独立行政法人
科学技術振興機構
Japan Science and Technology Agency

Press Conference

President of JST

May, 2012

Agenda

1. Our contribution to the nation‟s recovery and revitalization from the Great East Japan Earthquake
2. Strategic Proposals - Integrative Promotion of Infection Control
3. Proposal on Science and Technology for a Safe and Secure Society
4. Transfer of Bibliographic Information Service to a Private Company

Our contribution to the nation"s recovery and revitalization from the Great East Japan Earthquake

-Actions so far-
Emergency response to the disaster

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FY 2011 | **FY 2012**

Mar 11, 2011 The Great East Japan Earthquake

Urgent implementation support program in response to the Great East Japan Earthquake
Implementation of research outcomes that can be put to immediate application (6 projects)

Immediate support program for international collaborative research (J-RAPID) Flexible and prompt support for research needed for data collection and problem solving in a time of natural disaster or other unanticipated events (33 projects)

To Mar. 2013

Research Seeds Quest Program (RESQ)
Emergency measures and support for research disrupted by the disaster (101 projects)

Networks for blackout prevention
Utilizing local emergency networks to send information regarding energy conservation in order to avoid large scale blackouts in the summer of 2011

Continuing

Participation in "Michinoku Shinrokuden" archiving program
Collaborative work among Industry, Academia and Government , in order to archive the disaster „s record (headed by Tohoku University)

-Actions from now on-
Activities for recovery and rebirth

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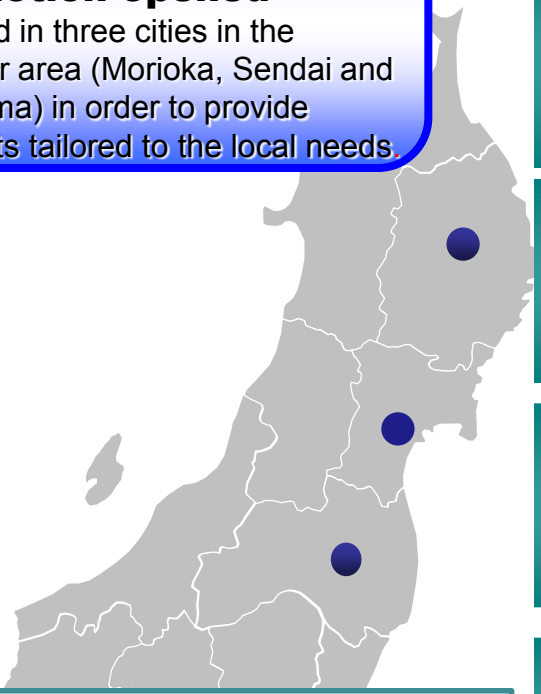
April 1, 2012
Center for Revitalization Promotion opened
Located in three cities in the disaster area (Morioka, Sendai and Koriyama) in order to provide supports tailored to the local needs.



Public seminars
in collaboration with
the Japan Radiation Research Society
Approx. 10 seminars are scheduled for FY 2012
- May 22 in Koriyama
- May 29 in Kikutamachi, Koriyama

FY 2012	2013	2014	2015	2016

Program for revitalization promotion
Enhance R&D activities in the disaster area, by supporting companies to commercialize universities" innovative technologies.

-Call for proposals-
Matching promotion: Three times a year / A-STEP: Closed / Industry-Academia Collaborative: Closed

Developing technologies/devices to measure/analyze radiation
Development of the devices/systems to measure/analyze the dose and density of the radiation in food and soil, for prompt and reliable use in the disaster areas. 14 projects were selected.

Establishing an R&D center for innovative energy (commissioned project)
MEXT and METI collaborate to establish the globally-advanced center for research and development of sustainable energy. JST is commissioned to research and develop innovative super-high-efficient solar cells.

(Providing a support to) Tohoku Medical Megabank
Aims to deliver the next-generation medical service from Tohoku region, conducts health survey on the residents in the disaster areas, and establishes a large scale biobank in collaboration with the medical information network.

(Providing a support to) Tohoku-based materials technology project
Establishes an Industry-Academia-Government collaborative nanotechnological R&D base in the area of nanotechnology-materials, which the universities and manufacturers in Tohoku are strong at, to boost the development of the materials industry in the region.

