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CSTP Review of Major Japanese Government-funded S&T programs/projects in JFY2009

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Japan's JFY2009 (April 2009-March 2010) budgets for S&T-related programs/projects requested by ministries/agencies toward the deadline of August 31, 2008 were collected by CSTP (Council for Science and Technology Policy) as reported in http://www.nsftokyo.org/rm08-07.pdf. CSTP reviewed the requested research programs/projects and issued the review result at the end of October, 2008. Attached tables summarize the result for (1) 85 new programs/projects – Table 1, and (2) 200 continuing programs/projects - Table 2.

1. New Programs/Projects: CSTP reviewed 85 new programs with a budget of over ¥100 million ($1 million), plus all the projects that are classified under the following priority technologies: Transformational technologies; Environment and energy technologies; S&T diplomacy; Regional vitalization through S&T; and Return of S&T results to the society. All of these technologies were designated as JFY2009 priorities in June 2008 by CSTP. S&T budget request for JFY2009 has

increased by 14 percent overall and by 43 percent for the priority technology areas, compared to the previous year's budget. A total amount requested for the new programs/projects was ¥76 billion ($760 million). CSTP rated each program/project as S (excellent), A (very good), B (good), or C (to be reviewed). Of particular interest this year is that CSTP rated only one program as S, which is very different from the previous years when several programs were rated as S. They rated 34 as A, 43 as B, and 7 as C. This indicates that CSTP has chosen the S-rated program "Frontier basic research on innovative storage battery" as exceptionally critical, recognizing its potentially significant contributions in realizing a low-carbon society. A few examples of A-ranked programs/projects are: Intelligent cluster creation program at MEXT; Strategic innovation creation program at MEXT; and Marine environment initiative at MOE.

2. Continuing Programs/Projects: CSTP also reviewed 200 continuing programs/projects with a budget of over ¥1 billion ($10 million), plus those programs/projects with budgets of over ¥500 million ($5 million) that are in the priority technology areas mentioned above. A total amount requested for them was ¥687.6 billion ($6.9 billion). CSTP commented whether they are (1) to be accelerated (12 programs/projects), (2) to be promoted (186 programs/projects), or (3) to be decelerated (2 programs/projects). A few examples to be accelerated are: Organizational graduate education reform requested by MEXT; Science and technology research partnership for sustainable development requested jointly by MOFA/MEXT; and Research grants for promoting a recycling society at MOE.

The CSTP's review results were forwarded to the Ministry of Finance (MOF) at the end of October. MOF is to use the information in making almost a final decision on the JFY2009 S&T budget by the end of December 2008. In parallel to this process, each ministry/agency held intensive negotiations with the MOF from September through November. The 3rd Science and Technology Basic Plan (2006-2010) targeted ¥25 trillion ($250 billion) (Refer to: http://www.nsftokyo.org/rm06-02.pdf) as a cumulative S&T budget amount for the five years. The target amount was set in 2005 and JFY2009 is the fourth year of this plan. S&T budget watchers are keeping their eyes focused on MOF's decision, given that the present severe economic environment is different from that in 2005 when the target amount was set. NSF Tokyo Office will produce another report when the MOF's decision is made public later this month.

The exchange rate used in this report is ¥100/$ 1 and the abbreviations used throughout this report are listed in the Appendix below.

