Defense Programs and Budget of Japan

Overview of FY2012 Budget Request

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- Response to attacks on offshore islands
- Response to cyber attacks
- Response to guerrillas and special operations force attacks
- Response to large-scale and special disasters
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Faced with an increasingly severe security environment, and drawing lessons from the Great East Japan Earthquake, Japan is aiming at the solid implementation of effective and efficient defense programs towards building a dynamic defense force, in accordance with the “National Defense Program Guidelines for FY 2011 and beyond” (approved by the Cabinet on December 17, 2010) and the “Mid-Term Defense Program (FY2011-FY2015)” (approved by the Cabinet on December 17, 2010).

The following new roles of the defense force are emphasized as continuous initiatives:
- Effective deterrence and response
- Further stabilization of regional security environment in the Asia-Pacific region
- Improvements in the global security environment

For that matter, response capabilities to large-scale disasters and nuclear disasters will be strengthened, and emphasis will be placed on the functions applicable to wide variety of operations and functions having asymmetric response capability*1, as well as non-substitutable functions*2.

Japan will also improve its defense posture, placing the priority on such functions as intelligence, surveillance and reconnaissance (ISR), maritime patrol, air defense, response to ballistic missile attacks, transportation, and command, control and communications in areas including the southwestern region.

Amidst growing fiscal austerity, it is necessary to allocate resources selectively to truly necessary functions by carefully examining the details of the programs.

※1 The term “functions having asymmetric response capability” refers to the functions that can respond to the actions of one’s opponent, while maintaining superiority in an efficient and effective manner: for instance, warning and surveillance using highly covert submarines against actions of the opponent’s surface fleet

※2 The term “non-substitutable functions” refers to the functions, such as Ballistic Missile Defense (BMD) systems, that are absolutely necessary to sustain response capability against attacks that may cause serious damage if such functions are lost.
1 Effective Deterrence and Response

Japan will solidly build defense forces to ensure constant and continuous warning and surveillance activities etc. in peacetime, and a seamless response to unfolding situations.

① Ensuring security of sea and air space surrounding Japan

Strengthening the defense posture for early detection of various signs by gathering information and conducting warning and surveillance activities in a constant and continuous manner in the sea and air space surrounding Japan

### Enhancement of warning and surveillance capability

- **Building of destroyer (DDH) (1 ship: ¥119 billion)**
  - Build one destroyer (19,500 ton) as a replacement for the destroyer Kurama, which is scheduled to be retired in FY2016

- **Building of submarine (SS) (1 ship: ¥56.5 billion)**
  - Build one submarine (2,900 ton), which is an improved version equipped with TCM
  - TCM (Torpedo Counter Measures)

- **Life extension of destroyers (life extension construction for 2 ships and parts procurement for 6 ships: ¥8.1 billion)**
  - Implementing life extension measures for the Hatsuyuki-class (1 ship), Asagiri-class (4 ships*), Abukuma-class (2 ships), and Hatakaze-class (1 ship) destroyers to maintain a sufficient destroyer force
  - Among which, 2 ships have been targeted for life extension construction

- **Improvement of information sharing capability of vessels etc. (¥0.9 billion)**
  - Improve satellite communication capability to share target information with other vessels etc. beyond line of sight.

- **Development of Fixed Air Defense Radar (¥3.9 billion)**
  - Replace the current radar on Okino Erabu Island with FPS-7 to strengthen air control in the southwestern region

### Study/research on unmanned aircraft

- Overseas studies on the operation, maintenance and development of high altitude endurance unmanned aircraft (¥1 million)
有效的威慑与响应

2. 应对离岛攻击的措施

为了应对各种离岛上的情况，日本将实施以下项目：改善信息收集/预警和监视体系，增强快速部署和响应能力，改善航空防卫能力，以及开发确保海域安全的必要系统。

(1) 信息收集/预警和监视体系

- 部署离岛观测单位等（与硫磺岛）
  - 为新组织的离岛观测单位和移动航空控制和预警中队（GSDF/ASDF）购置必要土地（¥1.5 亿）
- 为早期预警系统和控制飞机（E-2C）开发服务基础（ASDF）（¥0.2 亿）
  - 为确保E-2C在西南地区持续运营购置维护设备...