JST Research Institute of Science and Technology for Society
Urgent Implementation-Support Program in response to the Great East Japan Earthquake

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◎ Research Institute of Science and Technology for Society（RISTEX）

The organization fostering innovation to address social challenges, such as aging, global warming, as well as security and safety issues, based on the principle of "science in society and science for society"

◎Implementation-Support Program: Urgent implementation of support in response to the Great East Japan Earthquake

A special program to support the recovery and reconstruction from the Great East Japan Earthquake as part of the Implementation-Support Program, which aids in establishment of excellent R&D outcomes in society. RISTEX called for proposals in the month following the disaster. Six projects were selected, and all the activities were completed by the end of FY 2011.

Objective: Supporting reconstruction in the disaster-stricken areas through the implementation of research outcomes that can be put into immediate application and delivery of tangible results.

Selected：Six projects (from 124 proposals)

Duration: May, 2011 to March 31, 2012 (10 months)

Funding: 7 to 10 million yen per project (excluding overhead)

JST Research Institute of Science and Technology for Society

Urgent Implementation-Support Program Project outcomes – 1

Fukushima

1. Improving the quality of life of evacuees in temporary housing

Working with the prefectures, municipalities, and local NPOs, we:

1. Built 5,500 of the 16,000 temporary housing units in Fukushima with timber to control noise and condensation,
2. Prepared playspaces for children, community buses, and the system to prevent solitary death, and
3. Strived to reconnect disrupted communities as privately rented housings rapidly increased in the area.

Right: Temporary housing (made of timber, lofted) in the city of Iwaki

Left: Temporary housing (made of timber) in the city of Motomiya

Miyagi

2. Rapeseed project for restoring tsunami-salt-damaged farmland

1. Salt-resistant cruciferous plants (e.g. canola/rapeseed) were cultivated in the farmland flooded by the tsunami in order to rehabilitate the land while continuing farming.
2. More companies jointed to take part in this program as the scheme was stated in the reconstruction plan of Sendai city. The application expanded beyond biofuel, and sales channels were developed to distribute canola as food to the supermarkets within the prefecture.

Canola in full bloom on tsunami-hit farmland. Not even weeds grow much in the surrounding idle farmland.

Iwate

3. Rehabilitation of aquaculture industry with microbubbles

1. 150 cubic meters of microbubbles were generated in Ofunato Bay everyday for water purification. The increased oxygen and nitrogen in the sea greatly promoted the growth of rock oysters and scallops. This brought a bright hope for the once devastated aquaculture industry.
2. This technology has been introduced to other regions including Kesennuma and Kamaishi for further success.

A rock oyster twice as plump as an ordinary one

JST Research Institute of Science and Technology for Society

Urgent Implementation-Support Program Project outcomes - 2

Miyagi

4. Soil pollution survey in the area flooded by the tsunami

1. Detailed soil surveys were conducted in 129 spots around Miyagi prefecture to assess the risk concerning heavy-metal content. The report included the fact that toxic substances such as arsenic spilled into the sea from abandoned mines had been disturbed by the tsunami and polluted the soil.
2. The chemical characteristics of large scale tsunami sediment were revealed for the first time in the world. This enabled the accurate prediction of the area under risk of tsunami.

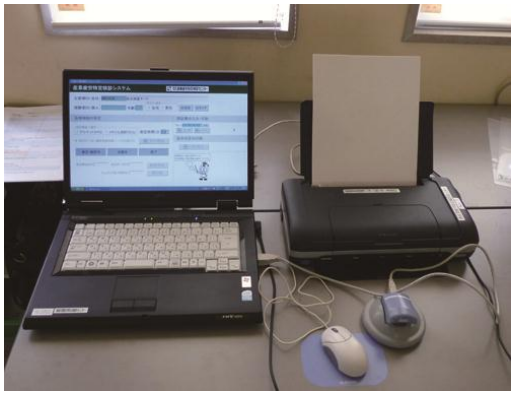
Sampling soil in Shishiori river basin, Kesennuma

Miyagi

5. Evaluation of tiredness of aid workers

Measured fatigue level of the employees of the city of Kesennuma using an objective method (with consent), to identify and care for those who had not fully recovered from mental fatigue after physical recovery, as well as those who with higher risk of illness resulting from fatigue. The results also contribute to a future care plan for helpers in case of a disaster.

