EU CONEXUS
Research for Society

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EU-CONEXUS Research For Society

"REPORT ON BARRIERS AND OBSTACLES HAMPERING THE PROJECT IMPLEMENTATION ON POLITICAL, LEGAL, INSTITUTIONAL, ADMINISTRATIVE ISSUES"

2022

Acronyms:
AHSS - Arts, Humanities, Social Sciences
AUA – GEOPONIKO PANEPISTIMION ATHINON
DMP – Data Management Plan
EIT KICs - European Institute of Innovation and Technology Knowledge and Innovation Community
ERA – European Research Area
EU – European Union
GDPR – General Data Protection Regulation
GEP – Gender Equality Plan
HR – human resources
KU – KLAIPEDOS UNIVERSITETAS
LRUniv – LA ROCHELLE UNIVERSITE
OA – Open access
RFS – Research for Society
RIIS – Research and Innovation Information system
R&I – Research and Innovation
STEM - Science, Technology, Engineering, and Mathematics
Swafs – Science with and for society
UCV – FUNDACION UNIVERSIDAD CATOLICA DE VALENCIA SAN VICENTE MARTIR
UNIZD - SVEUCILISTE U ZADRU
UTCB - UNIVERSITATEA TEHNICA DE CONSTRUCTII BUCURESTI
WP – Work Package
WG – working group

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INTRODUCTION

This “Report on barriers and obstacles hampering the project implementation on political, legal, institutional, and administrative issues“ was created by the RFS project coordination team using as the main sources of information:

- SWOT analyses: The quarterly produced RFS progress reports include analyses of strengths, weaknesses, opportunities, and threats (SWOT) at the level of each partner institution and at the level of each WP. These written SWOT analyses were further discussed in bilateral meetings with the project contributors and a common understanding of the items raised was used as principal information for this document.
- Surveys and questionnaires performed in relation to WP tasks and deliverables (see References).

The collection of barriers and obstacles for project implementation presented in this report reflects the experiences made during the first 18 months of the 3-year project.

1. POLITICAL BARRIERS

Political climate

With regard to the creation of a joint research area and agenda, the still ongoing COVID pandemic but also energy crisis had and still has a negative impact on joint research collaboration of researchers of the Alliance. Traveling costs jumped high and exceeded the established spending norms. At the start of its fourth year of development, the Alliance is still young and most of the researchers at the partner universities do not know each other. At the same time, a limited number of researchers realize the potential of creating new networks within the Alliance next to their existing research networks. Personal contact seems to prevail when aiming at the creation of sustainable and intensive research networks.

EU funding scheme

Political priorities at the level of the European Union funding structures were identified as a significant barrier to the implementation of long-term structures and policies of the project at the institutional level. The so-called „top-up“ funding of the European University initiative through the Horizon 2020-Science with and for the Society funding programme seems to have no continuation and will stand alone. Although the RFS project was designed as a complementary and coherent „strengthening of the research dimension“of the European University Alliance, the project structure established in response to the call, the general ambition, and especially its long-term objectives is difficult to disseminate among contributors at all partner universities without a long-term and sustainable funding perspective. In addition, the prospect of uncertain continuous support from the „research part (Horizon Europe)“ is reducing significantly the continuous interest and investment to be gained from permanent staff.

National political priorities

Differences in national policies regarding research integrity and ethics in research in particular for higher education and research institutions have been identified which influence institutional awareness and organisational principles. The promotion of gender and equality issues at the national level in Croatia has, for example, significantly reduced

the gender gap in the research area of this country. There the percentage of women scientists and engineers is almost 50%, higher than the average proportion in the EU. In contrast, other countries provide less support and incentives for institutional policies for gender, equality, and research integrity or only start to do so, which hampers the smooth implementation of Gender Equality Plans and research integrity and ethical standards within our Alliance.

With regard to open science practices, there are still political barriers hampering the full integration of these practices into the research culture. Only France and Lithuania are known to have enshrined Open Access to research results and research data in law. The Spanish government published the State Plan for Research, Development, and Innovation including aspects of open science. Greece, Croatia, and Romania do not have a national Open Access/ Open Science policy although there is ongoing work and discussions underway with various stakeholders.

In relation to more open sciences funding will also be a political issue because many universities cannot pay for open access to their scientific results.

