CODATA Vision of the Future

Krishan Lal National Physical Laboratory New Delhi

Key Session: CODATA Vision of the Future, 20th International CODATA Conference, Beijing, 25 Oct 06

Outline

Backdrop

Priority Assessment of CODATA Active Participation in Preparations for WSIS and in the Summit

- Strategic Plan: Challenges and Opportunities
 - ⇒ *To Focus on the Global Information Commons initiative*
 - ⇒ Encourage activities involving high science and high technology
 - ⇒ Enhance association of young scientists with CODATA
 - \Rightarrow Review Relationship with ICSU

Strategic Plan: Challenges and Opportunities

- ⇒ CODATA need to reinvent itself to enhance membership and formal association with other scientific unions
- ⇒ Need for bold decisions on actions needed for the developing world
- ⇒ Need to reach out to hitherto neglected regions like Middle East
- ⇒ *Relationship with other major organizations like BIPM/CIPM and ISO; WHO*
- ⇒ To explore newer international project funding sources like World Bank, UNDP etc
- ⇒ Initiative to develop linkage and partnership with major industries like Microsoft



ICSU CSPR Assessment Panel on Scientific Data and Information *Priority Area Assessment of CODATA*

Terms of Reference of Priority Area Assessment Panel

To examine current activities, identify gaps, overlaps, and synergies of existing activities and propose coordination and responsibilities for specific bodies, now and in the future.

ICSU Terms of Reference for CODATA

- Define an overarching "mission" and role for ICSU in the area of "Scientific Data and Information", taking into account relevant activities outside of ICSU;
- Propose a strategic framework for ICSU to take this area forward for the next 5-10 years;
- Examine current activities within the ICSU family; identify gaps, overlaps and synergies of existing activities, and; propose responsibilities for individual bodies;

ICSU Terms of Reference for CODATA

- Propose modalities for promoting collaboration and coordination within the ICSU family when necessary and propose potential partnerships with bodies outside ICSU;
- Examine and propose, if appropriate, changes either in the future direction of individual bodies or the way they operate including relationships with other bodies/organisations.
- To consider the ethical issues related to scientific data and information and, where necessary, propose how ICSU might develop policies in response to these issues.

ICSU Terms of Reference for CODATA

• To identify policy issues of particular importance to science and society, which should be highlighted in the World Summit on the Information

Recommendations of the Assessment Panel--*Four*

- 1. CODATA should develop a clear long-term strategy that focuses on key international data management and policy issues, giving special attention to the needs of developing countries.
- 2. The lines of communication between CODATA and ICSU need to be improved. CODATA should continue to develop a closer working relationship with ICSU bodies such as INASP and ICSTI in areas where there are complementarities and clear added

Recommendations of the Assessment Panel--*Four*

- 3. CODATA needs a more inclusive worldwide membership. ICSU should encourage those of its members who are not currently affiliated to CODATA to reconsider this position.
- 4. While developing its long-term strategy, a short-term CODATA focus on implementation of relevant aspects of the Science in the Information Society Agenda for Action and preparation for the World Summit on the Information Society II is both appropriate and
 - . . .

The Report of the Panel was approved at ICSU General Assembly, Suzhou, Oct 2005

Actions taken by CODATA on PAA Panel Report

- A Document, "Response to the ICSU Priority Area Assessment on Scientific Data and Information" prepared by Ray Norris, Brian McMahon, and Krishan Lal in October 2004 was approved by the Last CODATA General Assembly at Berlin in November 2004.
- A Strategic Planning Committee has been constituted with Bob Chen as Chair to prepare a Strategic plan with a Mission Statement and give recommendations keeping in view the ICSU PAA Panel report

world summit on the information society Geneva 2003 - Tunis 2005

World Summit on the Information Society [WSIS]

Two Phases of WSIS

- Preparatory Phase: Geneva, Dec 2003
- Final Phase: Tunis, November 2005

WSIS First Phase:

Geneva, December 2003

Declaration of Principles and Plan of Action Adopted by 175 countries

Paragraph 7:

"Science has a central role in the development of the Information Society."

Article 10 of the Agenda for Action: Emphasis on "Access to Information and Knowledge," and

Article 23 recognizes the **important role of "e-Science.**" Major CODATA activities between Geneva (2003) and Tunis (2005)

- Special Session at 19th International Conference of CODATA, Nov 2004, Berlin
- International Workshop on "Creating the Information Commons for e-Science: Toward Institutional Policies and Guidelines for Action" *Paris, 1-2 Sep 2005*

Major CODATA activities between Geneva (2003) and Tunis (2005)

• Three Sessions at the World Summit on Information Society, Tunis, November 2005 President, CODATA, Professor Shuichi Iwata, reported in the Main Plenary Session of the Summit:

Launching of a new initiative to create the Global Information Commons for Science "Science helped to create the Information Society—it can now help extend that society to all."

