

**NeDiMAH Ontology Working Group Meeting:  
Workshop at the DARIAH 5th General VCC Meeting**

Slovenian Ministry of Education, Science and Sport, Ljubljana, Slovenia

<https://www.dariah.eu/activities/general-vcc-meetings/5th-general-vcc-meeting.html>

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[NeMO: The NeDiMAH methods ontology / DG Digital Methods and Practices Observatory \(DiMPO\)](#)

**Organisers:**

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**Abstract**

The ESF Research Network, NeDiMAH, is developing an ontology of digital research methods in the arts and humanities (NeDiMAH Methods Ontology: NeMO, <http://nedimah.dcu.gr/>), in order to support the classification and understanding of digital research practice in the humanities, and to make this work more visible. It will enable the critical evaluation of digital humanities by providing an evidence base that is transparent. It will enable digital research in the humanities to be better-documented, and provide a framework for peer review and evaluation that incorporates multi and interdisciplinary research.

Largely grounded on still on-going empirical research on scholarly practices undertaken in several DARIAH-related projects including Preparing DARIAH, DARIAH-GR, and EHRI, NeMO emerged as a collaboration between NeDiMAH and the Digital Curation Unit, ATHENA R.C., partner and task co-chair in DARIAH VCC2, in order to deliver the NeDiMAH 'database' as a re-useable ontology of digital methods in the humanities.

NeMO has undertaken the development of a comprehensive model incorporating existing relevant taxonomies of scholarly methods and tools: TaDIRAH, Oxford ICT, DHCommons, CCC-IULA-UPF and DiRT have been reviewed and a mapping of the concepts defined therein onto NEMO concepts has been produced. The outcome of the project will be a formal ontology: an explicit specification of a conceptualization in the domain of scholarly research and their context of scholarly use, providing a shared vocabulary, i.e. the type of objects and/or concepts, and their properties and relations, which can be used to adequately represent the domain of arts and humanities scholarly practice in the digital age.

NeMO will be a means of documenting partnerships across disciplines and organizations, demonstrating the collaborative, scholarly, and human infrastructures of digital humanities, as well as technical infrastructures. Part of the research development of NeMO is developing the basis for a "knowledge base" of the "content illustrating digital methods use in humanities research". This is currently based on case studies developed at a series of 6 workshops funded by NeDiMAH, and using the scholarly practice model that evolved from the model originally developed by the DCU for DARIAH.

NeMo will be launched in May 2015, when NeDiMAH concludes. As a research output of the Network, it will be communicated through presentations at conferences, and in a series of publications. It will be circulated widely through the NeDiMAH Network, and through the ESF Member organisations that contribute to the Network and therefore have an investment in its uptake. As a resource, its technical sustainability will be assured by DARIAH-GR, which will maintain and manage the online platform for NeMO, as well the model itself.

However, its uptake and intellectual sustainability can only be assured through a collective, community-wide initiative. Accordingly, NeMO will convene an editorial board to sustain the content that underlies the ontology, and explore the possibility of working with DARIAH-EU and CLARIN-EU to continue to encourage community input into the development of the resource. Specifically, we would like to discuss with the DARIAH leadership the possibility that the NeMO Editorial Board become a central activity supported by DARIAH-EU in order to activate international collaboration, and input by the wider digital humanities community. We do not expect this to have a financial support, instead, we hope that the community can be active in pursuing other funding opportunities for meetings and events, and even for future development.

The NeMO workshop at the DARIAH meeting in Ljubljana introduced and discussed the outcomes of this collaborative work with the interested DARIAH partners, and explored ways to take it forward after the NeDiMAH initiative has been completed. This was an important opportunity for DARIAH participants can better understand NeMO, and the potential for involvement in the editorial board. We also had a series of discussions with the DARIAH directors and VCC2 coordinators about this idea.

## Conclusions

DARIAH have agreed to take forward the idea through VCC2, under the auspices of the DARIAH **Working Group: Digital Methods and Practices Observatory (DiMPO)**, part of VCC2. It will be coordinated by Costis Dallas (Digital Curation Unit-IMIS, Athena Research Centre, GR). Sponsors are Panos Constantopoulos (GR), Costis Dallas (GR), Lorna Hughes (UK), Marianne Ping Huang (DK), Susan Schreibman (IE). The description of DiMPO shows how NeMO work is to be integrated into a DARIAH activity and taken forward, bringing to fruition our sustainability plan for NeMO after the end of NeDiMAH in May 2015.

