

NATIONAL SCIENCE FOUNDATION

TOKYO REGIONAL OFFICE

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The National Science Foundation's Tokyo Regional Office periodically reports on developments in Japan that are related to the Foundation's mission. It also provides occasional reports on developments in other East Asian countries.

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CSTP Rated JFY2011 Japanese S&T Budget Request

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An exchange rate of ¥80/\$ is used.*

The Council for Science and Technology Policy (CSTP) has released its priority ranking of new and continuing S&T programs/projects in the JFY2011 budget request. Japanese ministries/agencies submitted JFY2011 budget request to the Ministry of Finance (MOF) by the deadline of August 31, 2010. Of the request, S&T budget was compiled by the Cabinet Office and reported in the NSF Tokyo Report Memorandum #10-04 (see <http://www.nsftokyo.org/rm10-04.pdf>). Of the S&T programs/projects, 65 new programs/projects with budgets more than ¥100 million (\$1.3 million) and 253 continuing with budgets of ¥500 million (\$6.3 million) and up were selected and put on the website for public comments. Referring to the public comments, CSTP reviewed those programs/projects to rank order the new programs/projects as S (Excellent), A (Very Good), B (Good), and C (to be Reviewed). The continuing programs/projects were prioritized as Accelerate, Continue, and Decelerate. The table below is the rating result.

The total (not limited to S&T) JFY2011 budget request is special in that while the request was required to be 90 percent of the JFY2010 budget or below, it allowed the ministries/agencies to submit a wish list of additional requests for projects/programs that would revitalize the Japanese economy. The table below includes a column for the additional requests.

The additional requests, most not related to S&T, are currently under review by a committee of Diet members. With no clear criteria to review the additional requests, the committee members began to make site visits to the organizations that promote the programs/projects with the additionally requested budget. The additional requests include the programs/projects essential in promoting basic research such as the grant program for individual investigator-led research at the Ministry of Education, Culture, Sports, Science and Technology (MEXT). MEXT split its budget request for so-called grants-in-aid for scientific research into ¥175 billion (\$2.2 billion) in regular funds and ¥35 billion (\$437.5 million) in additional 'revitalize Japan' funds for a total of ¥210 billion (\$2.6 billion). This is a slight increase over the ¥200 billion (\$2.5 billion) grants-in-aid budget in JFY2010, but if the 'additional request' is denied, basic research in universities will be challenged to adapt to the sharp budget cut. As a result, deans of 32 science faculties of national university corporations signed a statement urging approval of the full grants-in-aid request – original plus additional – of ¥210 billion (\$2.6 billion). A decision on additional budget requests will be made in early December.

The Ministries/agencies are currently engaged in negotiations with MOF. MOF will complete the Japanese Government JFY2011 budget proposal at the end of December 2010, referring to the CSTP's scientific review and the Diet members' review on the additional request. The proposed budget will be discussed in the Diet session held January- March and take effect in April 2011. The Diet session usually makes only negligible changes to the budget proposal.

NEW PROGRAMS/PROJECT

Green Innovation

Rating	Ministry/ Agency	Program/project	JFY2011 Request (¥ Million)	JFY2011 Additional Request (¥ Million)
S	MAFF	Monitoring of coastal fishing by meta-genomic analysis	143	0
S	METI	Next-generation printed electronics materials/processes	0	1,900
S	METI	Normally-off computer by spintronics technology	1,305	0
S	METI	Next-generation energy in society: experimental	10,000	8,200
S	METI	Prediction of solar energy output	100	0
S	METI	Output power control for next-generation interactive communication	1,000	0
S	MEXT	Advanced technologies for stable marine resource supply	278	0
A	METI	Ultra-low power consuming optical electronic hybrid circuit	100	0
A	METI	Ocean energy	1,000	0
A	METI	New energy: battery systems	2,000	0
A	METI	Innovative carbon fiber technologies	250	0
A	METI	Sustainable green chemical processes: innovative green technology development to enable conversion and diversification of materials for chemical products	0	850
A	METI	Sustainable green chemical processes: next-generation green innovation evaluation	0	510
A	METI	Solar-energy housing	250	0
A	METI	Highly-efficient CFC-free air conditioning	500	0
A	METI	Carbon dioxide capture and storage (CCS)	963	0
A	METI	Membrane modules for carbon dioxide separation	300	0
A	METI	Lower cost lithium-ion battery to replace fossil fuels	500	0
A	METI	Advanced heavy oil processing technology : contract fees	500	0
A	METI	Advanced heavy oil processing technologies	800	0
A	METI	Highly efficient hydrogen manufacturing technologies	80	0
A	MEXT	University-oriented green innovation creation program		5,000
A	MLIT	Housing evaluation technologies	72	0
B	METI	Nitride semiconductor as next-generation light source	2,400	0
B	METI	Comprehensive control systems for green sensors	1,050	0

