Toward CODATA Initiative of Data-centric Sciences and Technologies for "Big Data" and "Small Data" ~ Beyond 50 Years of CODATA ~

Takashi Gojobori

1. Vision for CODATA

Following its mission, CODATA works to improve the quality, reliability, management and accessibility of data of importance to all fields of science and technology, I would like to work, together with the elected EC members, to ensure that CODATA takes a strong initiative of dealing with Data-centric Sciences and Technology for the so-called "Big Data" and "Small Data." Taking into account the fact that CODATA will celebrate its 50th anniversary in 2016, I would like to try to make CODATA more visible in global scale, in both developed and developing countries.

2. Challenging issues for CODATA

The most important challenge for CODATA in a practical sense is to carry out the CODATA Strategic Plan 2013-12018, as scheduled. Of course, I think that we may need some flexibility, depending upon any changes as time goes. However, this strategic plan was established through tremendous discussion and unified consensus among the CODATA members, so I would like to place greatest emphasis on carrying out this Plan.

Taking into account the CODATA Strategic Plan 2013-2018, I think that the following issues can be addressed in CODATA, under the common recognition that data is playing a central role in science and technologies. In particular, in order for us to take actual actions, I would like to try to lead to the situation that most issues listed here can be recognized as the common understandings among the CODATA members.

Importance and significance of Data-centric Sciences and Technologies

I believe that CODATA can take more active stance in promoting Data-centric Sciences and Technologies, recognizing its importance and significance.

Computing resource and networking for Data-centric Sciences and Technologies

There is no doubt that we should encourage all stakeholders to assure effective use of

computing resource and networking for Data-centric Sciences. and Technologies.

Data explosion and care of "Small Data"

Although we know that the time of the data explosion called "Big Data" has come, we have also to ensure more careful care to "Small Data", because they are also precious and indispensable in most cases.

Disaster and Data Management

We recognize that disaster issues demonstrate direct connections between society and data. Data management for disasters should continue in CODATA activities.

Environments and Data Management

In developing the economic activities, environmental factors have already become a central matter of debate between the developing countries and developed countries. But, debates should be conducted using scientifically justifiable data.

Data Standardization

It is obvious that data standardization is essential for ensuring global activities of science and technologies. Thus, CODATA should continue its global contributions to Data Standardization.

Data Visualization

It is getting more important to have Data Visualization to ensure further developments of Data-centric Science and Technologies and also to promote the reach-out activities to the Society.

Data citation and commercial publications

In collaboration with publishes, we need more detailed discussions on Data citation and commercial publications.

Data Consumption and Necessity of Archives

Some data are used just like consumption, whereas the other data should be kept as archives. We need clearer concepts and definition of those features of data. We have to discuss the issues on Data Consumption and Necessity of Archives.

Data literacy and Education of Data-centric Sciences

CODATA promote its activities particularly in the developing countries on Data literacy and Education of Data-centric Sciences and Technologies.

CODATA for Developing countries

CODATA contributes to developing countries by promoting educational activities. Moreover, economic development can be achieved through the formation of a data-oriented society, in which CODATA can be helpful in every aspect of the related domains.

CODATA and WDS

One of the most important tasks in the coming years is the close collaboration with WDS. The liaison between CODATA and WDS can be established to the stage of firm ground.

Data Journal of CODATA

The present Data Journal of CODATA can be transformed into a more active and practical form, taking into account the development of open access journals including well-known commercial publishers.

Discussion on CODATA Academy of Data Science

We should continue the discussion on the CODATA Academy of Data Science.

CODATA as Practicing Organization

CODATA can play a role in policy-making and its promotion of implement through various organizations and opportunities.

3. What I would like to try to achieve in the coming 4 years

- I would like to increase global visibility of CODATA by taking initiative of Data-centric Sciences and Technologies for the so-called "Big Data" and "Small Data"
- I would lie to carry out the CODATA Strategic Plan 2013-12018, as scheduled.
- I would like to deepen the intimate collaboration between CODATA and WDS.
- I would like to conduct a 50 anniversary symposium for reinforcing the vision of the CODATA.
- I would like to promote activities the Task Groups and Working Groups of CODATA.

In short, I strongly value the reason for CODATA's existence is to help foster and advance science and technology through developing and sharing knowledge about data and the activities that work with data.

That is all.