Table 1: NEW Programs/Projects - JFY2009

	Program/Project	Agency/Res. Inst.	2009 Budget Request (Mil. Yen)
	NOTES		
Rating	Red letters: Competitive funds		
	Life Science		
A	Brain science: strategic promotion program (expanded budget from the previous year)	MEXT	1,000
A	Global-scale health issue	MHLW	630
A	Comprehensive research on lifestyle-related diseases/intractable diseases: Frontier medical development	MHLW	2,000
A	Comprehensive research on lifestyle-related diseases/intractable diseases: Collection of bio test materials	MHLW	1,700
A	Basic technology development to promote stem-cell industries	METI	1,000
A	Elucidation of light response mechanism of organisms and advanced use of the technology	MAFF	500
B	Innovative protein/cell analysis	MEXT	1,385
B	Comprehensive research on lifestyle-related diseases/intractable diseases: rare diseases; expansion of target diseases	MHLW	3,859
B	Low-cost and good-quality processing/industrial agro products (expanded budget from the previous year)	MAFF	134
B	Cyclical use of local resources to establish resource-saving agriculture	MAFF	300
C	Innovative protein/cell analysis: Facilities	MEXT	315
	Information Technology		
A	Green IT project: SiC power device; green cloud computing; heterogeneous many core processor	METI/NEDO	Part of 6,800
A	Supercomputer: promotion of use	MEXT	161
A	Ubiquitous network robots for elderly/disabled: collaboration of multiple number of robots	MIC	Part of 1,000
A	Energy-control home network	MIC	900
A	Comprehensive R&D for IT/Energy	MIC/NICT	260
A	Live-performance-like communication by innovative 3-dimensional	MIC/NICT	Part of 1,227

	image technology: basic research		
A	Basic information strategy program: software to analyze WEB-based society	MEXT	Part of 1,040
A	Market creation by merging IT and service: service engineering research development	METI	Part of 1,875
B	Green IT project: low-electric power circuit system; optical interface-built-in semiconductor device	METI/NEDO	Part of 6,800
B	Ubiquitous network robots for elderly/disabled: WEB management and analysis for cognitive information; robot service linkage system	MIC	Part of 1,000
B	Advancement of network efficiency by nano ICT	MIC	150
B	Mobility support	MLIT	140
B	Live-performance-like communication by innovative 3-dimensional image technology: applied research	MIC/NICT	Part of 1,227
B	Realization of "digital museum"	MEXT	606
B	Market creation by merging IT and service: solution of societal problems	METI	Part of 1,875
B	Monitoring of Illegal and harmful information on internet	MIC/NICT	250
B	ICT innovation to solve global warming problems	MIC	600
C	Next-generation system level design	METI/NEDO	125
	Environment		
A	Save-water-type and environment-friendly water circulation	METI/NEDO	2,500
A	Environment-economy policy study to contribute to the world	MOE	600
B	Bio-diversity-related technology development	MOE	120
B	Clean chemistry	MEXT/RIKEN	350
C	Use of data obtained from satellite observations	MOE	12
	Energy		
S	Frontier basic science on innovative storage battery	METI-NEDO	3,000
A	Re-processing of used fuel	METI	2,000
A	Housing system using next-generation highly-efficient energy	METI/NEDO	150
B	Innovative hydrogen manufacturing technology	MEXT/JAEA	1,500
B	Innovative energy-saving technology for producing steel from iron ore	METI/NEDO	450
B	Green sustainable chemical process	METI/NEDO	1,500
B	Abolishment of test research reactors	MEXT	155
C	Realization of ocean wind power generation	MOE	400