Participants: Current contributors to the activities of VCC2 Task 2 (web survey, methods ontology, see table below), and further DARIAH members interested in researching and monitoring digital scholarly methods and practice.

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#### Scope:

The WG will build on the work and the community involved so far in VCC2 Task 2- Understanding and expanding research practice. Its objective is to develop and provide an evidence-based, up-to-date, and meaningful account of the emerging information practices, needs and attitudes of arts and humanities researchers in the evolving European digital scholarly environment, for the benefit of the digital humanities research community. It aims to achieve this objective through the inception of a longitudinal mixed methods research and monitoring programme on the information practices and scholarly methods employed in digitally-enabled arts and humanities work across Europe, and through the digital dissemination, validation and enrichment of research outcomes by the scholarly community.

#### General contribution to DARIAH Infrastructure/ improvement of digitally based humanities research:

Monitoring digital humanities practices, methods and needs in Europe across countries and in the course of time is an important factor to ensure: a) the quality of the specification, planning and deployment of the DARIAH infrastructure, so that it addresses empirically validated needs and thus maximizes inception by the research community; b) the efficacy of evidence-based policy support, advocacy and outreach work; and, c) the effective dissemination of useful information on digital research methods to the arts and humanities community, contributing to transfer of knowledge and empowerment.

#### Relation to DARIAH Priorities 2015-2016:

The WG contributes to the following DARIAH priorities for 2015-16:

**a) Working with all scholars in the humanities.** Projects 1 (web survey) and 2 (case studies) are designed to involve a transnational team of researchers from more than a dozen countries, and to address digitally-enabled research practices, attitudes and needs in all areas of Europe and across different arts and humanities disciplines and contexts. In addition, Projects 2 (case studies) and 3 (methods ontology) aim to produce information resources on best practices in digital humanities work, contributing to an improvement of digital literacy and to the dissemination of best practice among the scholarly community. Resources to be produced by the Projects 1, 2 and 3 of the WG will be governed by open access, and will be made digitally available through the outcome of Project 4 (ontology infrastructure and observatory portal).

b) **Integrating scholarly communities.** Building on the strong trans-European community of VCC2 and especially its Task 2, the WG will continue working in a purposefully collaborative, transnational perspective. Publications of the outcomes of Projects 1, 2 and 3 will be multi-authored, building a community of practice and nurturing transfer of know-how across participating countries and partner institutions. The workplan of WG, and the planned integration of its outcomes into a digital methods and practices observatory, contributes directly to making “the role of DARIAH [...] essential in identifying the actual needs and expectations of the various fields in the arts and humanities”, and its outputs will be useful instruments to support “dialogue with national and European funding agencies so that they understand the various levels of engagement of scholars with the digital agenda”.

c) **Coherent development of national roadmaps.** The comparative and country-specific focus, and the distributed cross-European nature of work in Project 1 (web survey) and Project 2 (case studies), is expected to yield outcomes useful to national Members as they seek to define their national roadmaps. Data on monitoring the field of digital humanities practices, as well as on specific projects in specific countries, and the inception of digital methods, tools and services, which will be made available in the observatory, are also expected to contribute to a better understanding of the situation in different countries and in the development of synergies and multilateral cooperation.

## Proposal

### Abstract

The DARIAH **Digital Methods and Practices Observatory WG (DiMPO)** aims to develop and provide an evidence-based, up-to-date, and pragmatically useful account of the emerging information practices, needs and attitudes of arts and humanities researchers in the evolving European digital scholarly environment, for the benefit of the digital humanities research community. It seeks to achieve this objective through the inception of a longitudinal mixed methods research and monitoring programme on the information practices and scholarly methods employed in digitally-enabled arts and humanities work across Europe, and through the digital dissemination, validation and enrichment of research outcomes by the scholarly community. It takes forward the results and collective expertise of DARIAH *VCC2 Task 2 - Understanding and expanding scholarly practice*, it leverages earlier work on scholarly information behaviour, computational methods taxonomies and scholarly activity modeling, and builds on the first version of a digital methods ontology (NeMO) developed in collaboration with the Network for Digital Methods in the Arts and Humanities (NeDIMAH). Its primary affiliation is with DARIAH *VCC2 - Research and Education*.