(2) 快速部署和响应能力的增强

- 提升单位的效率
  - 日本-美国联合演习（JSO）
    - 进行自卫队和美军的联合训练，以维持和提高联合作战能力
  - 军队（西部军）（GSDF）
    - 协调与海上自卫队（MSDF）和航空自卫队（ASDF）的训练
  - 日美联合演习
    - 为新组建的离岛观测单位和移动航空控制和预警中队（GSDF/ASDF）购置必要土地（¥1.5 亿）
    - “移动3D雷达装置”用于移动航空控制和预警中队的活动

“移动3D雷达装置”用于移动航空控制和预警中队的活动

E-2C

日本-美国联合演习

军训练演习

军训练演习

与美国海军陆战队的联合训练演习

移动航空控制和预警中队
Candidates for next-generation fighter

<table>
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</table>

(3) Improvement of air defense capabilities

Acquisition of new fighters

- Acquisition of next-generation fighters (F-X) (4 units: ¥ 55.1 billion)
  - Acquire F-X as a successor to the existing fighters (F-4)
  - Aircraft type to be decided by the approval of FY2012 budget

Capability enhancement of existing fighters to ensure effectiveness

- Fighter upgrades
  Upgrade capabilities of existing fighters to adapt to the modernization of the aerial combat capabilities of neighboring countries and to appropriately carry out air defense operations
  - Modernize F-15 (2 units: ¥ 3 billion)
  - Improve F-15 to load IRST (2 units: ¥ 1.4 billion)
    Load IRST (Infra-red Search and Track) onto the modernized F-15 to improve air-to-air combat capabilities under electronic-warfare environment as well as adding capability to respond to the increasing number of stealth aircraft in neighboring countries.
  - Improve self-defense capability of F-15 (2 units: ¥ 4.8 billion)
  - Improve F-2 air-to-air combat capability (12 units: ¥ 4.1 billion)
  - Add JDAM* function to F-2 (20 aircraft: ¥ 2.8 billion)
  - IRST (Infra-red Search and Track)
  - JDAM (Joint Direct Attack Munitions)
Developments to enhance fighter support capability of F-2 (¥3.3 billion)
- Develop a system that displays optimal bomb dropping area to lessen the tasks of the pilot when releasing a laser JDAM, hence improving the fighter support capability of F-2. In addition, upgrade the capability of the mission computer, which is required for the development of this system.

Development of future missile warning technology (¥2 billion)
- Conduct research on missile warning systems using infrared radiation to be mounted on various aircraft that will enable the detection of new threats, such as reduced-smoke missiles.

Acquisition of other equipment
- Patriot system upgrade (3 units: ¥36.2 billion)
  - Upgrade the equipment system of PAC-2 of three anti-aircraft corps (old version) to enhance their air defense capabilities.
- Acquisition of type-03 medium-range surface-to-air missile (¥16.7 billion)
- Acquisition of type-11 short-range guided surface-to-air missile (¥4.9 billion)
- Acquisition of surface-to-air guided missile for base air defense (¥5.8 billion)
(4) Security of Sea-Lanes

- Acquisition of a minesweeping and transport helicopter (MCH-101)(minesweeping version)(1 unit: ¥6.4 billion)
  - For future mine countermeasure operations, acquire the minesweeping and transport helicopter MCH-101(minesweeping version) to replace the minesweeping and transport helicopter MH-53E.

- Acquisition of the patrol helicopter (SH-60K) (to replace SH-60J) (5 units: ¥28.2 billion)
  - Life extension of the patrol helicopter (SH-60J) (2 units: ¥1 billion)
    - Life extension measures on the SH-60J in order to maintain the posture of patrol helicopters
  - Building of submarine and destroyer and life extension of destroyer [repost]

- Development of new submarine-launched torpedo (¥3.7 billion)
  - More than 20 years have passed since the development of the existing type-89 heavy weight torpedo, and it is now difficult to respond to the advancement of torpedo deception devices and to the declined sensor detection range, due to sea surface reverberation in shallow water. New submarine-launched torpedoes will be developed to deal with this situation and to enable effective attacks against various vessels.

- Research on Variable Depth Sonar (VDS) system(¥2.2 billion)
  - Seeks to improve a capability to detect submarines in the deep water, which have been difficult to carry out with the existing device, and to increase target detection possibility.88

- VDS (Variable Depth Sonar)
- TASS (Towed Array Sonar System)
③ Response to cyber attacks

To enhance the capability for effective response to cyber attacks by strengthening the cyber defense system

Enhancement and strengthening of cyber defense system

- Strengthening of planning functions and training support functions concerning response to cyber attacks
  - Strengthen cyber planning functions of the Joint Staff Office to respond to increasing threat of cyber attacks
  - Strengthen training support functions of the SDFC4 (Command, Control, Communication and Computers) Systems Command in order to improve capability concerning cyber protection of each SDF group.