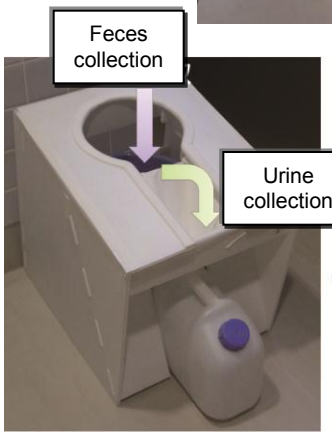
The device to measure the fingertip pulse waves for activities of the sympathetic and parasympathetic nerves



Miyagi etc.

6. Installation of toilet devices to improve hygiene

1. Modified portable toilets for hygienic and convenient use in the disaster area. The feces and urine are separately collected without use of water and without producing much odor. 550 units were installed in the area.
2. Currently further developing, in cooperation with a private company, to make the toilets reasonable, widely used, and stocked by local governments, as part of emergency supply kits.



Portable toilet for disaster areas that separates urine from feces.

◎ Research Seeds Quest Program (RESQ)

The Great East Japan Earthquake damaged many research facilities in Tohoku region and other areas, and necessitated the stopping of many research activities. While the nation was striving to recover from this unprecedented disaster, JST established and implemented this program as an emergency countermeasure and support measure for the affected areas.

◎Details of the Research Seeds Quest Program (RESQ)

The program supports continuation of the exploratory research disrupted by the disaster, in order to find out potentially pioneering and unique research seeds that can

1.Grow to be the seed of the next-generation innovation, and

2.Bring innovative development to the science and technology.

JST called for proposals in the month following the disaster. 101 projects were selected, and all the activities were completed by the end of FY 2011.

Process: Call for proposals on Apr. 1, Submission period was from Apr. 22 to May 20
The research that passed the screening and selection started working on Jul. 1
Selected : 101 projects (from 316 proposals)
Duration: Jul. 2011 to March 31, 2012 (nine months)
Funding: Max. 5 million yen (average 4 million yen) per project (excluding overhead)

Research Seeds Quest Program (RESQ) - Projects

Research Seeds Quest Program

◎ Examples of the subjects and schemes of RESQ

1. Preliminary research while restoring the environments

Subject: Bioorganic chemistry of glycoside involved in “memory” of insectivorous plants

Damage: Almost all research equipment was damaged. Plant samples and regents were lost.
Support: Repaired/replaced the damaged equipments. While reestablishing the biological samples in long term, preliminary research to identify target cells was promoted in order to support the early re-operation of the disaster-disrupted research on neurological system and memory.

2. Continuation of disrupted research

Subject: Development of the high-power soft X-ray microscope which enables real-time observation in 30 nm resolution

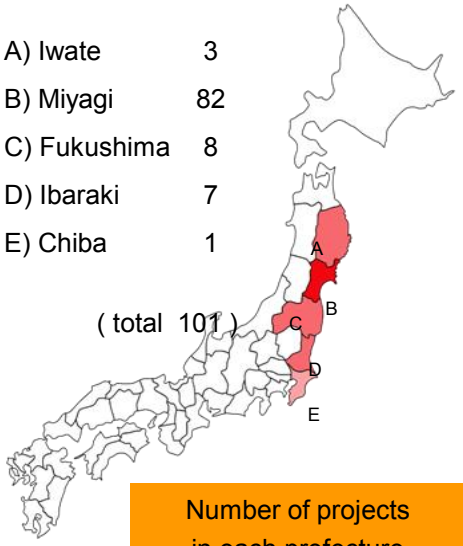
Damage: The damage to the clean room and electronic beam device as well as to the objective microscope under development and the precision tools for it necessitated the stopping of the research activity.
Support: Facilities and equipments belonging to external institutions were used to ensure an adequate research environment and to shorten the delay. Development of an optical measurement device for dynamic observation of biological objects and advanced materials used for multidisciplinary research to an accuracy of 0.1 nm.

3. Promoting solutions with alternative methods/approaches

Subject: Development of a new nano-sized thermoelectric cooling element using a half-metallic, highly spin-polarized current source

Damage: The lithography equipments were badly damaged and cryogen supply became limited; The microfabrication research had to be stopped.
Support: For about six months until the microfabrication equipments were restored, a search for a new material not requiring microfabrication was conducted, as well as the development of a measurement system for direct observation of the thermoelectric effect, in order to reduce the delay and enable efficient research promotion.

