The Case for International Sharing of Scientific Data:
A Focus on Developing Countries
An International Symposium

Board on International Scientific Organizations
in collaboration with the
U.S. Committee on Data for Science and Technology
Board on Research Data and Information
National Academy of Sciences
and the
Committee on Freedom and Responsibility in the conduct of Science
International Council for Science

Room 100
National Academy of Sciences
500 Fifth Street NW
Washington, DC

18-19 April 2011

Monday, 18 April

Session One: Setting the Stage
Session Chair: Farouk El-Baz, Boston University

8:45	Welcoming remarks	Academy President
9:00	Background and purpose of the Symposium A historical perspective	Farouk El-Baz, Symposium Co-Chair
9:20	Keynote presentation: Why is international data sharing important? [Farouk to invite; Elias Zerhouni alt.]	Harold Varmus NCI/NIH (not invited yet)
10:00	*Coffee break*	

Session Two: Status of Access to Scientific Data
Session Chair: Roberta Balstad

10:30	Overview of Scientific Data Policies	Roberta Balstad, Columbia University
10:45	Examples of scientific data sharing policies in developing countries - The Scientific Data Sharing Program in China	? [Paul to invite]

11:05	- Implementing a research data access policy in South Africa	DST –inquiry made via NRF] [Paul to invite]
11:25	- Need for a national scientific data policy in ?	[?]
11:45	The data sharing policy of the World Meteorological Organization	[Roberta to suggest]
12:00	Moderated Panel Discussion (all morning speakers) Moderator: Farouk El-Baz, Boston University	
12:30	*Lunch*	

Session Three: Compelling Benefits
Session Chair: Barbara Andrews, University of Chile

13:45	Examples of past successes [regional and discipline diversity, and developing and less developed countries]
	- Example A [rice genome in China, Yang Huanming]
	- Example B [virtual astronomy, IAU—Kathie to invite]
	- Example C [sharing engineering data for failure analysis in airplane crashes—Kathie to invite]
	- Example D [sharing influenza epidemiological data]
15:15	*Break*
15:45	Examples where data sharing could make a big difference
	- Example A [improving disaster response, Jane Rovins, ICSU, IRDR]
	- Example B [understanding biodiversity—Vanderlei Canhos, CRIA, Brazil ? – Paul to invite]
	- Example C [social science/statistics, Denise Lievesley, University College London—Paul to invite]
	- Example D [Remote sensing and in situ measurements in GEOSS—Curtis Woodcock, Boston University]
17:15	Moderated Panel Discussion (all 8 speakers)
18:00	*Adjourn and Reception*

Tuesday, 19 April

Session Four: The Limits and Barriers to Data Sharing
Session Chair: [?]

8:45   Introduction

9:00   Countervailing considerations and limiting factors (1 speaker—lawyer)
            [National interests—national security, law enforcement, protection of
            other values; Scientific interests—pre-publication data use, longitudinal
            studies, validation/authenticity, public-private partnerships, cost trade-
            offs; Private and ethical interests—privacy, confidentiality, intellectual
            property rights.]

9:20   Artificial barriers
            -    Technical (low bandwidth, high cost, interoperability, etc), Donald
                 Riley, U MD [Paul to invite]
9:40   -   Scientific (data hoarding, poor quality, lack of norms), Elaine Collier,
            National Center for Research Resources, NIH
10:00   -   Political/institutional (lack of policy, funding, corruption) – Tilahun
            Yilma, UC, Davis

10:20   Moderated Panel Discussion on Overcoming the Barriers (all 4 speakers)

11:00   *Break*

Session Five: How to Improve Data Access and Use?
Perspectives of different stakeholder groups (on the rights and
responsibilities of scientists and research organizations with regard to
providing and getting access to publicly funded scientific data)

Session Chair: [?]

11:20   Government science policy makers and research funders (Lidia Brito,
            UNESCO—invited)
11:40   International scientific organizations, Bengt Gustaffson, ICSU/CFRS
12:00   Professional societies and researchers, Mohamed Hassan, TWAS

12:20   *Lunch*

13:30   Universities--Hilary Inyang, African Continental University System
            Initiative—Paul to invite]
13:50   Industry (international umbrella group ?)
14:10   Data centers (Japan Program Office for WDS—Paul to invite)
14:30   Libraries (Association of Research Libraries—Paul to invite)

14:50	Young scientists (Raed Sharif, Young Scientist Program, CODATA— Paul to invite)
15:10	Moderated Panel Discussion: rights and responsibilities of scientists on data access and use (all 8 speakers)
15:55	Concluding observations by Symposium Co-Chair Wm. Wulf Univ. of Virginia
16:00	*End of Meeting*