- Strengthening of function for cyber warfare analysis
  - Strengthen the function of the Defense Intelligence Headquarters, which exclusively collects and analyzes information concerning overseas cases of cyber attacks over the long term

Establishment of operational framework

- Strengthening of security and analysis devices for cyber defense (¥0.2 billion)

  □ Device equipped with information collection, analysis and response exercise functions concerning cyber attacks

  □ Research aimed at cyber attack response (¥20million)
    - Research and study on the latest technological developments concerning information assurance

Human resource development and enhancement of partnership with other countries

- Human resource development initiatives to defend against cyber attacks
  - Dispatch personnel to study at Japanese and overseas graduate schools

- Enhancement of partnership with the U.S.
  - Participate in Japan-U.S. IT Forum

Participation in symposium hosted by the US Strategic Command
④ Response to guerillas and special operations force attacks

To rapidly and effectively respond to guerillas and special operations force attacks, further enhance readiness and maneuverability of units and improve responsive capability against attacks with nuclear, biological, and chemical weapons.

Response to special operations force attacks ¥119.7 billion

- Warning and surveillance, information-gathering
  - Warning and surveillance exercises
  - Acquisition of Flying Forward Reconnaissance System (FFRS) (1 unit: ¥0.4 billion)
  - Research on remote controlled small reconnaissance system (¥1.5 billion)
- Search for guerillas and special operations forces, and protection of vital facilities
  - Acquire light armored vehicles (101 units for GSDF: ¥3 billion, 2 units for ASDF: ¥90 million), a multi-purpose helicopter (UH-60JA), (1 unit: ¥3.7 billion) and an attack helicopter (AH-64D) (1 unit: ¥5.2 billion)
- Capture and intercept invading guerillas and special operations forces
  - Urban terrain combat exercises
  - Acquire multi-purpose guns (7 units: ¥70 million)
- Strengthening of partnership with the police
  - Joint public security operation exercise with the police
- Acquisition of type-10 tanks (16 units: ¥16 billion)
  - Continue to acquire downsized and lightweight type-10 tanks with improved mobility and enhanced network combat capabilities, in response to the decreasing number of existing tanks

- Development of firepower combat vehicle (¥6.4 billion)
  - Develop firepower combat vehicle (wheeled self-propelled gun), which is intended to improve the speed of firing and mobility, enhance strategic maneuverability, and expand networks, in response to the decreasing number of the existing towed howitzer (FH-70)

Enhancement of various capabilities to respond to Nuclear, Biological, and Chemical (NBC) weapons
1 Effective Deterrence and Response

5 Response to large-scale/CBRN disasters

Learning from the Great East Japan Earthquake, Japan will promptly and appropriately respond to various large-scale/CBRN disasters, including nuclear disasters, and improve various equipment and training in order to protect the lives and property of Japanese people.

Improvements in disaster response capabilities based on lessons learned from the Great East Japan Earthquake

- **Enhancement of transport capability of JSDF aircraft in times of disaster**
  - Rapid and stable transportation of relief supplies to a disaster-stricken area
  - Acquire next-generation transport aircraft (C-2) [repost]
  - Transport supplies by helicopters to an isolated area
    - Building of a destroyer (DDH) [repost]
    - Acquisition of transport helicopters (CH-47JA) [repost]
    - Acquisition of a minesweeping and transport helicopter (MCH-101) [repost]

- **Improvement in communication capacity after the deployment of units, and development of method of sharing information with concerned parties**
  - Acquire the Next Generation Field Communication System

- **Improvement in disaster response functions**
  - Establish the post of “Deputy Director of the Defense Operations Department” in the Joint Staff Office
  - Enhance disaster-ready dispatch functions (increase in the number of personnel for disaster dispatch) (Internal Bureau/JSO)
  - Strengthen analysis and estimation functions of disaster information (increase in the number of personnel for disaster information) (the Defense Intelligence Headquarters)

- **Disaster response training, including training on nuclear disasters (¥ 0.8 billion)**
  - Conduct various drills and exercises to strengthen preparedness against natural disasters (JSDF Joint Disaster Relief Exercise, U.S. National Disaster Medical System (NDMS)), as well as nuclear disasters, based on the lessons learned from the Great East Japan Earthquake. Also, hold radiation-related lectures to strengthen capability concerning nuclear disasters that require specialist knowledge and skills

