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DARIAH-EU Annual Report 2021

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**ANNUAL REPORT
2021**

The background is a dark blue gradient. It features several overlapping circles and arcs in various colors: light blue, pink, yellow, green, cyan, orange, and magenta. Small solid circles of the same colors are placed at the ends of these arcs, creating a network-like or orbital pattern. The text is centered in the upper right quadrant of the image.

DARIAH ERIC:

A research infrastructure
to enhance and support
digitally-enabled research
and teaching across the
Arts and Humanities.

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Foreword

There are times in life when one finds oneself, perhaps unwillingly, having the opportunity to let go of somethings, and reassess what is truly essential in life. For DARIAH, as for much of the world, 2021 was one of those moments. The optimism driven by vaccines, followed by the frightening delta and omicron waves of COVID-19 conspired to keep us guessing, to plan longed for in-person events only to revert to virtual ones, to feel our hands ever tied by the constraints and pressures of life in a pandemic.

Life, however, is resilient, and DARIAH too was able to find many silver linings within the dark clouds. Our Annual Event was once again a virtual one, bringing with it the sadness of human connections missed, but enlivening the topic of 'Interfaces' in new ways, with a much expanded audience and scope. Seeing our Theme project awardees come forward to offer unique cultural responses and supports was nothing short of inspiring, and the robustness of the SSH Open Marketplace development and rollout has proven that there is more than one way to deliver a collaborative project, and embed it within its wide community of users.

We also have used this time to really focus on the benefits we bring, improving the method by which we collect evidence of our effectiveness and impact as an organisation, and refining key service delivery pipelines for the benefit of all of our users. We invested in our relationships with both our national partners and with our fellow research infrastructures, deepening mutual understanding and cooperation.

These investments bore fruit as well, seeing DARIAH continuing to grow and thrive. In 2021, we welcomed new Cooperating Partners, a new Working Group, and even a new full member to our community. We also launched new initiatives and funded projects, including the ambitious CLS INFRA project, which will invest 5,000,000 € over the next four years in order to improve the baseline and expand the user base for computational literary studies.

An organisation is built upon its people, however, and 2021 has been a time of both new arrivals and departures. We welcomed a new Officer for National Coordination in January, and in December bid a fond farewell to our Director of fine years, Dr. Frank Fischer. The time passed so quickly, and we will always be grateful for his gentle but firm, and always jovial, leadership on the dream (now a reality) of a Social Sciences and Humanities centered Marketplace.

In spite of the challenges, we find ourselves at the end of 2021 in a much stronger position, ready to meet the new challenges of a post-pandemic world.



Jennifer Edmond

President of the Board of Directors



Chris De Loof

Chair of the General Assembly

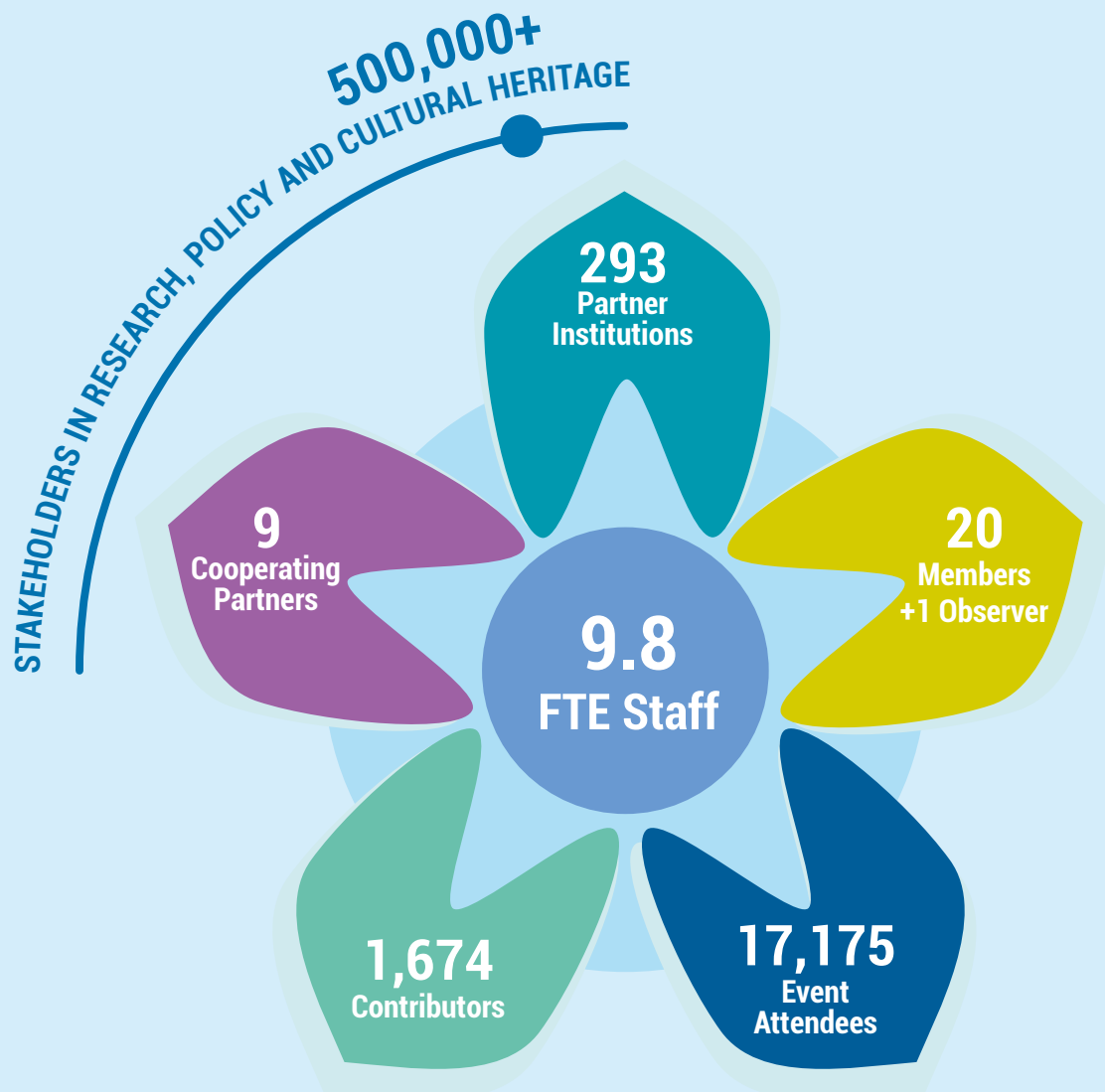
DARIAH in a Nutshell

The Digital Research Infrastructure for the Arts and Humanities (DARIAH) was established in 2006 to enhance and support digitally-enabled research and teaching across the arts and humanities. In 2014 the European Commission awarded DARIAH the status of a European Research Infrastructure Consortium (ERIC). Two years later, DARIAH was awarded Landmark Status in the 2016 ESFRI Roadmap as a Research Infrastructure that reached its implementation phase and was considered a pan-European hub of scientific excellence.

Today, DARIAH develops, maintains and operates an infrastructure with 20 Member countries, 1 Observer and several Cooperating Partners across 6 non-member countries in Europe and the US. By working with communities of practice, DARIAH brings together individual state-of-the-art digital arts and humanities activities and scales their results to a European level, enabling the transition to Open Science, and beyond to Open Innovation. It preserves, provides access to,

and disseminates research that stems from these collaborations and ensures that best practices, methodological and technical standards are followed.

We work across a wide range of arts and humanities research areas and with a diverse range of stakeholders, including academia, GLAM, libraries, technology and education.



Activity Highlights

Switzerland Joins DARIAH as an Observer

DARIAH is delighted to welcome Switzerland as the first country joining the consortium with an Observer status. Following a long collaboration with nine Swiss institutions participating as Cooperating Partners, it is a pleasure to have Switzerland joining with a strong national consortium. DARIAH's activities in Switzerland are coordinated by DaSCH, the Data and Service Center for the Humanities.

The CLS INFRA Project Kicks Off

The Horizon 2020 funded project Computational Literary Studies Infrastructure (CLS INFRA) kicked off in March, with a duration of 48 months. DARIAH joined a strong consortium that aims to build a shared resource focused on high-quality data, tools and services to undertake literary studies in the digital age.

Launch of the DARIAH Open Access Monograph Bursary

In May, DARIAH launched the first edition of an annual Open Access Monograph Bursary for the publication of Early Career Researcher's first monograph within the domain of Digital Humanities. This initiative aims to further strengthen DARIAH's long-standing commitment to pave pathways to the open research culture as it specifically pertains to arts and humanities disciplines.

January

February

March

May

Princeton University Becomes DARIAH's First non-European Cooperating Partner

DARIAH signed its first Cooperating Partnership agreement with a non-European institution: The Center for Digital Humanities (CDH) at Princeton University. This is an important milestone for DARIAH and a testament to CDH's expanding international reach. The training materials expected to result from the jointly organised "New Languages for NLP" workshop series will be hosted and maintained by DARIAH-Campus, DARIAH's open-access platform for educational resources.

Bosnia and Herzegovina Joins DARIAH as a Member

DARIAH ERIC proudly welcomed its 20th Member country: Bosnia and Herzegovina. Coordinated by the University of Sarajevo. The primary focus for Bosnia and Herzegovina is the digitisation of existing resources, documents and materials stored in institutions of national importance, to be made available not only to a narrow research circle but also to the wider scientific and cultural society nationally and internationally.

Two New Members Join the Scientific Board

DARIAH welcomed two new members in the Scientific Board: Martine Denoyelle, Senior Cultural Heritage Officer at Institut National de l'Histoire de l'Art, and Alain Heureux, Entrepreneur and CEO of Virtuology Academy. The Scientific Board, composed of arts and humanities researchers with international reputation in the field of digitally enabled research methods, advises DARIAH on issues such as the future research landscape and technological innovation.

A New Working Group in DARIAH: Theatralia

DARIAH welcomed a new Working Group 'Theatralia' which aims to respond to the needs of theatre artists, experts, and researchers by providing guidelines for the best methods to implement digitally based strategies in their research. It also focuses on increasing awareness and usage of ICTs in the Performing Arts research in general.

September

DARIAH Annual Event 2021 on Interfaces

The DARIAH Virtual Annual Event 2021 took place as an online event for a second year in a row. 300 registered participants from 37 countries around the world participated in a rich programme of sessions on the topic of 'Interfaces' running over 3 days, including two keynote speeches, 3 panels and 4 paper sessions.

November

Third Edition of the DARIAH Working Group Funding Call

DARIAH launched its third call dedicated to the support of DARIAH Working Groups and their projects for 2021-2023. The call acknowledges the strategic role of Working Groups in DARIAH, which represent – according to the Strategic Plan 2019-2026 – one of the four pillars of the DARIAH activities.

August

1. Nurturing and Expanding DARIAH's Network

a. DARIAH at the National Level

The richness and dynamism of the DARIAH consortium lies first and foremost in the diversity and plurality of its member countries. It is they who every day through their actions, projects and influence make DARIAH a key infrastructure in the field of the arts and humanities. National Members meet and work through the National Coordinators Committee (NCC) that gathers regularly either virtually or face to face to reflect on and coordinate the actions of its members.

In 2021, with the addition of Edward Gray as DARIAH-EU Officer for National Coordination (NCO), the NCC worked extensively on increasing knowledge exchange between the different National Coordinators (NCs). NCC meetings were held on a monthly basis, with several thematic meetings dedicated to a range of topics, from the SSH Open Marketplace to how the various NCs organise their national consortium. The NCO also conducted interviews with each of the National Coordinators,

enabling the European-level infrastructure to have a greater understanding of the actions and organisation of the various national consortia.

In 2021, DARIAH welcomed two new countries into its consortium, Bosnia and Herzegovina as a Member and Switzerland as an Observer. Bosnia and Herzegovina's successful application was approved in May 2021, and DARIAH-BiH officially began operations in the summer of 2021. Switzerland joined DARIAH on January 1st, 2021 as our first Observer, following their successful application in 2020 and the long-running Swiss involvement in DARIAH with 9 Cooperating Partnerships.

Though at different stages in the construction of their national consortia, Bosnia and Herzegovina and Poland made particularly impressive progress in 2021. Their stories are featured below. We are also proud to feature some of the accomplishments of our members, which you can find on the map on pages 8-9.

Focus on Bosnia and Herzegovina

Prof. Dr. Lana Paćuka is Assistant Professor of Musicology and Head of the Department for Musicology and Ethnomusicology at the Academy of Music at the University of Sarajevo, and also now, National Coordinator for Bosnia and Herzegovina. As a musicologist, she has published works examining female identities in the musical life of Austro-Hungarian Sarajevo. Bosnia and Herzegovina is our newest Member country, having joined DARIAH in 2021.

Could you introduce us to the role and the work of your consortium?

DARIAH-BiH is a new, but growing consortium focused on the preservation and valorisation of Bosnian cultural heritage. Our primary focus will be the digitisation of existing resources, documents and materials stored in institutions of national importance, to be made available not only to a narrow research circle but also to the wider scientific and cultural society in Bosnia and Herzegovina and beyond. With the help and expertise of the wider DARIAH consortium, the rich documents about our history and arts will finally be made available to researchers.

As part of our DARIAH activities, the national consortium in Bosnia and Herzegovina will work towards enabling greater visibility of national cultural heritage at the regional and European level. By collaborating with a number of institutions and cultural heritage organisations, we aim to support and encourage new research and achieve societal impact based on the values of humanity, innovation and creativity.

DARIAH-BiH is a consortium with a strong focus on digitisation of cultural heritage documents. Across this broad consortium, there are collections that are of parliamentary, cultural, artistic and historical value.

The history of Bosnia and Herzegovina, with Ottoman, Austro-Hungarian, and Yugoslav influences, has led to a uniquely heterogeneous and intertwined culture that we are excited to digitise and make available to researchers both nationally and internationally.

What would you consider the 2021 highlights of DARIAH-BiH?

2021 was a period of consolidation for the DARIAH-BiH consortium, as we finalised the project that started before corona, and overcame the delays due to the pandemic. 2021 was the year that Bosnia and Herzegovina made its entry into DARIAH, which represents an important, but not final step, towards the realisation of our goals for digitising Bosnian cultural heritage.

We are particularly proud of the organisation of ZSS DAOKuB 2021, a large scientific meeting on the digitisation, archiving and preservation of cultural heritage that took place on October 30th. This event, which gathered experts from diverse backgrounds and professions in cultural heritage, featured talks from DARIAHns both in Bosnia and Herzegovina and beyond, reinforcing how our membership in DARIAH can be a stepping stone to achieve our goals.