Iwata, S., and R.S. Chen. 2005. Science and the Digital Divide (editorial). Science **310** (5747, 21 October): 405.

Challenges and Opportunities

The Global Information Common Initiative-GICSI

- Open Access to scientific data and information is need of the hour
- CODATA has positive collaboration of several important organizations like IAP,INASP, TWAS, UNESCO and others
- The Initiative helps in evolving a system, which has legal validity and makes sense even from economic point of view

Need to encourage activities involving high science and high technology

- ⇒ The pace of developments in science and technology is very fast
- ⇒ In addition to traditional areas CODATA should encourage Task Groups in frontier areas in different disciplines of science and technology

Need to encourage young scientists

- ⇒ It is vital to increase association of young active scientists with CODATA
- ⇒We may institute an award for brilliant young scientists (age 35 years or less) to recognize their contributions

Need to Improve Communication with ICSU

- ➡ CODATA being a multidisciplinary body of ICSU, a strong and healthy relationship with the parent organization is desirable
- ⇒ ICSU has been actively associated with CODATA initiatives on WSIS
- ⇒ An yearly meeting with agenda to enhance ICSU sponsored activities can be an option

CODATA needs to reinvent itself to increase membership and formal association with other scientific unions

⇒CODATA has lost some important members in the recent past despite several serious efforts by the Executive Committee and the Presidents

⇒ There is need for a Brain Storming session to understand our weakness in this respect

⇒ There are opportunities for cooperation with other scientific unions which believe in open access

Need for bold decisions to help the developing world

⇒Concrete action needed for the less developed societies *Kits for developing databases of relevance in solving societal problems*

Try to identify partners to attract development grants from international agencies like UNDP and World Bank

To develop kits for open access journals

- •CODATA has the potential to serve with other organizations as a vehicle of development in the least developed regions, particularly in increasing the quality and spread of education.
- •There is a great scope in integrating traditional knowledge base with the main stream in a transparent and ethical manner.

Need to reach out to hitherto isolated regions like Middle East

- ⇒Urgent need to organize meetings in middle east, Himalayan region, and similar other areas
- ⇒ It will help not only I integrating the region with international scientific community but will also encourage regional cooperation

Relationship with other major organizations like Metre Convention (BIPM/CIPM), ISO, WHO and others

 \Rightarrow It will be desirable to enhance our reach

⇒It will be mutually beneficial to cooperate with organizations like the Metre Convention (CIPM /BIPM); WHO and ISO

To explore newer international project funding sources like World Bank, UNDP etc

⇒World bank and UNDP/UNIDO support development related activities involving ICT and possibly CODATA provide technical consultations Need for initiative to develop linkage and partnership with major industries like Microsoft

⇒Forward looking industries like Microsoft are open to association with organizations like CODATA

⇒CODATA should explore the possibility of creating Corporate Membership

Need for organizational changes

- ⇒To accomplish the challenging tasks outlined in this presentation organizational changes.
- ⇒Restructuring requires persistent efforts over an extended period

"Knowledge is good but it availeth not, practice the truth that the man there is thou."

Gospel of Buddha **Paul Carus,** National Book Trust of India, New Delhi

Uma said:

O Ocean bound (holy) rivers! I do not see in this world or in Heavens any knowledge, which any one has created on his own (without collaboration of others), therefore, I humbly seek your counsel.

Shrimahabharat, Anushasan Parva, Chapter 146, Shloka 23

Summary

- CODATA has to function keeping in view the Priority Area Assessment and its active participation in WSIS and in the Summit: to focus on the Global Information Commons initiative
- Encourage activities involving high science and high technology
- Enhance association of young scientists with CODATA: A Young Scientist Award
- Enhance Relationship with ICSU
- Introspection to enhance membership and formal association with other scientific unions

Summary Contd.

- Need for bold decisions on actions needed for the developing world: Development of kits
- Need to reach out to hitherto neglected regions like Middle East
- Attempt to develop relationship with other major organizations like BIPM/CIPM and ISO; WHO
- *To explore newer international project funding sources like World Bank, UNDP etc*
- •*Need for initiative to develop linkage and partnership with major industries like Microsoft*