	Nanotechnology/Materials		
A	Advanced efficient of low-cost next-generation solar battery	MEXT/NIMS	350
A	Strategy for elements (expanded budget)	MEXT	612
A	Alternative rare materials (expanded budget)	METI/NEDO	600
A	Environment technology development using nanotechnology	MEXT	1,000
B	Advanced evaluation for semiconductor functional materials	METI/NEDO	120
B	Innovative manufacturing technology for save-energy ceramics	METI/NEDO	300
B	Next-generation advanced-intensity and anti-heat steel	MEXT/NIMS	795
B	New high-temperature resistant, heat-electric energy converting materials for collecting unused heat energy	MEXT/NIMS	363
B	Lipid dynamics	MEXT/RIKEN	180
B	Optical/quantum research center (expanded budget)	MEXT	900
C	Development of new use of electronic microscope	MEXT	158
	Social Infrastructure		
A	Quick screening of toxic substances	PA	46
A	Volcano observation facilities	MEXT/NIED	590
A	Comprehensive promotion of research on active fault	MEXT	460
A	Marine environment initiative: highly efficient vessels; comprehensive policy for promoting international standards	MLIT	1,689
A	Urban system for low-carbon/hydrogen energy society	MLIT	462
B	Earthquake observation facilities at middle and deep layers	MEXT/NIED	227
B	Highly-sensitive earthquake observation facilities	MEXT/NIED	118
B	Wide-area earthquake observation facilities	MEXT/NIED	124
B	MP (multi-parameter) radar system	MEXT/NIED	300
B	3-dimensional shaking table facilities	MEXT/NIED	750
B	Research on the management of social capital like bulwarks	MLIT	13
C	Advancement of the prediction of earthquakes in Tokai area (middle of Japan) and prediction of large-scale earthquake in Nankai Trough	MLIT/MRI	Part of Government funds to MRI
	Intellectual Property/Local S&T/Industry-university-Government Cooperation		
A	Industry-university-government cooperation: strategic centers	MEXT	1,000
A	Strategic innovation creation program	MEXT/JST	2,800
A	Support for developing research results	MEXT/JST	5,000
A	Intellectual cluster creation (global centers)	MEXT	3,200

B	Industry-university-government cooperation: bio venture company creation and patent portfolio	MEXT	600
B	Venture business creation by young researchers	MEXT/JST	600
B	Service science/engineering	MEXT	504
B	Innovation creation in local areas: discovery of excellent researchers in local areas	MEXT/JST	1,867
B	Share of advanced research facilities	MEXT	5,000
B	Industrial technology R&D	METI	1,000
C	Technology transfer center	MEXT	100
	Personnel Fostering/Public Understanding of Science and Technology		
A	Core science teacher fostering centers	MEXT	930
B	Leading IT specialist fostering program: advanced practical S&E specialists fostering	MEXT	1,500
B	Compilation and distribution of supplemental materials for math and science education	MEXT	2,512
	Science Diplomacy		
A	Attendance to the G8 S&T Ministerial Meeting	CAO	6
A	S&T diplomacy experts exchange	MOFA	6
B	S&T policy dialogue with developing countries	CAO	20
B	Strategic international cooperative research program	MEXT/JST	1,524
B	Bottom-up-type international cooperative research program in cooperation with academic research promotion entities overseas	MEXT/JSPS	600
B	Environment prediction R&D and solicitation-based research (part of Asia Pacific Network funds)	MOE	142

Table 2: CONTINUING Programs/Projects - JFY2009

Program/Project	Ministry/Agency/ Res. Inst.	2008 Budget	2009 Budget Request (Mil. Yen)
NOTES			
Red letters: Competitive funds			
	To be accelerated		
	To be promoted		
	To be decelerated		
Life Science			
Comprehensive database project: comprehensive database	MEXT	1,100	850
Comprehensive database project: bioinformatics	MEXT	1,682	1,841
Comprehensive genomic information for organisms in agriculture, forestry, and fisheries	MAFF	707	707
Comprehensive database project	METI	70	70
Target protein research program	MEXT	5,200	5,200
Brain research strategic program	MEXT	1,700	1,700
Comprehensive brain research program	MEXT/RIKEN	9,321	10,026
Plant science research program	MEXT/RIKEN	1,519	1,677
Comprehensive research on immunology/allergy	MEXT/RIKEN	3,261	3,600
Comprehensive research on developmental/regenerative science	MEXT/RIKEN	4,467	4,847
Omics basic research	MEXT/RIKEN	505	1,761
Life molecular system basic research	MEXT/RIKEN	495	586
Bio-marker for producing medicine, bio-resources and model animals for producing medicine, next-generation vaccine development, comprehensive research on policy-based medicine production	MHLW	3,664	3,776
Human genome tailor-made research	MHLW	1,438	1,410
National bio resource project	MEXT	1,400	1,400
Bio resource program	MEXT/RIKEN	3,181	3,513
Realization of medical care based on genetic information	MEXT	2,794	2,794
Genome medical science program	MEXT/RIKEN	1,600	1,766

