BELMONT FORUM APPROACH TO OPEN DATA POLICY IN A NUTSHELL

The objective of this document is to provide information about Belmont Forum approach to Open Data. Source of the information for this document is <u>Belmont Forum</u> webpage and is aimed for COS (CHIST ERA Open Science) working group internal use only.

Belmont Forum est. 2009, is a partnership of funding organizations, international science councils, and regional consortia committed to the advancement of transdisciplinary science. Forum operations are guided by the <u>Belmont Challenge</u>, a vision document that encourages:

International transdisciplinary research providing knowledge for understanding, mitigating and adapting to global environmental change.

The Belmont Forum development of e-Infrastructure (incl. open data policy) is based and supported by document "A Place to Stand: e-Infrastructures and Data Management for Flobal Change Research (Belmont Forum e-Infrastructures&Data Management community Strategy and Implementation Plan) issued in 2015. Full version of the document accessible here.

Our **vision** is of high quality, reliable and multidisciplinary global change research enabled by a sustained human and technical, internationally coordinated and **data-intensive e-infrastructure able to process a continuous increase in the diversity and volume of data generated. In such a research-driven e-infrastructure, data should be discoverable, reusable, open and accessible by default as far as possible.**

Following 5 recommendations are developed further in document and specific actions to implement these recommendations are detailed in its Appendix.

Recommendation 1

Adopt Data Principles that establish a global, interoperable e-infrastructure with cost-effective solutions to widen access to data and ensure its proper management and long-term preservation. Researchers should be aware of, and plan for, the costs of data intensive research.

Recommendation 2

Foster communication, collaboration and coordination between the wider research community and the Belmont Forum, and across Belmont Forum projects through a Data and e-Infrastructure Coordination Office established within a Belmont Forum Secretariat.

Recommendation 3

Promote effective data planning and stewardship in all Belmont Forum agency-funded research to enable harmonization of the e-infrastructure data layer through enhanced project data planning, monitoring, review and sharing.

Recommendation 4

Determine international and community best practice to inform Belmont Forum research e-infrastructure policy, in harmony with evolving research practices and technologies and their interactions, through identification and analysis of cross-disciplinary research case studies.

Recommendation 5

Support the development of a cross-disciplinary training curriculum to expand human capacity in technology and data-intensive analysis methods for global change research, and increase the number of scientists with cross-cutting skills and experience in best practice.

The Belmont Forum is in a unique position to develop key pieces of a comparable, global e-infrastructure. It can **act as a catalyst for promoting dialogue and collaboration, and leverage - but not replace - existing national programs.** It also provides a synergistic, top-down approach that complements bottom-up activities carried out by individual nations and organizations across the globe.

Implementation plan integrates many near-term and medium-term measures and activities corresponding with recommendations 1-5, for instance:

- ✓ Theme 1: Coordination Office to foster communication and collaboration and coordination, mapping of best practices, implementation, monitoring and evaluation of e-infrastructure, coordination among funded projects
- ✓ Theme 2: Data Planning establishment of Data Policy Advisory Board to oversee relevant legal issues, to develop Enhanced Data Plan template, review and monitor Enhanced Data Plan, identification of key trustworthy repositories, ...
- ✓ Theme 3: e-Infrastructure evaluation matrix based on scoping workshops, which will be used to analyse, score and identify cross-disciplinary case studies and the broader scope of the relationship between environmental science, data and e-infrastructure. The resulting evaluation matrix will be used to inform the analysis action.
- ✓ Theme 4: Human Dimensions scoping workshop to design overall curriculum of short trainings, competitive call to deliver the trainings, competitive call for delivery of on-line courses,

Belmont Forum Data Policy and Principles adopted in 2015

The ambition is widen access to data and promote its long-term preservation in global change research, improve data management and exploitation, coordinate and integrate different organizational and technical elements.

Thus data should be:

- ✓ Discoverable through catalogue and search engines
- ✓ Accessible as open data by default, made available with minimum time delay
- ✓ Understandable in a way that allows researchers including those outside the discipline of originto use them
- ✓ Manageable and protected from loss for future use in sustainable, trustworthy repositories.

Further features to support OD policy

- ✓ Web page entirely dedicated to e-Infrastructure http://bfe-inf.org/
- ✓ E-Infrastructures and DMP toolkit guide how to create DMP
- ✓ Tutorial videos published on YouTube
- ✓ <u>Data and Digital Outputs Management</u> document explains expectations for DMP at the stages of Pre-proposals, Full proposals and Awarded Projects. Includes the questions addressed in above mentioned stages of the projects.