Life Innovation

Rating	Ministry/Agency	Program/project	JFY2011 Request (¥ Million)	JFY2011 Additional Request (¥ Million)
S	MEXT	Compilation of life science database	1,800	0
S	MEXT	Acceleration of translational research	0	3,000
A	METI	International R&D in environmental and medical fields: medical equipment	800	0
A	MEXT	Strategic promotion of next-generation cancer research	0	3,800
A	MHLW	Comprehensive research on lifestyle and difficult diseases: chronic pain	260	0
A	MIC	Innovation creation by Brain Machine Interface (BMI)	0	2,046
B	MEXT	Cell behavior systems	1,186	1,000
B	MAFF	Analysis/evaluation of the functions of agricultural/forestry/fisheries products and foods	500	0
B	METI	Stem cell commercialization evaluation technologies	0	1,340
C	MHLW	Third strategic comprehensive cancer program: cancer peptides	4,805	2,900

Personnel Training

S	MEXT	Introduction of tenure track system	0	2,674
S	MEXT	Ph.D. program to train world-leading researchers	0	5,150
A	MEXT	Postdoctoral fellowship	0	529
A	MEXT	Support for women researchers	0	311
A	MEXT	Training of research administrators	0	500
A	MEXT	Training of math and science students	0	185
B	MEXT	Strategic program to send young researchers overseas to enhance brain circulation	0	2,000

Quality of Life

S	MIC	Safety from various types of fire	50	0
A	MIC	Research on safety of firemen	43	0
A	MIC	Research on hazardous materials and facilities	41	0
A	PA	Simulation technology to investigate fire	38	0
A	PA	Medical and psychological research on drunk driving	10	0

Industrial Base

Rating	Ministry/Agency	Program/project	JFY2011 Request (¥ Million)	JFY2011 Additional Request (¥ Million)
S	METI	Innovative ultra-light/highly-strong materials for low carbon society	300	0
A	METI	World-leading experiments on hazard control for chemical substances, including oil-refined products	300	0
B	METI	Genetic modification in closed plant factory	130	0

Topics of National Importance

S	MEXT	Geological observation and earthquake prediction	3,264	0
S	MEXT	Disaster mitigation	1,712	0
S	MEXT	Non-proliferation/nuclear security	215	0
A	MLIT	Highly precise positioning technologies by global navigation satellite system by multi number satellites	100	0

Information Infrastructure

S	MIC	Next-generation communication network test bed (JGN-X)	0	5,349
A	MAFF	Genomic information database to create innovative agricultural and livestock business	350	0
A	MEXT	Centers that link math and science with other academic fields	10	0
A	MIC	Anti global-scale cyber attack technology	0	700
A	MIC	Next-generation space communication technology by effective use of frequency	300	0
A	MIC	Advanced use of frequency for new broad-band access in white space	900	0
B	MIC	Communication satellite technologies to be developed globally	0	1,026

Innovation Creation

S	MOFA	Networking with developing countries based on JICA's network	0	Part of the fund to JICA
A	MEXT	Local area vitalization through university-born research results	2,000	0
A	MOFA	Research collaboration with developing countries to solve global-scale problems	0	Part of the fund to JICA

