

# Science, Technology and Innovation Policy in Japan

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# Table of Contents

- Overview of Science, Technology and Innovation policy in Japan
- International Cooperation

OVERVIEW OF SCIENCE,  
TECHNOLOGY AND  
INNOVATION POLICY IN JAPAN

# Science, Technology and Innovation Policy in Japan

## The 4<sup>th</sup> Science and Technology Basic Plan (19<sup>th</sup> August, 2011)

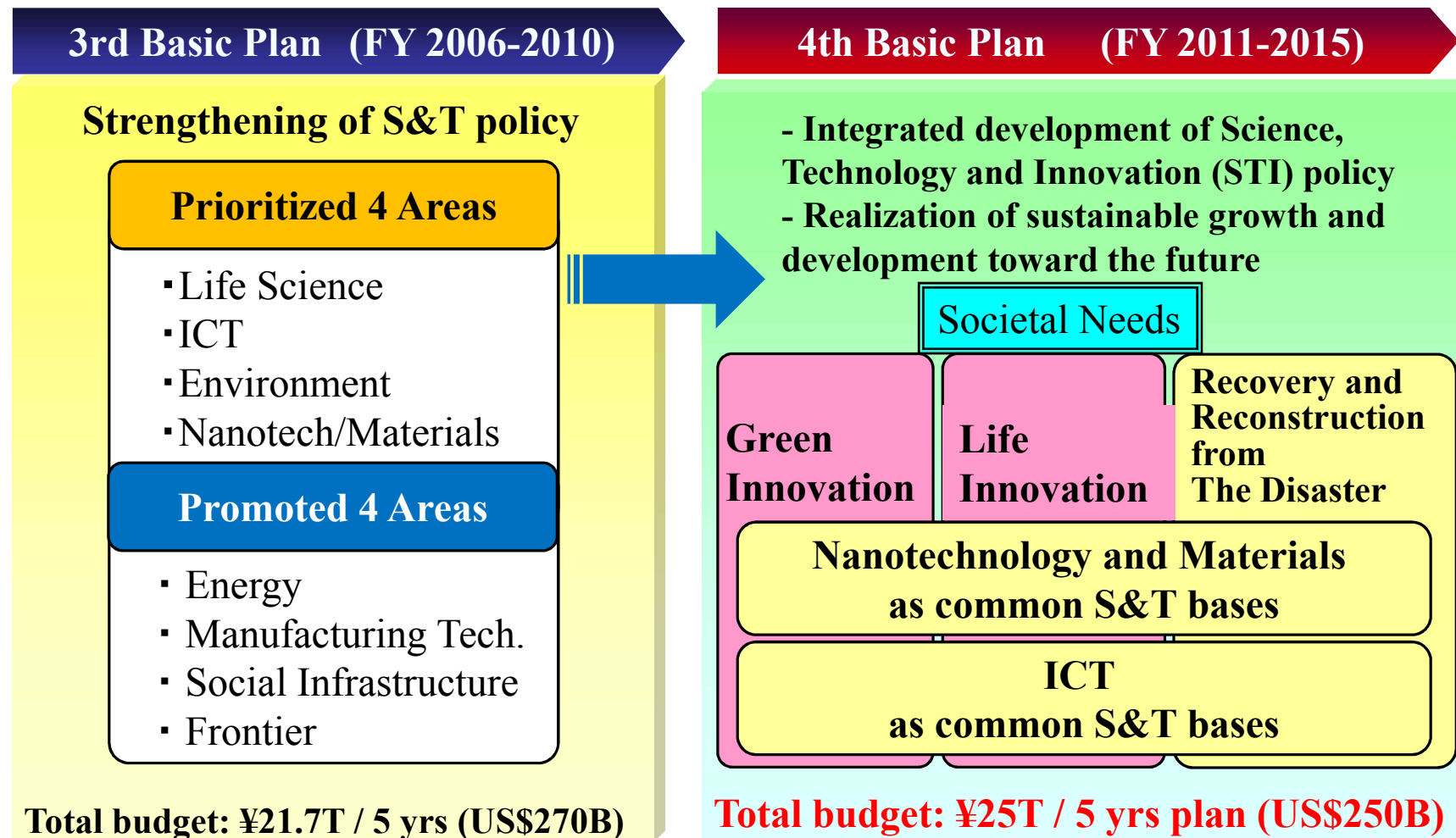
- 5 years mid-term plan (FY2011-2015)
- Promotion of R&D to address **societal and economical issues**
- Basic principles
  - (i) **Integrated promotion** of “science, technology and innovation (STI) policies”
  - (ii) Greater priority to “roles of **human resources and their supporting organizations**”
  - (iii) Implementation of the “**STI policy created together with society**”

