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Japan's Science, Technology and Innovation (STI) Budget And Budget-making Process for JFY2015

Japan's FY2015 (April 2015-March 2016) STI budget will be 3,447 billion yen (\$34.47 billion), a decrease of 5% over the previous year (see Table 1), and 3.4% of the total Japanese FY2015 budget.

Table 1: JFY2015 STI Budget

JFY2014 STI Budget (Billion Yen)	JFY2015 STI Budget (Billion Yen)	Increase/Decrease (%)	JFY2014 STI Supplemental Budget* (Billion Yen)
3,626.9	3,447.0	-5.0	225.8

* - The JFY2014 supplemental budget is actually used in JFY2015.

The STI Budget Committee led by the Council for Science, Technology, and Innovation (CSTI) convened in June 2014 to commence discussions on the JFY2015 STI budget. The Committee members consisted of the STI Ministers and Bureau Director-Generals of the STI ministries and agencies. All the STI ministries and agencies individually presented their preliminary plans for their JFY2015 budgets at the meeting, allowing plenty of time for discussions within the Budget Committee for the development of a focused STI budget without any duplication.

In mid-July the STI Budget Committee announced the STI budget guidelines for JFY2015 that list the five priority policy areas designated in the Comprehensive STI Strategy-2014: 1) Clean and economic energy systems; 2) Healthy long life; 3) Next-generation infrastructure; 4) Local-area revitalization; and 5) Recovery from the disaster caused by the 3-11 Tohoku earthquake. Based on the guidelines, each STI ministry and agency submitted their final JFY2015 STI budget request to the Ministry of Finance (MOF) by the end of August 2014. After discussions between the ministries & agencies and MOF, the JFY2015 budget proposal was determined on January 14, 2015. The budget proposal is normally in place by the end of December of the previous year, but it was delayed this time due to the snap general election that took place in mid-December 2014. The proposed budget is under discussion at the current Diet

session and is awaiting approval by the Diet by the end of March or early April 2015. Unlike the situation in the U.S., the proposed budget rarely undergoes any significant changes while going through the Diet.

The budget for each STI ministry and agency is presented in Table 2. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) will be allocated as much as 66% of Japan's STI budget followed by the Ministry of Economy, Trade and Industry (METI)'s 14%. These percentages are consistent with the previous years.

Table 2 also shows the reasons for the 5% decrease of the JFY2015 STI budget compared with the previous year. The decrease by 572 billion yen (35.2%) for the Ministry of Health, Labor, and Welfare (MHLW) is due to the reclassification of the MHLW's expenses. Most of the 572 billion yen is allocated for the medical support for difficult diseases and child chronic diseases which used to be counted under the MHLW's "STI account," but will be shifted, as of JFY2015, to be counted in the MHLW's "social welfare account," bringing a decrease to the MHLW's STI account. Also, the decrease by 579 billion yen (10.7%) for the Ministry of Economy, Trade and Industry (METI) is a result of METI's energy-related projects that are already funded in the JFY2014 supplemental budget that is actually used in JFY2015. Furthermore, the decrease by 164 billion yen (40.7%) for the Reconstruction Agency that was newly established in 2011 when the Great North East Japan Earthquake occurred suggests that recovery from the enormous disaster has steadily been in place. Thus, the 5% decrease was caused mainly by accounting reasons and not substantial.

Table 2: JFY2015 STI Budget by Ministry and Agency

Ministry and Agency	JFY2014 STI Budget (Billion Yen)	JFY2015 STI Budget (Billion Yen)	Increase/ Decrease (Billion Yen)	Increase/ Decrease (%)
Ministry of Education, Culture, Sports, Science and Technology (MEXT)	2,311.8	2,280.1	318	-1.4
Ministry of Economy, Trade and Industry (METI)	539.6	481.7	579	-10.7
Ministry of Defense (MOD)	161.5	151.7	98	-6.1
Ministry of Health, Labor, and Welfare (MHLW)	162.7	105.5	572	-35.2
Ministry of Agriculture, Forests and Fisheries (MAFF)	97.8	97.0	9	-0.9
Cabinet Office	74.0	70.8	32	-4.4
Cabinet Secretariat	61.0	61.4	4	0.7
Ministry of Environment (MOE)	58.2	59.5	12	2.1
Ministry of Land, Infrastructure, and Transport (MLIT)	52.9	52.7	2	-0.4
Ministry of Internal Affairs and Communications (MIC)	49.3	45.4	38	-7.7
Reconstruction Agency	40.4	24.0	164	-40.7
Ministry of Foreign Affairs (MOFA)	6.3	6.9	6	9.9
Ministry of Justice (MOJ)	6.8	5.9	9	-13.6
Police Agency	2.1	2.1	0	0.0
Ministry of Finance (MOF)	1.3	1.3	0	0.1
Diet	1.1	1.1	0	-0.4
TOTAL:	3,626.9	3,447.0	179.9	-5.0

The following Table 3 provides major programs and projects to be funded within each of the STI ministries and agencies.