CONTINUING PROGRAMS/PROJECTS

	Accelerate
	Continue
	Decelerate

Green Innovation

Ministry/ Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MAFF	Biomass-used technologies to vitalize local areas	1,503	1,634	0
MAFF	Recycle-type food production to cope with climate change	675	1,461	0
METI	International research center for innovative solar batteries	1,900	2,050	0
METI	Innovative system for producing ethanol from cellulose	1,900	2,424	0
METI	Efficient conversion of biomass and other materials into energy	3,458	2,565	0
METI	Frontier basic science on innovative batteries	3,000	3,000	0
METI	Highly-capable battery systems for next-generation automobiles	2,480	2,480	0
METI	Polymer electrolyte fuel cell: to be used in automobiles	5,100	3,880	0
METI	Hydrogen manufacturing, transport, and storage system	1,350	1,500	0
METI	Frontier basic research for hydrogen storage materials	900	600	0
METI	Frontier basic research on hydrogen	1,000	700	0
METI	Ultra-low electric power device project for low carbon society	2,545	2,425	1,800
METI	Power semi-conductor using new materials	2,000	1,565	2,000
METI	Next-generation highly-reliable/energy saving basic IT technologies	860	1,728	0
METI	Green IT project	4,000	2,640	0
METI	Next-generation power distribution control technologies	350	340	0
METI	Creation of photocatalyst industry for recycling society	669	572	0
MEXT	JST: frontier low carbon technology development on solar battery, woody biomass, and new electronics based on organic materials	2,500	0	4,549
MEXT	RIKEN: Creation of future green materials: next-generation coating-type organic thin-film solar cells	440	500	0
MEXT	JST: basic research programs, including S&T for Society: ultra-low electric power for information systems	52,520	53,120	0
MEXT	Next-generation IT: device/system technologies for highly-functional/low energy-consuming computing	208	165	0
MEXT	JAXA: advancement of satellite data to predict/analyze global environment	4,874	2,584	2,324
MEXT	JAMSTEC: research on global environment change	3,218	3,108	0

Ministry/ Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MEXT	Innovative program for predicting climate change in the 21 st century	1,540	582	0
MEXT	Strategic initiative for adapting to climate change	1,618	1,040	0
MEXT	Coordination funds for promoting S&T	29,643	28,161	0
MEXT	Advancement of technologies for exploring marine mineral resources	698	532	0
MIC	Frontier green cloud computing technology	980	0	1,550
MIC	Photonics network	3,733	2,414	2,254
MIC	Ultra-high speed optical edge node	630	0	980
MLIT	Localized heavy rain in relation to climate change	10	14	0
MOE	Comprehensive environment research	7,007	7,007	2,762
MOE	'Satoyama (harmony between nature and human beings)' initiative	91	91	0
MOE	Technology development to cope with global warming	5,002	5,000	2,000

METI	Next-generation advanced technology for solar power generation systems	4,077	5,100	920
METI	Strategic next-generation biomass energy	542	1,580	0
METI	Next-generation highly functional network device	385	366	0
METI	Dream chip (3-dimensional integrated circuit with new function)	900	770	0
METI	Polymer electrolyte fuel cell technologies: non-automobile usage	5,100	3,880	0
METI	Green IT project	4,000	3,640	0
METI	Environment-friendly water circulation	700	650	0
METI	Super light and highly strong materials for low carbon society	1,500	600	1,240
METI	Creation of leading industrial technologies: energy-saving industrial technologies and non-fossil energy industrial technologies	3,092	3,157	0
METI	Advanced reprocessing of used fuel	1,796	2,450	0
METI	Geological processing technology	2,949	3,894	0
METI	Next-generation light-water reactor	1,940	2,098	0
METI	Strategic and advanced use of nuclear power	1,630	1,000	0
METI	Next-generation wind power generation	285	785	0
METI	Off-shore wind power generation	2,301	3,731	0
METI	New energy venture: technology innovation	1,600	1,600	0