2. LEGAL BARRIERS

- National differences in regulations and **policies for human resources management**, such as career and evaluation models, regulation of contracts for researchers, are limiting the ability to conduct common actions in certain areas, which is a notable obstacle to implementing the EU-CONEXUS strategy for socially responsible HR management.
- National regulatory frameworks governing **data management** have still not been harmonized sufficiently enough for enabling frictionless and smooth cooperation in data management and GDPR issues. The legal framework for sharing scientific data and accessing scientific databases and national sharing policies (web platforms, digital subscription) are not addressed and are not eligible for entities outside the country. Copyright and financial problems are difficult to deal with, and in some cases impossible. On the other hand, EU legislation only refers to projects funded directly by the Commission. Promoting open access policies and increasing knowledge regarding legislative barriers and finding consultancy for overcoming them might be a possible solution to this weakness. Knowledge of the fees for scientific databases and having

funding sustainability from European institutions or other funding strategies would solve the second weakness.

- National and institutional differences in the design and application of **intellectual property policies** emerged. This gap may be bridged by bilateral agreements, though it is advised to establish a framework for mutually beneficial agreements.
- With regard to the **open sciences practices** in addition to the political and cultural barriers related to the legal problems mentioned above, the regulations of copyright, GDPR, and the protection of sensitive data issues complexify the implementation of joint activities across several countries and several institutions.

3. INSTITUTIONAL BARRIERS

Differences in institutional experiences/expertise

For enabling cooperation in data management, a common understanding of procedures for data identification, data standards, data exploitation and sharing, data archiving and preservation has to rely on a comparable level of institutional culture and expertise in data management. This is on the one hand dependent on more or less regulation of the field on a European/national level, but also on the type of internal organization (outsourcing of services, internal service provision) and investment in resources.

A lack of specialised expertise and knowledge was also identified with regard to Knowledge and Technology Transfer, emphasising a strong need for TTOs/ university lawyers to be involved, which are not always part of the institutional structure.

Duplication:

EU-CONEXUS databases might cause redundancies with partners' institutional databases and partners are reluctant to engage in the development of harmonised information systems. This is especially relevant for the research infrastructure and Research and Innovation Information system.

Institutional readiness

Variable levels of awareness and organisational uptake (procedures) of considerations of transversal ethical principles such as gender and equity and research integrity slowed

down the process of creation and implementation of corresponding joint policies, procedures, and principles. The harmonized implementation of a joint policy corresponding to the jointly developed Gender Equality Plan at the Alliance level can be inhibited by these differences. Continuous training has been identified in order to promote the uptake of joint principles developed for gender and research integrity.

With regard to open science practices, institutional readiness plays a significant role: next to the awareness raising on opportunities for using open science practices, the lack of funding was also identified as the main barrier to promoting open science at the institutional level. In addition, there is a lack of support services at all partner institutions that provide information on the required infrastructure or legal advice for implementing open science projects. A prerequisite for a successful participatory or citizen science project is well-developed information and communication technologies, including websites, various apps, tools, equipment, etc. In the “White paper on open science practices and barriers”, a survey lists the main barriers to open science: lack of credit or acknowledgment, concerns about being out-competed, (uncertainty about) legal constraints (for instance copyright law, licensing restrictions et cetera), cost and time of sharing data or of engaging with a broad spectrum of stakeholders, concerns about misuse of data, lack of skills (for instance data stewardship), privacy issues, uncertainty about socio-economic benefits of open science. The results of the survey conducted among the EU-CONEXUS partner institutions correspond in large measure with the latest research (Hessels et al., 2021, p. 11).

Another institutional barrier pointed out is the uptake and maturity of interdisciplinary practices in research and education. Usual habits of how to design a research project may need preliminary stages of clarification and deliberation for reaching a consensus about interdisciplinarity in the context of EU-CONEXUS research. This is also relevant with regard to external relations with the relevant innovation communities. Different fields of Science, Technology, Engineering, and Mathematics (STEM) and Arts, Humanities, and Social Sciences (AHSS) fields may not be equally represented in the innovation community. In general, this is a misconception, because, by name, most of the innovation communities seem to be STEM-oriented. However, all fields may contribute to the community, as the range of activities (research, product development, economics, advertising, public relations, teaching, etc.) may include all scientific disciplines.

Generally speaking, a lack of knowledge and differences between each partner's organisation and research culture, on top of language issues and remote meetings, can cause misunderstandings and collaboration issues, which can in turn seriously hamper the implementation of the project.

4. ADMINISTRATIVE BARRIERS

Mismatch of ambitions and resources

In particular, regarding the provision of IT services a mismatch between ambitions and resources has been detected and will lead to a downgrading of a milestone that would in its optimal form need more financial and staff resources than planned. This was the case for the Research and Innovation Information System (RIIS). The work on the main features of its architecture revealed the need for much higher investment for a comprehensive database. As a consequence, a more pragmatic solution has to be found for launching a pilot system in a rational timeframe. However, this experience has intensified a general reflection process on a strategic and political level on how to create and sustain a harmonised information system.