- **Development of education and research functions (increase the number of teaching staff)**
  - Establish a new program to conduct education concerning large-scale/CBRN disasters (National Defense Academy of Japan)

Enhancement of capabilities required for CBRN disaster response

- **Enhancement of various capabilities required for the response to special disasters**
  - Prevention: Smallpox vaccine
  - Detection/Identification: Research on CBRN Threat Assessment System (¥ 1 billion)
    - NBC Reconnaissance vehicles (2 units: ¥ 1.4 billion)
    - NBC Alarm (1 set: ¥ 0.2 billion)
    - Sets of new dosimeters (173 sets ¥2: ¥ 0.5 billion)
  - Protection: Protection equipment, anti-chemical hazmat suits for personnel.
  - Diagnosis, treatment: Remote area medical support system
  - Decontamination: Decontamination vehicles, decontamination devices
  - Training: NBC protection training
    - 1 CBRN: Chemical, Biological, Radiological and Nuclear
    - 2 γ-ray counter 121 units, β- and α-ray counter 27 units, neutron counter 25 units

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- **GSDF CH-47JA (joint operation) leaving from destroyer “Hyuga”**

- **NBC Reconnaissance Vehicle**

- **Operational support for CBRN response units**

- **Research on CBRN Threat Assessment System Technology**
Response to Ballistic Missile Attacks

To be fully prepared for responding to ballistic missile attacks, Japan will steadily implement capability improvements in Aegis ships and acquire PAC-3 missiles, as well as continuing cooperative development with the U.S. for an advanced interceptor missile for BMD (SM-3 Block IIA).

Development of interception system

- Improvement of Aegis ships’ performance (2 vessels: ¥ 39.9 billion)
  - Upgrade two Atago-class destroyers with a ballistic missile defense capability to maintain a continuous readiness against ballistic missile threats
  - Start developing/designing a system program and procure equipment necessary for improvements in FY2012

- Acquisition of PAC-3 missiles (¥ 4.7 billion)
  - Acquire necessary PAC-3 missiles and enhance defense capability against ballistic missile

Research and development, etc. (Japan-U.S. cooperative development)

- Advanced BMD interceptor missiles (SM-3Block IIA) (¥ 0.8 billion)
  - To increase the defense capabilities against ballistic missile attacks in view of strengthening the means for responding to future threats, Japan and the U.S. will continue the cooperative development of an advanced BMD interceptor missile (SM-3 Block IIA) to be carried by Aegis ships.
  - In FY2012, conduct system simulation tests and implement preparations for ground based flight tests
2 Further Stabilization of Security Environment in the Asia-Pacific Region

Japan aims at stable regional security through the appropriate implementation of information-gathering, surveillance, and training/exercises, and will promote bilateral and multilateral defense cooperation/exchanges and joint training and exercises, as well as establishment and enhancement of the regional cooperation framework, and support of the capacity building while deepening the Japan-U.S. alliance.

1 Daily Information-gathering and surveillance

- Implementation of various initiatives necessary for daily information-gathering/warning and surveillance activities
  - Building of a submarine and a destroyer, and the life extension of destroyers [repost]
  - Improvement of information sharing capability of vessels etc. [repost]
  - Develop fixed warning and control radar [repost]
  - Prepare to develop servicing foundation for early warning aircraft (E-2C) [repost]

2 Promoting defense cooperation and exchanges with partners

- Promoting bilateral and multilateral defense cooperation and exchanges, as well as joint training and exercises, in a multi-layered manner, in an attempt to achieve stability in the Asia-Pacific region, while deepening the Japan-U.S. alliance
  - Defense cooperation and exchanges with Australia, ROK, India, etc.
  - Defense exchanges and cooperation with China and Russia
  - Trilateral defense cooperation (Japan-U.S.-Australia, Japan-U.S.-ROK)
  - Defense cooperation and exchanges with Southeast Asian countries, European countries, and NATO

- Exercise Kakadu 12 (Multilateral joint exercise hosted by Australia)
  - Exercise Aman 13 (Multilateral joint exercise hosted by Pakistan)
  - Joint exercises: Japan-U.S.-Australia, Japan-U.S.-India

- Bilateral search and rescue exercises
  - Improve skills for search and rescue operations and promote relationship of mutual trust and mutual understanding