Lana Paćuka

Focus on Poland

Jakub Szprot is the Head of the Open Science Platform at the Interdisciplinary Centre for Mathematical and Computational Modelling (ICM) at the University of Warsaw, and the National Coordinator for Poland. Jakub has a long history of involvement with DARIAH, having been the DARIAH-PL National Coordinator for nearly seven years and serving as a pillar in the community. Jakub was a key member of the DESIR project, leading the work package on growing the consortium – work which has bore fruit with the accession of the Czech Republic and the closer ties with Finland, Spain, Switzerland, and the United Kingdom. Jakub will be stepping down from his position as National Coordinator in February 2022 but he will continue to be a strong ally, contributing to the DARIAH-PL consortium.

Could you introduce us to the role and the work of your consortium?

The DARIAH-PL consortium is a diverse and impressive group of Polish academic and cultural heritage institutions, counting eighteen members, with the University of Warsaw as its coordinator. The consortium is led by a board, representing each of the members, that ensures the scientific and strategic missions of the consortium. As a large consortium, DARIAH-PL includes universities, two supercomputing centres, a cultural heritage institution, and some institutes of the Polish Academy of Sciences. The range of expertise in the consortium is such that we can tackle all of the important aspects of the research infrastructure and the research agenda. This diversity and strength in both subjects has served the consortium well, as we are representative of the entire humanities community in Polish academia. A further proof for this excellence is the Dariah.lab project, a three year project that began in 2021.

Could you tell us more about the Dariah.lab project?

Dariah.lab is funded under the Smart Growth programme, jointly funded by Poland and Europe, for the development of modern research infrastructure which includes hardware and software tools using state-of-the-art technological solutions and integrated digital resources from various fields of humanities and arts sciences. It is a three-year project, worth 130 million zloty (around 28 million euros). Nearly all members of our consortium are involved in the project, and we are really excited to develop this infrastructure for Polish arts and humanities.

Dariah.lab is a comprehensive project to treat the entire data lifecycle, combining hardware, software, and data. It will develop hardware resources for storing and treating massive amounts of data, software for processing that data, and finally datasets with additional tools for analysis and exploration. Dariah.lab is therefore not focused on any particular domain or approach, it tries to combine all activities of DARIAH-PL and provide results that are useful for the whole academic community in Poland and beyond. As a distributed network of research laboratories, Dariah.lab consists of Source Laboratory, Automatic Enrichment Laboratory, Supervised Semantic Discovery Laboratory, Intelligent Analysis and Interpretation Laboratory, and Advanced Visualisation Laboratory. From acquisition, to enrichment, consolidation, analysis, visualisation and beyond, the lifecycle of data is a structuring principle for Dariah.lab.



Jakub Szprot

Dariah.lab – Photo by note thanun on Unsplash



2021 Highlights from our Member Countries

Ireland

Building on the UK-Ireland Digital Humanities Network, three events were successfully organised in 2021 on the topics of "Advocacy", "Next generation careers in and from Digital Humanities" and "Who has Access to the Digital Humanities? Diversity and Inclusivity in DH in Ireland and the UK". These events welcomed researchers in the wider area of Digital Humanities from the two countries and beyond, individuals in cognate careers including Research Software Engineering, content-holding institutions, strategic bodies and policymakers.

Italy

DARIAH-IT (Developing national and Regional Infrastructural nodes of dAriah in Italy (DARIAH.IT)) received funding by the Italian Ministry for the next five years (2021-2026) for the enhancement of the technological component of this research infrastructure, which involves the creation of a network federated Data Center, distributed over 6 geographic nodes located in the Central-Southern regions in Italy. In order to support the planned activities of the data centres, the Italian Ministry also funded 22 researcher positions (3-year Research Grants), the first of which were launched in 2021.

Slovenia

Another great funding success comes from our Slovenian partners with their successful application for funding the "Research Infrastructure for Slovenian Historiography" for the period 2022-2027. The secured overall funding is 305,000 € per year, of which 185,000 € are claimed by DARIAH-SI.

Portugal

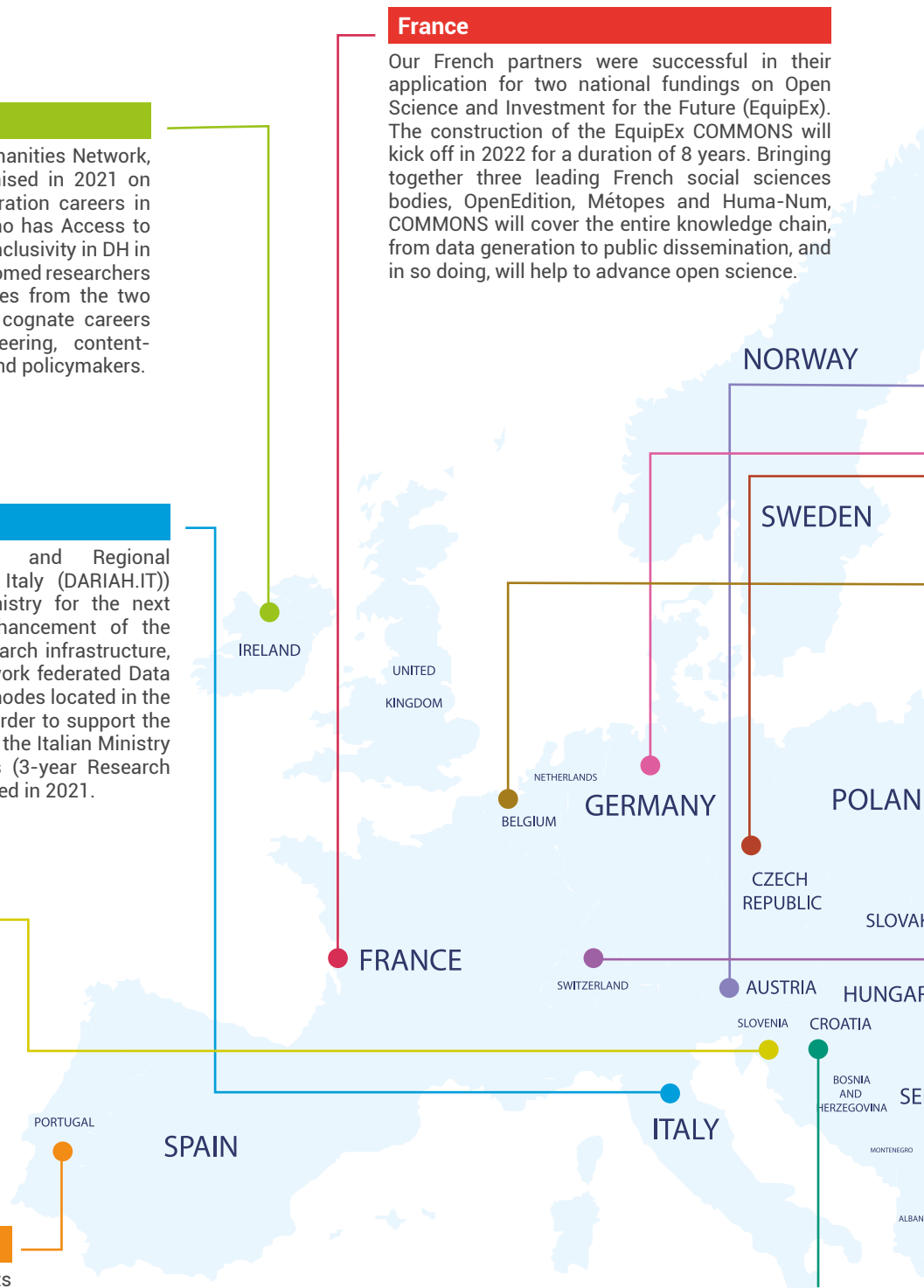
- The ROSSIO Infrastructure expanded its consortium integrating now 13 institutions, among them the Faculdade de Ciências Sociais e Humanas da Universidade NOVA de Lisboa, Arquivo Nacional do Som, Biblioteca Nacional de Portugal and Cinemateca Portuguesa – Museu do Cinema.
- Over the year, our partners were preparing the ROSSIO Infrastructure platform, to be launched in June 2022, with more than 5 million digital resources related to Portuguese Cultural Heritage.

France

Our French partners were successful in their application for two national fundings on Open Science and Investment for the Future (EquipEx). The construction of the EquipEx COMMONS will kick off in 2022 for a duration of 8 years. Bringing together three leading French social sciences bodies, OpenEdition, Métopes and Huma-Num, COMMONS will cover the entire knowledge chain, from data generation to public dissemination, and in so doing, will help to advance open science.

Croatia

- Our partners in Croatia were busy organising the **1st DARIAH-HR International conference on "Digital humanities and heritage"**, which took place in Zadar, on October 13-15, 2021. The event welcomed stakeholders dealing with heritage and its digital transformation, discussing topics such as Digital Humanities & Open Science, Cultural Heritage in Digital Humanities, Digital Methods and Tools, Information Organisation for the Digital Humanities as well as Digital Infrastructures.
- One more highlight of the past year was the establishment of a new DARIAH Working Group: **Theatralia**. The founding of this Working Group was initiated by theatre experts and researchers at the DARIAH Theatre Forum in Osijek, Croatia in 2018. The Group was officially established in 2021 and currently has more than 50 members from Europe and beyond.



Austria

- In 2021, the Austrian consortium developed and published the new strategy paper [Digital Humanities Austria Strategy 2021+](#), in consultation with the Austrian professional community in the field of digital humanities. This paper, which serves as a work programme for the consortium's working groups, identified four guidelines for the future development of digital humanities in Austria.
- The organisation of the #digitalDHaustria Twitter campaign was another 2021 highlight, running over three days on April 14-16, showcasing 100+ project entries, attracting 200+ new followers at the CLARIAH-AT Twitter channel and more than 7.900 profile visits.

Germany

In 2021, the German Joint Science Conference approved Text+ as a consortium of the nationwide initiative to establish a National Research Data Infrastructure (Nationale Forschungsdateninfrastruktur, NFDI). Text+ officially kicked off in autumn 2021 after several years of preparation and will initially be funded for five years by the German Research Foundation. The aim of the Text+ consortium will be to preserve text- and language-based research data in the long term and enable their broad use in science.

Czech Republic

Over the year, LINDAT/CLARIAH-CZ was successful in increasing the data collections in its repositories and in capturing even more impressive numbers in terms of its users. For example, the main repository grew in numbers by adding 885 new datasets to the collection, raising the overall number of items to 1,301. The number of registered users also increased by 135 to 1,113 while 38 different users submitted new items to the repository over the year.

There was also a substantial increase in the use of the LINDAT/CLARIAH-CZ web services, with 53.8 million requests in 2021 (versus 30.8 million in 2020 and 14.7 million in 2019).

Belgium

The CLARIAH-VL: Advancing the Open Humanities Service Infrastructure phase two project kicked off in early 2021, with a budget of 3.435.802 € for a 3-year period (2021-2024). The official kick off meeting, which was held later in the year in September 2021 at the KBR Royal Library of Belgium, addressed questions such as what we want to achieve and how we want to demonstrate the value of the integrated Open Humanities Service Infrastructure by the end of the project in December 2024.

Switzerland

Our Swiss partners officially joined DARIAH ERIC with the status of Observer in early 2021 while during the year the DARIAH-CH consortium was established.

Bulgaria

In September, Bulgaria organised an international online workshop running over a week on the XML encoding of ancient and medieval text-bearing objects. The training sessions were recorded and were made [publicly available on Youtube](#) following the end of the intensive training week. This event was followed by an international online conference in October on "Current Trends in (Digital) Epigraphy".

Greece

2021 saw the completion of the four-year funded action "[APOLLONIS](#): National Infrastructure for the Digital Humanities and Sciences and for Language Research and Innovation", the partnership of the National Network of Language Technology [clarin:el](#) and the National Network of Digital Infrastructures for the Humanities [DARIAH-GR/ΔΥΑΣ](#). The consortium already prepared and submitted a new funding proposal to the Hellenic Foundation for Research and Innovation for the Action: "The emerging landscape of digital work practices in the Humanities in the context of the European projects DARIAH and CLARIN".

b. DARIAH's Cooperating Partnerships Prosper Under New Strategic Framework

In 2020, DARIAH ERIC underwent a review and redesign of our Cooperating Partnership strategy, with the aim to better engage these institutions in our network and support their integration into the DARIAH community. 2021 saw the implementation of this new strategy at a wide scale, both renewing existing or expired Cooperating Partnerships as well as bringing in new institutions into the network.

The main objective of the new approach was to better engage Cooperating Partners with DARIAH, to support them more intensively to form a national consortium and to encourage the move to full DARIAH membership. The following key actions are now part of the work plan of every 3-year membership:

- Active participation in DARIAH bodies and initiatives
- Hosting a 'DARIAH Day' in the country of the Cooperating Partner
- Organisation of at least one face-to-face meeting between DARIAH representatives and the relevant ministry/funding agency to discuss potential membership

In 2021, we contacted current and lapsed Cooperating Partners to bring them into alignment with this new framework. As a result of this, during the May 2021 General Assembly, five Cooperating Partnerships were renewed, with Aalto University and the University of Helsinki in Finland, the National Library of Norway, the Institute of Ethnology and Social Anthropology at the

Slovak Academy of Sciences, and the University of Exeter in the United Kingdom. The summer and fall was spent setting up the foundation of these Cooperating Partnerships, organising welcome meetings and preparing a series of welcome articles officially communicating the renewal of our partners.

Additionally, in fall 2021, DARIAH approved an application from the Universidad Nacional de Educación a Distancia (UNED) in Madrid, Spain. Led by UNED's Digital Humanities Laboratory (LINHD), this partnership is a strong bonus for the DARIAH network. Not only do we gain LINHD's existing expertise in community services, research support, and dissemination and training, but we also strengthen our collaboration through the CLS INFRA project, in which both DARIAH and LINHD are deeply involved. Most importantly, this forms an important first step in officially welcoming Spain with a full Membership in DARIAH ERIC. "This is the result of a process that started in the DESIR project," said Salvador Ros (UNED). "As one of Spain's premier laboratories of innovation, and a lead in the INTELE network devoted to preparing the Spanish entry into DARIAH and CLARIN, we decided it was the right moment to participate more actively in these infrastructures via a DARIAH Cooperating Partnership."