## Comprehensive Strategy on Science, Technology and Innovation (7<sup>th</sup> June, 2013)

- Long-term vision + Short-term Action plan to tackle toward realizing the shape of the nation to be attained in 2030.
- **Mission-oriented** STI policy
- Create “**The world’s most innovation-friendly country**”
- Acting “**Smart**”, Implementing “**System thinking**”, Thinking “**Global**”

# The 4th S&T Basic Plan

## Shift from “S&T-pushing” to “Needs-pulling” Policy Change from 8 Areas to 3 Societal Needs



# Comprehensive STI Strategy

## ➤ Shapes of the nation to be attained in 2030

Economy that maintains the world-top-class economic strength and develops sustainably

Society where the people can enjoy wellness, security and safety

Economic society that harmonizes with the world and contributes to the progress of humankind

## ➤ Five immediate policy issues of STI policies

1. Realization of **a Clean and Economical Energy System**

2. Realization of **Healthy and Active Ageing Society** as a top-runner in the world

3. Development of **Next Generation Infrastructures** as a top-runner in the world

4. **Regional Revitalization** taking advantage of the regional resources

5. Early **Recovery and Revitalization** from the Great East Japan Earthquake

# Comprehensive STI Strategy

## ➤ Toward innovation-friendly environment

Focused policy challenges	Focused measures
Nurturing the sprouts of innovation	(1) Establishing an environment which enables diverse people to take the leadership in enterprises, universities and R&D corporations ➔ <b>Diversity</b>
	(2) Reinforcing universities and national research institutes as international hubs ➔ <b>Attractiveness</b>
	(3) Restructuring systems of competitive funds ➔ <b>Balance</b>
Activating the innovation system	(4) Reinforcing industry-academia-government collaboration and inter-ministry collaboration ➔ <b>Cross-border</b>
	(5) Promoting mobility of human resources ➔ <b>Mobility</b>
	(6) Improving research support system ➔ <b>Teamwork</b>
Fructifying innovation	(7) Activating private initiative engaging in new businesses ➔ <b>Start-ups</b>
	(8) Promoting regulatory reform ➔ <b>Enabling challenges</b>
	(9) Promoting strategic approach for international standardization and IP ➔ <b>Rule making</b>

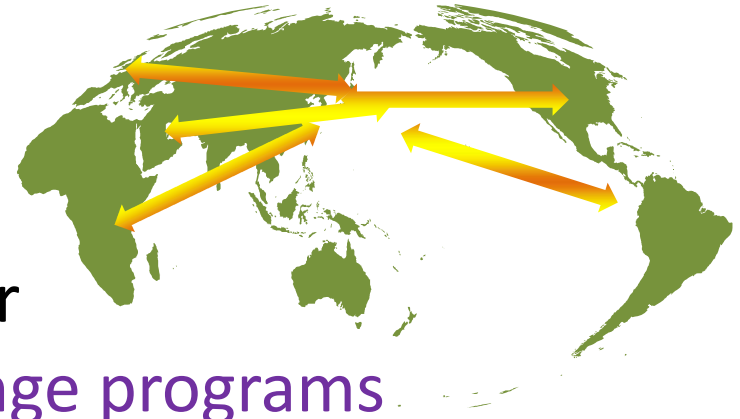
# INTERNATIONAL COOPERATION



# International Activities

## Activities for International Network

- Support for individual researcher
  - Fellowship
  - Exchange programs
- Support for research institution
  - Accelerate the Circulation



## Activities for S&T Diplomacy

- Joint research programs
    - SICORP
    - SATREPS
- Renewal !**
- ⇒
- Breakthrough innovation
  - Resolve global issues

# Activities for International Network - 1

## □ Program for Advancing Strategic International Networks to Accelerate the Circulation of Talented Researchers [implemented by JSPS]

- Support research institutions in Japan (including Universities)
- Establish a solid network between internationally top-ranked research institutions
- Dispatch & Accept researchers to/from internationally top-ranked research facilities for a long term
- Based on international strategy of research institutions



## Activities for International Network - 2

### Postdoctoral Fellowship for Research Abroad

Since 1982

**FY 1982 - 2012:** 2,261 persons in total  
**FY2013:** 441 persons / 22 countries

<http://www.jsps.go.jp/english/e-ab/index.html>

Tenure: 2 years

Financial Support: Roundtrip airfare

Stipend (3.8-5.2 million JPY / year)