Ministry/ Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
METI	Element technology development for solid oxide fuel cell systems	800	650	0
METI	Sustainable hyper composite technologies	600	500	0
METI	Sustainable green chemical processes: innovative manufacturing processes for functional chemical products	370	370	0
METI	Sustainable green chemical processes: innovative manufacturing processes for petrochemical products	710	710	0
METI	Sustainable green chemical processes: evaluation of the next-generation battery materials	133	250	0
METI	Sustainable green chemical processes: advancement of the functional materials for semiconductors	40	40	0
METI	Advanced aerodynamic designs	3,330	3,330	0
METI	Advanced system for airplanes	388	635	0
METI	Carbon fiber: composite modeling technologies	1,462	1,158	0
METI	Creation of next-generation structural materials: processing technologies	368	699	0
METI	Environment-friendly small airplane engine	534	803	0
METI	Environment-friendly steel processing technologies	1,960	2,800	0
METI	Innovative steel processing technologies by saving energy and using lower-grade materials	420	700	0
METI	Clean coal technologies	1,500	1,900	0
METI	Innovative energy-saving technologies	7,000	6,000	0
METI	Next-generation heat pump systems	400	800	0
METI	Yttrium-based superconducting power apparatus	2,916	2,500	0
METI	Commercialization of highly efficient gas turbine	3,081	1,721	0
METI	Element technologies for generating advanced ultra-super critical pressure power	743	1,100	0
METI	Demonstration of carbon dioxide reduction technologies	5,900	5,000	0
METI	Next-generation environment-friendly fuels	750	700	0
METI	Innovative next-generation oil refining technologies	3,376	2,058	0
MEXT	Acceleration of innovation by industry-university cooperation: strategic innovation creation	973	1,150	0
MEXT	Development of environmental technologies by nanotechnology	410	349	0
MEXT	NIMS: next-generation solar battery	673	905	0
MEXT	JST: basic research programs, including S&T for Society: solar energy conversion in interdisciplinary fields, and R&D on battery, fuel cell, hydrogen supply systems	52,520	53,120	0
MEXT	Acceleration of innovation by industry-university cooperation: frontier measurement analysis technologies/equipment development	4,951	4,456	0

Ministry/ Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MEXT	RIKEN: biomass engineering	560	710	0
MEXT	NIMS: highly-capable power generation/battery materials	417	670	0
MEXT	JST: frontier low carbon technology development, excluding solar battery, woody biomass, and new electronics based on organic materials	2,500	0	4,549
MEXT	RIKEN: creation of future green materials, excluding next-generation coating-type organic thin-film solar cells	440	500	0
MEXT	JST: societal scenario for realizing low carbon society	300	0	451
MEXT	Domestic airplane: highly functional technology/clean engine technologies	1,731	1,428	0
MIC	ICT green innovation	566	0	1,037
MLIT	Marine environment initiative	817	831	0
MOE	R&D on global warming	5,022	5,000	2,000
MOE	Global environment observation via satellites	696	711	0
MOE	Measurement of CO2 reduction/absorption in the woods of developing countries	39	200	0

Life Innovation

METI	Comprehensive research on cancer: early-stage diagnosis and treatment equipment	1,220	477	1,600
METI	Translational research from basic to clinical	2,550	1,615	0
METI	Drug discovery using acquired genome modification mechanism	320	243	0
METI	Commercialization of Life-support robots	1,525	1,050	840
METI	Next-generation robot intelligent technology	910	778	0
METI	Basic biological technology to accelerate genomic drug discovery	1,570	1,417	0
MEXT	Cancer treatment using heavy ion beam	1,676	1,816	2,200
MEXT	Diagnosis and treatment method using molecular imaging method: Open-PET equipment	866	830	0
MEXT	Brain research strategic promotion: Brain Machine Interface	2,390	1,790	2,000
MEXT	Molecular imaging research: strategic program	530	500	0
MHLW	Comprehensive research on longevity and handicapped: mental disease-related research: part of the research on difficult diseases and cancer: equipment to support handicapped with brain information, preventive nursing care with advanced equipment, equipment to support those with Alzheimer's disease	3,108	2,686	150
MHLW	Comprehensive research on infectious diseases: part of the research on difficult diseases and cancer: hepatitis	6,613	5,505	500
MIC	On-site communication technology using innovative 3-D images	1,108	1,040	0

Ministry/ Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MIC	R&D on life-support robots	739	0	750
MOE	National survey on children's health and environment	3,140	3,140	2,000

