



GRIPS

政策研究大学院大学  
NATIONAL GRADUATE INSTITUTE  
FOR POLICY STUDIES

# Japan's S&T Diplomacy and strengthening the US-Japan Alliance

GRIPS

Atsushi Sunami, Ph.D.

Special Advisor, Science, Technology and Innovation,  
the Cabinet Office of Japan

Deputy Director of GIST Program; Professor;

Executive Advisor to the President, GRIPS

*Gateway to  
Global Leadership*



## Implementing S&T Diplomacy in Japan

- Council for Science, Technology and Innovation in Cabinet Office
  - Diplomacy for Science
- Ministry for Foreign Affairs
  - Science for Diplomacy
- Other ministries
  - Science for ..... Increasingly global in nature.
- ◆ Prime Minister's Office
  - NO Science Advisor for PM at the moment !!
- ◆ Boundary is not clear between Science for Diplomacy and Diplomacy for Science
- ◆ Increasing competition from neighboring countries in particular.
- ◆ Importance of partners and alliances
  - Dual Use and Big Science

# 1. Science for Diplomacy in Japan

## Advisory Panel on S&T Diplomacy in MOFA (Jul. 2015 - Apr. 2015 )

### ● Background

*Recent **global challenges increasingly require scientific and technological knowledge**. ... This applies in particular to the frontier in science and technology such as outer space, the Arctic, deep sea, and cyber space, where major states have started to make rules on governance and are exercising their diplomatic measures.” (Report of the Advisory Panel, May, 2015)*

### ● Objective of the Panel

- Examine new challenges of science and technology diplomacy as well as MOFA’s and whole-of-government approaches to addressing such challenges

### ●Period of the Meeting: Jul. 2014 – Apr. 2015

### ●Submission of the Report to the Minister: May 8, 2015



## ● Member of the Panel

Takashi Shiraishi	President, National Graduate Institute for Policy Studies (GRIPS) --Chair
Masaru Iwanaga	President, The Japan International Research Center for Agricultural Sciences (JIRCAS)
Masafumi Kaneko	General Manager/Senior Research Fellow, Center for International and Strategic Studies, PHP Institutes, Inc.
Atsushi Sunami	Professor, Executive Advisor to the President, GRIPS
Mariko Hasegawa	Executive Director, Vice President, The Graduate University for Advanced Studies
Yuichi Hosoya	Professor, Faculty of Law, Keio University
Mitsuhiko Yamashita	Member of the Board, Senior Technology Advisor, NISSAN MOTOR Corporation

## Related Bodies

- Council for Science, Technology and Innovation (CSTI)
- Ministry of Education, Culture, Sports, Science and Technology (MEXT)
- Japan International Cooperation Agency (JICA)
- Japan Science and Technology Agency (JST)
- National Institute of Advanced Industrial Science and Technology (AIST)
- Task Force on Japan-US Science and Technology Cooperation
- Science Council of Japan (SCJ)
- Ministry of Economy, Trade and Industry (METI)
- The Japan Foundation (JF)
- Japan Society for the Promotion of Science (JSPS)
- New Energy and Industrial Technology Development Organization (NEDO)
- (Organizer) Ministry of Foreign Affairs (MOFA)

## ● The Report of the Advisory Panel - Contents

### 1. Strategy for S&T Diplomacy

- (1) The purpose of S&T diplomacy
- (2) Strategic Approaches of S&T Diplomacy

### 2. S&T Diplomacy and concrete actions

- (1) Responding to global challenges and utilizing diplomatic opportunities
- (2) Strengthen cooperative relationships with countries such as emerging economies and partner countries with high diplomatic importance

### 3. Reinforcement of the basis and human resource development for the effective promotion of S&T diplomacy

- (1) Strengthen the utilization of scientific knowledge in formulating and implementing diplomatic policy
- (2) Develop human resources for supporting science and technology diplomacy
- (3) Strengthening networks and dissemination of information