New Languages for NLP Workshop, organised in June 2021 by the Center for Digital Humanities Princeton University, Cooperating Partner in DARIAH-EU since 2020. Image Credits: Shelley Szwest



c. Projects

Social Sciences & Humanities Open Cloud – SSHOC (January 2019 – April 2022)

53 partners

Total amount: 14,455,594.08 €

Total amount received by DARIAH: 1,644,325.00 €

In its third year, the Social Sciences and Humanities Open Cloud (SSHOC) project continued to deliver key exploitable results to offer researchers in the SSH smooth access to a unified panorama of relevant data and services, tools and training. Over the year, the project released an outstanding number of data management tools, datasets, sharing and discovery platforms and training resources which will be available for further research activities after the end of the project. To maximise data-reuse, SSHOC has been actively applying Open Science and FAIR principles in the planning of data products such as vocabularies and ontologies, data citation in SSH and conversion solutions. In 2021, DARIAH was heavily involved in the preparation of the final release of the SSH Open Marketplace, a discovery platform for resources relevant to academics, scholars, and students of the social sciences and humanities which relies on contextualisation and community curation.

Transforming Research through Innovative Practices for Linked interdisciplinary Exploration – TRIPLE (October 2019 – March 2023)

24 partners

Total amount: 5,626,548.75 €

Total amount received by DARIAH: 202,372,50 €

The TRIPLE project aims at building an innovative multilingual discovery platform solution for the social sciences and humanities, which will provide a central access point to discover and reuse open scholarly SSH resources and find peers. A major milestone was reached in 2021 with the release of the first prototype of the GoTriple platform. This version includes only some of the advanced functions and innovative features which are currently being developed for the final release, such as the Annotation System, the Trust Building System, the Crowdfunding Platform and improved visualisation of search results. The co-design approach and user-orientation strategy are key in developing these functionalities and DARIAH was involved in this work in 2021 by organising and analysing cognitive walkthroughs. These aimed to better understand the current discovery processes of potential end-users and find how the GoTriple platform could provide a seamless user experience for discovery purposes.

Computational Literary Studies Infrastructure – CLS INFRA (March 2021 – February 2025)

13 partners

Total amount: 4,999,941 €

Total amount received by DARIAH: 374,375.00 €

The CLS Infra project had its official kick-off in March 2021. This partnership, which relies on a strong consortium composed of 14 partners and recognised experts in the field, aims to build a shared resource of high-quality data, tools and knowledge to aid new approaches to studying literature in the digital age, using artificial intelligence and other computational methods. As a result, the project will benefit researchers by bridging knowledge-based resources for the community, developing new digital tools and services as well as integrating existing ones, and strengthening a culture of cooperation through dedicated training and scholarly exchange opportunities. In the first year of the project, DARIAH led the first call on transnational access which gives scholars the opportunity to be hosted in project partner institutions and receive expertise and advice on ongoing projects. The call awarded 11 scholars from all over Europe and beyond with funded fellowships to be conducted in Spring-Summer 2022.

Preparing Open Access in the European Research Area through Scholarly Communication – OPERAS-P (July 2019 – June 2021)

17 partners

Total amount: 2,010,539.13 €

Total amount received by DARIAH: 233,206.63 €

DARIAH has been heavily involved in this preparatory phase project of OPERAS, the European Research Infrastructure for the development of open scholarly communication in the social sciences and humanities. The project, which ended in June 2021, reached its main objectives: (1) the inclusion of OPERAS in the ESFRI Roadmap 2021 update, (2) the implementation of innovative services allowing the development of transnational access to publication services, and (3) the expansion of the consortium through landscape studies and surveys on scholarly communication. The participation of DARIAH in OPERAS-P, together with its partner SIB (Swiss Institute of Bioinformatics), included technical support for shaping OPERAS central services but also provided a solid contribution in assessing the quality of innovative research in SSH through research on better understanding the ways in which peer review works in actual SSH practices.

d. DARIAH and the EOSC

In 2021, DARIAH reached new milestones in connecting arts and humanities research and researchers to the European Open Science Cloud (EOSC), building an intellectual and infrastructural middleware between generic e-infrastructure services and high-level research policy bodies. In particular, we established the following:



1. A Strong Voice for Arts and Humanities in the EOSC Association

This year, DARIAH became a founding member of the EOSC Association, the legal entity charged with the governance of the overall EOSC partnership. In this role, DARIAH will seek to ensure that resources offered via the EOSC catalogue, financed through projects or delivered through the future Partnership, will also serve the needs of Arts and Humanities researchers. DARIAH also strived to reach this goal by actively contributing to the following EOSC task forces, which act as advisory groups of the EOSC Association: Research Careers, Recognition, and Credit; Upskilling Countries to Engage in EOSC; Financial Sustainability; and Semantic Interoperability.

2. Building on the Science Clusters to Deploy the EOSC

Since 2019, DARIAH has been contributing to the development of the EOSC in coordination with the partners of the Social Sciences and Humanities Open Cloud (SSHOC) project, as well as through the wider coordination between this cluster and those serving the physical and life sciences. In 2021, these clusters released common statements – such as the *ESFRI Science Clusters Position Statement on Expectations and Long-Term Commitment in Open Science* – and refined their position as an efficient mechanism by which to promote researcher uptake and disciplinary collaborations to shape the EOSC.

3. Getting involved in the EU project EOSC-Future

77 partners

Total amount: 40,877,088.83 €

Total amount received by DARIAH: 378,187.50 €

2021 was also the starting year for the EOSC-Future project, which aims at establishing a trusted platform for open science and FAIR data, resources and services in all scientific disciplines. One way to think about EOSC is as a fully operational web of data and related services founded on FAIR protocols, principles and standards for accessing interoperable datasets. In practice, we will work with key stakeholders to ensure a smooth user experience, developing (1) EOSC core, a set of services needed to operate the EOSC; (2) EOSC exchange, registering resources and services from research infrastructures, other EOSC projects and science clusters to the EOSC and integrating them with the EOSC core functionalities; and (3) the EOSC interoperability framework which will provide guidelines for providers that want to integrate services or data into EOSC.

DARIAH together with its Linked Third Parties – the GWDG and the ACDH-CH – leads the efforts to integrate services and products from research communities and clusters into the EOSC Core. Contributing to this challenging project is yet another way for DARIAH and its national nodes to ensure that the EOSC framework can optimally integrate with the strengths of our distributed infrastructure. DARIAH and its LTPs are also involved in another area of the project, related to education and training. The goal is to provide training resources and materials on the discovery and use of the EOSC from the perspective of arts and humanities researchers.

4. Making EOSC's Offerings Concrete: Translating EOSC's Offerings Into Disciplinary Realities

At DARIAH, we are well aware that it is not easy to gain an accurate overview and translate the offerings of the EOSC into one's own institution or research setting. To this end, in 2021, we started a series of blog posts on the DARIAH Open blog to present the actual state of the art, the contribution DARIAH makes to the EOSC, de-mystify EOSC terminology and outline some concrete ways in which scholarly and service provider communities can interact with the EOSC and access the value it may hold for them. In addition to the blog post series, we delivered more than 10 presentations and webinars, in events ranging from the UK Joint Information Systems Committee's 'Tech 2 Tech' series to the DH in Germany (DhD) research conference, thereby making the EOSC and its emerging arts and humanities dimensions concrete for scholars, research support professionals, service providers, and research funders.

2. Activities and Results

a. Investing on Arts, Supporting Research Through COVID-19: The DARIAH Theme 2020 Projects and Outcomes

Last year, DARIAH launched a thematic funding call for projects on 'Arts Exchanges' and 'Arts, Humanities and COVID-19'. Nine projects were selected and awarded a total budget of 87,920€. In this section, we highlight the outputs of two of these projects, one for each stream of funding, that were particularly successful in 2021.

Arts Exchanges

Empty Mind, Ine Vanoeveren, Kristof Timmerman (Artesis Plantijn Hogeschool Antwerpen, Belgium, DARIAH-BE)

Empty Mind is an audiovisual live performance project which – thanks to the support of DARIAH – involved a multidisciplinary team of artists, ICT developers and a graphic design company for over a year exploring the virtual experience in musical performances. The main outcome was the online performance of Empty Mind for flutes, live electronics and live visuals which premiered on October 28th, 2021 during the research festival ARTICULATE at the Wintertuin of the Royal Academy for Fine Arts Antwerp.

Besides the live performance, the main focus of the project lay on the virtual experience online. Flutist Ine Vanoeveren performed the piece in a motion capture suit. Her movements created the virtual surroundings in real time, while the virtual audience could interact and influence the scope of the performance.

The project team has been and is still performing the Empty Mind-piece at a number of venues, which will feed back into the live performance-interactive-VR-environment and lead to further initiatives such as 'Sense of Wonder', a joint research project of MAXlab (Royal Academy of Fine Arts, Antwerp, Belgium) and CREATIE (Royal Conservatoire Antwerp, Belgium).

The experience and knowledge obtained by the project team during their research trajectory led to the creation of their own platform and user interface for interactive virtual performances. Furthermore, the project has been listed as an example of a good practice of digitalisation for 'Voices of Culture, (Re)engaging Digital Audiences in the Cultural Sectors – Improving Audience Data' by the European Commission and the cultural sector.

Arts, Humanities and COVID-19

DH in Transition: A mixed approach and a hybrid publication on the effects of COVID-19 in DH research and practice, Agiatis Benardou, Vicky Dritsou, Maria Ilvanidou (Digital Curation Unit, IMSI, ATHENA R.C.)

This project aimed to monitor and document the ephemeral nature of the COVID-19 pandemic and its potential long-lasting effect of DH research. Here we highlight the project's main outcomes:

An international DH conference, titled 'DH in the Time of Virus', which took place entirely on Twitter on April 2nd 2020 in the midst of lockdowns and isolation due to the COVID-19 pandemic.

The Twitter conference was an experimental endeavour focussing on the subject of Digital Humanities in the time of a highly contagious, potentially life-threatening virus. Topics such as e-Education and e-Research, digital tools, methods and platforms, digital history, archaeology of disease and epidemic were addressed. Invited speakers were renowned Digital Humanities experts, both academics and practitioners, as well as stakeholders from digital research infrastructures and institutions across Europe.

The conference, which was voted 1st Runner Up in the 'Best DH Response to COVID-19' at the DH Awards, was significantly successful, while the hashtag #DHgoesVIRAL became a trending topic in Greece during and after the event. More than 2.8K users from all over the world were engaged in conversations during and following the event.

A follow-up digital workshop reunited the Twitter conference participants alongside further DH researchers a year later, on 26 April 2021, to rethink the impact of COVID-19 on Digital Humanities research and practice and collect further qualitative evidence through a questionnaire.

The workshop led to a digital as well as printed publication, titled 'DH goes viral', monitoring the effects of the pandemic on e-Education, e-Research and digital tools, methods and platforms, to be disseminated at the DARIAH Annual Event 2022 in Athens, Greece.

Impact Case Study

A DARIAH Impact Case Study:

Arts Research during COVID-19

What did we do?

A DARIAH programme to instigate innovative arts and humanities research responses to the COVID-19 pandemic supported 9 unique and high-impact reflections on the cultural implications of this global event.

Why did we do it?

These research projects reached new audiences, but most importantly, they filled a gap in the landscape of pandemic-focussed research. They ensured that the effects of illness, fear, social distance, virtuality and lockdowns on human cultural practices could be as well understood as the biological effects on human bodies. As a DARIAH initiative, they were also chosen for their coherent and clear focus on the role of technology as a factor in both challenges and responses.

Who did we do it for?

The beneficiaries were in the first instance the researchers who led these projects, but in the wider sense they touched a huge range of disciplines and audiences, from the literary studies to music; and from academic researchers to museum goers and community dance groups.

Overview of the DARIAH Theme on Arts and COVID

DARIAH has run a biannual funding call related to a nominated theme since 2015. Although the overall budget for this activity is only ca. 50,000 € in each cycle (roughly 9,000 € to 10,000 € per project), the nature of the scheme has allowed DARIAH to draw out and incentivise the development of a consolidated cohort of inter-related, cutting-edge projects in each round.

In 2019, we decided that the next DARIAH Theme funding would focus on the role of the arts in creating knowledge in our community. However, when the COVID-19 pandemic hit in early 2020, we decided to open a second theme to harvest arts and humanities research responses to the pandemic. Interestingly, many of the proposals we received actually combined these two themes, indicating that the topics were not only of interest to the community, but also resonant with each other in interesting ways.

Description of the Impact

A total of 9 projects were funded (full list can be found at: <https://www.dariah.eu/2020/12/10/dariah-theme-call-2020-2021-meet-the-winning-projects/>), all with fascinating research angles and proposed activities. This case study will focus on the impact of only two of these projects, as examples. They are:

Visualising the Virus (led by Sria Chatterjee, IXDM, FHNW, Basel & Max-Planck Kunsthistorisches Institut) created a stimulating and publicly accessible **virtual image**

collection (visualizingthevirus.com), bringing together a **unique dataset** documenting the visual metaphors generated to incorporate the pandemic experience into everyday life, with **scholarly reflection** on these images.

The *Electronic Literature (e-lit) and COVID-19 project* (led by Søren Pold, Aarhus University) also created both an accessible data set (<https://www.eliterature.org/elo2021/covid/>) and a set of community interactions around how the COVID-19 pandemic was reflected in electronic literature and other digital narrative practices online.

Each of these two platforms reached an extensive community, directly and indirectly.

Indirectly, each platform produced publications, presentations, training and network. For example, *Visualising the Virus* was integrated into a 10-day course at the National Institute of Design in India, and presented at the Hamwe Festival 2021, hosted by the University of Global Health Equity (UGHE). The project was also a community partner for an internship at Princeton University. The *Electronic Literature and COVID-19 project* already has resulted in two published research articles, and has a further one in progress, not to mention related academic talks (3 as of early 2022) and **coverage in the popular press**.

The evidence of impact goes beyond this level of outputs, however. *Visualising the Virus* received a Special Mention Award from the Arts in Health International Foundation

(AIHIF) in April 2021, evidencing its utility as a cross-disciplinary investigation. Similarly, the E-literature project turned some of the practitioner interviews into a short video documentary (available at: <https://vimeo.com/543267350>) which was screened at multiple festivals and viewed on-line almost 100 times since its release in late 2021.

Most importantly for us, however, the DARIAH Theme made a difference in what these researchers felt they could achieve at a difficult time in their careers. e-lit and COVID-19 PI Søren Pold commented on this issue:

“...the funding has helped us a lot to carry through this project, which has meant a lot to us, and the included artists during a difficult period of pandemic lockdown. Furthermore, we believe that the results are important as artistic witness to an extreme situation and an expression of the importance of art and digital culture in relation to what has been called the first digital pandemic.”

Søren Pold

Similarly, the Visualising the Virus team tells us that:

“The funding from DARIAH has been instrumental for both the foundation and development of the Visualizing the Virus project and website. This has allowed us to collect a number of trans- and interdisciplinary contributions that visualize the COVID-19 pandemic from a variety of perspectives, highlighting the experiences of marginalized communities across the globe and shedding light on inequalities exacerbated by the pandemic. We reach a broad general public audience as well as students and scholars.”

