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MESSAGE FROM THE VICE-RECTOR

Institutions are living challenging times, but also times full of opportunities. Recently, the COVID-19 pandemic underlined the need for science policies to stop delaying the sharing of scientific information. Open Science, as a broad term, unveils how science shall become more open, accessible, efficient, democratic and transparent. This principle of openness and transparency in the whole research cycle will foster this Open Science revolution, promoting, as well, an increase in public trust and interest in science and the public's participation in research activities.

Open Science represents both challenges and opportunities driven by new, digital tools for scientific collaboration, experiments and analysis and which make scientific knowledge more easily accessible by professionals and the general public, anywhere, at any time. While great steps in Open Science have been and are presently being given to enable increased access to vital information, it is necessary to provide a policy, infrastructure and research output publishing system that is prepared for the current and future crises we have yet to face, both as individuals and as institutions.

In many countries, impactful changes are happening and we need to exchange more in order to understand these good practices better and propose new actions at an institutional, national and international scales. It is a priority area for European research, science and innovation policy. The definition of 8 pillars, namely (1) the future of scholarly publishing, (2), the FAIR data, (3) the European Open Science Cloud, (4) education and skills, (5) rewards and incentives, (6) next-generation metrics, (7) research integrity and (8) citizen science, illustrate the broad scope of Open Science, as foreseen by the European Commission, and it is clear that multiple groups within the university need to contribute towards its implementation.

To support this movement, the European Commission has supported a number of collaborative efforts at the regional level to increase up-take for the European Open Science Cloud (EOSC) and also made available the Open Research Europe (ORE), an open access publishing platform for the publication of research stemming from Horizon 2020 and Horizon Europe funding across all subject areas, making it easy for beneficiaries to comply with the open access terms of their funding and offer researchers a publishing site to share their results and insights rapidly and facilitate open, constructive research discussion.

At national level, a National Policy for Open Science is underway. The work was initiated by the Government and Ministry for Science, Technology and Higher Education and the following pillars were set for the policy for Open Science in Portugal: (1) transparency in practices, methodology, observation and data collection, (2) public availability and re-use of scientific data, (3) public access and transparency in scientific communication, (4) use of web-based tools to facilitate scientific collaboration.

Despite the wish to converge with international best practices, in particular with the initiatives of this domain established within the European Union, the National Foundation for Science and Technology has a policy on management and sharing of data and other results arising from FCT-funded research, which, in practice is a general call for researchers to share their data, and not a mandatory policy at the moment. It is described in two terms: one of them focuses on publications, when institutional repositories have already been implemented in most higher education institutions; the other is devoted to data and other results of projects financed by FCT.

Knowledge should be shared at all stages of the R&D&I lifecycle and across the different disciplines, which makes it of particular importance to integrate open science practices as an elementary component from the beginning of each project. Infrastructures must be, however, provided. The Portuguese Open Access Scientific Repository (RCAAP) was created in 2008, preceded by the recommendation of the Council of Rectors of Portuguese Universities (2006) for the establishment of institutional repositories and their aggregation in a single portal.

The Institutional Repository of the University of Aveiro (RIA) is an information system that stores, preserves, disseminates and gives access to the intellectual production of the University of Aveiro in digital format, through the Web, under an open access regime. By bringing together the Institute's scientific publications on a single platform, RIA intends to share the scientific and technical knowledge produced at the University and to facilitate this access to the scientific production, contributing to the generation of new knowledge, allowing rapid dissemination and visibility and impact.

A recent effort by the University of Aveiro, through the Library, Document Management and Museology Services and the Information Technology and Communication Services, in collaboration with the Research Support Office, was the creation of the University of Aveiro Research Data Repository – DunAs, based on Dataverse, an open source platform. The project aims to implement an open repository for the archive and publication of research data, promoting its visibility, impact and reproducibility.

For research performing organisations, as universities, and other stakeholders to embrace Open Science principles, policies and practices, there needs to be a culture change in these organisations. It refers, similarly, to ongoing changes in the way research is conducted: for scientists themselves, through increasing the use of open access scientific publishing and open data, and for the public, through increasing their understanding of and participation in science.

Successful engagement with Open Science requires, therefore, this holistic vision by the institution, working together to deliver a set of goals in a complex and evolving mix of themes and priorities, to which all members can commit. Academic, administrative, legal and cultural issues need to be considered. Such changes are expected to enable greater transparency, collaboration and research integrity in the short term and improve scientific quality in the long term.