A) Iwate 3
B) Miyagi 82
C) Fukushima 8
D) Ibaraki 7
E) Chiba 1
(total 101)



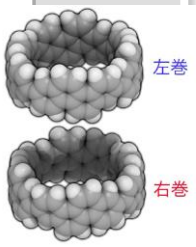
Number of projects in each prefecture

Damaged research facilities

◎Example of the outcome of RESQ*

A world’s first: Successful bottom-up synthesis & isolation of finite models of right/left-handed helical carbon nanotubes

Prof. ISOBE (Tohoku University) and his team found their research plan, which aimed to develop their unique synthesis technique into various areas, in a deadlock when the earthquake damaged the laboratory environment and equipment. But thanks to the RESQ program, they could restore and prepare the analysis device and synthetic materials essential to the research.
As a result, the team was able to make full use of synthetic organic chemistry to achieve the synthesizing of six types of shortest carbon nanotubes, and successfully isolated and determined the structure of the each.
Four of the six have the optical rotation (optical activity) property, and they are the world"s first examples of bottom-up, asymmetric synthesis. This outcome will greatly contribute to the actualization and development of the organic chemical synthesis method of nanotubes, as well as the selective synthesis of the complexly structured carbon nanotubes with optical rotation property.
If the control of existing substances and complicated structures is difficult, the synthesis of carbon nanotubes provides options for target physical properties, functions, and structures. Therefore, seeds for breakthrough usable fundamental technologies have been found in the production and operation of the same materials, which will be required in the future.



*The report on the research outcomes is currently being compiled.

(Reference)

Subjects selected for research outcome extension project: Advanced measurement & analysis technology/device program (Developmental Area: Radiation Measurements)

Practical Realization type: Short-term Development - 6 subjects

Development Subject	Team leader	Participating Organizations
Development of Depth Profile Monitor for Radioactivity Contamination Ground in Field	ISHIKURA, Takeshi (FUJI ELECTRIC CO., LTD.)	National Institute of Radiological Sciences Kyoto University
Development of a high-speed and high-sensitivity screening system for radioactivity in foods and large volumetric standard radiation sources	INOUE, Yoshihiro (SHIMADZU CORPORATION)	Kyoto University
Development of high throughput practical calibration system for ultraportable electronic personal dosimeters	OHGUCHI, Hiroyuki (CHIYODA TECHNOL CORPORATION)	National Institute of Advanced Industrial Science and Technology
Development of Handy and Smart Becquerel Counter (CsI)	OKUBO, Shigeo (ShinNihonDenko Co., Ltd.)	Osaka University Mie University
Development for practical use of the two-dimensional mapping system using the plastic scintillation fiber	MIYAZAKI, Nobuyuki (Japan radiation engineering Co. Ltd.)	Japan Atomic Energy Agency
Development of practical gamma camera with semiconductor detector arrays for environmental radiation monitoring	MORO, Eiji (Hitachi Consumer Electronics Co., Ltd.)	Nagoya University The University of Tokyo Hitachi, Ltd.

Practical Realization type: Mid-term Development - 4 subjects

Development Subject	Team leader	Participating Organizations
Development of the Practical Application of Radioactivity Detection System in Foodstuffs	YAMADA, Kouji (Fuji Electric Co., Ltd.)	National Institute of Radiological Sciences Kyoto University
Practical development of high position resolution gamma-camera identifying Compton scattering energies mounted on an unmanned helicopter	USUKI, Yoshiyuki (Furukawa Co., Ltd.)	The University of Tokyo Japan Atomic Energy Agency
Development of practical gamma-ray image analyzer with high sensitivity and wide view	BANDO, Naoto (HORIBA, Ltd.)	Kyoto University Canon Inc.
Development of practical dosimetry method adaptable to high-dose-rate radiation environment	YAMAMOTO, Takayoshi (CHIYODA TECHNOL CORPORATION)	Osaka University Kanazawa Institute of Technology

Subjects selected for research outcome extension project: Advanced measurement & analysis technology/device program (Developmental Area: Radiation Measurements)

