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S&T-related Supplemental Budget The Japanese Government's Economic Stimulus Package-2009

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The Japanese Government Economic Stimulus Package in JFY 2009 (Japanese Fiscal Year 2009: April 2009-March 2010) includes a science and technology-related budget of ¥1,346.5 billion (~\$13.5 billion). This is about ten percent of the package. This strong focus reflects the Government's view that S&T is vital to recovery of the economy. A summary of the recent science and technology-related budgets prepared by MEXT is shown in Table 1.

Table 1: Japan's Recent Science and Technology-related budgets

(Unit: ¥Billion)

	JFY2008 Budget (¥Billion)	JFY2008 1st Supplemental Budget (¥Billion)	JFY2008 2nd Supplemental Budget (¥Billion)	JFY2009 Budget (¥Billion)	JFY2009 Supplemental Budget (¥Billion)
S&T-related budget Total	3,570.8	165.9	74.1	3,563.9	1,346.5

When viewed by ministry/agency (Table 2), about half of the supplemental budget for S&T is allocated to the Ministry of Culture, Sports, Science and Technology (MEXT), followed by the Ministry of Economy, Trade and Industry (METI) and the Ministry of Health, Labor and Welfare (MHLW).

Table 2: Breakdown of the JFY2009 Science and Technology-Related Supplemental Budget by Ministry/Agency

(Unit: ¥Billion)

Ministry/Agency	JFY2009 S&T-related Supplemental Budget
Ministry of Education, Culture, Sports, S&T (MEXT)	(a) 656.2
Ministry of Economy, Trade and Industry (METI)	344.9
Ministry of Health, Labor, and Welfare (MHLW)	230.7
Ministry of Internal Affairs and Communications (MIC)	58.1
Ministry of Agriculture, Forestry, and Fisheries (MAFF)	40.0
Ministry of Land, Infrastructure, and Transportation	8.7
Ministry of Environment	3.5
Cabinet Office	3.3
Ministry of Justice	0.8
Police Agency	0.3
Ministry of Defense	0.1
Diet	0.0
Ministry of Foreign Affairs	0.0
Ministry of Finance	0.0
Cabinet Secretariat	0.0
TOTAL:	1,346.5

(Source: MEXT)

(The separate line items may not add up to the total due to the rounding errors.)

Establishment of Special Fund at JSPS (Japan Society for the Promotion of Science):

Out of the total amount allocated to MEXT, ¥300 billion (~\$3 billion) will be transferred to a Special

Fund established at JSPS. The money will be spent over the 5-year period from 2009-2013 [Table 2 – item (a)]. Japanese government's research budgets usable over more than two fiscal years are unprecedented. It has been difficult for the Japanese researchers to fully and effectively spend research funds due to the inflexibility of short fixed-term budgets. In order to transfer the ¥300 billion (~\$3 billion) into the JSPS's special fund, it is necessary to amend the law governing JSPS. A draft law currently awaits approval by the Diet. The fund would be dedicated to the following two specific five-year programs:

1. Establishing 30 "World-class Cutting-edge Research Centers (tentative name)" [¥270 billion (~\$2.7 billion).] The CSTP (Council for Science and Technology Policy) is currently developing the procedures for proposal solicitation, review mechanisms, and award management. It is likely that these centers will be managed by several funding agencies to which JSPS will transfer the funds. Each center's award budget will total ¥9 billion (~\$90 million) to be spent over 5 years.

2. Providing support for young Japanese researchers (graduate students, post docs and perhaps beginning faculty) [¥30 billion (~\$0.3 billion)]: JSPS plans to send 15,000-30,000 outstanding young Japanese researchers to other countries. The details of the program are still under discussion at JSPS.

[NSF Tokyo Regional Office will report again on the above special fund, when the details are finalized.]

Other S&T-related Budgets:

Listed below are examples of specific activities that will be supported by the ministries' supplemental funds.

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

- ¥69.5 billion (~\$0.7 billion): Industry-university-government cooperative research centers in all 47 Japanese prefectures
- ¥10 billion (~\$0.1 billion): Research on regenerative medicine using iPS (induced pluripotent stem) cells
- ¥10 billion (~\$0.1 billion): Infrastructure for the development, launch, and use of quasi-zenith satellites; the earth observation satellites and extremely small satellites
- ¥5 billion (~\$50 million): Environmental technology development centers
- ¥4 billion (~\$40 million): Facilities for WPI (World Premier International) Centers

- ¥4 billion (~\$40 million): Marine resource exploration technology development
- ¥0.5 billion (~\$5 million): A new program to encourage companies to hire postdocs. Japanese companies are reluctant to hire postdocs, so MEXT will provide companies with ¥5 million (~\$50K) per postdoc.

METI (Ministry of Economy, Trade and Industry)

- ¥31 billion (~\$310 million): Advanced R&D facilities for nanotechnology, storage batteries and solar panel
- ¥29.5 billion (~\$295 million): A marine resource exploration vessel
- ¥20.5 billion (~\$205 million): Low Carbon Society projects
- ¥12.7 billion (~\$127 million): Cool Earth (energy innovation) projects
- ¥4.8 billion (~\$48 million): A coastal aqua-community project
- ¥3.5 (~\$35 million): Acceleration of Green IT projects
- ¥3 billion (~\$30 million): Biomass related projects
- ¥2 billion (~\$20 million): International cooperative R&D on innovative solar energy and hydrogen storage

MHLW (Ministry of Health, Labor and Welfare)

- ¥127.9 billion (~\$1.3 billion): Development and production of vaccines for new strains of influenza virus
- ¥75.3 billion (~\$753 million): Development of pharmaceuticals for (a) cancer and (b) children's diseases
- ¥12 billion (~\$120 million): Medical centers to address issues of national priority (iPS cell application, regenerative medicine, innovative medical equipment, innovative bio pharmaceuticals, R&D on cancer, cardiovascular diseases, neurological and mental diseases, incurable and rare diseases)
- ¥4.2 billion (~\$42 million): Acceleration of review process for approving medicine
- ¥2.9 billion (~\$29 million): Subsidies for research on the government-designated diseases
- ¥2.1 billion (~\$21 million): International Medical Center of Japan
- ¥1.7 billion (~\$17 million): National Institute for Sciences
- ¥1.4 billion (~\$14 million): National Cancer Center

MIC (Ministry of Internal Affairs and Communications)

- ¥38.9 billion (~\$389 million): Strengthening of R&D facilities for information and communication technologies

- ¥10 billion (~\$100 million): Acceleration of priority R&D programs in information and communication technologies

MAFF (Ministry of Agriculture, Forests and Fisheries)

- ¥19.3 billion (~\$0.2 billion): Creation of industries that make use of locally available resources
- ¥8.2 billion (~82 million): Soil science research
- ¥4.0 billion (~\$40 million): Research on Japanese cedar pollen syndrome, commercialization of genetically modified silkworms, low-cost, high-yield rice at the National Institute of Agrobiological Sciences
- ¥3.4 billion (~\$34 million): Facilities for research on preventing global warming at the Forestry and Forest Products Research Institute
- ¥2.7 billion (~\$27 million): Energy-conserving fishing boats and genome analysis at the Fisheries Research Agency
- ¥1.8 billion (~\$18 million): Analysis and use of genetic information to accelerate the production of new varieties, including low-cost, high-yield rice at the National Agriculture and Food Research Organization
- ¥0.6 billion (~\$5.5 million): Development of technologies for biomass utilization