### Fellowship Program to Japan for Overseas Researchers

Postdoctoral Fellowships  
for Foreign Researchers  
(Standard)

1 - 2 years  
About 420

Postdoctoral Fellowships (FY2013-)  
(Pathway to University Positions in Japan)

Postdoctoral Fellowships (Short-term)

Postdoctoral Fellowships (Strategic  
Program)

Summer Program

<http://www.jsps.go.jp/english/e-fellow/index.html>

Invitation Fellowships for Research in Japan

Mid Career -  
(Long-Term)  
2 -10 months  
About 80

Professor  
(Short-Term)  
14-60 days  
About 280

Nobel Prize  
Level  
(Short-Term S)  
7-30 days  
A Few

For Networking with/among Former JSPS Fellows...

#### JSPS Fellow Alumni Associations

- BRIDGE Fellowship Program for revisiting Japan
- Seminars and symposia
- Information on website or by newsletters
- Pre-departure seminar for new fellows



[implemented by JSPS]

# Activities for International Network - 3

## *Bilateral Cooperation* [implemented by JSPS]

### Joint Research Projects and Seminars based on agreements with overseas funding agencies



#### [Joint Research Projects]

Term: 1-3 years  
Annual Support:  
¥1-5 million/project

#### [Joint Seminars]

Term: Within 1 week  
Support: ¥1.2-2.5 million/seminar

#### [Researcher Exchanges]

Term: 14 days-2 years  
Support: Roundtrip int'l airfare,  
maintenance allowance

### Open Partnership Joint Projects and Seminars



#### [Joint Research Projects]

Term: 1-2 years  
Annual Support:  
Up to ¥2.5 million/project

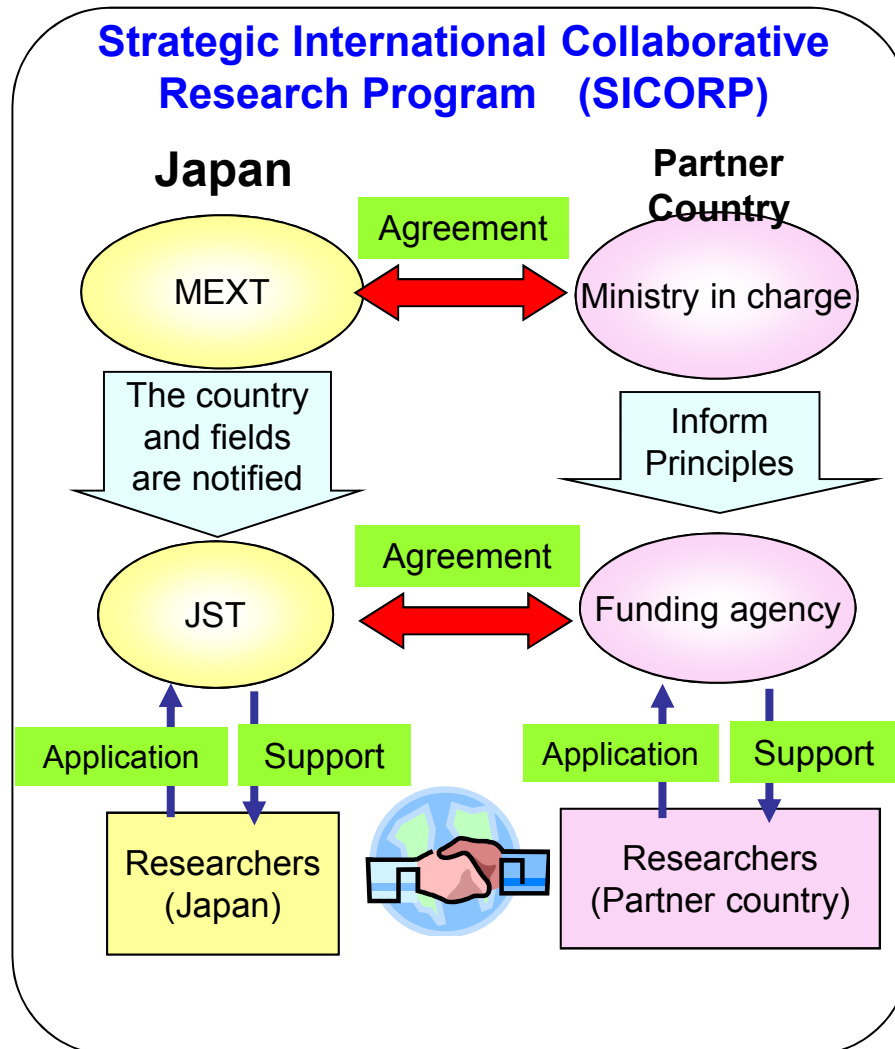
#### [Joint Seminars]

