, 3D Data, Online Publishing	Mikiharu Takeuchi(NARA)	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	Page view : 2,899 File download : 2,197
Link	http://doi.org/10.24484/sitereports.90271			Open Access (Yes/No)	Yes
2021	FAIR Data and Cultural Heritage Special Issue - Editorial	International Journal on Digital Libraries, Vol. 22, 251–255	Hermon, S., Niccolucci, F.	Cultural Heritage practitioners	902 accesses
Link	https://doi.org/10.1007/s00799-021-00309-8			Open Access (Yes/No)	Yes
2021	A way to express the reliability of archaeological data: data traceability at the Laboratoire Archéologie et Territoires (Tours, France)	International Journal on Digital Libraries, Vol. 22, 257-266	Marlet O., Rodier X.	Archaeologists	164 accesses
Link	https://doi.org/10.1007/s00799-019-00274-3			Open Access (Yes/No)	No

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2021	FAIR data for prehistoric mining archaeology	International Journal on Digital Libraries, Vol. 22, 267–277	Hiebel G., Goldenberg G., Grutsch C., Hanke K. & Staudt M.	Archaeologists	1,831 Accesses
Link	https://doi.org/10.1007/s00799-020-00282-8			Open Access (Yes/No)	Yes
2021	Heritage Science and Cultural Heritage: standards and tools for establishing cross-domain data interoperability	International Journal on Digital Libraries, Vol. 22, 279–287	Castelli L., Felicetti A. & Proietti F.	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	402 accesses
Link	https://doi.org/10.1007/s00799-019-00275-2			Open Access (Yes/No)	No
2021	CHNet cloud: an EOSC-based cloud for physical technologies applied to cultural heritages	GARR Conference 2021, Selected Papers,	Bombini A., Castelli L., Taccetti F., dell’Agnello L., Giacomini F., Niccolucci F. & Felicetti A.	Researchers and practitioners in digital archaeology, cultural heritage, and research infrastructures	Published 7 June 2021. 158 downloads
Link	http://doi.org/10.26314/GARR-Conf21-proceedings-09			Open Access (Yes/No)	Yes
2021	Digital Dutch Archaeology: future perspectives	Internet Archaeology, 58	Hollander, H.	professional archaeologists, archaeology researchers, heritage, data and repository managers	published 09/11/2022. Approx. 120K visitors pa.
Link	https://doi.org/10.11141/ia.58.28			Open Access (Yes/No)	Yes

Date	Title of Article/Paper	Publication	Authors & organisation	Type of Audience	Estimated reach
2022	<u>Data Management Policies and Practices of Digital Archaeological Repositories</u>	<u>Internet Archaeology, 59</u>	<u>Geser G., Richards J., Massara F. & Wright H.</u>	<u>archaeological repository staff and project data managers</u>	<u>published 28/03/2022: Approx. 120K visitors pa.</u>
Link	https://doi.org/10.11141/ia.59.2			Open Access (Yes/No)	Yes
2022	ARIADNE – výzkumná infrastruktura ve službách mezinárodní archeologické komunity	Přehled výzkumů 63/1	Lečbychová O., Novák D. & Kosarová Z.	Archaeologists	Czech archaeological community
Link	https://www.arub.cz/wp-content/uploads/PV-63_1_12_x.pdf			Open Access (Yes/No)	Yes
2022	Linked Data for the Historic Environment	Internet Archaeology, 59	Binding, C., Evans, T., Gilham, J., Tudhope, D. and Wright, H (USW and ADS)	professional archaeologists, archaeology researchers, heritage, data and repository managers	Published: 20 July 2022 (usual IA reach, see Item 36)
Link	https://doi.org/10.11141/ia.59.7			Open Access (Yes/No)	Yes
2022	Deep Data Example: Zbiva, Early Medieval Data Set for the Eastern Alps	Research Data Journal for the Humanities and Social Sciences 2022	Štular, Benjamin and Belak, Mateja (ZRC SAZU)	Data scientists, archaeologists	Published 2 Sep. 2022. 154 views and 329 downloads
Link	https://doi.org/10.1163/24523666-bja10024			Open Access (Yes/No)	Yes

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2022	Scientific Dissemination of Archaeological Interpretation of Airborne LiDAR-derived Data.	In: Garstki, Kevin (ed.): Critical Archaeology in the Digital Age: Proceedings of the 12th IEMA Visiting Scholar's Conference. Cotsen Institute of Archaeology Press, pp. 111-122, (Financial support from the Slovenian Research Agency with grant numbers N6-0132 and P6-0064.)	Štular, Benjamin	Data scientists, archaeologists	677 downloads (16/12/2022)
Link	https://escholarship.org/uc/item/0vh9t9jq			Open Access (Yes/No)	Yes
2022	Documenting the Structure and Adaptive Reuse of Roman Amphitheatres through the CIDOC CRMba Model.	Journal on Computing and Cultural Heritage, 15(2), Article 36, 1–23,	Ronzino P., Toth A. & Falcidieno B.	Archaeologists, digital humanities	119 downloads
Link	https://doi.org/10.1145/3485466			Open Access (Yes/No)	No
2023	International data aggregation for archaeological research and heritage management: the ARIADNE experience	Internet Archaeology	Aspöck & Richards editors - with 15+ papers	Archaeologists; digital humanities researchers	c.10,000 international readers

2023	From CAD to GIS to BIM to where? Documenting excavations in 3D	CAA2021 Proceedings	Katsianis, M. & Kotsakis, K.	Archaeologists; Researchers and practitioners in digital archaeology, cultural heritage	
2023	ARIADNEplus Visual Media Service 3D configurator: toward full guided publication of high-resolution 3D data	CAA2023 Proceedings	Potenziani M. (CNR-ISTI), Ponchio F. (CNR-ISTI), Callieri M. (CNR-ISTI) & Cignoni P. (CNR-ISTI)	Archaeologists; Researchers and practitioners in digital humanities, cultural heritage	