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Report Memorandum #12-02

Japanese Government S&T Budget Proposal for JFY2012

An exchange rate of ¥80/\$ is used in this report. The project names in the tables are provisional translation and may differ from the official English project names. For further questions about the report, contact Ms. Kazuko Shinohara of the NSF Tokyo Regional Office at nsftokyo@nsf.gov

Today the Japanese House of Representatives approved the government budget for JFY2012, appropriating ¥3,669.3 billion (\$46 billion) for science and technology. This represents an increase of 0.6% or ¥21.3 billion (\$266 million) over the JFY2011 S&T budget (see table 1) and establishes the highest government nominal S&T budget ever. S&T budget specifics reflect the far-reaching impact of the March 11 earthquake, tsunami and nuclear disasters. The S&T budget is 4% of the total Japanese Government budget of Yen 90,333.9 Billion for JFY2012. The budget awaits to be cleared by the House of Councilors by the end of March 2012, but the budget amounts are not expected to change.

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) accounts for the largest share of the total S&T budget at 67.8%. MEXT's share of total government S&T expenditure was up from 65% the previous year, reflecting responsibility for several newly urgent activities related to natural disasters, ranging from monitoring radiation in air, soil, and sea to rebuilding national research facilities. The largest year-on-year increase, 89.2% was seen by the Ministry of Environment (MOE), which will assume responsibility for nuclear safety from other ministries when the new Nuclear Energy Safety Agency (provisional name) opens for business in the new fiscal year (April 1, 2012-March 31, 2013). The tables below provide additional budget detail.

This year's S&T budget emerged from a process that differed in key ways from past budget seasons. First, the budget process was complicated by pressing disaster recovery needs, multiple supplementary budget efforts, and a change in prime ministers. Government's budget guidance called for requests of no more than 10% below JFY2011 budget levels. But, in a repeat of an approach introduced last fiscal year, additional guidance allowed significant increases for programs meeting special policy goals. This year, ministries and agencies were allowed to request up to 1.5 times the reduced amount to cover new programs to address disaster concerns and priority economic areas. In other words, agency requests could include a healthy increase over JFY2011, if new programs in strategic priority areas such as disaster resilience or green growth were proposed.

Budget requests in the S&T area were then evaluated by the Council for Science and Technology Policy (CSTP), using a new approach. Seeking to encourage greater activity that is both interdisciplinary and more immediately beneficial to society, CSTP ended its traditional practice to prioritizing science-related budget requests (S, A, B, C) by discipline or thematic field. Instead, the new system reviews projects based on one of several policy priorities laid out by CSTP on behalf of the government. These included:

1. Action Plan: Aims to advance strategic S&T missions to benefit the nation with clear target dates for commercialization of the results of research. Consistent with the 4th S&T Basic Plan (JFY2011-2015) adopted in August 2011, the Action Plan established priorities in disaster recovery, green innovation, life innovation, and promotion of basic research and research personnel (Tables 4-7).
2. Policy Package: programs identified by each ministry or agency as high priority in advancing its mission (Table 8)
3. National Base Programs: "core" S&T funding (Table 9)
4. National Priority Programs: special large, high priority projects (Table 10).

Based on these priorities the government S&T request was submitted to the Ministry of Finance in December 2011 and approved unchanged by the House of Representatives. All projects included in the four priority programs above (detailed in Tables 4-10) received support, but the budget details have not yet been made public.

Table 1: JFY2012 S&T Budget Request and Proposal

(Unit: ¥Billion)

JFY2011 S&T Budget	JFY2011 Four Supplemental S&T Budgets	JFY2011 Local Government S&T Budget	JFY2012 S&T Budget Request	JFY2012 S&T Budget*	Increase from JFY2011 S&T Budget (%)
3,647.9	583.2	450.5	4,112.3	3,669.3	21.3 (0.6%)

Table 2: Breakdown of JFY 2012 S&T Budget Requests and Proposals by Ministry and Agency

(Unit: ¥Billion)