Bio diagnosis technology development for realizing medical care that meets individual needs	METI	340	340
Biological base for accelerating support for producing genomic medicine	METI	2,806	3,000
New and recurring infectious diseases research center	MEXT	2,500	2,300
Comprehensive research on infectious diseases	MHLW	6,008	7,530
Molecular imaging research program (partially competitive funds)	MEXT/RIKEN/NIRS	3,896	4,244
Heavy particle radiotherapy cancer treatment research	MEXT/NIRS	5,797	5,357
Third comprehensive strategic anti-cancer research	MHLW	6,487	6,584
Subsidies for cancer research	MHLW	1,804	2,213
Intelligent operation equipment R&D	METI/NEDO	600	800
Frontier basic R&D: medical equipment R&D	MHLW	561	550
Comprehensive research on longevity/handicapped	MHLW	1,684	1,667
Comprehensive research on lifestyle-related diseases/intractable diseases: cardiovascular; immunity/allergy; intractable; liver diseases	MHLW	6,591	6,558
Mental health research	MHLW	1,856	1,819
Food/medicine risk analyses (comprehensive research on regulatory science including medicine and medical equipment) (those items not included in the "Return to the Society")	MHLW	567	531
Basic research in health/medical fields	MHLW/NIBIO	8,169	8,162
Commercialization of medicine and medical equipment: Bayh-Dole contract fee for R&D on medical products	MHLW/NIBIO	1,200	1,200
New functional antibody pharmaceuticals	METI	1,000	1,000
Sugar-chain function activation	METI	1,000	1,000
Risk analyses of food and medicine: safety/security of foods	MHLW	1,752	1,717
Highly precise and effective risk management of bird flu and BSE (mad cow disease)	MAFF	700	697
Japanese-style livestock feeding by large amount of simple feed	MAFF	519	519
Commercialization technology development to promote new agriculture, forestry, and fisheries policies	MAFF	5,200	10,379
Systematic elucidation of harms and risk mitigation in production/distribution/processing processes	MAFF	549	546
New agriculture development genome project	MAFF	4,004	3,985
Experiments on designated items	MAFF	924	924

Commercialization at industries	MAFF	1,400	1,600
Basic research to create innovation	MAFF/NARO	6,805	11,440
Basic technology for advanced manufacturing, using plant functions	METI	1,596	1,596
Basic technology for environment-friendly manufacturing, using microorganism functions	METI	1,105	1,105
Tailor-made human genome research	MHLW	1,438	1,410
Information Technology			
Dream chip development project	METI/NEDO	1,200	1,300
Frontier IT specialists fostering	MEXT	828	1,043
MIRAI (millennium Research for Advanced Information Technology)	METI/NEDO	5,000	5,044
Next-generation process-friendly design technology	METI/NEDO	893	880
Semiconductor application chip project	METI/NEDO	1,400	1,238
Next-generation large-scale display of low-electric power consumption	METI/NEDO	1,173	1,167
Device/system technologies for highly-functional/low-electric power consuming computing	MEXT	425	850
Spintronics non-volatilization function technology	METI/NEDO	520	585
Green-IT project (continued)	METI/NEDO	3,000	Part of 6,800
Next-generation robotics artificial intelligent technologies	METI/NEDO	1,500	1,500
Open source software utilization	METI/IPA	560	565
Industry-university cooperation on software engineering	METI/IPA	2,420	2,490
Secure platform project	METI	800	800
Photonic network technologies	MIC/NICT	3,637	4,037
Next-generation network: common base technology, control technology to deal with high efficiency	MIC/NICT	3,002	2,656
New-generation network: element technologies for dynamic network, virtual technologies to meet flexible speed and quality and personnel fostering	MIC/NICT	2,130	2,044
New-generation backbone	MIC	1,296	1,300
Element technologies for advanced use of frequency in mobile communication system	MIC	3,799	Part of 9,462
Wireless system: shift to unused frequency zone	MIC	2,328	Part of 9,462
Cell phone system that meets both terrestrial and satellite	MIC	580	Part of