- Capacity building assistance (¥ 0.5 billion)
  - Promote response capability enhancement and human resources development of the military and relevant organizations of developing countries in the field of non-traditional security, such as humanitarian assistance/disaster relief and mine/unexploded ordnance clearance, by dispatching SDF personnel and civilians to developing countries such as S.E. Asia to offer knowledge and experience in these fields, thus contributing to the stability of global security.
  - (Full-fledged implementation of the program starting in FY2012)
Promoting multilateral cooperation in the Asia-Pacific region

- Initiatives under the ASEAN Defense Ministers’ Meeting-Plus (ADMM Plus)
  - Actively promote enhancement of regional defense and security cooperation through the defense ministers’ meeting, the only official meeting in the Asia-Pacific region
  - Actively promote practical regional cooperation in the field of military medicine by co-chairing the Expert Working Group (EWG) with Singapore

- Participating in Pacific Partnership (PP) 2012
  - Naval ships mainly sent by the U.S. Navy visit countries in the Asia-Pacific region and conduct medical activities and cultural exchanges, etc. Through cooperation with governments, militaries, international organizations, and NGOs, the PP strengthens partnerships among participating countries and facilitates international disaster relief operations.

- Participating in the ASEAN Regional Forum (ARF)
  The ARF provides Japan with an opportunity to actively explain its defense policies and efforts, and to candidly exchange opinions with member nations, thereby increasing the transparency of the defense policies as well as fostering mutual understanding.

- Multilateral security dialogues hosted by the MOD and the SDF
  - Hosting the Tokyo Defense Forum (TDF)
  - Hosting the Meeting of Senior Defense Officials on Common Security Challenges in the Asia-Pacific Region

- Participating in Pacific-Area Senior Office Logistics Seminar (Joint Staff Office)
  - Hosting Multilateral Logistics Staff Talks (GSDF)
  - Hosting Asia Pacific Naval Collage Seminar (MSDF)
  - Hosting International Air Defense Education Seminar (ASDF)
3 Improving the Global Security Environment

In addition to active participation in international peace cooperation activities, Japan will proactively take part in various activities such as arms control and disarmament, non-proliferation and capacity-building support, as well as promote initiatives for international anti-terrorism measures and marine traffic security.

① Strengthening JSDF’s basis for international activities

- Development of equipment relevant to international operations
  - Acquire special trucks (equipped with PLS*) (GSDF) (2 units: ¥ 0.3 billion)
  - INMARSAT(International Maritime Satellite Organization)-related projects (MSDF) (¥ 0.3 billion)
  - Develop a joint intranet for vessels (MSDF) (¥ 90 million)
  - Develop explosion-proof foam for fuel tanks of C-130H (ASDF) (¥ 30 million)
- Education and exercises related to international peace cooperation activities, etc.
  - Participate in multilateral exercises (JSO) (¥ 0.1 billion)
  - Dispatch personnel to PKO training centers (GSD) (¥ 2 million)
- Overseas logistics study (JSO) (¥ 0.3 million)
- Enhancement of education and research at the Japan Peacekeeping training and Research Center
  - Offer educational courses to train personnel engaged in international peace cooperation activities (JSO)
- Enhancement of total transport functions concerning international activities
  - Enhance the local transportation coordination function (JSO)
- Enhancement of preparation for cartography related to international activities
  - Enhance preparation for cartography with the involvement in Multinational Geospatial Co-production Program (the Defense Intelligence Headquarters)

② Initiatives for international community efforts

- Dispatch of instructors to PKO centers in African countries
- Participation in PSI interdiction exercises, etc.
  - Maintain and increase the capability of carrying out a coordinated response among MOD/SDF, relevant organizations, and concerned countries against the proliferation of weapons of mass destruction, and so on.
- Anti-piracy operations off the coast of Somalia and in the Gulf of Aden
  - Continue anti-piracy operations carried out by destroyers and P-3Cs in the Gulf of Aden
Promoting the Structural Reform to Improve Effectiveness of Defense Forces

Among agendas in the Structural Reform to Improve Effectiveness of Defense Forces, those that have reached a certain conclusion in accordance with the so-called “roadmap of the reform” are properly reflected in the FY2012 budget request.