Ministry & Agency	JFY2011 S&T Budget	JFY2012 S&T Budget*	Increase from JFY2011 budget (%)
MEXT (Education, S&T)	2,449.4	2,486.2	1.5%
METI (Trade & Industry)	586.3	528.7	-9.8%
MHLW (Health & Welfare)	150.1	160.0	6.6%
MOD (Defense)	96.8	107.6	11.2%
MAFF (Agriculture, Forests & Fisheries)	113.8	105.4	-7.4%
Cabinet Secretariat	67.0	63.0	-6.0%
MIC (Communications)	53.1	55.7	4.9%
MLIT (Land, Infrastructure & Transport)	52.4	52.4	0.1%
MOE (Environment)	39.3	74.3	89.2%
CAO (Cabinet Office)	17.2	14.6	-14.7%
MOFA (Foreign Affairs)	11.6	11.6	-0.5%
MOJ (Justice)	6.4	5.3	-17.0%
Police Agency	2.2	2.0	-9.0%
MOF (Finance)	1.3	1.4	1.7%
Diet	1.2	1.1	-3.1%
TOTAL:	3,647.9	3,669.3	0.6%

* - As approved by the House of Representatives on March 8, 2012.

Table 3: Guidelines for the Action Plan for JFY2012

1. Recovery from the Disaster	Topic	Earthquake	Tsunami	Radioactive substances
Safe and Secure Society High-quality Life	Life and health	Rapid communication/rescue	Rapid communication/rescue	Accurate information provision
	Employment	Anti-seismic facilities/Strengthening of industrial competitiveness	Quick recovery from disaster/Strengthening of industrial competitiveness	Effective/efficient ways of removing radioactive substances
	Housing	Anti-seismic/heat structures/countermeasures for liquefaction	Design based on geographical conditions	Security of evacuation areas
	Flow of information, goods, energy	Secure immediate distribution channel	Secure rapid distribution channel and recovery of systems	Rapid measurement and removal

2. Green Innovation	Sustainable Environment and Energy	Clean energy
		Energy distribution systems
		Innovation of uses of energy
		Social infrastructure

3. Life Innovation	Healthy Life	Early diagnosis
		Cancer, lifestyle-related diseases
		Regenerative therapies
		Excellent medical technologies
	Elderly and Handicapped	Care and support

4. Promotion of Basic Research and Personnel Training	Training of Young Researchers who can be adaptable	World-class basic research
		Creative and diverse basic research
		S&T Personnel training

Table 4. Projects selected to be funded under the Action Plan in JFY2012:

The total of the JFY2012 budget* for the 150 Action Plan projects is ¥235,902 Million (\$3 Billion):

Recovery from the Disaster caused by the Great North East Japan Earthquake:

The total of the JFY2012 budget* is ¥47,814 Million (\$600 Million)

(Note: Due to criticality of target technology, the target year of commercialization is clearly Mentioned for each of these projects.)

EARTHQUAKE Project	Project Years (JFY)	JFY2012 Budget Request (¥Million)	Ministry
Further development of earthquake early warning and prediction [to be commercialized in two years]	2008-2013	5	MLIT