DiMPO programmatic objectives are served by an integrated workplan consisting of the following distinct yet interrelated activities (2015-17): a) *Web Survey on Digital Practices in the Arts and Humanities*: analysis of the results of the initial, 2014-15 run of a longitudinal, trans-European Web Survey; authoring of a multi-chapter report covering the scope and objectives, methods used, aggregated, comparative, and country-based interpretation of statistically-significant results; update of the survey questionnaire and procedure; launch of the second run of the Survey; b) *Case Studies on Digital Humanities Projects*: development and validation of research protocol (based on a combination of observational, documentation-based and qualitative interviewing methods); trialling in 2-3 countries; full launch and development of further case studies across Europe; c) *Methods Ontology Curation and Content Development*: set up of editorial board for NeDIMAH Methods Ontology (NeMO); development of lower ontology descriptions and documentation of digital research methods, based on a combination of desk research and community consultation; linking and integration with relevant information

resources on projects, tools and services, and other aspects of digital research methods; and, d) *Ontology Infrastructure and Digital Practices and Methods Observatory Portal*: functional requirements, specification, design and implementation; definition of schema based on methods ontology; content sourcing, linking and integration.

DiMPO welcomes new members from DARIAH affiliated and third European countries. For further information please contact the WG Chair, Dr Costis Dallas (Digital Curation Unit-IMIS, Athena Research Centre, GR, email: c.dallas@dcu.gr).

### Partnerships

The Working Group leverages the expertise of DCU (GR) in the field of scholarly practices research and ontologies, as well as the knowledge and involvement of researchers from more than ten countries who participated actively in the specification, design, translation and dissemination of a transnational Survey of Digital Scholarly Practices in the Arts and Humanities, and who possess extensive knowledge on the DH situation in these countries.

This work also leverages earlier research in the field of computational research methods taxonomies (ADS in the UK, Oxford Taxonomy, Ireland's DHO). It builds on, and harmonizes with the findings of the Taxonomy of Digital Research Activities in the Humanities (TaDiRAH) methods taxonomy developed by DARIAH-DE, as well as on the Scholarly Research Activity Model (SRAM) developed by DARIAH-GR, initially in the context of the Preparing DARIAH project. It also builds on an established partnership with the Network for Digital Methods in the Arts and Humanities (NeDIMAH), taking forward the work conducted in association with DCU (DARIAH-GR) towards the specification of the NeDIMAH Methods Ontology (NeMO), a formal representation of knowledge on scholarly digital methods in the arts and humanities and associated entities, such as digital tools and services, research activities and projects.

The WG leverages and updates the workplan of DARIAH VCC2 Task 2, by building on:

1. The first run of the VCC2 Web Survey on Digital Practices in the Arts and Humanities, which was translated and disseminated in 10 different languages, and was concluded in February 2015 with 2,387 valid full responses by researchers from 14 European countries.
2. The first version of the NeDIMAH digital scholarly methods ontology (NeMO), currently in pre-final stage and due for publication in April 2015.
3. Directions and initial plans agreed by participants in Task 2, towards developing a set of digital humanities research project profiles – case studies from different European countries and disciplines.

The workplan of the WG will be structured in four interrelated activities, or Projects. Each Project will have its own project lead and project team, drawn from the membership of the WG according to the rules established for WG activities and contributions. The following Projects are planned for the period 2015-2017:

1. **Web Survey** on Digital Practices in the Arts and Humanities: analysis of the results of the initial, 2014-15 run of the Web Survey; authoring of a multi-chapter report covering the scope and objectives, methods used, aggregated, comparative, and country-based interpretation of

statistically-significant results; update of the survey questionnaire and procedure; launch of the second run of the Survey. Project lead: Costis Dallas, Digital Curation Unit-IMIS, RC Athena (GR).