MAFF	Commercialization of technologies born from the combination of agriculture and medicine (agri-health business)	551	618	0
MEXT	Diagnosis and treatment method using molecular imaging	866	830	0
MEXT	Molecular imaging	1,315	1,347	0
MEXT	Brain research strategic promotion, excluding Brain Machine Interface (BMI)	2,390	1,790	2,000
MEXT	Personalized medical care	2,027	1,560	0
MEXT	National bioresource project	1,338	1,325	0
MEXT	Regenerative medical care	2,370	0	4,000
MEXT	Innovative protein/cell analyses research initiative	5,170	4,498	0
MEXT	Comprehensive brain research	8,586	8,364	0
MEXT	Plant science	1,248	1,136	0
MEXT	Comprehensive immunology/allergy research	3,084	2,807	500
MEXT	Genomic medical research	1,474	1,341	0
MEXT	Comprehensive developmental biology research	4,195	3,818	0
MEXT	Bioresource research	3,126	2,999	0
MEXT	Basic research on life science: omics	1,490	1,416	0
MEXT	Infectious diseases: international network promotion program	1,900	1,800	0
MHLW	Comprehensive research on commercializing medical technology: part of the research on difficult diseases and cancer: clinical research	6,014	5,187	900
MHLW	Third comprehensive cancer strategic program, excluding cancer peptide	5,806	4,805	2,900
MHLW	Comprehensive research on longevity and the handicapped: part of the research on difficult diseases and cancer: research on mental diseases, excluding equipment to support the handicapped with brain information, preventive nursing care with advanced equipment, equipment to support Alzheimer's disease patients	3,108	2,686	150
MHLW	Frontier research: drug discovery	3,700	3,371	0
MHLW	Frontier research: commercialization of regenerative research, medical equipment development, regenerative medicine for difficult diseases and cancer	2,857	1,425	1,000
MHLW	Comprehensive research on lifestyle and difficult diseases: cardiovascular, diabetes, kidney, immunology/allergy	3,109	2,404	0
MHLW	Local area medical base	692	533	0

Ministry/Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MHLW	Risk analyses on foods and medical products: comprehensive research on regulatory science including drugs and medical equipment	649	413	0
MHLW	Basic research at the National Institute of Biomedical Innovation (NIBIO)	6,301	4,664	0
MHLW	Risk analyses on foods and medical products: chemical substances	1,084	839	0

MHLW	Comprehensive research on lifestyle and difficult diseases: difficult diseases	10,000	7,000	4,000
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Basic Research

MEXT	World premier International (WPI)	7,109	8,218	0
MEXT	Atacama Large Millimeter Array (ALMA) program	4,242	1,054	0
MEXT	New physics law by advancement of B-factory accelerator	7,500	5,112	0

MEXT	Funding Program for World-Leading Innovative R&D on Science and Technology (FIRST)	40,000	18,000	0
MEXT	RI beam factory	3,593	3,660	0

Personnel Training

MEXT	Postdoc fellowship	16,740	11,988	6,400
MEXT	Graduate education improvement: institutional improvement program	2,203	693	0
MEXT	Global COE (Center of Excellence) program	26,474	26,429	0
MEXT	Super science high schools	2,064	2,103	0
MEXT	Science communication program	659	581	0

MEXT	Facilities for science education	1,100	990	0
MEXT	Science support staff	1,000	963	0
MEXT	Science partnership project	743	727	0
MEXT	International training program	2,048	2,049	0

Quality of Life

MAFF	Development of new agriculture business	3,277	3,050	0
MAFF	Risk management for bird flu, mad cow disease, mouth and foot disease	587	661	0

Ministry/Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MEXT	All weather/high-density flight technologies	619	714	0
MHLW	Risk analysis on foods and medical products: safety of foods	1,486	1,140	0
MAFF	Domestic livestock by domestically-supplied foods	545	516	0
METI	Methane hydrate development	4,543	8,930	0

Industrial Base

MEXT	Element strategy project	520	534	0
METI	Rare-metal equivalent materials development	1,240	1,302	0
METI	Embedded system development	733	865	0

METI	Advancement of strategic base technologies	15,005	15,000	0
METI	Innovative high-strong and highly functional iron and steel technology	350	500	0
METI	Next-generation device manufacturing by merging interdisciplinary technologies	802	712	0
METI	High-output-power and long-wavelength laser processing technology	700	1,170	0

Topics of National Importance

MEXT	Special project for preventing/mitigating disaster caused by large-scale earthquake in urban areas	755	881	0
MEXT	Solid rocket	2,000	3,800	0
MEXT	No. 26 th scientific satellite (ASTRO-H)	100	3,018	0
METI	Advanced space system by smaller-size satellites	2,246	220	5,640