broadcasting			9,462
Next-generation advanced-efficiency network device	METI/NEDO	1,043	1,043
Ubiquitous/platform technologies	MIC	1,500	1,700
Universal voice/language communication technologies	MIC/NICT	1,480	1,730
Information navigation project	METI	4,108	4,110
Trial for stopping cyber attack, including spam mail and phishing	MIC	747	750
Countermeasures for information leak	MIC	1,100	1,200
Early-stage warning for computer security	MIC	1,869	1,715
Corporate/individual information security measures	METI/IPA	1,440	1,675
Strategic promotion of R&D on information communication	MIC	2,573	2,600
Promotion of private sector basic technology R&D	MIC/NICT	4,200	4,200
Environment			
Comprehensive promotion of global environmental research	MOE	3,197	3,955
Grant for waste disposal study	MOE	1,135	1,335
21st century climate change prediction program	MEXT	2,232	2,520
Basic process model for global environmental change prediction	MEXT/ JAMSTEC	1,556	1,309
Climate change simulation from the whole earth scale to local	MEXT/ JAMSTEC	1,075	1,032
Establishment of global observation system	MEXT	373	554
Non-Freon-type energy-saving air conditioning system development	METI	576	1,037
Global environment observation by satellite (GOSAT)	MOE/NIES	665	731
Water/heat/matter cycle observation at various scales from basin to globe	MEXT/ JAMSTEC	677	602
Chemical substance risk analyses	MHLW	1,281	1,255
Promotion of environmental research/technology development	MOE	836	1,570
Energy			
Next-generation reactor development	METI	1,250	2,042
Environment-friendly iron manufacturing process technology development	METI/NEDO	560	1,950
ITER	MEXT/JAEA	10,298	12,252
Nuclear energy system	MEXT	5,926	5,829
High-level radioactive waste disposal R&D	MEXT/JAEA	8,718	8,734
Geological disposal technology	METI	3,682	3,682

Full reactor MOX fuel nuclear reactor facilities	METI	3,000	3,155
New energy technology R&D (solar, wind, new energy venture)	METI/NEDO	4,900	6,572
New energy technology field tests (solar and wind)	METI/NEDO	6,688	7,188
Element technology development for solid oxide fuel cell system	METI/NEDO	1,350	2,300
Practical application of solid oxide fuel cell	METI/NEDO	800	1,600
Hydrogen production/transport/storage system	METI/NEDO	1,700	2,500
Practical strategic technology development for solid polymer fuel cell	METI/NEDO	6,669	8,762
Frontier research on fuel cell	METI/NEDO	900	1,200
Frontier science basic research on hydrogen	METI/NEDO	1,750	2,200
Establishment of infrastructure for hydrogen-economy society	METI/NEDO	1,400	2,000
Frontier basic research on hydrogen reserving materials	METI/NEDO	908	1,400
Practical application of fuel cell system	METI/NEDO	1,300	1,400
Commercialization of highly efficient gas turbine	METI	540	1,845
Element technology development for ultra-supercritical thermal power generation	METI	200	817
Advanced functional converging technology development for refining oil	METI	7,930	4,297
Innovative next-generation oil-refining technology development	METI	3,960	4,300
Multi-purpose coal gas production technology development out of the innovative zero-emission coal power generation project	METI/NEDO	Part of 3,251	Part of 4,162
Storage and segregation of CO2	METI	1,405	640
Molecular gate-functioning CO2 membrane	METI	150	680
Entrained flow coal gasification plant	METI	2,067	1,200
Gas to Liquid (GTL) technologies of natural gas	METI/ JOGMEC	6,000	3,802
Development of methane hydrate	METI	2,533	4,526
Superconducting power apparatus with Yttrium	METI/NEDO	3,000	4,000
Practical application of high-temperature superconducting cable	METI/NEDO	160	800
Strategic technology development for commercializing next-generation power storage system	METI/NEDO	5,300	5,840
Strategic development on save-energy technologies: practical application	METI/NEDO	6,900	9,653
Nanotechnology/Materials			
Sustainable hyper composite technology	METI/NEDO	320	710