2. **Case Studies** on Digital Humanities Projects: development and validation of research protocol (based on a combination of observational, documentation-based and qualitative interviewing methods); trialling in 2-3 countries; full launch across European countries. Project lead: Costis Dallas, Digital Curation Unit-IMIS, RC Athena (GR).
3. **Methods Ontology** Curation and Content Development: set up of editorial board; development of lower ontology descriptions and documentation of digital research methods, based on a combination of desk research and community consultation; linking and integration with relevant information resources on projects, tools and services, and other aspects of digital research methods. Project lead: Lorna Hughes, University of London (UK).
4. **Ontology Infrastructure and Observatory Portal** on Digital Practices and Methods Ontology: information architecture and information design; definition of schema based on the methods ontology; content sourcing and integration. Project lead: Panos Constantopoulos, Digital Curation Unit-IMIS, RC Athena (GR).

### ***Collaboration with DARIAH***

The primary association of the WG is with **VCC2 – Research and education**, as it fits directly with its objective, namely “to expose and share researchers’ knowledge, methodologies and expertise”. The WG will work with other WGs within VCC2 to:

- a) leverage insights from scholarly community engagement, training and education work within VCC2 in order to validate and refine its scope of activities; and,
- b) provide information on best practice / case studies, as well as on digital research methods included in the methods ontology, for use by educational and training activities and as a free-standing learning resource for digital humanities.

The WG will work with **VCC1 – e-Infrastructure** in the following areas:

- a) examine and establish ways of providing harvesting, aggregating and disseminating data from other components of the DARIAH infrastructure on the current state of digitally-enabled humanities research and the adoption of digital methods and practices in different European countries; and,
- b) harmonize and seek interoperability between the methods ontology and the systems, including registries, developed within or adopted by DARIAH.

The WG will work with **VCC4 – Advocacy and outreach** in the following areas:

- a) provide up to date online information on digital humanities inception across Europe, which can be used for advocacy and policy making towards increased support for digital humanities research and infrastructural planning; and,
- b) integrate DARIAH advocacy and outreach priorities in the scope of research and monitoring activities undertaken by the WG.

## Deliverables:

1. **Methods Ontology (v. 1.0).** Including final version of upper and middle ontology, as well as a partial version of the lower ontology. Available in print and in RDF(S) format (May 2015).
2. **2014-15 Web Survey of Digital Practices in the Arts and Humanities Report.** Co-authored, multi-chapter report. Chapters: Introduction; Executive Summary; Background and Literature Survey; Method and Scope; Digital Humanities and Scholarly Practices in Europe – a Consolidated View; Austria; France; Germany; Greece; Ireland; Lithuania; Poland; Serbia; Switzerland; Slovenia; Regional and Country-Wide Differences; Conclusions (October 2015).
3. **Case Study Research Manual and Trials Report.** Chapters: Introduction; Protocol, Procedure and Research Instruments; Examples: Case Study 1; Case Study 2; Case Study 3; Conclusions. (December 2015).
4. **Ontology Infrastructure and Observatory Portal.** Structured according to the methods ontology, hosting all information from the first methods ontology, the web survey analysis and results, and the case studies. Offering an operational environment for the management and update of the methods ontology, and for access and contributions by the research community (May 2016).
5. **Updated Web Survey Questionnaire and Procedure.** Survey implemented in Limesurvey; translations to be updated; new translations to be added; dissemination materials; instructions for analysis (September 2016).
6. **Case Studies Report.** Chapters: Introduction; Background and Scope; Protocol, Procedure and Research Instruments; Examples: Case Study 1; Case Study 2; Case Study 3; Conclusions. (December 2016)
7. **Methods Ontology (v. 2.0).** Based on v. 1.0. Edited by an Editorial Board. Expanded to include a range of records for particular digital methods in the arts and humanities, full textual descriptions of process/workflow (“recipes”), information and/or links to research projects, digital tools and services, methodological sources, exemplary published studies using each method, and other relevant information (April 2017).

## **Provisions for sustainability:**

DCU/ARC (GR) will provide coordination and infrastructural support to the activities and deliverables of the WG, will lead Projects 1, 2 and 4, and will conduct Greece-related activities in Projects 1 and 2. Other partners will conduct research related to their countries in Projects 1 and 2, and will contribute on the basis of their disciplinary competencies and interests to Project 3.

This section will be updated as further WG members make specific commitments to the work of the WG.

Contributions will be accounted for according to the in-kind contribution plans to be submitted for approval by WG partners through the officially agreed procedure.

The technical infrastructure for hosting the Ontology Infrastructure and Observatory Portal will be provided by DCU/ARC (DARIAH-GR).