Innovative Technology Type: Fundamental Technology Development - 3 subjects

Development Subject	Team leader	Participating Organizations
Development of environmental standard reference materials for radio-assay	MINAI, Yoshitaka (Musashi University)	Environmental Technology Service Co., Ltd. Saitama University National Institute of Advanced Industrial Science and Technology Japan Chemical Analysis Center Japan Radioisotope Association Japan Institute of International Affairs Japan Society for Analytical Chemistry
Development of a three-dimensional direct imaging method for radioactive elements	SAKAMOTO, Tetsuo (Kogakuin University)	Japan Neutron Optics Inc. Ato Construction Company
Development of a Radiation Tolerant Active-Matrix HEED (High-efficiency Electron Emission Device)	WATANABE, Atsushi (PIONEER CORPORATION)	Tokyo City University PIONEER MICRO TECHNOLOGY CORPORATION

Innovative Technology Type: Equipment and System Development - 1 subject

Development Subject	Team leader	Participating Organizations
Development of innovative gamma-ray visualization system based on an ultra-wide-angle compton camera	TAKAHASHI, Tadayuki (Japan Aerospace Exploration Agency)	Mitsubishi Heavy Industries, Ltd. Nagoya University

Strategic Proposals - Integrative Promotion of Nation-wide Infection Control

-Vaccination and Epidemiology-

Life science and clinical research unit
Center for Research and Development Strategy (CRDS)

Background of the proposal

- At one time, it seemed that infectious diseases were no longer a threat.
  However, new outbreaks of serious infectious diseases have actually been continuing in the world.
  cf.) "New diseases are emerging at the historically unprecedented rate of one per year." -WHO, A safer future (2007)

- Due to the social factors such as advanced transportation system and human causes (biohazard/bioterrorism), the world is now acutely aware of the risk of infectious diseases, and many countries are promoting countermeasures against them.
  e.g.) U.S.: CDC's tough measures to prevent infectious diseases, establishment of NIH-NIAID Vaccine Research Center (2000)
  South Korea: establishment of The International Vaccine Institute (1997)

- Awareness of the risk of infectious diseases is relatively low in Japan.
  The influenza pandemic in 2009 revealed various issues, including those regarding the surveillance structure, prompt development and sufficient supply of vaccines, and the distribution of information.

Proposal: Integrative Promotion of Nation-wide Infection Control
-Vaccination and Epidemiology- **(JST-CRDS, Mar. 2012)**

Summary of proposal - 1

- Three issues for the nation to address:

Promotion of Research and Development

- Of vaccines and adjuvants
- Industry-Academia-Government collaborative R&D activities which put the entire process from the starting line (seeds) to the goal (social implementation) into perspective

Establishment of Infectious Disease Epidemiology

- Collecting information and samples domestically and internationally
- Establishing a more prompt and accurate surveillance structure for infectious diseases

Social Implementation

- Analysis and appropriate distribution of information to improve “infectious disease literacy” among the public
- Assessment of R&D outcomes and discussions for their social implementation

- It is important to strengthen each measure in the above three categories while linking them for integrative promotion. (See the figure on the next slide.)

Summary of proposal - 2

1: R&D of medical technology

R&D of vaccines and adjuvants

Funding
Supporting target-oriented R&D and team research to create innovative "seeds"

point of concern
Rulemaking for dual use research

Industry
- Vaccine maker
- Pharmaceutical companies
- Bio-venture companies
- ・Clinical research (with Academia)
- ・Cost provision (matching funds)
- ・Product development & production
- ・Market strategy

R&D consortia

Government
Relevant governmental agency
- ・Providing research cost (funding)
- ・Discuss the selection method
- ・Supporting international standardization

Academia
Universities (virology, bacteriology, immunology, clinical medicine, pharmacy, public health, and bioinformatics)
- Research centers
- Uni hospitals
- ・Basic life science research
- ・Clinical research (with Industry)

Personnel exchanges (Government ↔ R&D consortia)
Personnel exchanges (R&D consortia ↔ Academia)
Personnel exchanges (Government ↔ Academia)

3: Social Implementation

Analysis/distribution of information

Providing medical tech. (e.g. vaccine)
Providing info. on research needs

- Government
- Local government
- Medical institutes
- NIID
- Quarantine
- Regional health institutes
- Health centers
- PR (inc. discussion on the sender, method, and contents of the information)

- Government
- experts
- citizens
- ・Science-based discussion & advice for relevant governmental agencies

- Research institute
- ・Behavioral and social science
- ・Medical technology assessment