# The Report of the Advisory Panel

## 1. Strategy for S&T Diplomacy

### (1) The purpose of S&T diplomacy

#### Recent changes in international situation

- Change in power balance of the world
- Diversification of threats by globalization  
→Necessity of international cooperation & more strategic diplomacy

#### One of the measures for national security

- Strengthening technological capabilities to address global issues
- Utilization of the capabilities in diplomacy

#### Accumulation of discussions on and efforts for promoting S&T Diplomacy

WG and TF on S&T Diplomacy, G8 S&T Ministers' Meeting, SATREPS, STD Network etc

→ *At the stage of positioning S&T as a pillar of diplomacy*

### (2) Strategic Approaches of S&T Diplomacy

- Reinforce "Science for Diplomacy"
- Execute S&T diplomacy aligned with foreign policy strategies
- Use borderless feature of S&T for diplomacy
- Use scientific knowledge for foreign policy decision making

<Foreign Policies>

Diplomacy for proactive contribution to peace

Reinforcement of economic diplomacy

Diplomacy that takes a panoramic perspective of the world map

Public diplomacy

# ● The Report of the Advisory Panel - Recommendations

## 2. S&T Diplomacy and concrete actions

### (1) Responding to global challenges and utilizing diplomatic opportunities

1. Establish a diplomatic stance to “lead resolutions to global challenges through science, technology and innovation and realize a favorable international environment” (clearly position science and technology diplomacy as the new axis of Japanese diplomacy).
2. Build a mechanism to rapidly identify the “next challenges” of the international community which will be important in the future and for which Japan can readily exercise leadership.
3. In light of the identified issues, set a diplomatic agenda based on scientific evidence, and lead international efforts.

## Recommendations (cont'd)

### **(2) Strengthen cooperative relationships with countries such as emerging economies and partner countries with high diplomatic importance**

4. Promote strategic joint research and development with partner countries with high diplomatic importance.
5. Along with promoting overseas activities of Japanese companies, actively support capacity improvement in designing policies on science and technology innovation, and the development of innovative human resources, in emerging economies.
6. Strengthen cooperation with emerging and developing countries through triangular cooperation that utilizes ODA coordinated with third countries or the Science and Technology Research Partnership for Sustainable Development (SATREPS) program, and move ahead with setting up strategic joint projects with emphasis on innovation for emerging economies and ODA graduate countries.
7. Strengthen human resources development cooperation (assistance for engineering universities etc.) and proceed with next-generation network-building.
8. Utilize science and technology human resources personnel in diplomatic activities through private-sector exchanges.

## Recommendations (cont'd)

### 3. Reinforcement of the basis and human resource development for the effective promotion of S&T diplomacy

#### (1) Strengthen the utilization of scientific knowledge in formulating and implementing diplomatic policy

9. Appoint a science and technology advisor to the Minister for Foreign Affairs on a trial basis.
10. Build networks in and out of the nation for strengthening coordination with relevant ministries, organizations, academic experts and the industrial community, and formulate a structure for assisting the Minister for Foreign Affairs' science and technology advisor.
11. Seek to bolster the capacities and personnel numbers at the embassies and consulates in charge of science and technology (including strengthening information-sharing and coordination with headquarters and other diplomatic missions, and enhancing training opportunities).

## Recommendations (cont'd)

### **(2) Develop human resources for supporting science and technology diplomacy**

12. Have mid-career and young researchers participate in formulating diplomatic policy (through work at the Ministry of Foreign Affairs, assist the science and technology advisor, and by sending them to international organizations).

### **(3) Strengthening networks and dissemination of information**

13. Proactively convey the message that Japan will “lead resolutions to global challenges through science and technology innovation and realize a favorable international environment” to the international community at a high level, including the Prime Minister and the Minister for Foreign Affairs.
14. Strategically target influential science and technology-related organizations while promoting intellectual exchange, and strengthen the science and technology diplomacy network.
15. Strengthen dissemination of Japan’s science and technology information abroad by dispatching scientists and pursuing coordination with exhibition facilities at home and abroad (e.g. Japan House).