Research on enhanced safety during seismic events and tsunamis; and technologies to prevent fires in sediments and rubbles [to be commercialized in five years]	2011-2015	82	MIC
Research on safety to cope with fires and fire extensions [to be commercialized in five years]	2011-2015	66	MIC
Non-destructive testing technologies using high-frequency sensors [to be commercialized in five years]	2011-2015	TBD	MIC
Study of social infrastructure using E-Defense facilities (large-scale 3D shake table) [to be partly commercialized in five years]	2011-2015	TBD	MEXT
Research on anti-seismic design technologies to be ready for large-scale earthquakes [to be commercialized in two years]	2010-2012	97	MLIT
Evaluation of earthquake resistance for non-structural materials [to be commercialized in five years]	2012-2014	15	MLIT
Creation of materials that contribute to strengthening earthquake- and fire-resistance [to be commercialized in five years]	2011-2015	TBD	MEXT
Research on low-cost liquefaction-resistant technologies in urban areas [to be commercialized in five years]	2012-2014	TBD	MLIT
R&D to strengthen communication/broadcasting networks at disasters [to be partly commercialized in five years]	2012-2014	3,300	MIC
Research on rapid prediction technologies for large-scale and wide-area earthquakes [to be commercialized in five years]	2011-2014	13	MLIT
Research on SAR (synthetic aperture radar) to access the size of large-scale disasters [to be commercialized in five years]	2011-2015	TBD	MIC
Research on countermeasures to reduce risks to water systems [to be commercialized in five years]	2012-2014	5	MHLW
Next-generation energy R&D to rebuild Tohoku area [to be commercialized in five years]	2011-2020	TBD	MEXT
TSUNAMI Project	Project Years (JFY)	JFY2012 Budget Request (¥Million)	Ministry
Advancement of tsunami- prediction technologies and development of tsunami-caused disaster mitigation [to be commercialized in two years]	2010-2013	TBD	MLIT
R&D on tsunami early warning [to be commercialized in five years]	2012-2014	25,468	MEXT
Technologies on safety of fire- fighting activities [to be commercialized in five years]	2011-2015	85	MIC
R&D on robots to work in natural disaster environment [to be commercialized in five years]	2012-2016	TBD	MEXT
Research on medical care in large-scale disaster [to be commercialized in two years]	2012-2013	7	MHLW
Research on health of the victims of the Great North East Japan Earthquake, and health support in large-scale disasters [to be partly commercialized in two years]	2011-2021	350	MHLW
Survey of changes in marine ecosystem in Tohoku coastal area [to be partly commercialized in two years]	2011-2020	TBD	MEXT
Frontier technologies to establish new food supply base [to be partly commercialized in two years]	2012-2017	1,006	MAFF
Innovative breeding and disease prevention technologies for livestock using genomic information [to be partly commercialized in five years]	2012-2016	380	MAFF
Development of breakwater structures resistant to repeating tsunami waves [to be commercialized in two years]	2011-2013	TBD	MLIT

Research on the embankment mechanisms in disasters to develop comprehensive evaluation technologies on river banks and liquefaction [to be commercialized in five years]	2011-2015	TBD	MLIT
Comprehensive research on trench-originated earthquakes and tsunami [to be partly commercialized in five years]	2012-2018	1,953	MEXT
Research on technologies and systems for rapid and smooth disposal of waste after the disaster [to be commercialized in two years]	2012-2013	TBD	MOE
R&D on Advanced Land Observing Satellite (ALOS)-2, and ALOS-3	2008-2016	TBD	MEXT
Acceleration of research on next-generation information communication technology test satellite [to be partly commercialized in five years]	2012-2019	1,000	MEXT
EARTHQUAKE & TSUNAMI Project	Project Years (JFY)	JFY2012 Budget Request (¥Million)	Ministry
SBIR: Support for medium- and small-sized companies in developing innovative and challenging technologies after the disaster[to be partly commercialized in five years]	2012-2016	50	METI
Support for innovation strategies in local areas [to be partly commercialized in five years]	2012-2022	1,504	MEXT
Tohoku-oriented science, technology and innovation creation by industry-university-government cooperation [to be commercialized in five years]	2012-2021	4,861	MEXT
RADIOACTIVE EFFECTS project	Project Years (JFY)	JFY2012 Budget Request (¥Million)	Ministry
Research on mitigation of long-term radioactive effects to human bodies and environment [to be partly commercialized in two years]	2012-2021	1,547	MEXT
Research on mechanisms and countermeasures for contamination in sewage systems [to be commercialized in two years]	2011-2012	TBD	MLIT
Comprehensive research on disaster, radioactive substances, and environment [to be partly commercialized in two years]	2012-2015	TBD	MOE
Research on contamination in the environment, focusing on soil [to be commercialized in two years]	2012-2013	5,664	MOE
Research on removal and mitigation of radioactive substances on farmlands and forests [to be commercialized in 2-5 years]	2012-2014	274	MAFF
Research center to restore the environment, and countermeasures for rapid decontamination [to be partly commercialized in two years]	2011-2020	TBD	MEXT
Research on assessment of long-term radioactive effects [to be commercialized in two years]	2011-2013	1,346	MEXT
Research on radioactive substances in foods [to be partly commercialized in two years]	2012-2016	150	MHLW

Table 5. Projects selected to be funded under the Action Plan in JFY2012: Green Innovation

The total of the JFY2012 budget* is ¥132,755 Million (\$1,660 Million).