Each of the DARIAH Arts, Humanities and COVID projects is making a significant scientific impact in its domain and across audiences. In addition to exciting new platforms and exchanges, they are also producing significant scientific outputs, and notable esteem indicators.

Evidence of the Impact

- Curator statement: Nacher, Anna , Scott Rettberg, og Søren Bro Pold. “COVID E-LIT: Digital Art from the Pandemic”. Electronic Book Review. 2021. [https://pure.au.dk/portal/en/publications/covid-elit\(3635a9b3-e0d0-4e11-a059-196a14ca72d8\).html](https://pure.au.dk/portal/en/publications/covid-elit(3635a9b3-e0d0-4e11-a059-196a14ca72d8).html)
- Edited version of the interview with Ben Grosser in electronic book review: Pold, Søren Bro, Anna Nacher og Scott Rettberg. “Platform In[ter]ventions: an Interview with Ben Grosser”. Electronic Book Review. 2021. <https://doi.org/10.7273/9fdq-t667>
- Research article, “A Pandemic Crisis Seen from the Screen” for an edited research anthology with the title “Platformed Reflections on the Pandemic: Covid-19 and Electronic Literature” (in print)
- Pold, S. B. (2021). Digital kunst i en coronatid: Hvem sidder der bag skærmen? Akademikerbladet. <https://www.akademikerbladet.dk/debat/soeren-bro-pold/digital-kunst-i-en-coronatid-hvem-sidder-der-bag-skaermen>
- Talk by Anna Nacher, Scott Rettberg & Søren Pold: “Post Pandemic Prose”, ELO 2021, May 21, <https://vimeo.com/555698083>
- Talk by Anna Nacher, Scott Rettberg & Søren Pold: “Platformed Reflections on the Pandemic: Covid-19 and Electronic Literature”, Japanese Association of Digital Humanities, The University of Tokyo, Sept. 21
- Talk by Søren Pold: “A Pandemic Crisis Seen from the Screen: Digital art and electronic literature as reflection on pandemic platform culture”, Sankt Interface Day, Kunst Universität Linz, Austria, 17 Dec. 21



b. Working Groups

In 2021, DARIAH counted 20 active Working Groups (WGs), including the newly founded WG Theatralia. The DARIAH WGs are a good reflection of the diverse and rich landscape of the interdisciplinary research carried on in the arts and humanities, and in particular within the DARIAH infrastructure. As one of its strategic pillars, DARIAH is actively engaged in the support and growth of such a rich community of researchers. This translates into the provision of financial resources to set up innovative projects (cf. funding scheme 2021 below) but also the support of the DARIAH Coordination Office in terms of communication or organisation. In addition, the Joint Research Committee provides scientific guidance from the creation of the Working Groups to the activities they carry out.

Building on the successful format of the 2020 online WG meetings, in 2021 the WGs were again invited to organise their WG meetings online over the fall, with help and support from the DARIAH Coordination Office. From September to December 2021, 10 WG meetings were organised, opening up to external participants, welcoming non-members to follow the meetings and explore potential collaborations. The structure of these meetings varied, from workshops to internal meetings, with invited speakers or presentations from the chairs of the WGs, welcoming overall 260 registered participants.

Working Groups Funding Scheme 2021: Call and Winning Projects

Every two years, alternating with the thematic funding call for projects "DARIAH Theme", DARIAH issues a call for funding exclusively dedicated to its Working Groups (WGs). They are invited to submit project proposals which are evaluated by a panel of internal and external reviewers against three main criteria: the quality and impact of their project, its implementation feasibility, and its alignment with DARIAH's overall strategy. In 2021, we issued a new round of the Working Groups funding call with selected projects being granted a maximum of 5,000 € to explore innovative ideas, build up their expertise or sustain existing tools and services. The funded projects are:

WG Theatralia / Performing Arts: Transitioning to the Digital Age

This project aims at organising a series of international workshops for all performing arts professions to get acquainted with the openly or easily accessible digital technologies that are applicable in the performing arts practice. A scientific and professional international conference will follow, to discuss the possibilities of digital technology and tools in the context of performing arts through practical examples and theoretical models.

Working Groups Activities: 2021 at a glance



Focus on the New Working Group: Theatralia

2021 saw the start of a new Working Group: the Theatralia WG, chaired by Anamarija Žugić Borić (Research Assistant at DARIAH-HR) and Tihomir Živić (Associate Professor at Josip Juraj Strossmayer University of Osijek). The WG aims to respond to the needs of theatre artists, experts, and researchers, providing guidelines for the best methods to implement digitally based strategies in their research and to increase awareness and usage of ICTs in the Performing Arts research in general. In its first year, the WG already counted 30 members from across the DARIAH countries.

"We recognised that there is a rising necessity to digitise as many theatrical material items as possible and, furthermore, to provide access to as many existent databases as possible that contain a digitised or an originally produced, theatre-related digital heritage", said Anamarija, co-chair of the WG. "The consortium of the WG Theatralia – initially mainly comprised of Croatian experts and researchers – recognized the DARIAH-EU infrastructure as the best venue to support the creation of a digital infrastructure that will unify the European theatre experts and interconnect the existent databases on a broader, international level, i.e., in the DARIAH member countries".

Talking about future plans of the WG, co-chair Tihomir added, "starting with the year 2022, we will focus on the compilation of an international theatrical registry that will collect crucial information on the national theatre houses, including their existent digital archives and repositories, with the aim of expanding the registry to the independent theatres, theatre troupes and individual performative artists."



Anamarija Žugić Borić



Tihomir Živić

WG Digital Urban Heritage / Enabling City Dwellers to Better Understand and Valorise Intangible and Built Heritage Together: Digital Tools and Practices

This project intends to organise two intensive hands-on workshops to study, discuss and analyse sites of interest in the cities of Cordoba, Spain, and Lourinhã, Portugal; Córdoba is listed by UNESCO and Lourinhã is a candidate to Geopark/UNESCO. These workshops will bring together WG members, local groups and researchers using participatory design and co-creation methodologies.

WG Bibliographical Data / Mutual Learning Workshop for Improving Cultural Heritage Bibliographical Data

The project's goal is to intensify and expand the collaboration between bibliographical data researchers and the librarian community by delivering two main outputs: a specialised workshop for mutual learning for both communities, and a joint statement on their shared agenda for the humanistic bibliodata.

WG Research Data Management / Research Data Management for Arts and Humanities: Integrating Voices of the Community

The project aims at organising a writing sprint with the outcome of an Open Access publication that covers and provides practical know-how for both researchers and the new research support professionals (data stewards, subject librarians, open science officers, etc.) working with them.

The publication will accommodate not only text and illustrations but also underlying resources (e.g. data sets, references to standards, data modelling environments) will be linked to it. The collection will address major and shared research data management challenges manifested in arts and humanities disciplines.

WG DARIAH Teach + WG Ethics and Legality in the Digital Arts and Humanities (ELDAH) / Social Justice in the Digital Humanities: Diversifying the Curriculum

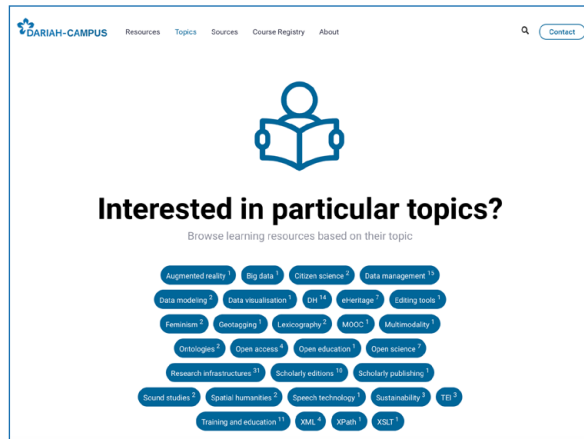
The goal of the project is to develop a new open educational resource for the #dariahTeach platform. The course will build on case studies that took a social justice approach to digital scholarship, study digital modalities used by artists in the developing world to preserve their work and reach dispersed audiences, and bring to light marginalised voices from the past.

WG Community Engagement / Identifying PhD Student's Training Needs

The project aims at identifying DH training needs for PhD students from various disciplines and with different levels of expertise. As diverse as the field of DH is, equally diverse are the training needs for PhD students entering the field from various backgrounds. DARIAH provides a wealth of training and education tools and resources, the awareness and utilization of which will be systematically explored by this project.

c. Education and Training

2021 Updates from DARIAH-Campus: New Courses and New Collaborations



DARIAH-Campus

In 2021, DARIAH-Campus received 13,265 page views, and 4985 visitors. Of those visitors, 78.8% were new visitors while 22.2% were returning. This is an increase on the number of views in 2020, when DARIAH-Campus received 8,831 page views, and 2,851 visitors. Encouragingly enough, even when the COVID-19 pandemic situation was slightly different in 2021 with the key audience for DARIAH-Campus returning (physically) to work and study, and with greater numbers of online resources available, the DARIAH-Campus audience continued to grow.

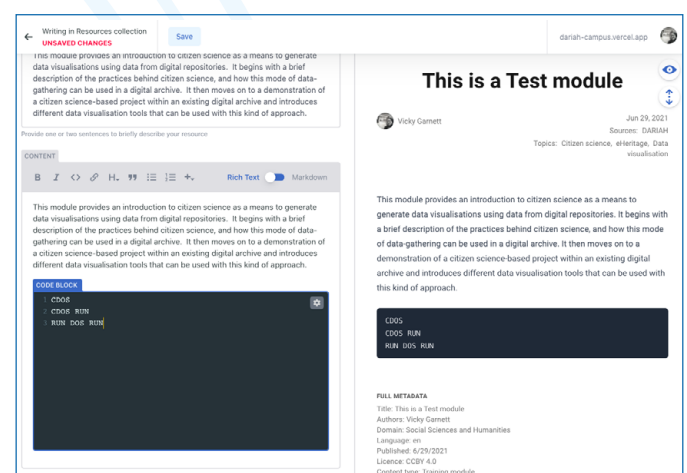
One of the biggest developments in 2021 for DARIAH-Campus was the development of the new Content Management System that allows contributors to create a resource without having to use Markdown. The Content Management System (CMS) was built by Stefan Probst from the Austrian Centre for Digital Humanities and Cultural Heritage (ACDH-CH) in consultation with DARIAH Director Toma Tasovac and Training and Education Officer Vicky Garnett. The CMS has the appearance of an online form that also generates a preview for the person making the contribution, but the system still makes use of the GitHub workflow, generating Pull Requests for the editors to review, edit and merge. The development of the CMS also allowed for additional features to be included on the platform, such as 'Curricula' for content providers who have multiple resources that can be built into a larger course. This Content Management System was launched in September 2021, and has already resulted in considerably more contributions made directly by content providers.

In 2021, there were more contributions from new sources, including the Ranke2.lu lessons from the University of Luxembourg, and resources around the use of EOSC from the TRIPLE project. The Austrian Centre for Digital Humanities and Cultural Heritage (ACDH-CH) included their ongoing Lecture series as external resources while the Digital Repository of Ireland also added their Webinar Series to Campus.

Training Tuesday Campaign

Following on from a successful first year of the Training Tuesday Twitter campaign in 2020, the campaign continued in 2021, once again featuring resources from DARIAH-Campus for the most part, and the occasional learning resources from the wider DARIAH community.

In 2021, 45 training resources were featured overall, running from February to mid-December. With a total of 81,701 impressions (the total number of times a Tweet has been seen) in 2021, there was a drop in comparison to the 2020 stats, likely due to the changing day-to-day situation with the pandemic and the subsequent return to work for many in 2021. However, the ratio of likes (n=320), click throughs (n=296) and retweets (n=205) to the total engagements (1223) remains at a similar level in both years, indeed slightly higher in 2021, suggesting that the campaign remains consistent.



DARIAH-Campus: Preview of Content Management System

Friday Frontiers

The Friday Frontiers in-house webinar series built on the success of its launch in 2020 with the 2021 Spring and Autumn sessions. In Spring, two webinars were held: “Unwaged labor – Work Life balance and Information Management during COVID-19” presented by Dr. Kristen Schuster, King’s College London, and “An Introduction to APIs” presented by Dr. Mark Hall, Open University UK.

The Autumn Session delivered three further webinars: “Thinking about the CARE Principles in Digital Humanities Research”, presented by Prof. Dan O’Donnell, University of Lethbridge (Canada); “Introduction to Persistent Identifiers”, presented by Dr. Tibor Kalman, GWDG; and “How to share your research using social media”, presented by Dr. Bob Nicholson, Edge Hill University, UK. As with previous Friday Frontiers webinars, the videos of presentations were published on DARIAH-Campus soon after the events, for wider viewing.

Over the course of the year, these webinars have increased in popularity, as the number of registrations and subsequent attendees increased. The average number of people registering for each Friday Frontiers webinar in 2021 was around 30, while the transfer of registrations to attendees has seen an average of 23 people showing up to

the events. This represents a reasonably high registration: attendee ratio, which suggests that the topics, timing and format of these sessions are consistently favourable to the DARIAH community. The intention was never to draw in huge numbers for these seminars, more to ensure that there was a good knowledge exchange during the sessions. The solid numbers, though, are encouraging to the guest speakers, so a good balance between the event being small enough to encourage discussion and engagement, but large enough to attract speakers is something that continues to be monitored.

The speakers for Friday Frontiers are invited based on their expertise. Topics for webinars are selected within three broad themes: ongoing projects within Digital Humanities; technical skills development; and societal impact of research. Within these broader themes, speakers are sought out, either through personal recommendation or a review of expertise in the subject, and are invited to take part. One failing that was recognised in 2021, though, was the gender imbalance among the speakers. Attempts were made in compiling and inviting speakers to ensure that more women were included, but this did not materialise in the final running order. Greater efforts will be made in 2022 to address this, and ensure greater representation of women in the community.

DESIR Winter School 2019, Luisa Seixas, CC BY



d. Investing on Open Science

Accommodating the Needs of Arts and Humanities Scholars to European Open Science and Open Access Agendas

In 2021, DARIAH further strengthened its mission of building bridges between high-level Open Access and Open Science policy mandates and research realities in the arts and humanities, and reducing the implementation gap between them. Academic books, for example, have remained on the periphery of Open Access mandates and funding mechanisms. Together with other actors, DARIAH has been a strong advocate of the better inclusion of academic books with the Open Access policy and publication landscape. In 2021, we saw a clear momentum with the launch of Open Access book mandates by European and national research funders. DARIAH contributed to a number of them and was particularly active in providing insights to Horizon Europe's Open Access book policy, bringing to arts and humanities scholars one of the earliest communications about it. This latter has since been taken up and translated to multiple languages.