Epidemiological research, surveillance, and database construction

Providing Samples & epidemiological Info.
Providing research outcome info. & vaccine info.
Providing Epidemiologic. Info.
Providing Medical tech assess. info

- NIID
- Regional health institutes
- Health centers
- Quarantine
- Universities
- Government
- Local government
- Medical Institutes

- ・Occurrence determination
- ・Route/host identification
- ・Sample collection in the epidemic area

Point of concern
How to assess the outcomes

2: Infectious disease epidemiology

Summary of proposal - 3

- Health hazard caused by infectious diseases will be reduced by the long-term implementation of the aforementioned proposals in three categories, which aim to respond to existing infectious diseases without a known cure and prepare for unknown ones.

- Expected spin-off effects:
  - Industrialization and overseas expansion of R&D outcomes such as a vaccine
  - International contribution in the form of science and technology
  - Contribution to social security, for example with a measure against pandemics

- Rulemaking for dual use research* is also crucial when promoting the research on infectious diseases. (See the next slide.)

**Research outcomes that can possibly be diverted for military use*

Biosecurity and JST-CRDS

A series of disputes arose over the release of research results on Avian flu virus. This called for the reconsideration of the freedom of science and scientists, social contributions of R&D outcomes, and accountability to society and/or communities.

The Science Council of Japan launched a committee on dual use in Nov. 2011, and started discussion in Feb. 2012 in order to establish a code of conduct.

The US NSABB introduced a preliminary review system for federal government-subsidized research plans that concern viral or toxic substances, in addition to a review process to discuss whether or not to release research results.

JST-CRDS will discuss how stakeholders for science and technology should deal with biosecurity and dual use in life science research, and then will form a proposal within a year. The current status survey report on biosecurity and dual use (in Japan and overseas) has been compiled, and is introduced today with this presentation, to improve the literacy of stakeholders, including the media. Related sessions will be held at several academic meetings including Japan Association for Bioethics (Oct.) and Molecular Biology Society of Japan (Dec.).

Proposal on Science and Technology for a Safe and Secure Society

ABE, Hiroyuki – JST Adviser

Background of the proposal

・The Great East Japan Earthquake and the subsequent tsunami and the accident at the nuclear power plant in Fukushima exposed the vulnerability of Japanese society

・A greater emphasis has been placed on enhancing and promoting advanced forms of science and technology

Little attention was paid to the social role of science and technology such as in the area of social security

・Although a large number of outstanding research results have been amassed, research outcomes relating to social security are lacking in mechanisms for social implementation

・Social security is a crucial issue for Japan, the country with many risk factors such as:

Nankai, Tonankai, and Tokai earthquakes
Threat of infectious disease
Resource constraints
Creeping food crises
Cyberattacks

and more (global environmental issues, terrorism, complex social structure, financial crisis, etc.)

Problems that have gained prominent attention
—Vulnerability in the area of risk/crisis management—

- Despite the importance of collecting, analyzing, sharing, and communicating information, these processes do not function in many areas, including within the government
- There was no functioning chain of command with a strong sense of leadership, which is vital, and this gave rise to confusion
- There was an inadequate common understanding of the role of each decision-maker, such as experts, the government, and the power company
- Many experts who aired their views through the mass media went to extremes in disseminating their own opinions, creating confusion and chaos among the public
- Crises had not been hypothesized as plausible scenarios.
  For this reason, practical response and training had not been carried out prior to the disaster

Can Japan be prepared for risk and crises!?

Proposal

-Issues that should be tackled as soon as possible by the Council for Science and Technology-

- Establish science and technology for social security as one of the important pillars of innovation policy
  The existing policy is about R&D strategy. Social security is an important factor of innovation.

- Discuss the ideal situation of science and technology in relation to social security, and gain a comprehensive understanding of risks
  Form a sectional committee for social security, and prepare a ***national*** risk portfolio not developed by an office or ministry.

- Establish publicly-connected R&D programs for social security
  e.g. New research frames, collective knowledge of the nation, management, maintenance and modification of the research outcomes, and pilot programs

- Create a database of researchers and equipment in relation to social security
  Establish a database for collective knowledge with the cooperation of academia and think-tanks.

- Build up a network of firefighters, police, Japan Coast Guard, and Self-Defense Forces to facilitate cooperation
  The authorities supporting the social security, such as the fire authorities, police, and the Self-Defense Forces, must share a common awareness of issues.