Project	Project duration (JFY)	JFY2012 Budget Request (¥Million)	Ministry
Advanced research on photovoltaic power generation	2010-2014	6,525	METI
High-performance organic solar cell (research by NIMS, RIKEN, and JST)	2009-2019	TBD	MEXT
R&D on photovoltaic power generation not based on the conventional technologies	2011-2020	TBD	MEXT

International research on innovative solar cells	2008-2014	2,650	METI
Wireless power transmission and reception by photovoltaic power generation	2009-2014	150	METI
Basic research and innovative technology development on biomass use	2010-2019	TBD	MEXT
Technology development on practical use of biomass	2012-2020	TBD	MEXT
R&D on bio fuel materials in agriculture, forests and fisheries	2012-2015	600	MAFF
Innovative production system for cellulose ethanol	2009-2013	1,245	METI
High-performance energy conversion technologies, including biomass energy	2008-2012	1,947	METI
Technology development using strategic next-generation biomass energy	2010-2016	2,500	METI
R&D on next-generation wind power generation technology	2008-2018	617	METI
R&D on ocean wind power generation technology	2010-2015	5,692	METI
Experimental research on ocean wind power generation	2010-2015	3,048	MOE
R&D on floating ocean wind power generation facilities	2011-2015	48	MLIT
U.S.-Japan cooperative research and standardization on clean energy technologies	2010-2014	600	METI
R&D on use of undeveloped energy in rivers in mountains	2011-2012	TBD	MLIT
R&D on element technologies of solid oxide fuel cell system	2008-2012	618	METI
Technology development for commercialization of polymer electrolyte fuel cells	2010-2014	4,000	METI
Technology development for high-performance hydrogen production	2012-2013	900	METI
Technology development for hydrogen production, transport, and storage systems	2008-2012	1,500	METI
Advanced basic research on hydrogen	2006-2012	800	METI
Advanced basic research on Innovative storage battery	2009-2015	4,000	METI
Development of advanced technologies for application and commercialization of lithium-ion batteries	2012-2016	3,500	METI
Technology development for new energy storage battery system	2011-2015	2,000	METI
Innovative and non-traditional R&D on fuel cells and storage batteries	2012-2020	TBD	MEXT
Creation of materials that support innovative energy creation and storage technologies: (1) advancement of the materials that respond to societal needs; (2) environmental technology development using nanotechnology; (3) university-oriented green innovation creation; and (4) development of element strategies	2011-	TBD	MEXT
Development of measurement analysis technologies and equipment	2011-	507	MEXT
Technology development to cope with global warming (competitive funds)	2004-	7,200	MOE
Next-generation energy and social system verification project	2011-2014	12,600	METI
Verification of the best control technologies for the next-generation power transmission and distribution	2010-2012	340	METI
Verification of next-generation interactive communication output control	2011-2013	500	METI
Verification of photovoltaic power generation output prediction technology development	2011-2013	100	METI
Standardization of smart-grid communication interface	2012-2014	400	MIC
Technology development of spatial-structured and newly-functional integrated circuit (dream chip)	2008-2012	TBD	METI
Low-power electronic device project	2010-2015	2,504	METI
Technology development of low-power-consuming optoelectronics implementation systems	2012-2021	6,000	METI
Normally-off computing technology	2011-2015	1,200	METI