Study on the joint enhancement of the SDF functions and on the future unit structure

- Command and control/basic unit
  - Establish “Deputy Director of the Operations Department” in the Joint Staff Office

- Mobile Deployment
  - Deploy mobile squadrons (Yonaguni Island)

- Exercises/drills/education
  - Implement various exercises, including Japan-U.S. Joint Exercise

- Information-gathering/warning and surveillance/reconnaissance activity
  - Deploy a coast observation unit (Yonaguni Island)
  - Overseas study on operations/maintenance/development of high-altitude unmanned aircraft

- Air defense posture/antiaircraft artillery system
  - Research on elemental technology concerning future missile systems (2 projects: ¥ 2.2 billion)
    - Conduct research on elemental technology concerning rocket motor parts and domes for light-wave seekers, contributing to surface-to-air missile systems in the future, in consideration for sharing of equipment between GSDF and ASDF.

Study on the unification and optimization of cross-sectional resource allocation

- Enhancement of the management of information and telecommunications projects
  - Develop and manage projects for X-band satellite communication
  - Acquire the Next Generation Field Communication System

- Streamlining of logistics operations
  - Conduct study on SDF programs

Promotion of drastic institutional reform relating to human resource base

- Approaches to recruitment and career support
  - Enhance career support measures
  - Enhance of vocational training for personnel near retirement to upgrade their skills
  - Study on labor market needs etc. to implement effective career support measures

Promotion of comprehensive procurement reform

- PBL
  - Implement PBL pilot model

Enhancement of medical functions

- Creation of hub of and addition of higher functions to SDF hospitals
  - Reconstruct Sapporo Hospital (2nd stage) (¥ 3.9 billion)
    - Reconstruction of JSDF Sapporo Hospital, whose performance has suffered due to deterioration and small size, etc.

- Infrastructure development for information and telecommunications technology
  - Outline/detailed design of JSDF Central Hospital Medical Information System

- Other matters to be examined
  - Projects related to the creation of 4-year nurse education courses
5 Space and Information and Telecommunication Programs

Japan will implement activities to promote space-related programs and enhance the information and telecommunication function.

**Space programs** ¥ 260.9 billion

- Research for enhancement of C4ISR capability
  - Research on two color infrared image sensor technology, etc.
- Use of satellite communication
  - Develop and operate X-band satellite communications
  - Lease of transponder of communications satellite, etc.
- Use of commercial imagery satellite
  - Receive commercial satellite imagery, etc.
- Use of meteorological satellite information
- Send personnel to Space Fundamentals Course of the U.S. Air Force

**Enhancement of information and telecommunication function**

- Development and operation of X-band satellite communications (¥ 188.1 billion)
  - Since the existing communications satellites (Superbird B-2 and D) will reach the end of their design lifespan in FY2015, successor satellites will be developed. This project will adopt the PFI method, which implements all stages, from design to disposal, under a blanket contract, utilizing the money, management ability, and technological knowledge of the private sector.
  - Development (production and launch, etc.) and operation of X-band satellites
  - Development and maintenance/management of facilities and equipment necessary for X-band satcom
  - Introduction of integrated control system for X-band satcom network etc.

- Acquisition of the Next Generation Field Communication System (2 units: ¥ 14.8 billion)
  - As an field communications infrastructure of GSDF, GSDF will acquire the Next Generation Field Communication Systems, which will enable the rapid creation of high-speed and wide-area communication networks and also be useful for disaster relief operation.
6 Restructuring and Organizational Changes

Japan will increase the actual number of SDF personnel and reorganize units of each defense force in accordance with the National Defense Program Guidelines and the Mid-term Defense Program. Japan will also implement organizational changes to strengthen the defense policy planning function.

Increase in the actual number of SDF personnel

- Increase in the number of GSDF personnel
  - Request to increase the number of personnel by 109 so that units deployed in the area surrounding the Fukushima Dai-ichi Nuclear Power Plant can take all possible measures to continuously respond to nuclear disasters.

Restructuring programs

- Reorganization of units, etc.
  - Transfer subordination of Air Rescue Wing from Air Support Command to Air Defense Command
  - Relocate the headquarters of Central Readiness Force to Camp Zama (provisional name) (Establishment of Camp Zama (provisional name))
  - Reorganize the 4th Division for modernized readiness
  - Reorganize the 12th Brigade for modernized readiness
  - Bring chemical protection unit of a brigade under the direct control of the brigade
  - Reorganize the 1st tank group

Organization-related Programs

- Enhancement of the framework for the “Strengthening the Basis for Responding to Large-scale and Special Disasters based on the Responses to the Great East Japan Earthquake”
  - Establish a “Mental Health Planning Officer (provisional title),” under the Director of the Health and Medical Division of the Bureau of Personnel and Education particularly in order to promote the care system for the mental health of SDF personnel deployed in case of natural disasters such as the Great East Japan Earthquake and other contingencies.

