## Lauer, Gerhard, "Changing the Conduct of Science in the Information Age: Focusing on Sharing Knowledge and Data"

Briefing Document, NSF Workshop on April 26, 2010 "Changing the Conduct of Science in the Information Age" Focusing on "Sharing knowledge and data"

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Since digital technology makes it much easier to share knowledge and data it is quite obvious that knowledge and data sharing is still only in some fields of sciences part of daily work.[1] Nearly all colleagues are convinced sharing knowledge and data is somehow fine and necessary in an open society where knowledge must be reproducible and reusable.[2] But repositories and archives are often empty, pre- or post-publications, open peer review and off the record data are seldom open available.

Together with other European funding agencies the German Research Foundation encourage their members to do more to change the conduct of science towards a more open world of sciences. "The Alliance's Digital Information Initiative" from June 2008 is a big step forward to equip scientists and academics with the information and infrastructures best suited to facilitate their scientific work. It is a paper of the German Research foundation, the Fraunhofer Society, the Hermann von Helmholtz Association of German Research Centers, the German Rectors' Conference, the Leibniz Association, the Max Planck Society and the German Council of Science and Humanities focusing on six priority areas: German national licensing, open access, a national hosting strategy, primary research data, virtual research environments and legal frameworks for the provision of scientific information. But it is not only a paper it is also a founding initiative: The acquisition of new national licenses the German Research Foundation provides free access to databases, journal archives and ebook collections. Within the funding area "electronic publications" for networked repositories the alliance enforced the building of digital open access publications, enabling also journals to go fully digital with an open access moving wall not longer the half of a year. The building of thematic information networks and virtual research environments, the improvement of scientific information management tools and the call for the publication of primary research data and its storage in a publicly accessible form are also part of the agenda. And long term preservation is one of the ongoing topics for the funding agencies as well as for the libraries.

But still all the actions taken change the conduct of science only partly and provoke on the other hand diffuse opposition. The funding agencies as well as the universities in Germany and Europe are looking for good or best practice to make a better accepted use of the digital chances in the Information Age.

- [1] Nature Specials "Data Sharing", http://www.nature.com/news/specials/datasharing/index.html
- [2] An example for good practice is of course www.arXive.org.
- "Digital Information" Priority Initiative, http://www.dfg.de/en/research\_funding/programmes/infrastructure/lis/digital\_information/index.html

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