## 2. Following Up the Report

### ● Appointment of the first S&T Advisor to the Minister for Foreign Affairs (Sept. 2015)

**Recommendation No 9:** *“Appoint a S&T advisor to the Minister of MOFA on a trial basis, to develop Institutional scheme for timely input to the minister, by which the information... will be reflected to the policy-making.”*

#### Expected Roles of S&T Advisor:

- Support Minister's activities through the utilization of S&T
- Strengthen network with Science Advisors, scientists and researchers abroad
- Give advice to Ministers and divisions in MOFA on utilization of S&T in planning and formulating diplomatic policies



**Dr. Teruo Kishi**  
*Prof. Emeritus of the Univ. of Tokyo*

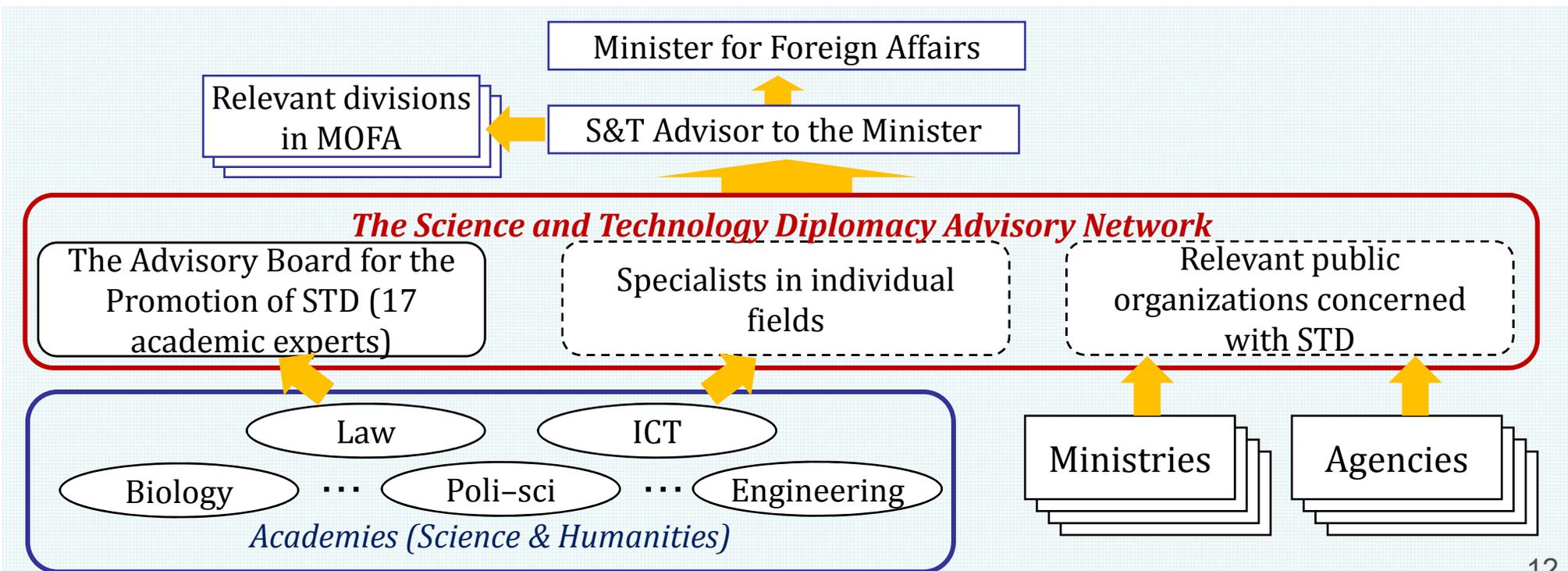
## 2. Following Up the Report

### ● The Science and Technology Diplomacy Advisory Network (December 16, 2015)

**Recommendation No 10:** “Build networks in and out of the nation for strengthening coordination with relevant ministries, organizations, academic experts and the industrial community, and *formulate a structure for assisting the Minister for Foreign Affairs’ science and technology advisor*”