R&D on photonic network technology, and ultra high-speed and low-power consuming optical network technologies	2006-2015	TBD	MIC
Green IT project	2008-2012	3,109	METI
R&D on advanced green cloud base	2010-2012	TBD	MIC
ICT green innovation (competitive fund)	2009-2013	TBD	MIC
Reduction of energy consumption by improving energy saving standard in assessing houses and buildings	2011-2013	TBD	MLIT
Technology development of solar houses	2011-2015	247	METI
Technology development of high-performance CFC-free air conditioners	2011-2015	480	METI
Base technology development for next-generation lighting, including nitride semiconductors	2009-2013	1,800	METI
Power semiconductor project for low carbon society using new materials	2010-2014	1,850	METI
Innovative carbon fiber technology development and innovative carbon fiber manufacturing process technology development	2011-2015	2,030	METI
Ultra light, high-intensity, innovative, and integrated materials for low carbon society	2010-2016	1,230	METI
Sustainable hyper composite technology development	2008-2012	500	METI
R&D on alternative materials for rare earths	2007-2015	820	METI
Technology development of magnetic materials for high-performance motors for next-generation automobiles	2012-2021	4,000	METI
Marine environment initiative (technology development of innovative energy-saving vessels)	2009-2012	531	MLIT
Technology development for economic, environment-friendly, and high-performance airplanes	2004-2012	1,308	MEXT
Basic technology development for next-generation printing electronics materials and processing	2010-2015	400	METI
R&D on testing genetically modified plants in closed plant factory	2010-2015	104	METI
Basic technology development for green sustainable chemical processing	2008-2021	6,650	METI
Technology development for energy-saving and innovative iron-making process	2009-2012	400	METI
Technology development for environment-friendly steel manufacturing process	2008-2012	1,700	METI
Technology development for innovative and energy-saving ceramics manufacturing	2011-2013	85	METI
Basic technology development for innovative cement-manufacturing process	2010-2014	160	METI
Technology development for innovative glass melting process	2008-2012	344	METI
High-temperature superconducting cable testing project	2007-2013	1,000	METI
R&D on transmission loss-free, superconducting, and direct-current transmission	2012-2016	TBD	MEXT
Development of satellite observation data to predict and analyze global environment	2003-2020	39,930	MEXT
Coordination, continuation, and improvement of satellites' observation of global environment	2012-2017	TBD	MOE
Research on global environmental change	2009-2013	3,062	MEXT
Green Network of Excellence (GRENE): Arctic climate change	2011-2015	TBD	MEXT
Global map project (time-series data management method) to assess deforestation, desertification, and GHG emission	2009-2014	37	MLIT
R&D on data integration and analysis system to solve global environmental	2010-2016	TBD	MEXT

issues			
World science data platform	2011-2015	TBD	MIC
S&T strategy promotion fund: social system reform to create new society to solve global change problems	2010-2016	TBD	MEXT
Research on prediction of localized torrential downpours	2009-2013	12	MLIT
Low carbonization and recycling of the materials used for social infrastructure	2011-2015	TBD	MLIT
Technology development for cultivation and breeding management to adapt climate change	2010-2015	1,282	MAFF
Technology development for sustainable cultivation without relying on natural resources	2012-2016	320	MAFF
Advanced technology development to preserve marine bio resources	2011-2020	141	MEXT
Establishment of bio diversity information platform, and strategic promotion of bio diversity preservation	2011-2015	TBD	MOE

Table 6: Projects selected to be funded under the Action Plan in JFY2012: Life Innovation

The total of the JFY2012 budget* is ¥38,900 Million (\$486 Million).

Project	Project duration (JFY)	JFY2012 Budget Request (¥Million)	Ministry
Promotion of genome cohort research by combining genome information and electronic medical information	2011-	TBD	CAO & MEXT
Tohoku Medical Mega Bank Plan	2011-2020	TBD	MEXT
Comprehensive cancer research: very early stage diagnosis and treatment equipment	2010-2014	1,100	METI
Strategic promotion of next-generation cancer research	2011-2015	4,451	MEXT
Cancer treatment using heavy ion beam	1984-	2,873	MEXT
Development of Open-PET (positron emission tomography)	2005-	208	MEXT
Network to accelerate translational research: second phase	2012-	3,700	MEXT
Commercialization of medical technologies of difficult diseases and cancer	2011-	1,260	MHLW
Drug discovery using the mechanism of acquired gene modifier	2010-2014	450	METI
Support system for life science research including common use of advanced measurement and analysis equipment to be use for drug creation and other medical technology research	2011-	4,316	MEXT
Minimization of life-style diseases including diabetes	2005-2016	350	MHLW
Strategic promotion of brain science research	2008-	2,383	MEXT
Development of evaluation index using markers and images on the cause and development of dementia	2007-2020	100	MHLW
Commercialization of regenerative medicine	2008-	5,250	MEXT
Basic technology development for regenerative medicine, including elucidation of three-dimensional tissue formation	2012-2019	TBD	MEXT
Research on commercialization research on regenerative medicine	2008-	443	MHLW
Research on commercialization of the medical technologies on difficult diseases and cancer	2011-	2,000	MHLW
Research promotion on commercialization of agri-health technologies	2020-2014	TBD	MAFF
R&D on next-generation technologies on alternatively functional organs	2020-2014	550	METI
Commercialization of stem cells: drug discovery using iPS cells and regenerative medicine using stem cells	2009-2013 & 2011-2015	2,103	METI

