Positioning of Research and Innovation Policy : "4th Science and Technology Basic Plan"(2011)

2011.08.19 (brand new!)

4th Science and Technology Basic Plan(Basic Plan)

Basic Plan for every 5 years since ST Basic Law (1995)

Background of 4th Basic Plan

1. Unprecedented crisis in Japan
   - Earthquake, Tsunami, Nuclear incident
   - Ageing and declining birthrate
   - Falling competitiveness of Japanese industries
2. Changes around the world
   - Global scales issues
   - Economic rise of newly emerging countries
   - Open and global innovation systems

Aim = Comprehensive and systematic promotion of S&T policies

(Science = terminology often used for the meaning of "research")

S&T Policies Before and Now

Before

Implementation = Promotion of S&T independently

No coordination with industry, economy, diplomacy, etc

Now

2008 Research and Development Enhancement Act * = 1st acknowledgement of "Creation of innovation"

Strategic promotion of S&T by integrating innovation policies

2011 4th Science and Technology Basic Plan

Integration of S&T policy and Innovation Policy

* Act No. 63 of 2008 : Law on Enhancement of Research and Development Capacity and Efficient Promotion, etc. of Research and Development, etc. by Advancement of Research and Development System Reform

Basic concepts of future S&T policies

1. Integrated development of "**STI** policies“

2. Further focus on the "roles of human resources and the organizations“

3. Realization of a "Policy to be created and promoted together with society“

   =Ethics concern

Position of Ethics Concern in STI Policy

- General Feature in the 4th Basic Plan-

Two levels of positioning of ethics

1. Promotion of Green Innovation
   - (1) Sustainable energy technology
   - (2) Greening of social infrastructure

   Measures to be taken = system reforms
2. Promotion of Life Innovation
   - (1) Development of innovative preventive care
   - (2) Development of new early diagnostic methods
   - (3) Realization of safe and highly effective treatment
   - (4) Improvement of quality of life (QOL) of elderly / disabled persons and patients

   Particular measures = Regulatory science (RS)

RS=Science for coordinating results of S&T with the most desirable form for harmony between people and society by conducting accurate forecasts, assessments, and decisions based on evidence for the purpose of using the results of S&T for the people and society.

Incorporation of Ethics in STI Policies

Mainly incorporated in "Development of policies to be created and promoted together with society"

Increasing importance of public understanding, support and trust in planning and promotion of STI policies

STI Policies as part of "Policies for society and the public"

(1) Public involvement in the policies

(2) S&T communication activities

(3) Transparency and accountability with PDCA cycle

= Deepening the relations between society and STI

How to deepen it?

(1) Promotion of STI policies from the public viewpoint

(2) Promotion of S&T communication activities

What are incorporated in “Ethics”?

(1)Deepening the Relations Society/STI

1. Promotion of STI policies from the public viewpoint
   (1) Further involvement of the public with the policy planning
      Various means and ways to widely involve the public
   (2) Response to ELSI (next slide)
   (3) Human resources who connect society with STI policies
      Training and ensuring human resources
        Strategic manager, PD and PO, Research Administrator,
        Science technician, S&T communicator etc.
2. Promotion of S&T communication activities
   Improvement of the public literacy in S&T
     Interactive dialogues and opinion exchange
     S&T communication activities by researchers, museums, etc.

What are incorporated in “Ethics”?

(2)Response to ELSI

Increasing involvement of the people in bioethics and in cutting edge S&T

Efforts to strengthen effective STI policies

= social impact and risk assessments of S&T

Promotional measures

(1) To set up guidelines for leaders of S&T to understand ELSI correctly in consideration of international trends

(2) To allocate a portion of research funds to ELSI activities

(3) To improve regulatory science based on scientific reasonableness and social validity

(4) To improve technology assessment(TA) and to grapple impacts of S&T involving ELSI

(5) To promote measures of nuclear safety using TA and other tools

Others Elements

1. Regulatory Science (RS)

RS= Science for coordinating results of S&T with the most desirable form for harmony between people and society by conducting accurate forecasts, assessments, and decisions based on evidence for the purpose of using the results of S&T for the people and society.

Awareness of scientists of the lack of public literacy in science and their sense of responsibility of ensuring safety and effectiveness

Ministry of Health supports the initiative of scientists and practitioners to establish the Japanese Association for Regulatory Science

2. Science for Policy

Policy in STI should be transparent, reasonable and effective

The whole process of policy planning, implementation, evaluation and reform is a part of science for policy.

Involvement of social science and humanities

To ensure a scientific basis of an effective STI policy

Problems and perspective

(Ida's personal view)

1. Ethics is embedded in the "Relation with the Society". However, ethical issues and ethical principles are not main and direct concern in STI policy.
2. System for solving or avoiding ELSI is not clearly defined.
3. Social science/Humanities, in particular, bioethics and law, are not amply involved in STI Policy.
4. The participation process and procedure of the public in the policy planning is not quite clear yet.

As a whole, the 4th Basic plan is not on the position of giving one of the main role to ethics principles.

However, this is rather a dawn of full positioning of ethics in STI