- Enhancement of the framework for “Deepening and Developing the Japan-U.S. Alliance”

- Additional establishment of “Initiatives for Multi-layered Security Cooperation with the International Community”
  - Establish the “International Policy Planning Officer (provisional title)” in the International Policy Division of the Bureau of Defense Policy

- Enhancement of the framework of “Strengthening a Consolidated Operation Base to Respond to Complex Situations, etc.”
  - Establish a “Deputy Director of the Operations Department (provisional title)” in the Joint Staff Office to enhance the framework of sustainable and concomitant implementation of both assistance and executive orders, regarding consolidated operations, as well as to improve efficacy of Japan-U.S. coordination, etc.
7 Strengthening Education and Research System

Implement the measures to strengthen the system of education and research of the National Institute for Defense Studies, the National Defense Academy, and the National Defense Medical College in addition to developing an environment for the enhancement of various health measures so that students can be devoted to their duties.

The National Institute for Defense Studies

- Enhancement of research framework to respond to the diversification of security challenges (increase in the number of senior research fellows)
  - Initiatives for multi-layered security cooperation in the international community
    - Strengthen research on China, Africa, and Oceania
    - Strengthen research on the military history of Russia/USSR
  - Promotion of policy-oriented research
    - Organize timely exchange of opinions and ideas related to information analysis with notable security research institutions in other countries (such as Institute for National Security Strategy (INSS) in U.S.)

National Defense Academy

- Enhancement of study abroad programs
  - Long-term training at the National Armed Forces Language School in Qatar
  - Unit exercises in Federal Republic of Germany and extension of training period at the Federal Language office (3 weeks – 4 months)
- Enhancement of education and research (increase in instructors)
  - Establish new programs (crisis management and life science) unique to the National Defense Academy, combining both academic and practical aspects, to implement education suitable for the new missions and roles of the SDF
  - Establish a new program to implement education concerning large-scale and special disasters.
- Measures to attract highly qualified human resources
  - Introduce a new entrance examination system and improve the existing examination system, in order to ensure highly qualified students with the makings of an excellent SDF officer in a society of increasingly fewer children with higher education levels
7. Strengthening Education and Research

National Defense Medical College

- Enhancement of functions of the National Defense Medical College and its affiliated hospitals
  - Enhance functions of the National Defense Medical College Hospital in order to accurately meet the needs of the MOD/SDF, thus contributing to educational needs of medical officers. (¥ 1.6 billion)
- Establishment of four-year nursing program
  - Preparations towards the start of the program in FY2014 (¥ 1.8 billion)

Development of environments conducive to work

- Enhancement of mental health care
  - Enhance mental health care for SDF personnel by developing various counseling approaches, such as training conducted by external lecturers for in-house counselors, the allocation of clinical psychologists, and the invitation of external counselors, etc. (¥ 0.2 billion)

Various medical measures

- Maintenance/improvement of medical skills of medical officers and contribution to regional medicine, etc.
  - Outline/detailed design of Self-Defense Forces Central Hospital Medical Information System (¥ 0.4 billion)
    - Along with the conversion of the medical information system of the Self-Defense Forces Central Hospital, an outline and detailed design will be developed in view of using the common medical computers of SDF regional hospitals, etc.
  - Development of medical equipment of SDF hospitals, etc. (¥ 17.1 billion)
- Enhancement of medical function
  - Develop individual first aid kits (¥ 0.7 billion)
  - Develop an outdoor surgery system (¥ 0.2 billion)
- Establishment of a four-year nursing program (see above)
8 Initiatives for the Realignment of U.S. Forces in Japan

In order to make steady progress in the realignment of U.S. forces in Japan, Japan will take relevant actions as appropriate, including the relocation of the U.S. Marine Corps from Okinawa to Guam.

Measures for reducing the burden on local communities

- Relocation of US Marine Corps from Okinawa to Guam
  - Contribution to the “Mamizu” projects and infrastructure development projects, etc.
  (Note1) The term “Mamizu” project refers to the one funded by Japanese direct cash contributions for the development of facilities, such as headquarters buildings.
  (Note2) With regard to the infrastructure development projects, investment is made in the Japan Bank of International Cooperation (JBIC), which is an international business section of Japan Finance Corporation, to be used as funds from JBIC to the U.S. side.