METI	Oil resource remote detecting technologies	1,188	1,150	0
METI	Next-generation global observation sensors (highly functional hyper-spectrum sensor)	2,400	2,765	0
MEXT	Research on active fault	588	585	0
MEXT	International Thermonuclear Experimental Reactor (ITER)	9,906	11,742	0
MEXT	Nuclear power: basic strategic research initiative	997	682	0
MEXT	Nuclear power system R&D	4,144	3,810	0
MEXT	International development of Japan-oriented nuclear power through advanced 3S (safety, safeguards, and security) personnel and technology	8,684	0	15,390

Ministry/ Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MEXT	Innovative hydrogen manufacturing technologies	550	730	0
MEXT	Liquid Natural Gas (LNG) propulsion systems	2,950	500	0

Information Infrastructure

MEXT	Nanotechnology network	1,328	1,326	0
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MEXT	Shared use of frontier research facilities	1,398	1,293	0
MEXT	Acceleration of innovation by industry-university cooperation in frontier measurement and analysis technologies, and developing equipment	4,951	4,456	0
MEXT	Quantum physics centers	1,520	1,372	0
MEXT	Japan Proton Accelerator Research Complex (J-PARC)	7,375	10,588	0
MEXT	Large-scale synchrotron accelerator facilities (Spring-8)	9,440	9,137	0
MIC	Security for cloud computing	522	0	584
MIC	Free space optics technologies	510	0	509
MIC	Quasi-zenith satellite systems	1,063	638	0
MIC	Basic technologies for next-generation network	1,756	1,300	0
MIC	Wireless network technologies	3,624	3,004	0
MIC	Basic technologies for network security	1,478	1,489	0
MIC	Advanced ICT technologies	2,641	3,835	0
MIC	Electromagnetic wave measurement technologies	3,437	3,804	0
MIC	Element technology for advanced use of frequency in mobile communication systems	3,683	3,323	0
MIC	Shift of wireless systems to unused bandwidth	1,922	2,180	0
MIC	Terrestrial and satellite mobile phone system technologies	760	550	0

Innovation Creation

METI	International Standardization	2,536	1,480	1,000
MEXT	International S&T Research Cooperation Program, including SATREPS and Strategic International S&T Cooperation Promotion Program	3,390	3,371	801
MOFA	Science and Technology Research Partnership for Sustainable Development (SATREPS)	3,230	Part of the fund to JST	0

Ministry/Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
CAO	Okinawa Institute of Science and Technology (OIST)	13,312	10,579	2,000
MAFF	Basic research to create innovation	5,904	5,627	0
MAFF	New policies to promote commercialization of agriculture, forestry, and fisheries technologies	7,039	5,208	0
METI	Strengthening of industrial R&D	900	600	0
METI	US-Japan cooperative research on energy, environment technologies, and standardization	400	600	0
METI	Creation of innovation in local areas	3,440	2,000	0
METI	Research cooperation with developing countries	600	540	0
MEXT	Innovation system improvement: Local area innovation cluster program	12,065	9,359	0
MEXT	Acceleration of innovation by industry-university cooperation: industry-university joint basic research	300	0	2,000
MEXT	University promotion of industry-university-government cooperation	2,649	2,310	0
MEXT	Comprehensive support to transfer university-born technologies to industries	16,580	7,921	9,000
MEXT	Utilization of intellectual property	2,238	2,035	700
MEXT	Acceleration of innovation by industry-university cooperation: creation of strategic innovation	973	1,150	0
MEXT	JSPS: international programs	7,213	6,975	0
MIC	Strategic information communication R&D promotion	1,787	1,672	0
MIC	Universal voice/language communication technology	1,524	2,248	0

Innovation Creation: S&T Research Results to be Returned to the Society

CAO	Level of disaster visible to the public	68	68	0
CAO	Comprehensive system for disaster information	697	401	0
CAO	Hazard map by establishing disaster-related information infrastructure	12	9	0
MAFF	Biomass technologies to vitalize local areas	1,503	1,634	0
METI	Energy-saving intelligent transport system (ITS)	904	950	0
METI	Intensive and shared probe information	0	190	0
METI	Large-scale carbon dioxide fixation using biotechnology	75	68	0
METI	Advanced biomass energy conversion technologies	3,458	2,565	0
METI	Innovative production system for cellulosic ethanol	1,900	2,424	0
MEXT	Disaster prevention: disaster risk information platform	0	1,251	0