Another policy area that DARIAH began to prioritise in 2021 was the ongoing European reform of research assessment. Redefining "what counts" in research(er) evaluation beyond the traditional bibliometric and publisher prestige-based mechanisms of assessment is crucially important not only for the Digital Humanities communities we serve but also for DARIAH itself. DARIAH's mission of bringing on collaborative and innovative means of digitally-enabled research cannot be fully realised as long as the defining majority of these activities are still unrewarded, if not even counter-incentivized by the current evaluation proxies. With this

in mind, in 2021, DARIAH became an active member of the Research Careers, Recognition, and Credit EOSC Task Force and joined leading European initiatives such as the "Towards an agreement on reforming research assessment" Interest Group led by the European Commission. This line of policy work was complemented by strengthening evaluation communities around digital scholarship that is yet invisible in formal assessment within and across the DARIAH networks.

Leading a Task Force on Research Assessment and Peer Review Innovations in Social Sciences and Humanities within the H2020 Project OPERAS-P

Identifying gaps, needs, and good practices in scholarly communication within the arts and humanities domain is crucial to support evidence-based, data driven policy-making. These insights on the state of the art and the real challenges in equitable scholarly communication also inform the development of innovative services. To this end, DARIAH has been continuously investing in meta-research and assessments within our communities. Between 2019-2021, DARIAH-EU led a task force on research assessment and peer review innovations in Social Sciences and Humanities within the H2020 project OPERAS-P. The study was based on 32 deep interviews conducted with Social Sciences and Humanities researchers and publisher representatives across Europe, as well as on a portfolio of relevant case studies. The analysis revealed a rich, in-depth perspective on the central role of peer review in terms of gatekeeping; shaping disciplines, publication patterns and power relations and outlined both its current limitations and its innovation potentials situated in Social Sciences and Humanities disciplines.

Peer review – challenges to its expected functionality

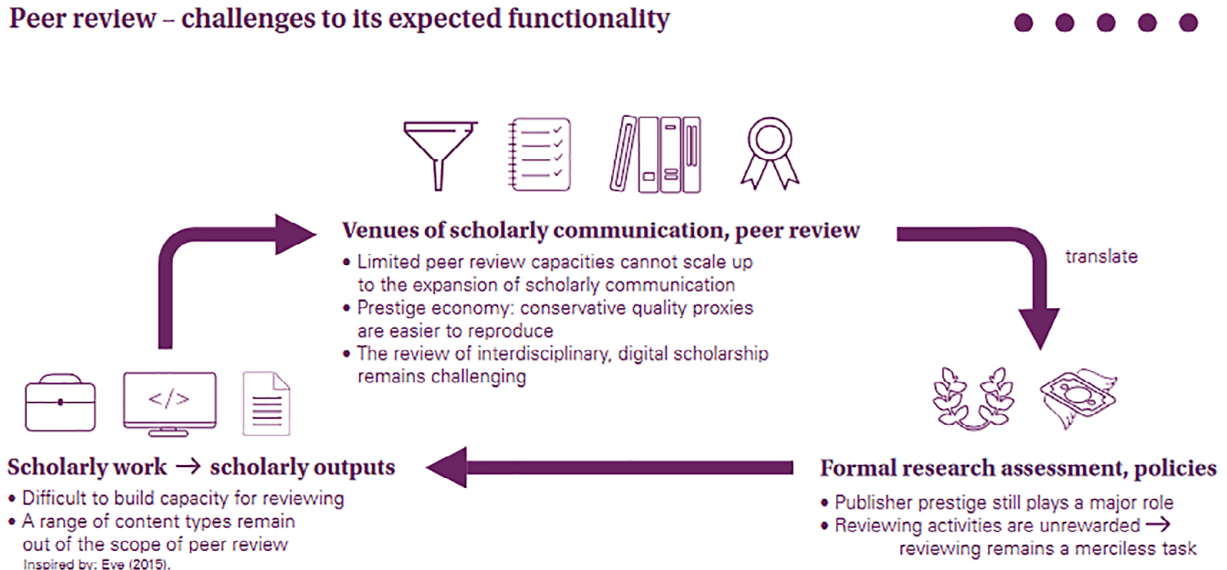
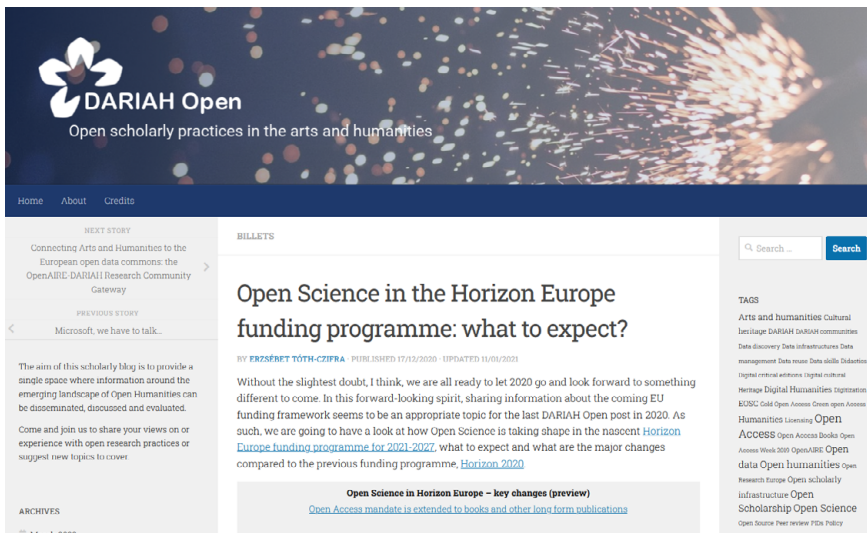


Image Source: OPERAS Publication on Future of Scholarly Communication. Forging an inclusive and innovative research infrastructure for scholarly communication in Social Sciences and Humanities. CC BY 4.0

DARIAH Open posts on Horizon Europe's Open Access Book Policy have been translated to multiple languages



The screenshot shows the DARIAH Open website interface. At the top, there is a navigation bar with 'Home', 'About', and 'Credits'. Below that, a 'NEXT STORY' section highlights 'Connecting Arts and Humanities to the European open data commons: the OpenABIE DARIAH Research Community Gateway'. A 'PREVIOUS STORY' section mentions 'Microsoft, we have to talk...'. The main content area features a search bar and a list of tags including 'Arts and humanities', 'Cultural Heritage', 'DARIAH', 'Digital Humanities', 'Open Access', and 'Open Science'. The featured article is 'Open Science in the Horizon Europe funding programme: what to expect?' by Ferenc Tóth-Czifra, published on 17/12/2020 and updated on 11/05/2021. The article's abstract discusses the transition from Horizon 2020 to Horizon Europe and the implications for open science.



The screenshot shows a French translation of the article titled 'Science ouverte : qu'est-ce qui change avec Horizon Europe ?' by Ferenc Tóth-Czifra, published on 05/02/2021. The article features a prominent image of the European Union flag. The text discusses the impact of Horizon Europe on open science, mentioning the 'grant agreements' and the 'Open Access Book Policy'. It highlights the extension of the open access mandate to books and other long-form publications, a significant change from the previous Horizon 2020 funding programme.

These results (DOI: [10.5281/zenodo.4922537](https://doi.org/10.5281/zenodo.4922537)) directly fed into DARIAH's own Open Science advocacy and training activities in terms of understanding the complexities of cultural change towards open research workflows.

Launch of the Annual DARIAH Open Access Book Bursary

Beyond fighting for the inclusion of domain-specific needs and challenges to European Open Access policies, DARIAH is also committed to providing immediate contributions to ease the current anomalies and mitigate gaps in the European Open Access funding landscape. To address this gap, in 2021, DARIAH launched an annual book bursary for the Open Access publication of early career researchers' first monograph in Digital Humanities. The innovation of this initiative lies in the fact that it is inclusive with first monographs, thus supporting early career researchers who are less privileged in this respect but could possibly achieve the biggest change in academic culture and beyond.

The recipient of the first, introductory round of the bursary was [Ulrike Henny-Krahmer](#), Junior Professor for Digital Humanities, Institute for German Studies, University of Rostock, author of the manuscript *Genre Analysis and Corpus Design: 19th Century Spanish American Novels (1830-1910)*. DARIAH was pleased to support the Open Access publication of a truly innovative, multilingual scholarship that goes beyond traditional monographs in many ways. The book will be published in the [SIDE Open Access](#) publication series of the Institute for Documentology and Scholarly Editing (IDE). IDE is a non-profit scholarly network that has strong commitments to strengthening various types of DH resources such as digital scholarly editions, text collections and editing tools.

Open Humanities Training and Advocacy

Bringing back policy changes to the DARIAH communities and supporting them in leveraging

innovations fuelled by the open research culture is just as important an area in DARIAH's Open Science strategy as policy support and meta-research. In 2021, we built on early responses and lessons learnt during the first phase of the pandemic and further optimised the delivery of our training and advocacy activities to our COVID- and lockdown-affected environments. As an example, in February, in collaboration with the SSHOC project, we organised a Train-the-Trainer Research Data Management Bootcamp that accommodated both synchronous and asynchronous interactions. It was designed in a format that allowed attendees to test and anchor the learning materials in their own working environments in-between the two days of the workshop, on February 8 and 11, and then to bring back and exchange these experiences with the trainers of the bootcamp. Documentation from the event was captured and published soon after the bootcamp, allowing thus a broader audience to access and reuse these resulting resources.

Furthermore, open humanities themed webinars were organised over the year, in collaboration with the Centre Marc Bloch Berlin, Freie Universität Berlin, King's College London, University of Basel, University of Lviv, DAAD and JISC, while conference presentations were given at DARIAH-CZ and DARIAH-HR conferences, PUBMET, FORCE11, OAI – The Geneva Workshop on Innovations in Scholarly Communication, Forschungsdaten in den Geisteswissenschaften, and at the International Society for Ethnology and Folklore conferences.

Alongside training and outreach events, the DARIAH Open Science Service Suite, consisting of the Open Science helpdesk, the DARIAH Open blog and the OpenMethods platform remained active throughout the year. A 2021 initiative was a new series on OpenMethods called [Spotlights](#), aiming to better showcase the people behind DH tools and methods and enable conversations around scholarly assets.

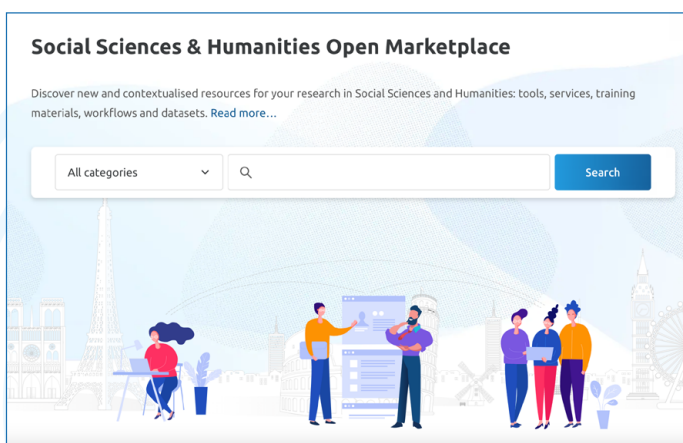
e. Creating Tools and Services for the Community

The SSH Open Marketplace: A Discovery Portal for Digital Resources

2021 has been the year of the Social Sciences and Humanities Open Marketplace final release. The SSH Open Marketplace – marketplace.sshopencloud.eu/ – is a discovery portal which pools and contextualises resources for Social Sciences and Humanities research communities spanning tools, services, training materials, datasets, publications and workflows. The Marketplace highlights and showcases solutions and research practices for every step of the SSH research data life cycle. Thanks to the commitment of all the partners engaged in the Social Sciences and Humanities Open Cloud project, and beyond, this DARIAH flagship service has been released at the end of the year, featuring around 5000 resources coming from 15 trusted sources.

Thanks to the SSH Open Marketplace, SSH researchers can:

- Gain access to useful and well curated resources
- Find and discover new digital methods
- Easily understand and assess usefulness of a resource thanks to the contextualisation provided between the items of the catalogue
- Promote their work, e.g. by adding information about the tool or workflow they developed
- Get actively involved in the SSH community data curation routines, choosing to become a basic contributor or advanced curator.



As a distributed infrastructure, **DARIAH relies on its national nodes and partner institutions to create and provide services** for the Arts and Humanities community. Building the SSH Open Marketplace would not have been possible without our key partners' involvement. For this reason, in this Annual Report we wanted to highlight four of our key partners' contributions towards the development of the Marketplace.

While the Austrian Centre for Digital Humanities and Cultural Heritage of the Austrian Academy of Sciences (ACDH-CH) focused on coordinating the development of the application and delivering the front-end part of the service, our partners at Poznan Supercomputing and Networking Center (PSNC) developed the back-end and a new ingestion pipeline (see next section on DACE) to onboard data sources. As for the University of Göttingen (UGOE), it has contributed considerably to the engagement of the communities with the alpha and beta versions of the service, shaping and coordinating the first curation sprints!

The Society for Scientific Data Processing (GWDG) and ACDH-CH also delivered very promising work on extracting tools mentioned in publications and training a model to improve the recognition of these mentions and automatise the creation of relations between the items of the Marketplace. Thanks to this work, contextualisation in the Marketplace has been greatly improved and new tools were also identified.

Sustainability planning for the SSH Open Marketplace has been at the heart of the service development. In 2021, DARIAH, CESSDA and CLARIN agreed to keep the service actively alive after the end of the SSHOC project, and introduce an Editorial Board which will take care of the day-to-day maintenance and the data quality of the service.

Furthermore, as the SSH Open Marketplace has been designed to be one of the entry doors to the European Open Science Cloud (EOSC) for SSH researchers, special attention has been paid to interoperability and integration with the EOSC. Two of the project deliverables explain in detail how this has been implemented in practice: D7.2 Marketplace – Implementation [<https://doi.org/10.5281/zenodo.5749465>] and D7.3 Marketplace – Interoperability [<https://doi.org/10.5281/zenodo.5871651>].

Focus on DARIAH Resources in the SSH Open Marketplace

DARIAH resources played an important role in the first (meta)data population of this discovery portal while a lot of DARIAH assets are now referenced/indexed in the SSH Open Marketplace.

What are the DARIAH Assets?