Comprehensive research on regulatory science for medical products and equipment	2012-2016	3,000	MHLW
Establishment of guidelines for promoting development and commercialization of medical equipment	2011-2015	70	METI
R&D on innovation creation using brain mechanisms	2011-2014	TBD	MIC
Strategic promotion of brain science	2008-	812	MEXT
R&D on support for persons with disabilities using brain information	2010-2017	51	MHLW
R&D on life-support robot technologies	2009-2012	TBD	MIC
Development of preventive care program using advanced equipment, including personnel training	2011-2020	50	MHLW
Research on support for persons with dementia using self-reliance equipment	2011-2020	20	MHLW
R&D on commercialization of life-support robot technologies	2009-2013	1,300	METI

**Table 7: Projects selected to be funded under the Action Plan in JFY2012:
Promotion of Basic Research and Personnel Training**

The total of the JFY2012 budget* is ¥16,433 Million (\$205 Million).

Project	Project duration (JFY)	JFY2012 Budget Request (¥Million)	Ministry
World Premier International (WPI) program	2007-	10,053	MEXT
Part of Grants-in-Aid for Scientific Research (part of the research grants that can be carried over to the next fiscal year without red tape; other part of the fund needs red tape to carry over unused fund to the next fiscal year)	2012-2015	97,924	MEXT
Promotion of tenure-track system	2011-	9,013	MEXT

Table 8: Policy Package Projects

The total of the JFY2012 budget* is ¥35 Billion (\$438 Million).

Ministry	Policy Package	Project	Implementing Organization & Duration	JFY2012 Budget Request (¥Million)
MIC	ICT: International Cooperative R&D Program	Next-generation communication network testbed (JGN-X)	NICT 2011-2015	3,200
		Strategic international cooperative R&D	Private companies 2012-	400
		International exchange	NICT 2011-2015	70
MEXT	Career Paths for Young Researchers	Fellowship for Ph.D. students and postdocs	JSPS 1985-	19,192
		Support for women researchers	MEXT 2011-	1,067
		Training of research administrators	MEXT 2011-	1,400
		Postdoc career development	MEXT 2011-	2,197

MEXT	Next-generation Training	Super science high school	JST 2002-	2,721
		Science partnership platform	JST 2012-	1,037
		Undergraduate math and science training program	MEXT 2011-	300
MEXT	Technology Development for Collecting and Recycling Rare Earth Elements from Urban Mines	R&D on rare earths at Tohoku University	Tohoku University To be decided	TBD
METI		R&D on new technologies for recycling rare earths from small-scale home appliances	Private companies 2012-2015	1,200
		R&D on recycling rare earths in manufacturing process	Private Companies 2008-2012	800
MOE		R&D on recycling rare earths from wastes	Universities, private companies 2009-2015	TBD
METI In cooperation with MEXT	Strengthening of Space Industry's Base through R&D on Space System	R&D on advanced space-borne thermal emission and reflection radiometer (ASTER)	USEF, NEC 2008-2012	2,440
		R&D on transportable small-size ground system	Private companies 2009-2012	1,270
		R&D on miniaturization of super high-resolution synthetic aperture radar	Private companies 2010-2014	3,290
		R&D on air launch system	USEF 2009-2014	150
		R&D on establishing the base for space industrial technology information	USEF 2010-2015	150
		R&D on remote sensing technologies for detecting oil resources	ERSDAC, AIST 1999-2014	1,000
		R&D on resource exploration observation system to be on a polar orbit platform; and next-generation synthetic aperture radar	JAROS 1999-2017	80
		R&D on hyper spectral sensors	JAROS, NEC 2007-2013	2,000
		R&D on base technologies for next-generation earth observation satellite	ERSDAC, AIST 2006-2014	530
METI	Energy-saving Semiconductor Manufacturing Process and Minimization of the Size of Semiconductors	R&D on innovative semiconductor manufacturing process	Private companies 2012-2014	2,500
METI	Translational Research from Basic to Clinical	Translational research from basic to clinical	Universities, private companies 2007-2012	400
MLIT	Strategic Management of	Technology development for evaluating imbedded parts by non-destructive tests	Minister's Secretariat & NILIM	90