Ministry/ Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
MEXT	Monitoring system for earthquake/tsunami observation	1,510	1,290	0
MIC	Part of the research on electromagnetic wave measurement equipment	180	140	0
MIC	Use of ICT in preventing disaster caused by fire	17	15	0
MIC	Information technologies to cope with large-scale disaster	0	44	0
MIC	ITS information communication system survey to realize low carbon society	150	150	0
MIC	Universal voice/language communication technology: automatic voice translation technology	660	920	0
MILT	Information communication on disaster prevention by advanced use of optical fiber or other communication infrastructures	11	10	0
MLIT	Advanced precision in predicting floods / for real-time hazard maps	Part of the funds for flood control	Part of the funds for flood control	0
MLIT	Disaster information sharing system (DISS)	Part of 40	Part of 40	0
MLIT	Safe and efficient traffic systems by intelligent transport system (ITS)	Part of the road fund	Part of the road fund	Part of the road fund
MLIT	Advanced safe vehicle (ASV) project	95	99	0
MLIT	Low-carbon-emission vehicle to promote innovation in traffic and distribution systems in local areas	20	40	0
PA	Environment-friendly model programs on highway transportation system: traffic control system using probe information	245	0	139

MEXT	Regenerative medical care	2,370	0	4,000
METI	Translational research from basic to clinical research	2,550	1,615	0
METI	Strategic next-generation biomass energy technologies	542	1,580	0
METI	Biomass resources and energy circulation in local areas	Part of the integrated infrastructure development fund	Part of the integrated infrastructure development fund	Part of the integrated infrastructure development fund
MHLW	Frontier basic research: regenerative medical care and equipment, and part of realization of medical care for difficult and cancer diseases	2,857	1,958	1,000
MHLW	Risk analysis research on foods and medical products: comprehensive research on regulatory science including medical products and equipment	649	516	0
MOE	R&D to cope with global warming	Part of 5,000	Part of 5,000	Part of 2,000

Programs Reviewed but Not Rated (nationally important programs/projects essential to be promoted)

Ministry/Agency	Program/Project	JFY2010 Budget (¥ Million)	JFY2011 Budget (¥ Million)	JFY2011 Additional Request (¥ Million)
METI	New nuclear reactors for power generation	5,597	7,385	0
MEXT	JAMSTEC: exploration and use of marine resources and energy	0	0	2,587
MEXT	JAXA: earth observation satellite	1,788	4,729	0
MEXT	Dynamics of the Earth's interior region	1,093	1,072	0
MEXT	Biosphere in marine and extreme environments	813	797	0
MEXT	Global development of Japanese space technology: frontier space S&T and personnel training	8,529	0	27,200
MEXT	Fast breeder reactor	42,095	40,807	0
MEXT	Innovative high-performance computing infrastructure (HPCI)	22,779	0	39,800
MEXT	X-ray free electron laser (XFEL)	4,365	4,878	0
MEXT	International space station	40,437	39,393	0
MEXT	Advancement of rocket	412	2,184	0
MEXT	Grants-in-Aid for Scientific Research	200,000	175,000	35,000
MEXT	JST: Basic research, including S&T and Society	52,520	53,120	0
MEXT	Fund for private universities	158,391	140,816	22,744
MEXT	Facilities for private schools	876	1,139	0
MEXT	Research facilities at private universities	3,361	3,106	0
MEXT	Education facilities at private schools	7,198	7,266	0
MEXT	Coordination fund for promoting S&T	29,643	28,161	0
MEXT	Facilities for national university corporations	50,000	45,279	5,051

Appendix

Abbreviations Used in the Table

CAO	Cabinet Office
JAMSTEC	Japan Agency for Marine-Earth Science and Technology
JAXA	Japan Aerospace Exploration Agency
JSPS	Japan Society for the Promotion of Science
JST	Japan Science and Technology Agency
MAFF	Ministry of Agriculture, Forestry and Fisheries
METI	Ministry of Economy, Trade and Industry
MEXT	Ministry of Education, Culture, Sports, Science and Technology
MHLW	Ministry of Health, Labor, and Welfare
MIC	Ministry of Internal Affairs and Communications
MLIT	Ministry of Land, Infrastructure, and Transportation
MOE	Ministry of Environment
MOFA	Ministry of Foreign Affairs
NIMS	National Institute of Materials Science
PA	Police Agency