#### Objectives:

- Gather specialized knowledge in a variety of S&T fields for the Advisor
- Utilize it in the process of planning and formulating various diplomatic policies



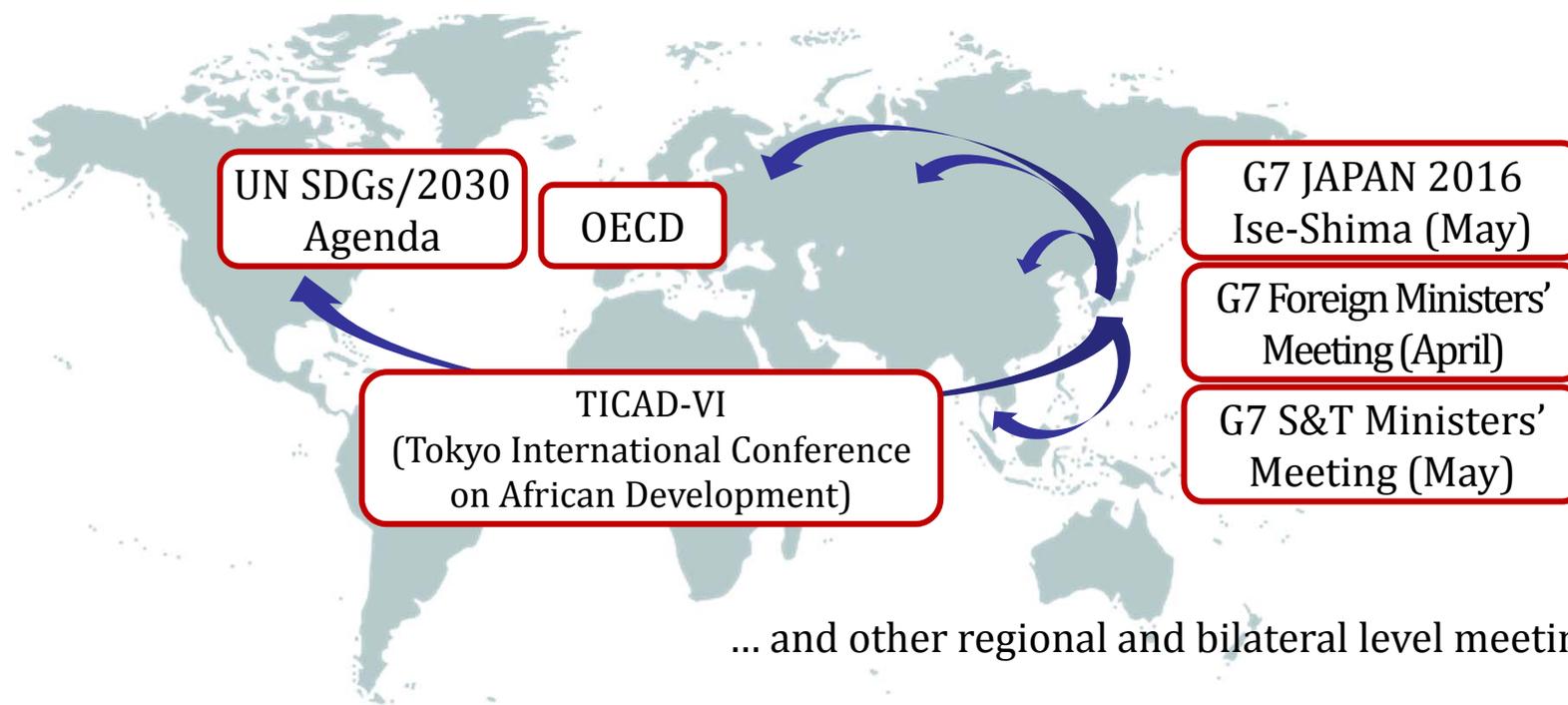
### 3. Upcoming Agenda

- **Respond to global challenges and utilizing diplomatic opportunities**

- Various diplomatic opportunities to convey/practice Japan's will for taking leadership for solving global challenges by STI to achieve desirable international circumstances to the world.

