CITEC
Open Science Manifesto

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CITEC is highly committed to the Open Science ideal that "**scientific knowledge of all kinds should be openly shared** as early as is practical in the discovery process" [1]. CITEC supports the principles of Open Science as expressed by the *Budapest Open Access Initiative* [2], the *Berlin Declaration* [3], and the *Panton Principles* [4].

Open Science includes open access, open data, and open research (cf. [5]), i.e. publications, measured and observational data, analyzed data, questionnaires, soft- and hardware, analysis scripts and tools, multimedia files, experimental setups and workflows, metadata and provenance data, etc.

CITEC believes that **all research data created through public funds should be freely available for public exploitation,** provided there are no legal or ethical constraints and the intellectual property rights of all involved parties are considered appropriately.

The free and public **availability of research data is the basis for more transparency and efficiency in science**, allowing to: i) reproduce, verify, re-analyse and improve upon existing data and results, ii) allow for the reuse of data in new contexts, iii) opening new paths for scientific enquiry and interdisciplinary collaboration and iv) preventing duplication of effort.

Research funding agencies such as DFG are advocating Open Science to ensure that public funds are used in the most effective way (cf. [6], [7]). CITEC supports these policies and will make all efforts necessary to optimize the benefit of research for society.

CITEC expects from its affiliated researchers to make their research data and methods publicly available after a minimum period of exclusive exploitation for their own research questions. CITEC respects the autonomy of researchers and leaves at their discretion the decision at which stage and under which particular conditions the research data should be released to the public.

CITEC supports scientists in the development of data management plans and domain-specific guidelines and maintains a local **organizational and technological infrastructure** that offers scientists a platform to publish and store their research data.

For this purpose, **CITEC fosters scientific research into data management** with the goal of evaluating, developing and improving methods for the dissemination of scientific knowledge. CITEC's goal is to explore, identify and define best practices and workflows for publication, quality assurance, citation and documentation of research results.

CITEC recognizes the need to extend the **educational curriculum for young scientists towards topics of research data management** and offers training and personal consulting for advanced researchers, thus contributing to awareness among young researchers of good practice in scientific research.

For the creation of a successful Open Science infrastructure, **interdisciplinary efforts across institutions and disciplines are vital**. CITEC is active in and continuously seeks co-operations inside and outside Bielefeld University and connects to existing Open Science initiatives such as the Open Knowledge Foundation [8], the Open Access initiative of the Leibniz Society [9], or the information platform Open Access [10].

To develop practical workflows CITEC implements selected **pilot projects** that illustrate the concrete steps and the practical usefulness of open data for research. CITEC is convinced that showing the benefits of Open Science both for the individual researcher as well as for science and society as a whole will be the best catalyst to **bring about the organizational, political and social changes that will advance the movement towards openness in research**.

[1]   Michael Nielsen, Open Science Mailing List, 28 Jul 2011, http://lists.okfn.org/pipermail/open-science/2011-July/000907.html.

[2]   Budapest Open Access Initiative, http://www.opensocietyfoundations.org/openaccess/.

[3]   Berlin Declaration, 22 Oct 2003, http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung.

[4]   Murray-Rust, P, Neylon C, Pollock R & Wilbanks J, "Panton Principles - Principles for Open Data in Science", 19 Feb 2010, http://pantonprinciples.org.

[5]   Open Science Working Group, http://science.okfn.org/about-us/open-science-overview/.

[6]   Ausschuss für Wissenschaftliche Bibliotheken und Informationsysteme der DFG, "Empfehlungen zur gesicherten Aufbewahrung und Bereitstellung digitaler Forschungsdaten", Jan 2009, http://www.dfg.de/download/pdf/foerderung/programme/lis/ua_inf_empfehlungen_200901.pdf.

[7]   Priority Initiative "Digital Information" by the Alliance of German Science Foundations, http://www.allianzinitiative.de/en.

[8]   Open Knowledge Foundation Deutschland, http://okfn.de

[9]   LeibnizOpen, Open Access Initive of Leibniz Foundation, http://www.leibnizopen.de

[10] Information Platform Open Access, http://open-access.net