First of all, 80 training materials coming from DARIAH-Campus are referenced in the SSH Open Marketplace offering a new entry door for these DARIAH learning resources. The 25 research scenarios coming from the Standardization Survival Kit, and their 355 associated resources (tools & services, training materials and publications) are also present in the Marketplace. Finally, national coordinators provided a selection of resources – mainly tools & services, but also few training materials and datasets – to be included in the SSH Open Marketplace for its final release, representing the diversity of the DARIAH national contributions. Over 50 resources were selected, 35 were already registered in the in-kind contribution tool, and were automatically ingested in the Marketplace, while the rest of the entries were manually curated by UGOE as part of the SSHOC project activities. It should be noted that for some of the most mature services, such as ISIDORE for example, the entry was harvested directly from the EOSC Catalogue that is a trusted source of the SSH Open Marketplace, and was further enriched by the service owner in the SSH Open Marketplace.

Added-Value of Being in the SSH Open Marketplace for DARIAH Resources

Interoperability between catalogues is key to ensure discoverability and reusability of resources in the EOSC. The SSH Open Marketplace is instrumental in shaping the

SSH branch of this landscape and the diversity of DARIAH resources and national flavours needs to be included. Being in the SSH Open Marketplace means bringing visibility, interlinking and context on a resource that is the result of the expertise and experience of DARIAH partner institutions at the local or national level. In that regard, 2021 was a year during which DARIAH used the SSH Open Marketplace to consolidate the services' and resources' offer coming from its distributed network and to align its internal workflow of in-kind contributions to the EOSC environment.



DACE: a Data Aggregation and proCessing Engine for Digital Humanities and Cultural Heritage

Developed by the Poznan Supercomputing and Networking Center (PSNC), DACE is an Open Source framework that supports the SSH Open Marketplace in terms of data aggregation, processing and ingestion. PSNC started to build this engine in collaboration with University of Wrocław to serve the Leopoldina platform – an institutional metadata aggregator (<https://leopoldina.pl/>). It has been further developed to serve FBC, a country-wide aggregation pipeline in Poland (<https://fbc.pionier.net.pl/>). It is also planned as a basis for data aggregation pipelines in the Polish Dariah.lab e-infrastructure.

The flexibility of DACE allowed for its successful use in the context of the SSH Open Marketplace. The challenge here was in the variety of data source platforms and formats as well as the mapping requirements. Technically, DACE is composed of several applications

(microservices) that can be orchestrated to build a customised workflow. A set of predefined applications for data harvesting, processing and ingestion are already available in DACE, with the possibility to add new processing features. The applications communicate with each other using asynchronous messaging and are managed via an online administrator's interface, called Dace Management Centre. The framework is flexible and the deployment can consist of only those applications which are really needed for the specific processing workflow. Each application can be scaled and run in multiple instances if needed.

In 2021, the framework was tested on SSH Open Marketplace data sources and was stabilised to become its main ingestion pipeline. Based on this success, DACE is now ready to be used in other data aggregation projects.

Impact Case Study

A DARIAH Impact Case Study:

TaDiRAH – The Taxonomy of Digital Research Activities in the Humanities

What did we do?

In close exchange with the digital humanities (DH) research community, TaDiRAH was developed to describe and organise research activities in the field. Recently, this taxonomy of digital research activities was completely revised, visualised and formalised to improve scientific reuse, interlinking and interoperability across projects and disciplines.

Why did we do it?

The taxonomy responds to the need of DH to describe and define itself. TaDiRAH enables the interlinking of content and enriches it to make it more visible in the long term. At the same time, it brings together the multilingual DH community, contributing to reflecting and shaping DH terminology.

Who did we do it for?

The beneficiaries of TaDiRAH are primarily DH researchers who use the taxonomy to access DH resources and contributions or reflect upon DH on a disciplinary level seeking a cross-disciplinary understanding.

Genesis of TaDiRAH

TaDiRAH started as a transatlantic cooperation that dates back to 2014,¹ including DARIAH, as well as Digital Research Tools (DiRT), DHCommons (now TaPoR) as well as the Network for Digital Methods in the Arts and Humanities (NeDiMAH). The institutions involved had the common goal of developing a taxonomy that would allow systematic description and categorisation of DH content in order to enrich resources and render them more visible. DARIAH has continued to accompany the development of the non-funded initiative ever since and has become its institutional backbone.

TaDiRAH is usually pronounced “ta-DEE-ra” and stands for Taxonomy of Digital Research Tools in the Humanities. The name of the taxonomy also refers to the initiators, who are alluded to here as partial anagrams.

Description of the Impact

The taxonomy has become well established, as can be seen from the fact that it has now been widely translated by researchers and research groups looking to promote its adoption. Although TaDiRAH was initially conceived in English, further languages, e.g. German, Spanish, Portuguese and Serbian, were quickly added. Italian and Japanese versions have recently been added [1,2]. TaDiRAH is now available in a total of 8 languages.

This multilingualism makes it possible to better interlink international DH research and to integrate research in languages other than English into the research discourse.

¹ For a list of TaDiRAH publications visit <https://tadirah.info/pages/Publications.html>



Gimena del Rio: “Very happy to announce that my friend & colleague @RicardoMPimenta from @larhud1 has published @tadirah_dh in Portuguese following our Spanish version. And more news soon about our labs & taxonomies.” @CE_DARIAH @christof77 @HDCAICYT @4srdiego @rominickyDL

Since its original release in 2015 TaDiRAH has been used in a variety of contexts to categorise bibliographic data (DARIAH Zotero bibliography “Doing Digital Humanities”), research projects (in addition to DHCommons also in AGATE, the European Science Academies Gateway for the Humanities and Social Sciences), pedagogical resources (Digital Humanities Course Registry), conference abstracts [3,4,5], research tools (TAPoR Text Analysis Portal for Research), and contributions to modelling.

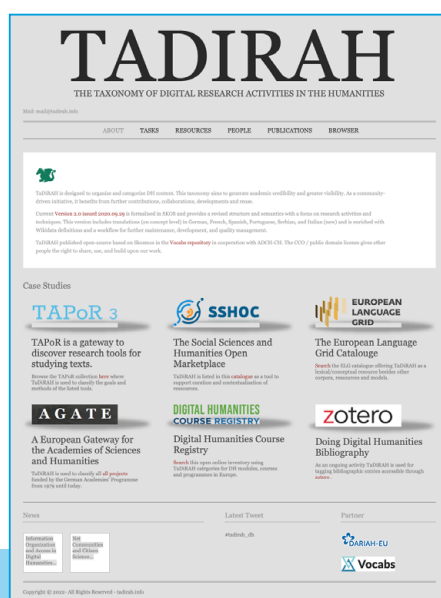
The taxonomy has also become a popular tool among scholars and researchers. For example, Swantje Dogunke claims to be “a big fan of the taxonomy” and counts it among the useful things when it comes to modelling research processes [6,7]. Silvia Gutiérrez from The College of Mexico tells us that “the TaDiRAH taxonomy proved to be a helpful common vocabulary for research processes” [8] and stresses its unifying qualities when she confirms that “[e]xplanations are understandable for computer scientists, DHers & humanities scholars” [9]. The community also uses

TaDiRAH in workshops [10] or when presenting projects for third-party funding [11]. The taxonomy was also used to conduct various surveys [12,13] and has even been employed in a dissertation.

Due to the interdisciplinary awareness of the model, TaDiRAH is currently being used among others as part of several NFDI consortia like Text+. In **NFDI4Culture** it is used to develop criteria for sustainable and interoperable software aiming to develop a certification process as well as part of the recommendations of the “**Consortium 3D for Humanities**”. Furthermore, the use of TaDiRAH is also evaluated within the framework of **BERD@NFDI**.

It is thanks to DARIAH's initiative that the taxonomy has recently been taken to a new level. The harmonisation of DARIAH-DE and CLARIN-D and the integration of various tools to the Language Resource Switchboard (LRS) required a more formalised and standardised version of the taxonomy to be developed. The redesign included a transformation into a standardised, machine readable version (achieved with SKOS). This 'skosification' was acknowledged as a 'huge achievement' on Twitter [14] and enables listing TaDiRAH on the SSH Open Marketplace [15,16] and the **European Language Grid (ELG)**. The redesign also facilitated release of the taxonomy under a CC0 licence within the **Vocabs service** at the Austrian Academy of Sciences, and an alignment with Wikidata that facilitates the suggestion, definition, discussion and translation of further terms. Since this work was completed in 2020, the taxonomy has been accessed well over 1000 times.

We can only expect the impact of TaDiRAH to continue to expand. TaDiRAH is currently being used to develop a Skills & Capability Framework identifying the roles, required key qualifications and levels of experience along DH research activities. The resulting matrix will be able to facilitate citizen scientists to participate and actively contribute to scientific research in DH, determine qualification gaps along the DH role spectrum and create learning pathways and opportunities.



Evidence of the Impact

[1] Tweet on the Portuguese version of TaDiRAH following its Spanish translation, Gimena del Rio, <https://twitter.com/gimenadelr/status/1279865628552200192>

[2] The existing language versions are implemented to varying degrees in Vocabs: <https://vocabs.dariah.eu/tadira/>

[3-5] German Digital Humanities Conference (DHd) uses TaDiRAH to classify its conference abstracts, see i.e. Patrick Sahle (February 2018), “Einreichungen zur DHd 2018”, DHd-Blog, retrieved from <https://dhd-blog.org/?p=9001>; Armin Hoenen (March 2019), “Einreichungen zur DHd 2019 – II”, DHd-Blog, retrieved from <https://dhd-blog.org/?p=11418>, and <https://vdhd2021.hypotheses.org/137>

[6-7] Swantje Dogunke on Twitter (@swagunke): <https://twitter.com/swagunke/status/1326111330047299584> and <https://twitter.com/swagunke/status/1400368944838582273>

[8] Silvia Gutiérrez on Twitter: <https://twitter.com/espejolento/status/1381722397636628481>

[9] Silvia Gutiérrez on Twitter: <https://twitter.com/espejolento/status/1501913689519280128>

[10] Annika Rockenberger from the University of Oslo Library on Twitter <https://twitter.com/ARockenberger/status/1326100771507728384>

[11] Georg Hohmann on Twitter: <https://twitter.com/GeorgHohmann/status/1235204160368279555>

[12] “The LIBER survey uses the TaDiRAH research taxonomy of digital research [activities]”: Wilms, L. (2021). Digital Humanities in European Research Libraries: Beyond Offering Digital Collections. LIBER Quarterly: The Journal of the Association of European Research Libraries, 31(1), 1–23. <https://liberquarterly.eu/article/view/10884>

[13] Chris Alen Susa, Sarah Hackney and Phillip Cunningham (2015). A Survey of Digital Humanities Curricula at the Present Time. <http://chrisalensula.org/project/a-survey-of-digital-humanities-programs/>

[14] Twitter user @FrueheNeuzeit: <https://twitter.com/FrueheNeuzeit/status/1311003148388044801>

[15, 16] Matej Ďurčo (2020), DARIAH: main requirements and best practices, https://www.youtube.com/watch?v=A8_57eGlwew; Stefan Buddenbohm (May 2020), “What's in it for you? How the SSH Open Marketplace will be populated with content”, DHd-Blog, <https://dhd-blog.org/?p=13729>



f. DARIAH Annual Event 2021

Due to the ongoing uncertainty with the COVID-19 pandemic, the 2021 DARIAH Annual Event was planned as an online conference and was held on September 7-9, 2021. Topic of this year's event was Interfaces. As in 2020, the online dimension of the event allowed participation from all over the world. We had the pleasure to welcome 300 registered participants from 37 countries, from Europe, the US, Canada and Latin America, from Africa and Asia.

This year's DARIAH Annual Event aimed to discuss the role that interfaces play in the arts and humanities. To what extent do they enable new research, and at the same time, do they also limit research possibilities? How is content/information changed while being transmitted by interfaces? How do interfaces reframe the roles of those using them, their roles as producer and/or consumer of interfaces?

The event accommodated such discussions in a rich programme, running over three days. Two keynote speeches were delivered by Sarah Kenderdine (École polytechnique fédérale de Lausanne) on "Computational Museology: Experimental Interfaces to Cultural Big Data", and Chris Heilman (Microsoft) on "You Never Build Just One Interface – You Don't Even Own It", while the event also featured 3 panels and 4 paper sessions on the topics:

- Interfaces for GLAM and Cultural Heritage Institutions
- The Making of Interfaces
- Interfaces and Infrastructures
- Theoretical Reflections Around Interfaces

European Summer University in Digital Humanities

g. European Summer University in Digital Humanities

The 11th European Summer University in Digital Humanities "Culture & Technology" (ESUDH), organised by the University of Leipzig, was held online on August 3rd – August 13th. As in previous years, DARIAH was one of the sponsors granting 28 tuition fellowships to doctoral students and early career researchers from 15 countries across Europe and beyond to cover their participation fees. Overall, DARIAH funded 20 female and 8 male early career researchers from Belgium, Cameroon, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Portugal, Serbia, Slovenia, Sweden, Switzerland and Turkey.

"Despite not being in Leipzig, the ESU 2021 experience was remarkably fulfilling. In addition to the morning workshop sessions we attended lectures, project presentations and panel discussions that kept us engaged and busy from morning until the late evening every day, maximising our two weeks' worth of DH immersion...I want to thank DARIAH-EU, Elisabeth and the ESU team, and the workshop leaders for once again living up to expectations and providing us with another eye-opening and brain-wracking two weeks full of DH and so many other things to take back home with."

David Amelang, Spain

The Summer University was structured over 11 intensive days of workshops, lectures and poster sessions, but also community building activities and virtual tours to the Bibliotheca Albertina, to the German National Library, to the Museum of Musical Instruments and to the city of Leipzig. The event was framed by two keynote lectures on "Reordering Priorities in the Post-COVID Age: Human-Centered Technologies and Digital Humanities" by Nuria Rodríguez and a collective talk by Ray Siemens, Randa El Khatib, Luis Meneses, Graham Jensen and Caroline Winter on "Open, Social Scholarship as a Foundation for Digital Humanities".



3. Doing Things Right and Doing the Right Things

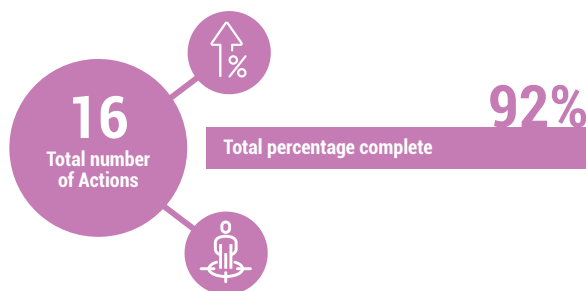
a. Measuring our Impact

Evaluating the success of an organisation is a crucial activity, defined also in terms of making progress toward its strategic goals. DARIAH has made great efforts to define a set of indicators that truly capture and measure success based upon a solid understanding of what our stakeholders value. As we have collected for the third consecutive year a set of quantitative and qualitative KPIs - expressed in the form of a Balanced Scorecard covering the areas of Efficiency, Use and Impact - we are increasingly able to provide an accurate picture of the performance and impact of DARIAH at a European scale and, more importantly, lay the foundation for an analysis of their evolution over time.