- **Reinforce cooperation with diplomatically important partner & emerging states**

- Promote strategic relationship-building with partner countries with high diplomatic importance mainly on advanced S&T
- Position STI cooperation as a new axis of Japan's diplomacy to cooperate with emerging/developing countries
- Promote confidence-building on Track 1.5 or 2 with the participation of scientists in case of difficulty in building cooperative relationship at governmental level



... and other regional and bilateral level meetings

## S&T Cooperation for US-JAPAN Alliance (1)

- Cooperation in Key S&T Areas

1. Cyber Security and Governance

2. New and Sustainable Energy

- *Mission Innovation*
- ITER, ILC, Hydrogen, etc

3. Space

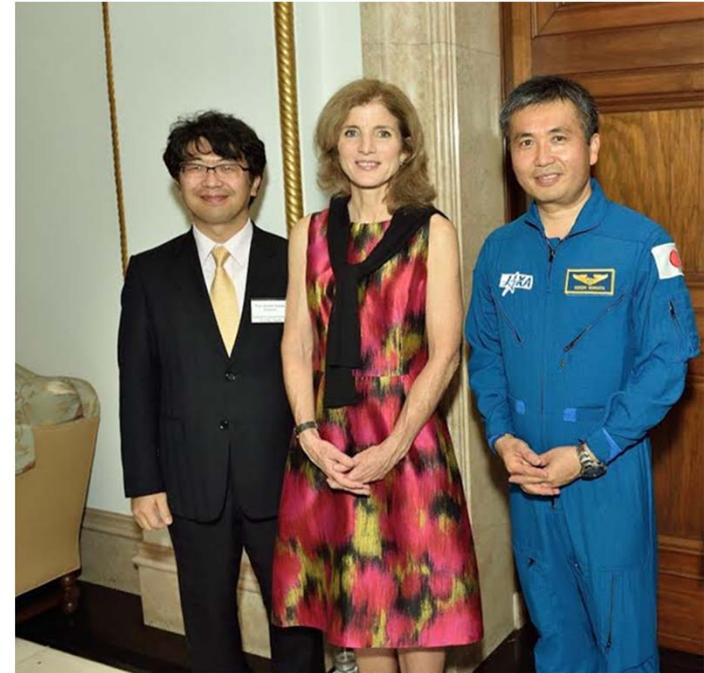
- ISS, Exploration, Observation, SSA and Governance

4. Health Science

- Big Data, Data Science
- Gene Bank and Rules and Regulations

5. Arctic

- Research and Observation
- Sustainable Development
- Governance



## S&T Diplomacy for US-JAPAN Alliance (2)

- Strategic Cooperation in Geopolitical Area

1. Okinawa

- Research, Health Services
- Big Data and Cyber Security
- STEM
- Network among Hawaii, Guam, and Okinawa

2. ASEAN

- Myanmar, Vietnam, Philippines, Indonesia

3. North Korea

4. Iran

5. Russia

## S&T for US-JAPAN Alliance

- Defense Technology Development
  - Joint Development
  - Horizon scanning and Technology roadmap
  - Capacity Building: Procurement, Project management
  - Governance mechanism
- Dual-Use Technology Development
  - Standards, Regulation Harmonization
  - Joint Development, DARPA joint projects
- Humanitarian Assistance / Disaster Relief
  - Capacity Building in ASEAN and other developing nations
  - Technology and System Development



(Google)

Thank you for your attention.