Nanoelectronics semiconductor: new materials/new structure technology development: Nitrogen-related chemical combination semiconductor board/expitaxial development	METI/NEDO	500	550
Nanoelectronics semiconductor: new materials/new structure technology development: New materials and new structure nano electronic devices	METI/NEDO	500	700
Innovative advancement of strength and functions of steel materials	METI/NEDO	1,000	1,000
Basic technology development for fiber materials having advanced functions and new structures	METI/NEDO	705	705
Strategies for elements (continued portion)	MEXT	588	Part of 1,200
Alternate materials for rare metals (continued portion)	METI/NEDO	1,000	Part of 1,600
Research on apparatus on molecular imaging	METI/NEDO	960	960
Frontier Basic research: medical equipment (nano medicine)	MHLW	1,937	1,898
Frontier optical science research	MEXT/RIKEN	882	882
Optical/quantum science research center (continued portion)	MEXT	1,500	Part of 2,400
Nanotechnology network	MEXT	1,727	1,727
Interdisciplinary and inter-industry nanotechnology challenge: commercialization of innovative materials	METI/NEDO	3,646	3,646
Monozukuri (Manufacturing)			
Frontier measurement and analysis technology/equipment	MEXT/JST	5,500	7,000
Simulation software that will be the base for creating innovation	MEXT	500	800
Advancement of strategic base technologies carried out at small- and medium-size companies	METI/SMRJ	8,805	6,050
Green sustainable chemical process	METI/NEDO	600	600
Interdisciplinary next-generation device manufacturing technologies	METI/NEDO	1,150	1,150
Optical catalyst industry creation for realizing recycling society	METI/NEDO	880	880
Super hybrid material technology development	METI/NEDO	620	700
Super flexible display parts technology development	METI/NEDO	620	648
Social Infrastructure			
Tera Herz technology research	MIC/NICT	232	580
Comprehensive research on active fault	MEXT	478	353
Linkage between possible Tokai-East Tokai-South Tokai	MEXT	495	1,181

Earthquakes			
Focused study/observation/research on strains caused by earthquakes	MEXT	401	863
Special project for prevention/mitigation of urban-area large-scale earthquakes	MEXT	1,102	1,404
Anti-seismic research, using E-defense	MEXT/NEDO	1,830	1,963
Advancement of the level of monitoring/modeling of the crust change to mitigate disaster caused by earthquakes and mountain eruptions	MLIT	989	1,227
Domestic airplane: high functional technology/clean engine technology R&D	MEXT/JAXA	2,725	2,610
All weather/high density flight technology	MEXT/JAXA	546	546
Advanced system basic technology development for airplanes	METI	537	715
Environment-friendly engine for small-size airplanes	METI/NEDO	600	780
Next-generation airplane structure materials manufacturing and processing technology development	METI	800	1,040
Development of carbon fiber complex materials to save energy	METI	5,000	6,840
Advanced aerodynamics design	METI	4,100	4,305
Safe and Secure Society	MEXT	625	1,283
Frontier			
Development of basic tool to make use of marine resources:	MEXT	400	800
Quasi-zenith satellite system	MIC	1,200	1,560
Development/operation/usage of Japanese module "Kibo" of the International Space Station	MEXT/JAXA	16,964	15,926
Advancement of reliability of satellites	MEXT/JAXA	459	550
International cooperation experiment, using "Kizuna," supersonic internet satellite	MEXT/JAXA	1,773	1,264
Next-generation transport system design	METI/NEDO	620	700
Space environment reliability verification integrated system (SERVICE) project	METI/NEDO	490	900
Next-generation earth observation sensor research	METI/NEDO	1,303	3,060
Frontier space system by miniaturization	METI/NEDO	604	1,650
Oil resource remote detection technology	METI	1,600	1,800
Universities/Basic Research/Competitive Funds			
Global COE program	MEXT	33,986	34,488