	Houses to Secure Safety: Shift to Longer Life Houses		2010-2012	
		Technology development for checking invisible parts by image data	Minister's Secretariat & NILIM 2010-2012	69
		Technology development for checking leakage by using infrared light	Minister's Secretariat & NILIM 2010-2012	0
		Technology development for monitoring buildings by position measurement	Minister's Secretariat & NILIM 2010-2012	20
MOE	Environmental Risk Management System for Children	Nation-wide survey on the environmental effects on children: 17-year long survey on 100,000 pregnant women till the children reach 13 years old	NIES 2010-2027	5,676

Table 9: Base Programs

The total of the JFY2012 budget* is ¥564.5 Billion (\$7 Billion).

Ministry	Policy	Project	Implementing Organization & Duration	JFY2012 Budget Request (¥Million)
MEXT	Improvement of National University Corporation Facilities	Improvement of national university corporation facilities	MEXT 2011-2015	124,153
MEXT	Improvement of Education and Research at Private Universities	Support for private universities	Private universities 1970-	163,027
		Improvement of private universities' facilities and equipment	Private universities 1997-	1,359
		Support for private universities' research facilities and equipment	Private universities 1953-	3,179
		Support for private universities' education facilities and equipment	Private universities 1983-	12,041
MEXT	Basic Research to Discover Seeds for New Technology	Basic research fund: under the MEXT strategies, JST (Japan Science and Technology Agency) set up research areas	MEXT 2002-	53,215
MEXT	Grant-in-Aid for Scientific Research	Curiosity-driven basic research fund	MEXT 1965-	256,836

Table 10: National Priority Programs

The total of the JFY2012 budget* is ¥65 Billion (\$813 Million).

Ministry	Policy	Project	Implementing Organization & Duration	JFY2012 Budget Request (¥Million)
MEXT	High Performance Computing Infrastructure (HPCI)	High performance computing infrastructure (HPCI)	MEXT 2006-2012	21,666
MEXT	Space Transport System	R&D on improving rockets	JAXA 2010-2014	589
		R&D on H-II Transfer Vehicle (HTV) for International Space Station (ISS)	JAXA 1997-2016	24,384
MEXT in cooperation with MOE	Marine Earth Observation Exploration System	Next-generation ocean exploration technologies	JAMSTEC 2006-2013	738
		R&D on satellite observation monitoring system	JAXA 2006--2020	41,173
		Data integration and analysis system (DIAS)	University of Tokyo 2006-2015	1,040

Table 11: JFY2012 S&T Budget-making Flow

Year	Month	Action
2011	June	CSTP guidelines on Action Plan
	August	Government guidelines on JFY2012 budget request
	September	Deadline for JFY2012 budget request
	October	CSTP decision on Action Plan Negotiations between ministries and agencies, and the Ministry of Finance
	November	CSTP decision on Policy Package Negotiations between ministries and agencies, and the Ministry of Finance
	December	Government budget proposal to be submitted to Diet
2012	January-March	Diet Discussions on JFY2012 budget
	March	Final decision on JFY2012 budget

Appendix:

Abbreviation	Full name
CAO	Cabinet Office
ERSDAC	Earth Remote Sensing Data Analysis Center
JAMSTEC	Japan Agency for Marine-Earth Science and Technology
JAROS	Japan Resources Observation System and Space Utilization Organization
JAXA	Japan Aerospace Exploration Agency
JST	Japan Science and Technology (funding agency)
MAFF	Ministry of Agriculture, Forests 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 Transport
MOE	Ministry of Environment
MOF	Ministry of Finance
MOFA	Ministry of Foreign Affairs
MOJ	Ministry of Justice
NICT	National Institute of Information and Communications Technology
NIES	National Institute for Environmental Studies
NILIM	National Institute for Land and Infrastructure Management
NIMS	National Institute of Materials Science