In this spirit, we collected indicators throughout the central European office and national consortia to populate the Balanced Scorecard while we produced three Impact Case Studies on Arts Research during COVID-19 (see p. 14-15), TaDiRAH (see p. 24-25) and UK-Ireland Cooperation in DH (see p. 28-29).

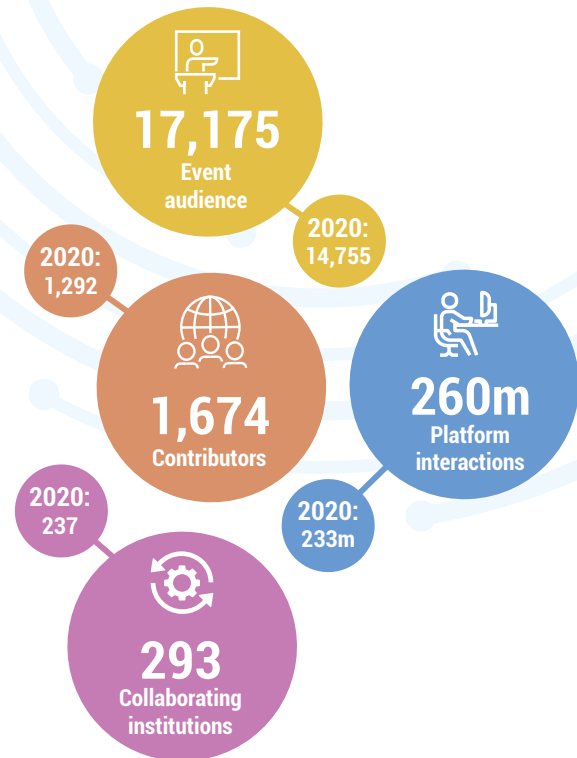
EFFECTIVENESS

In terms of our commitment to continuous organisational improvement, we were very happy to be able to deem our Strategic Action Plan for 2019-2022 to be 92% complete. Considering this, we have planned the agenda of our 2022 Strategy Days meeting around the challenge of developing a third Strategic Action Plan to guide the next phase of our development.



USER BAROMETER

In 2021, we welcomed one new member and one new observer bringing the total number of participating countries to 21 (vs. 19 last year). We have seen a slight increase in the number of our partners and contributors but most importantly a clear growth in the event audience and in platform interactions, demonstrating a continued growth of the DH community and a more intensive use of the services and tools.



IMPACT

In terms of impact, if there was a slight decline in the number of publications between 2020 and 2021, the funding leverage has increased by more than 40%, reflecting the significant continuous investment of our member countries in Digital Humanities.



Impact Case Study

A DARIAH Impact Case Study:

UK-Ireland Cooperation in the Digital Humanities

What did we do?

DARIAH-Ireland worked with Irish DARIAH Representing Entity, the Irish Research Council, and UK partners, including the University of Warwick and Arts and Humanities Research Council, to convene a workshop with the aim of co-creating a joint funding call on Digital Humanities research community in the UK and Ireland.

Why did we do it?

The opportunity for a joint research call that would harness the synergies between these two complementary, neighbouring research communities would require careful scoping to reap maximal value.

Who did we do it for?

The work directly benefited the joint research councils formulating the call, as well as the participants from across the Digital Humanities research spectrum, and beyond. Seen in a wider context, the resulting network and project funding calls enabled the collaboration and work of established scholars, early career investigators, undergraduate and postgraduate students, directly funding research assistants, post doctoral scholars, and indeed the wider research culture as a whole.

Overview of the Activity

Collaboration is essential to building research excellence. This need to consolidate and further strengthen the tradition of research excellence between Ireland and the UK post Brexit was a pressing one. A long history of cultural and academic exchange between the UK and Ireland provided a fruitful baseline for such an initiative, as did the very differently constructed, but equally strong, digital humanities cultures. With the UK enjoying a long history of research emerging from institutional DH Centres, Ireland has been pulling from a far more diverse range of players and organisational models, while also investing in shared infrastructural investment through its strong DARIAH membership. This workshop and its later realisation in funding needed to capture this diversity in a balanced manner as a strength, valourising Digital Humanities as a pivotal catalyst for innovation and open social innovation within the Arts and Humanities. The resulting conclusions were profoundly transdisciplinary and bottom-up, reflecting the effort to build international research networks and support colleagues as needed, facilitating collaboration in a variety of fields.

Description of the Impact

Impact was directly felt in the development of **12 research networks** in a variety of Digital Arts and Humanities fields, leading to **11 full project collaborations** in Digital Humanities between researchers across the UK and Ireland.

These networks and projects are characterised by a commitment to and engagement with digital technologies in advancing our understanding of humanities research questions – an enrichment that is reciprocal in augmenting and sustaining both domains. This inter- and transdisciplinary research excellence is at the core of the Digital Humanities.

"I am delighted to see these awards announced today, supported by the Irish Research Council. The ongoing partnership between the IRC and AHRC-UKRI will drive a step-change in the level of cooperation between these two islands in the growing field of digital humanities. The UK-Ireland digital humanities partnership is a timely reminder of both the appetite and the potential for UK-Ireland research collaboration, both 'east-west' and 'north-south'. Maintaining and further building an international and a vibrant all-island higher education and research system is a key priority for government."

Welcoming the awards, Simon Harris, Irish Minister for Further & Higher Education, Research, Innovation and Science

"I am delighted to see that the strength of AHRC's partnership with the Irish Research Council has enabled us to co-fund such an exceptional and diverse group of projects. Through cutting-edge approaches these projects powerfully capture the innovative potential of joining creativity in the arts and humanities with digital technologies and promise to achieve a new international benchmark in Digital Humanities research."

Christopher Smith, AHRC Executive Chair and International Champion for UKRI

Although the activities of most of the networks and projects are still ongoing at the time of the writing of this case study, significant evidence of impact can already be seen. The proposals demonstrated a significant interest in both expanding and reshaping digital humanities for the better, incorporating feminist principles, making DH more inclusive, and ensuring both common and uncommon approaches, from digital scholarly editing to IIF, were expanded and promoted.

One of the successful Network proposals, the UK-Ireland DH Network (<https://dhnetwork.org/>) aimed to build a foundation for a future digital humanities association for the UK and Irish DH communities. This network bore a

particular DARIAH stamp, as the consortium consisted of members of the DARIAH-IE consortium on the one side, and five DARIAH Cooperating partners on the UK side. Although their work in forming the Association is ongoing, they have already been able to report that: "The precious opportunities for mutual learning regarding enablers, structures, integrators and other drivers to enrich our collaborations and outputs in a larger and more diverse context than could have been possible in a single national system were of great value to all involved in the network."

Evidence of the Impact

The report (co authored with Prof Claire Warwick of Durham U for AHRC) is available to view here: it's a snapshot of the state-of-the-field, pre COVID-19: <https://research.ie/assets/uploads/2019/12/UK-Ireland-DH-Workshop-Report-Final.pdf>

Networking projects <https://research.ie/assets/uploads/2020/07/AHRC-IRC-UK-Ireland-DH-Networking-Awards.pdf>

UK-Ireland Collaboration in the Digital Humanities Awardee list 2021 <https://research.ie/assets/uploads/2021/08/Digital-Humanities-2021-Awardee-List.pdf>

International Collaboration in Digital Humanities Funding Announcement 2021 <https://research.ie/2021/08/04/ireland-and-uk-expand-cooperation-with-joint-research-awards-in-digital-humanities/>



b. Harnessing our National Networks: In-Kind Contributions 2020

In-kind contributions have always been at the heart of DARIAH's distributed model for building and maintaining an infrastructure consisting of and serving a large and heterogeneous user base via a similarly large and heterogeneous network of members. With 322 individual entries, the 2020 DARIAH contributions, which were submitted and partly assessed throughout 2021, demonstrate both the range of activity in our national nodes and the richness of the services offered across the network.

Through the organisation of 70 events, the national DARIAH consortia have been able to reach an ever wider community while strengthening the links within the DH communities through summer schools (CZ), hackathon (AT) or webinars (CY).

The 2020 in-kind contributions also illustrate with great clarity the range of activities that are pursued beneath our umbrella, from traditional music (PL) to historical cartography (PT) and pandemic history (NL). Access to national resources, such as online encyclopaedias (HR) or dictionaries (BG), are valuable in DARIAH's network. The range of types of services is equally broad, with a national infrastructure that provides access to documents and publications on the European construction (LU) sitting alongside more generic user-facing services such as TexGrid or Geobrowser (DE).

c. Changes in the Organisation

At the very beginning of 2021, the DARIAH Coordination Officeteam welcomed a new member based at Huma-Num in Paris, Edward Gray as Officer for National Coordination. Edward's main task is to support the network of national DARIAH infrastructures and Cooperating Partners institutions, fulfilling a long awaited role. Later in the year, we bid farewell to our Technical Officer, Yoann Moranville after many years of having his valuable expertise in the team. Another significant departure in 2021 was that of Frank Fischer, a member of the Board of Directors (BoD) since January 2017. He stepped down on 31 December 2021, one year before the end of his second term, for happy personal and professional reasons. His successor, Sally Chambers, former National Coordinator of Belgium and Chair of the National Coordinators Committee was appointed by DARIAH's General Assembly during their November meeting. She will officially start her duties as Director on 1 March 2022.

The Scientific Board was largely renewed in 2021. Four members stepped down at the very end of the year: Roxanne Wyns, Chad Gaffield, Arianna Betti, and Patrick Svensson, who served as Chair of the board for the whole 2021. With their departure, we welcomed five new members who were appointed by the General Assembly: Martine Denoyelle, Alain Heureux, Milena Dobrova, Marko Demantowsky and Payal Arora, each bringing their expertise and knowledge in Digital History, Cultural Heritage, Industry and Globalisation.



In-Kind Contributions 2020 – Harnessing Our National Networks

4. Looking Ahead

2022 begins for us all under a new kind of cloud, with war having come to Europe, and our Ukrainian neighbours placed under the kind of pressure we like to think of as relegated to history textbooks or far flung continents. Our efforts to build research infrastructure may seem insignificant in the face of their struggles, but of course we must build not only for the fears of today, but the promise of tomorrow. The arts and culture must be a part of this future, as forces that can build common ground, that can fulfil us in ways material goods don't, that can bring joy and inspiration.

DARIAH will continue to strive for this world in 2022, welcoming two new Directors (one in March, one at the year's end) and a new Board President, as Jennifer Edmond finishes her 6-year term with us. DARIAH will long bear the mark of her impact on how we act according to our strategy, how we measure our successes, and how we communicate our impact.

We look forward, however, to being able to truly weave the SSH Open Marketplace, along with our RI partners CLARIN and CESSDA, more firmly into the fabric of European Open Science and its Cloud. We will use our position in EOSC Future to promote this exceptional work, and to ensure the place of the arts and humanities in advanced research maintains its voice. We will also look forward in 2022 to bringing forth a third Strategic Action Plan, able to propel us into a new period of growth and development, and to investing in our Working Groups with our bi-annual funding for these grass-roots drivers of innovation within DARIAH.

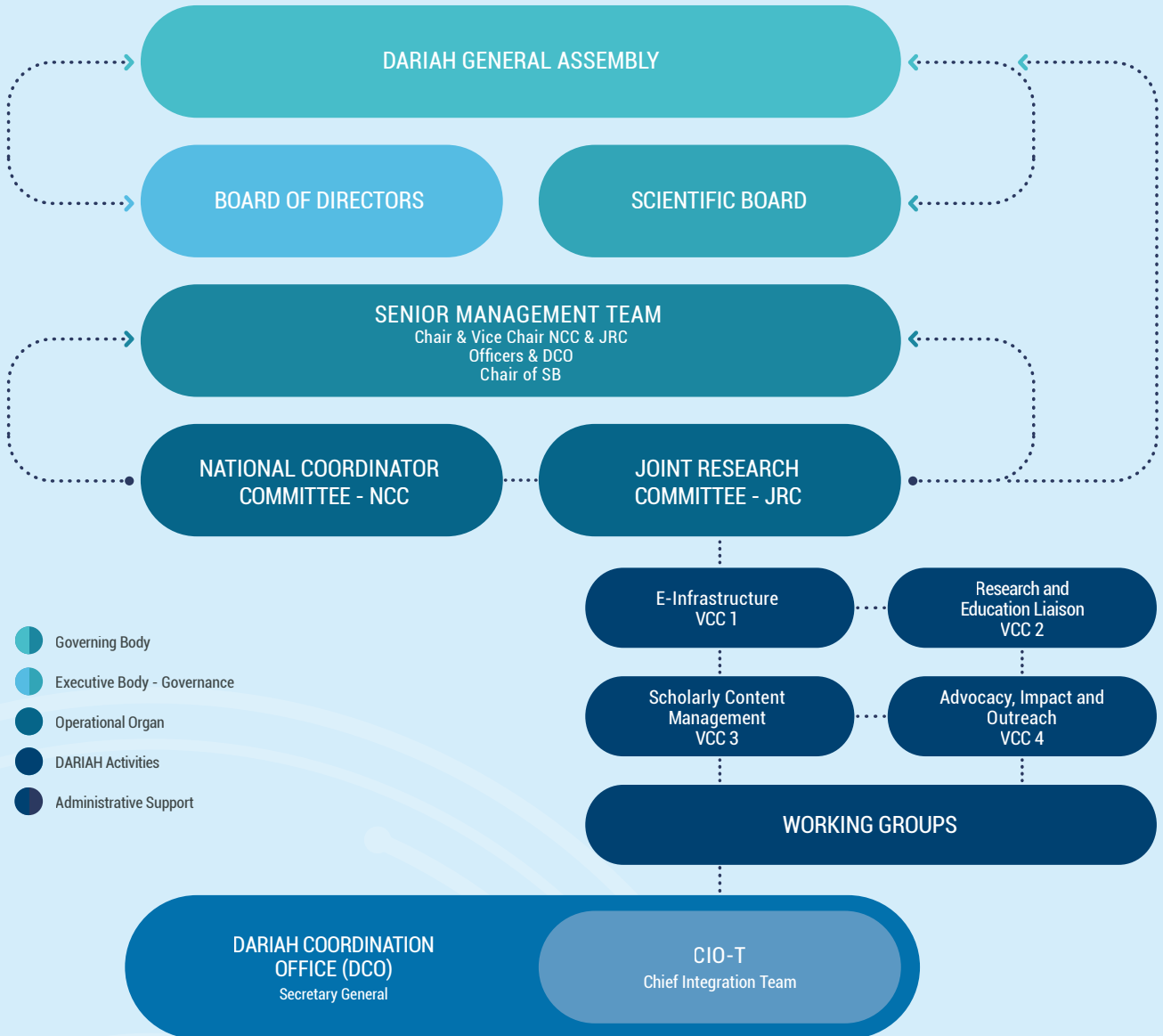
More than anything else, we look forward to, at last, reconnecting with our communities, through our long-delayed Annual Event in Athens, and our second Innovation Forum, to be held in Dublin, almost 5 years to the date after our first one. We feel confident that the energy of our newfound appreciation for the fragility of our time together will lead to innovations in our practices, and a deepening of the bonds that enable DARIAH to provide the many layers of infrastructural support it does to its communities.