Proposal

- Issues that should be tackled in the medium term by the Division of Science and Technology Innovation Strategy (1) -

- Develop human resources with the necessary abilities in the areas of management for risks, crises, and catastrophes

  Administrators are transferred within a short time, there is no method to pass down experiences to the next generation, and the provided training is insufficient.

- Conduct research on regional security that is rooted firmly in the region, and establish local strongholds for the development of human resources

  The security of local society is important; establish a locally-based stronghold for research and training

- Establish a highly mobile and dynamic new research institute in the areas of risk management and catastrophe response

  Full scale R&D in relation to social security requires new research institutes based on new management principles.

- Carry out reforms on the awareness of risks within the science and technology community

  The community is not making enough effort as an expert group to share an awareness of risks with society.

Proposal

- Issues that should be tackled in the medium term by the Division of Science and Technology Innovation Strategy (2) -

- Diversity in knowledge is the key for responding to unknown risks. Striking a balance between problem-solving efforts and efforts to ensure the diversity of knowledge is important

  The only way to prepare for unknown risks is to have research in various areas readily available, so that there are always some researchers familiar with the desired field or a similar field, no matter what happens.

- Humbly draw lessons from catastrophes and failures, and establish flexible frameworks to incorporate these lessons at the academic and cultural levels

- Promote measures aimed at enhancing the ethics of organizations and individuals engaged in the field of science and technology

- In addition to clarifying the roles of the government and the science and technology community, construct a framework and routes that enable experts to provide advice to the government

- Establish frameworks that can help to spin off into the private sector those science and technology achievements that play a useful role during catastrophes and crises.

  Systems to enable government procurement and/or international trading should be available.

- Take the necessary measures to provide adequate education on risks from the elementary stages

Proposals for the science and technology community
(incl. the Science Council of Japan and academic/professional societies)

- Change the view that academic papers alone serve as an index for assessing researchers
- Reaffirm that the diversity and succession of basic study are important for social security
- Change the trend of placing excessive emphasis on efficiency and neglecting redundancy
- Reaffirm the importance of ethics for engineers (as individuals and as organizations)
- Being proactive in providing advice for the governmental decision-making process is most desirable
- Reaffirm the importance of an academic/sociological perspective in issues relating to social security
- Do not lose a sense of humility, but constantly attempt to detect overconfidence among individuals in the science and technology community with regard to scientific knowledge and technology

Committee of “Science and Technology for a Safe and Secure Society”

Chair:	ABE, Hiroyuki	Former member of Science and Technology Policy Council / JST advisor
	IWATA, Takahito	Crisis communication supervisor, Crisis management dept., Shizuoka pref.
	KURATA, Takeshi	Professor, International University of Health and Welfare
	SHIGEKAWA, Kishie	Professor, Graduate School of Environment and. Disaster Research, Fuji Tokoha University.
	TADA, Hiroyuki	Senior manager, Mizuho Information & Research Institute, Inc.
	NAWA, Toshio	Information analysis manager, Cyber Defense Institute Inc.
	MIYABAYASHI, Masayasu	Vice President, Chiba Institute of Science

Japan Science and Technology Agency (JST)

	KAWAKAMI, Nobuaki	Senior Executive Director
	ARIMOTO, Tateo	Director-General, Research Institute of Science and Technology for Society
	TORII, Hiroyuki	Section chief

Handouts:

- “Science and Technology for a Safe and Secure Society”

  contents: proposals, riders (on social issues), and explanatory note for the proposals

- “Science and Technology for a Safe and Secure Society” –related documents

  contents: Public hearing case studies, approach in the USA, and symposium survey results

- Report on JST symposium “Science and technology for Social security”

Transfer of Bibliographic Information Service to a Private Company

Transfer of Bibliographic Information Service to a Private Company

JST concluded a contract with G-Search Limited concerning the transfer of the bibliographic information service

Budget screening process in FY 2010

Basic policy to reform independent administrative institutions

Invited

Business operators who provide information on scientific/technological bibliographies

Selected → G-Search Limited

Future direction

JST: Science & tech info.

株式会社 ジー・サーチ G-Search Limited: Patent info., Company info.

Integrated for → improved convenience & added value

Promotes data provision and intersystem coordination with a privately-provided database, in an aim to develop an open system which enables the wide use of data accumulated by JST.