Term: Within 1 week  
Support: Up to  
¥2.5 million/seminar

# Activities for S&T Diplomacy - 1

## Mutual cooperation in advanced S&T fields

### Strategic International Collaborative Research Program (SICORP)



### 3 Types of the renewed SICORP

#### Type1: Consortium type

3-5 years

30m–100m JPY (300k-1m USD) / y

#### Type2: Core team type

1-3 years

10m–30m JPY (100k-300k USD) / y

#### Type 3: Accelerate int'l cooperation type

1-3 years

5m–10m JPY (50K-100k USD) / y

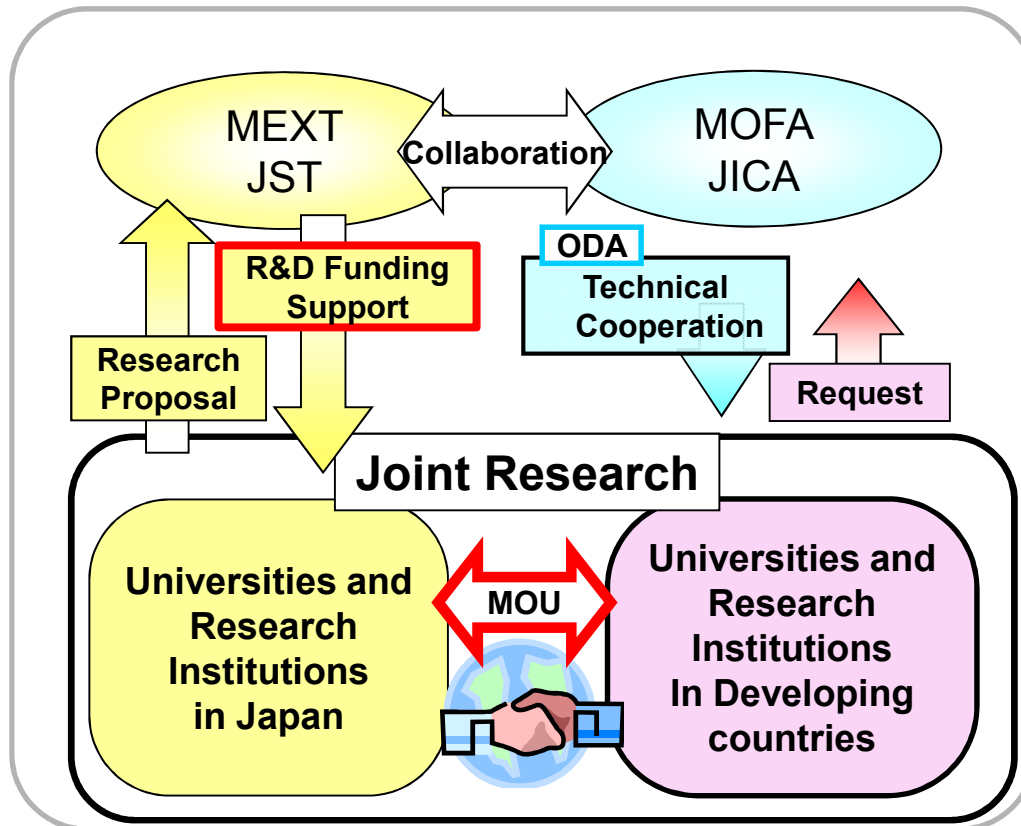
[implemented by JST]

<http://www.jst.go.jp/inter/english/>

# Activities for S&T Diplomacy - 2

## S&T cooperation with developing countries to address global issues

### Science and Technology Research Partnership for Sustainable Development (SATREPS)



#### Fields:

- Global-scale Environmental Issues
- Low Carbon Society and Energy
- Bio resources
- Natural Disaster Prevention
- Infectious Disease Control

Term: 3-5 years

[implemented by JST]

<http://www.jst.go.jp/global/english/>



# Research in JAPAN



Japan has started new initiatives for foreign researchers.  
Many opportunities are open to you.  
We encourage your “cool” science life in Japan.

## *Message from the Minister*

*-The Japan Vision 2020 initiative-*

*The science community in Japan will  
become more internationalized and  
a more attractive place for top-notch persons.  
Innovate with us for a better future!*



**Hakubun Shimomura,**  
Minister of Education, Culture, Sports,  
Science and Technology,  
Minister in charge of Education Rebuilding  
Minister in charge of the Tokyo Olympic and  
Paralympic Games



Thank you for your attention.

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