DARIAH Annual Event 2018 @Encre Noire Corporate



Appendix I: Administrative and Legal Details

Organisational chart



Who's who in DARIAH

Body: Board of Directors



Jennifer Edmond

Trinity College Dublin



Frank Fischer

Higher School of Economics, Moscow



Toma Tasovac

Belgrade Center for Digital Humanities

Body: Scientific Board (as of 31st December 2021)

Patrik Svensson

Chair of the DARIAH Scientific Board, UCLA

Panos Constantopoulos

Athens University of Economics and Business

Martine Denoyelle

Institut National de l'Histoire de l'Art

Chad Gaffield

University of Ottawa

Alain Heuroux

Virtuology Academy

Sarah Kenderdine

École Polytechnique Fédérale de Lausanne (EPFL)

Andrew Perkis

NTNU ARTEC

Andrea Rapp

Technical University Darmstadt

Roxane Wyns

LIBIS

Arianna Betti

University of Amsterdam

* Shaded area marks colleagues that changed positions or left DARIAH before the end of 2021

Body: Joint Research Committee

Andrea Scharnhorst

Chief Integration Officer

DARIAH/DANS

Adeline Joffres

JRC Member

TGIR Huma-Num (CNRS)

Tibor Kálmán

Heads of VCC1

GWDG

Matej Durco

ACDH-CH

Agiatis Benardou

Heads of VCC2

Digital Curation Unit, ATHENA R.C.

Marianne Ping Huang

Aarhus University

Georgios Artopoulos

Heads of VCC3

STARC, Cyprus Institute

Tomasz Parkola

Poznan Supercomputing and Networking Center

Fabio Cotti

Heads of VCC4

University of Roma Tor Vergata

Dirk Wintergrün

Max Planck Institute for the History of Science

Body: DARIAH Coordination Office		
	Arnaud Roi	Secretary General
	Femmy Admiraal	Integration Officer
	Laure Barbot	European Project Officer
	Vicky Garnett	Training and Education Officer
	Edward J. Gray	National Coordination Officer
	Anne Grésillon	Chief Organisation Officer
	Francesca Morselli	Integration Officer
	Eliza Papaki	Outreach and Communications Officer
	Marco Raciti	European Project Manager
	Andrea Scharnhorst	Chief Integration Officer
	Erzsébet Tóth-Czifra	Open Science Officer
	Yoann Moranville	Developer and Research Associate

* Shaded area marks colleagues that changed positions or left DARIAH before the end of 2021

Body: National Coordinators Committee		
Sally Chambers	Chair of NCC/Belgium	Ghent Centre for Digital Humanities
Nicolas Larousse	Vice Chair of NCC/France	Huma Num
Mörth Karlheinz	Austria	Austrian Centre for Digital Humanities, Austrian Academy of Sciences
Walter Scholger	Austria	Center for Information Modeling – Austrian Centre for Digital Humanities, University of Graz
Dimitar Iliev	Bulgaria	Sofia University
Kiril Simov	Bulgaria	Bulgarian Academy of Sciences
Koraljka Kuzman Šlogar	Croatia	Archive, Institute of Ethnology and Folklore Research
Marinos Ioannides	Cyprus	Cyprus University of Technology
Martin Lhoták	Czech Republic	Czech Academy of Sciences
Birte Christensen-Dalgaard	Denmark	Digital Humanities Lab Denmark
Nanette Rišler-Pipka	Germany	Göttingen State and University Library
Paris Potiropoulos	Greece	Academy of Athens
Orla Murphy	Ireland	University College Cork
Emiliano Degl'Innocenti	Italy	Italian Council of Research
Andreas Fickers	Luxembourg	Luxembourg Centre for Contemporary and Digital History
Richard Zijdeman	Netherlands	International Institute of Social History (IISH)
Jakub Szprot	Poland	ICM, University of Warsaw
Amelia Aguiar Andrade	Portugal	NOVA FCSH
Snežana Petrović	Serbia	Serbian Academy for Sciences and Arts
Darja Fišer	Slovenia	Institute of Contemporary History/Primorska University
Marco Menna	Switzerland	Swiss National Data & Service Center for the Humanities (DaSCH)
Rita Gautschy	Switzerland	Swiss National Data & Service Center for the Humanities (DaSCH)

Appendix II: Finances

1) DARIAH ERIC

a) Financial overview

In 2021, 20 member countries and 1 observer country contributed to DARIAH ERIC's budget in two different ways: through cash and in-kind contributions. In 2021, according to the budget voted by the General Assembly, the contributions from the member countries amounted to:

2021 total cash contribution	756,567 €
2021 total in-kind contribution	4,542,229 €

It should be noted that the financial information in this 2021 annual report has not been audited yet. The General Assembly responsible for validating the accounts of the fiscal year 2021 will indeed only meet in November 2022. It should be mentioned, nonetheless, that the last report of the auditor about the year 2020 concluded that DARIAH's financial statements "give a true and fair view of the assets and liabilities, and of the financial position of the organisation as at December 31, 2020 and of the results of its operation in accordance with the accounting rules and principles applicable in France."

Despite that, DARIAH is able to give an accurate situation of its finances that reflect DARIAH's operations in an understandable and transparent manner for its stakeholders.

It is important to clarify that in this first section, only the resources and expenses of DARIAH – without European and other projects – are accounted for. Due to their very nature, the in-kind contributions are not included in the calculation of resources available to run DARIAH's operations. The total income 2021 is mostly composed of cash contributions and overheads of a European project that has been completed. As a result, the financial overview for the year 2021 is as follows:

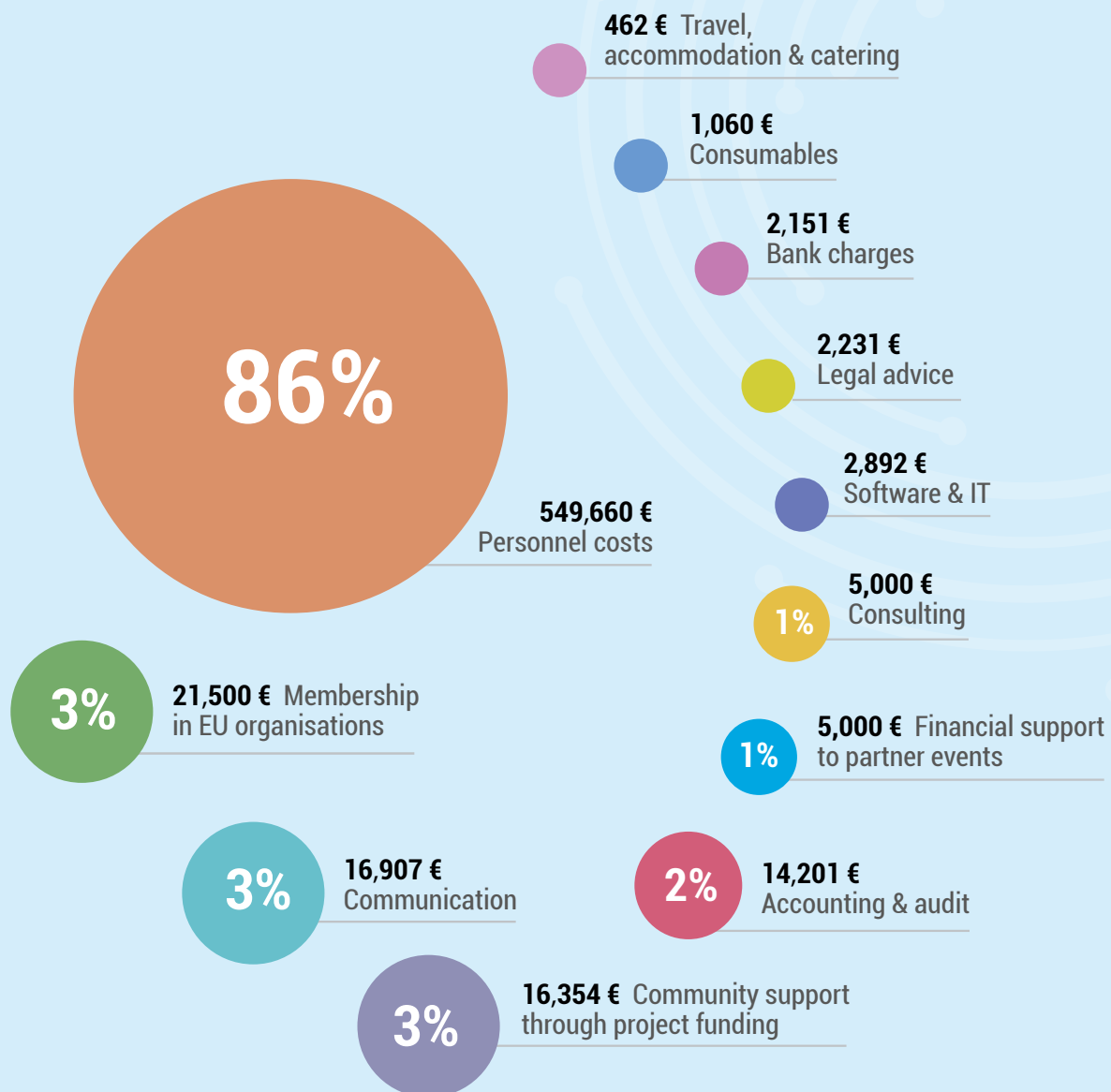
Balance previous year	690,252 €
DARIAH income 2021	766,396 €
DARIAH expenses 2021	637,418 €
Balance 2021	128,978 €
Total balance	819,230 €

b) Focus on the expenses

The largest component of operating expenses is by far the personnel costs which represents 86% of the total costs. The membership fees paid to be part of European organisations, such as the EOSC association, the OPERAS infrastructure or the European Alliance for Social Sciences and Humanities (EASSH), constitute the second largest item of expenditure with 3% of the total. In fourth position (3%), we can mention the support to the research communities which refers to tailored project funding for scholars in the arts and humanities. It may be useful to clarify that under the heading "financial support to partner events" reference is made to DARIAH's financial contribution to the organisation of the European Summer University in Digital Humanities 2021 at the University of Leipzig in Germany.

The overall operational costs for the year 2021 are distributed as follows:

Type of costs – DARIAH only	2021
Personnel costs	549,660 €
Membership in eu organisations	21,500 €
Communication	16,907 €
Community support through project funding	16,354 €
Accounting & audit	14,201 €
Financial support to partner events	5,000 €
Consulting	5,000 €
Software & IT	2,892 €
Legal advice	2,231 €
Bank charges	2,151 €
Consumables	1,060 €
Travel, accommodation & catering	462 €
Total	637,418 €



c) Focus on personnel costs

Although personnel costs are the largest item of expenditure, this does not reflect an excessive administration but rather a strong and diverse team that works directly to support the research communities and meet their needs in terms of communication, research policy, service development, etc. It should be also noted that the above-mentioned personnel costs do not take into account the work carried out in the framework of the European projects. Below is the composition of the DARIAH central team:

Personnel Costs – administration	FTE
Directors	1,5
Secretary-General	1
Legal and administration officer	1
European project manager	1

Personnel Costs – support for the community	FTE
Communication officer	1
Developer/technical support	0,5
Officer for national coordination	0,5
EU Project officer (SSHOC project)	1
Training and education officer	0,6
Open Science officer	1
Working group coordinators and experts for in-kind contributions	0,8

2) European projects

a) Financial overview

European projects funding within the frameworks of Horizon 2020 or Horizon Europe is solely used to carry out specific projects in which DARIAH is involved in:

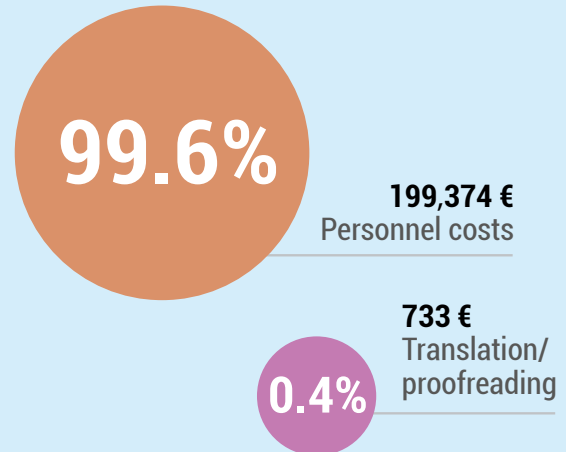
- The Social Sciences & Humanities Open Cloud (SSHOC), Grant agreement number 823782
- Transforming Research through Innovative Practices for Linked interdisciplinary Exploration (TRIPLE), Grant agreement number 863420
- Preparing open access in the European research area through scholarly communication (OPERAS-P), Grant agreement number 871069
- OpenAIRE Advancing Open Scholarship (OpenAIRE Advance), Grant agreement number 777541
- The ERIC Forum Implementation project (ERIC Forum), Grant agreement number 823798
- EOSC future (EOSC Future), Grant agreement number 101017536
- Computational Literary Studies Infrastructure (CLS INFRA), Grant agreement number 101004984

The table below includes personnel as well as other direct costs, such as translation and/or proofreading:

	Credit	Debit
SSHOC	71,924 €	71,924 €
TRIPLE	44,521 €	44,521 €
OPERAS P	49,827 €	49,827 €
OpenAIRE Advance	454 €	454 €
ERIC Forum	- €	- €
EOSC Future	16,335 €	16,335 €
CLS INFRA	17,044 €	17,044 €
Total European projects	200,107 €	200,107 €

b) Focus on the expenses

Type of costs – EU projects	2021
Personnel costs	199,374 €
Translation/proofreading	733 €
Total	200,107 €







Digital Research Infrastructure
for the Arts and Humanities

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