ALMA (Atacama Large Millimeter/submillimeter Array)	MEXT	3,101	4,927
J-PARC (Japan Proton Accelerator Research Complex)	MEXT/JAEA/ KEK	19,044	20,644
RI Beam Factory	MEXT/RIKEN	3,192	4,087
Management of the use of Spring-8 facilities	MEXT/RIKEN	9,165	11,197
Basic research programs, including ERATO, CREST, SORST, ICORP, and PRESTO	MEXT/JST	50,326	57,131
WPI (World International Premium) program	MEXT	7,109	7,109
Local S&T/Industry-university-government cooperation/Intellectual property			
Industry-university-government cooperation strategic development program: creation and protection of strategic intellectual property	MEXT	2,819	3,336
Technology transfer support center	MEXT	2,589	3,070
World-leading international standardization	METI	2,255	2,223
Industry-university seeds innovation program	MEXT/JST	2,200	1,860
Creative seeds development program	MEXT/JST	8,122	6,990
Innovation creation through shared use of research facilities	MEXT	1,382	1,391
University-oriented business creation	METI/NEDO	1,750	2,202
Research grants for industrial technologies	METI/NEDO	4,779	4,876
Testbed network for frontier research	MIC/NICT	4,006	4,001
Intelligent cluster creation	MEXT	7,530	8,100
Industry-university-government cooperative research on urban area	MEXT	4,600	5,500
Comprehensive support for local area innovation creation	MEXT/JST	11,025	13,313
Support for establishing industrial clusters	METI	1,139	1,323
Formation of corporations to create local area innovation	METI	1,116	1,116
Local area innovation creation program	METI	7,474	7,066
Personnel Fostering/Public Understanding of Science and Technology			
Organizational reform for graduate education reform	MEXT	5,070	9,024
Doctoral and Postdoctoral researcher program	MEXT	15,794	16,968
Super science high school	MEXT	1,480	1,519
Science education facilities	MEXT	1,320	2,500
Okinawa Science and Technology Graduate School	CAO/OIST	10,752	14,873
Industry-university cooperation personnel fostering program	METI	1,770	1,511
Science Diplomacy			

Science and technology cooperation to deal with global-scale issues	MOFA/JICA	1,380	3,760
Science and technology research partnership for sustainable development	MEXT/JST	500	1,348
Strategic International S&T Cooperation	MEXT/JST	1,250	1,558
Postdoctoral Fellowship for foreign researchers	MEXT/JSPS	1,492	1,732
International training for young researchers	MEXT/JSPS	636	893
Establishment of network for invited foreign researchers	MEXT/JSPS	6,115	6,029
Contribution to the OECD science and technology policy committee	METI	6	6
Research cooperation program	METI	953	872

Appendix

Abbreviation	Full Name
CAO	Cabinet Office
IPA	Information-technology Promotion Agency
JAEA	Japan Atomic Energy Agency
JAMSTEC	Japan Agency for Marine-Earth Science and Technology
JAXA	Japan Aerospace Exploration Agency
JICA	Japan International Cooperation Agency
JOGMEC	Japan Oil, Gas and Metals National Corporation
JSPS	Japan Society for the Promotion of Science
JST	Japan Science and Technology Agency
KEK	High-energy Accelerator Research Organization
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, Labour, 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
MRI	Meteorological Research Institute
NARO	National Agriculture and Food Research Organization
NEDO	New Energy and Industrial Technology Development Organization
NIBIO	National Institute of Biomedical Innovation
NICT	National Institute of Information and Communication Technology
NIED	National Research Institute for Earth Science and Disaster Prevention
NIES	National Institute for Environmental Studies
NIMS	National Institute of Materials Sciences
NIRS	National Institute of Radiological Sciences
OIST	Okinawa Institute of Science and Technology
PA	Police Agency
RIKEN	Institute of Physical and Chemical Research
SMRJ	Organization for Small and Medium Enterprises and Regional Innovation of Japan