Table 3: Major Programs and Projects Implemented in JFY2015

NOTE: The names of the programs/projects are provisional translations and not official.

Major Program/Project	Billion Yen
Ministry of Education, Culture, Sports, Science and Technology (MEXT)	
Strategic promotion of marine resource research	1.2
Next-generation space science and technology	3.3
International Thermonuclear Experimental Reactor (ITER)	22.1
Research on earthquake and tsunami	3.7
Acceleration of decommissioning R&D on Fukushima Dai-Ichi Nuclear facilities	3.8
Post “K” supercomputer (flagship project 2020)	4.0
Security and disaster prevention/space industry promotion by use of space technologies	59.6
Implementation of climate change adaptation technologies	0.6
Arctic research	0.7
Formation of innovation hubs with the already-existing R&D institutions as the centers	1.5
Local area-led R&D initiative	2.6
KAKENHI (curiosity-driven research fund)	227.3
Empowerment of women researchers	1.9
Training of program managers and promotion of their activities	0.1
Innovation Super-bridge: Creation of university-oriented venture businesses	5.7
World Premier International program (WPI)	9.6
Ministry of Economy, Trade and Industry (METI)	
Wind energy generation technology R&D	8.5
Advancement of green diesel engine technologies	0.5
Innovative energy-saving chemical processing technologies	2.6
Innovative new structural materials	4.3
Commercialization of nano-carbon materials	1.6
Innovative hydrogen energy storage and transport technologies	1.7
Maintenance, management, and improvement of the obsolete infrastructure	1.9
Highly-functional lignocellulose nano-fiber: seamless manufacturing from the material to products and components producing technologies	0.5
Commercialization of robots	1.5
Translational research at the National Institute for Advanced Industrial S&T (AIST)	TBD
Translational research between research institutions and small & medium-sized industries	1.4
R&D-type venture creation support	1.8
Ministry of Defense (MOD)	
Dual-wavelength infrared sensors	4.8
Promotion of safe and secure technology R&D	2.6
Ministry of Health, Labor, and Welfare (MHLW)	
Health support for the victims of the 3-11 Great Northeast Earthquake disaster and R&D on health support at large-scale disasters in general	0.2
Ministry of Agriculture, Forestry and Fisheries (MAFF)	
Industry-university-government cooperative promotion of “Knowledge Integration”	1.3
Innovative technology development, including frontier robots	1.4
R&D to develop “Proactive agriculture, forestry and fisheries businesses”	4.6
Acceleration of next-generation greenhouse horticulture business	2.0
Implementation of eel fry mass production system	0.3
Contamination-control technologies for implementing agricultural business after decontamination	0.1

Cabinet Office	
Cross-ministerial Strategic Innovation Promotion (SIP) program	50.0
Cabinet Secretariat – Japan Agency for Medical Research and Development (A-MED)*	
New pharmaceuticals creation	25.6
Medical equipment development	14.5
Innovative medical technology creation	10.6
Regenerative medicine highway (from basic research stage through commercialization) project	14.3
Genome medicine for difficult diseases	7.4
Japan cancer research project	16.2
Brain and mental health project	6.8
New and recurring infectious diseases	5.8
Difficult diseases project	9.6
Ministry of Environment (MOE)	
Wind energy generation test program	1.8
Global environment observation by satellites	3.8
Comprehensive research on radioactive substances in disaster and environment	0.7
Countermeasures for the environmental pollution by radioactive substances	TBD
Ministry of Land, Infrastructure and Transport (MLIT)	
Advancement of monitoring and prediction technologies for extreme weather	0.1
Disaster prevention and fast recovery technologies for large-scale land slide disasters	TBD
Disaster and accident prevention at facilities along the coastal areas	TBD
Development of robots for next-generation social infrastructure	0.4
Maintenance and management of IT-used social capital	0.1
Safe, secure and comfortable society by use of 3D geospatial information	0.1
Ministry of Internal Affairs and Communications (MIC)	
Photonics technology and next-generation optical network to support Big Data distribution	TBD
Strengthening of cybersecurity	TBD
New industry and innovation creation by Big Data	TBD
Global communication – multi-language translation technology	TBD
ICT to maintain and manage smart infrastructure	0.2
Use of real-time information on G space platform	0.1
Next-generation disaster simulation in G space	0.1
Fire extinguishing robot at the time of disasters at energy industries	0.2
Strategic ICT R&D (SCOPE)	2.0
I-Challenge: Innovation creation challenge program	0.4
Ministry of Foreign Affairs (MOFA)	
International R&D cooperation in agriculture to help reduce poverty	0.2
Science and Technology Research Partnership for Sustainable Development (SATREPS)	TBD

*- The health-related budgets allocated to MEXT, MHLW and METI will be collected by A-MED (See Weekly Wire-June 24, 2014 for A-MED at: http://www.nsf.gov/od/iaa/ise/tokyo/articles/Weekly%20Wire-2014_0617.pdf)