The same issue was identified with regard to the task of creating a common human resources strategy for staff related to research. The working group finds out that it is necessary to recruit a full-time enrolled person dedicated to researching HR policies at all partner universities by taking into account their regulatory framework in order to move significantly forward in the implementation of a fully-fledged common HR strategy.

Lack of resources

Barriers to sustainable project implementation are on various levels of course financial resources, but in particular for the implementation of a sustainable innovation community which is depending a lot on membership fees for professional networks - EIT-KICs - and participation fees for professional fairs and conferences and specifically trained human resources which are not easily available in the public job market. In the case of EIT KICs (European Institute of Innovation and Technology (EIT) Knowledge and Innovation Community (KIC)) for example, memberships come at various levels, each with different corresponding fees and rights. For example, EIT Food features core and network partners, associates, and project contributors. Each membership category has a different

fee and allows for different participation rights in the partner assembly and funding programmes. Should EU-CONEXUS or any partner become a member, a financial provision will be required as the fees need to be paid annually. The lack of these resources needed for accessing innovation communities is specifically relevant for financially restrained public universities.

Transversal project organisation:

In order to complete deliverables and milestones, numerous benchmarking surveys and questionnaires were disseminated in order to gather comparable data and compare partners' national and institutional frameworks for research. Despite regular WP leaders' meetings that aimed at sharing updates on activities and identifying transversal actions, a lot of surveys were sent separately by the different working groups which may have led to weariness for the staff in charge of collecting the data. Also, WP deliverables have been developed mostly in too much isolation.

Institutional administrative system

Variations in the environment within which research is done at the partner institutions lead to communication problems when creating a common research agenda. As stated in the ERA Policy Brief, Alliance members work in various sets of research structures (internal organisation and research funding, research culture, research infrastructures, etc.) which led to difficulties in creating a common understanding of each other in the Working Groups.

Regarding human resources management, partners are not at the same stage in their HR practices and development. For example, not all partners have a researcher's information system, a postdoc system doting PhD and postdoc with resources and support, an excellence reward scheme, or a fully documented and accessible "Human Resources Strategy for Researchers" (HRS4R). Partners noted they were at different stages of applying for the HRS4R label - the main challenge being a lack of financial resources and full-time staff dedicated to HR in Research, who could manage the HRS4R process within the institution. As a potential remedy, the main challenges were listed that the alliance members were facing to obtain the award, and also an action plan was suggested to overcome these challenges in the already published "Study on the challenges of EU-CONEXUS to implement actions required by HRS4R".

FINAL REMARKS

This report gives a summary of barriers and obstacles hampering the implementation of the EU-CONEXUS Research for Society project identified in regular reporting loops (SWOT analyses). Mitigation measures are discussed and developed in regular WP leaders' meetings and lead to continuous improvement of the collaboration at the institutional and administrative levels through gradual institutional transformations at all levels touched upon by the RFS project. Identified political and legal barriers will inform recommendations that are planned to be included in a report to the relevant political actors and legislators at the end of the project period.

ANNEX

The survey has shown that open science barriers within the EU-CONEXUS alliance are mainly pointed at the university level, researchers' level, and infrastructural level among the partner institutions (Table 1.)

Table 1. *Open science types of barriers explanation by EU-CONEXUS partner institutions perspective*.

KU	AUA	LRU	UCV	UTCB	UNIZD
Competition between researchers as no credits are given for open-science journals.	Underfunding of the Universities	Research and researchers' evaluation is mostly based upon the number of published papers and their impact and h factors	Coordination between groups can be difficult	Open Science is a costly process both in terms of OA publications and FAIR data	Lack of recognition of researchers who publish in Open access journals
Some of the researchers are not aware of data FAIR, data protection rules, and requirements.	Lack of information on the available platforms and abilities	Publications of good quality, highly cited, and disseminated articles are found in journals that are not open access	Lack of incentive to use open infrastructure	Lack of career benefits or on the contrary, disadvantages for researchers who promote Open Science	Advancing in a carrier requires publishing in expensive journals

No career benefits for researchers who promote Open Science.		Protocols to follow may require a certain level of knowledge and experience	Political resistance from other university departments	Open Science literacy	Lack of capacity to develop infrastructure
Low motivation in sense of salary to researcher		Many researchers consider open-access journals as low-quality and low-impact journals	Lack of capacity to develop infrastructure		
		Researchers do not feel concerned about open science	Ethical risks		

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6. D6.1 Guideline on participatory science
7. D6.2 White paper on open science barriers
8. MS2 Common agreement on R&I data management (validated by the Governing Board)
9. MS3 Definition of the R&I information system architecture