University Reform in Science, Technology and Innovation Policy in Japan

Bureau of science, Technology and Innovation, Cabinet Office
Administrative Structures for STI Policy in Japan

**CSTI/Cabinet Office/Ministries**

### Cabinet Office

**Roles:**
- Support the Cabinet in **formulating important policies** and in **overall coordination** of Ministries
- Make total **planning and coordination from a higher standpoint of view than other Ministries**

### Councils on key policy fields

2. **Council for Science, Technology and Innovation**
3. Advisory Council for National Strategic Special Zones
4. Central Disaster Management Council
5. Council for Gender Equality

### Council for Science, Technology and Innovation (CSTI)

**Chair:** Prime Minister  
**Member:** 7 cabinet members (including PM & Minister for S&T Policy) and **8 executive members**  
**Secretariat:** STI Bureau, CAO

**<Main Functions>**

1. Investigate and discuss **basic S&T Innovation policies**
2. Investigate and discuss S&T **budgets** and the allocation of **human resources**
3. Assess Japan’s **key R&D**
4. Investigate and discuss **Framework conditions** for the promotion of innovation

- Basic policies on S&T (Budget Allocation, Basic Strategy etc)  
- Consultation  
- Response

### Ministries (14 ministries)

In conformity with the basic policy indicated by CSTI, each ministry promotes S&T according to the division of duties

**MEXT**  
**Ministry of Education, S&T**  
- General promotion of S&T  
- Basic research  
- University policy

**METI**  
**Ministry of Economy, Trade and Industry**  
- Industrial policy  
- Energy, Nuclear power

**MHLW**  
**Ministry of Health, Labor and Welfare**  
- Clinical study

**MAFF**  
**Ministry of Agriculture, Forestry and Fisheries**  
- GMO  
- Agriculture and Fisheries

Other ministries
Administrative Structures for STI Policy in Japan

Members of CSTI

Chairperson

Shinzo ABE
Prime Minister

Yoshihide SUGA
Chief Cabinet Secretary

Taro ASO
Minister of Finance

Cabinet Members

Takuya HIRAI
Minister of State for Science and Technology Policy

Masahiko SHIBAYAMA
Minister of Education, Culture, Sports, Science and Technology

Masatoshi ISHIDA
Minister for Internal Affairs and Communications

Hiroshige SEKO
Minister of Economy, Trade and Industry

※ Relevant ministers are appointed as ad-hoc members when needed to attend plenary session meetings of CSTI

Executive Members

Dr. Takahiro UEYAMA
Former Vice President & Professor, National Graduate Institute for Policy Studies (Full-time Position)

Ms. Yumiko KAJIWARA
Corporate Executive Officer, Fujitsu Ltd.

Dr. Motoko KOTANI
Professor, Tohoku University

Dr. Yoshimitsu KOBAYASHI
Director of the Board & Chairperson, Mitsubishi Chemical Holdings Corp.

Head of an Affiliated Organization

Mr. Masakazu TOKURA
Representative Director & President, Sumitomo Chemical Co., Ltd.

Dr. Kazuhito HASHIMOTO
President, National Institute for Materials Science

Dr. Seiichi MATSUO
President, Nagoya University

Dr. Juichi YAMAGIWA
President, Science Council of Japan
Integrated Innovation Strategy

Key concept: Integration of STI policies

Main Pillars
⇒ Source of Innovation
⇒ Creation of Innovation
⇒ Implementation
⇒ Global development

Priority fields
AI Technology, Biotechnology, Environment & Energy,
Safety & Security, Agriculture, and etc.

Coordination among related control towers
CSTI, IT, IP, Healthcare, Space, Ocean, and etc.
Changes in the block grant from the government to national universities

(100 million yen)
Share of young researchers in national universities is sharply declining.

Source: School Teachers Survey, MEXT
Japanese universities receive lower percentage of R&D funds from industry compared with other countries.

Source: OECD “Science, Technology and Patents / Gross domestic expenditure on R&D by sector of performance and source of funds”
Changes in the total expenditure of universities (90 institutions: mainly national universities)

<table>
<thead>
<tr>
<th>Year</th>
<th>Education</th>
<th>Research</th>
<th>Medical Costs</th>
<th>Support for Education and Research</th>
<th>Funded Research</th>
<th>Personnel Costs</th>
<th>Others</th>
<th>Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>1,040</td>
<td>2,333</td>
<td>7,235</td>
<td>10,099</td>
<td>1,256</td>
<td>2.36</td>
<td></td>
<td>(trillion yen)</td>
</tr>
<tr>
<td>2006</td>
<td>1,233</td>
<td>2,479</td>
<td>7,598</td>
<td>10,124</td>
<td>1,203</td>
<td>2.47</td>
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<tr>
<td>2008</td>
<td>1,408</td>
<td>2,712</td>
<td>8,477</td>
<td>9,920</td>
<td>1,214</td>
<td>2.62</td>
<td></td>
<td></td>
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<tr>
<td>2010</td>
<td>1,411</td>
<td>2,870</td>
<td>9,277</td>
<td>9,623</td>
<td>1,106</td>
<td>2.67</td>
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<tr>
<td>2012</td>
<td>1,615</td>
<td>3,238</td>
<td>10,160</td>
<td>9,636</td>
<td>1,107</td>
<td>2.80</td>
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<tr>
<td>2014</td>
<td>1,832</td>
<td>3,450</td>
<td>11,143</td>
<td>10,083</td>
<td>1,127</td>
<td>3.04</td>
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<td></td>
</tr>
<tr>
<td>2016</td>
<td>1,647</td>
<td>2,998</td>
<td>11,695</td>
<td>10,221</td>
<td>989</td>
<td>3.06</td>
<td></td>
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</tr>
</tbody>
</table>
2 pillars

= “Knowledge-Intensive Cluster” “Renovation of R&D management “

- University reform as the core for K/I cluster
  - Re-definition of National Universities
    - Universities as “central hubs” for innovation, business creation, social-contribution
    - Modification of university concept cf. “investment target”
    - Introduction of ERP (Enterprise Resource Planning)
      cf. National Universities=86, National Research Institutions=27
  - Human mobility = Exceptional human resource mgt. system
    - complete introduction of annual based salary
    - strict performance assessment/cross appoint system reform
  - Challenges beyond borders ex. large-scale academia-private collaboration, international R&D collaborations

- R&D management reform cf. SIP, PRISM, ImPACT
Thank you for your attention