- Realignment-related measures in Japan
  - Relocation of Futenma Air Station
  - Return of land south of Kadena Air Base
  - Return of a portion of the land, etc. at Sagami General Depot
  - Relocation of Carrier Air Wing from Atsugi Air Facility to MCAS Iwakuni
  - Relocation of U.S. aviation training from Kadena Air Base to mainland Japan
  - Community development measures (realignment grants, etc.)

Since projects should be launched at the earliest possible time, as measures to reduce burden on local community, it is necessary to reflect the result of coordination with local communities and U.S. forces in the process of budget creation. Therefore these matters will be examined during the process of budget compilation and necessary measures will be taken. For that effect, the amount requested will be temporarily set at ¥147 billion, the same as the last fiscal year. In addition, ¥1.5 billion is requested for the development of facilities related to reducing the burden on local communities, etc.

Measures for maintaining deterrent capabilities

- Relocation of the headquarters of the GSDF Central Readiness Force to Camp Zama
- Compensation for functions of the US facilities along with the relocation of the JASDF Air Defense Command to Yokota Air Base, etc.

SACO-related cost

- Regarding the measures not subject to change under the Japan-U.S. Security Consultative Committee (2+2) Joint Statement, Japan will continue to steadily implement these measures included in the Special Action Committee on Okinawa (SACO) Final Report (tentatively set for the same amount as the previous fiscal year: ¥8.3 billion).
9 Promotion of Base Measures

Japan will steadily implement measures to achieve reconciliation of interests between defense facilities and the neighboring communities, as well as measures to facilitate the smooth and effective stationing of U.S. forces in Japan.

Expenses related to programs for communities near bases ¥118.8 billion

- Residential sound insulation: ¥42.9 billion
- Improvement of living environment of neighboring communities: ¥75.9 billion

- Expenses for the prevention of disturbances resulting from SDF activities or the establishment and operations of defense facilities
  - Implementation of sound insulation projects for residences near air bases, etc.
  - Implementation of projects to improve living environment of neighboring communities (river and road restoration, sound-proofing systems in schools, etc.)
  - Implementation of projects covered by specified defense facilities environs improvement adjustment grants, with strong requests from municipalities around bases (development of public facilities and so-called soft projects, such as medical cost subsidies, etc.)

Cost-sharing for the stationing of U.S. Forces in Japan ¥191.9 billion

Including:
- Special Measures Agreement: ¥139.5 billion
- Facilities improvement: ¥25.5 billion
- U.S. forces in Japan employees measures, etc.: ¥27.0 billion

- Expenses of the Special Measures Agreement to ensure the smooth and effective stationing of U.S. forces in Japan
  - Share the cost of wages and utilities, etc. of U.S. forces in Japan employees
  - Improve facilities (barracks, family housing, etc.)
  - Share the cost of social insurance premiums (healthcare insurance, welfare annuity insurance, etc.) for U.S. forces in Japan employees

Rental cost of facilities, compensation expenses, etc. ¥137.3 billion

- Rental cost of defense facility land, etc., compensation for loss of fisherman income due to training exercises on water areas, etc.
10 Streamlining Initiatives

Various initiatives will be promoted to further rationalize and streamline equipment acquisition and ensure the greater fairness of procurement, as well as to improve the efficiency of MOD’s budget execution.

Bulk procurement of equipment

Regarding equipment which is procured every fiscal year, the government will conduct bulk procurement of major equipment, which is expected to save some expenditures through one-time procurement.

[Equipment subject to bulk procurement]

- Type-96 Multi-purpose Missile System (3 sets: ¥ 4.1 billion)
  - For 3 fiscal years: 3 sets in one procurement
  - Cost-saving effect of about ¥ 1.1 billion

Streamlining initiatives

- Implementation of PBL pilot model
  - In consideration of the future introduction of PBL-style maintenance as part of comprehensive acquisition reform, efforts will be made to streamline operations and cost reduction, while maintaining current operational availability by implementing comprehensive contracts on the acquisition, repair, etc. of parts of GSDF’s special transport helicopter (EC-225LP) as a PBL pilot model.
  - PBL (Performance Based Logistics): A contract method with corporations in which payment is made for achieving the performance of equipment, such as operational availability or safety, rather than paying for the actual amount of maintenance work

- Reducing acquisition costs of equipment
  - Reduce development costs by consolidating programs for several destroyers at the time of the renewal of combat system computers loaded on them.

- Conduct study on the streamlining of service
  - Survey on the nature of operations of JSDF
    - Implement demonstrative tests on streamlining measures for service at camps and bases
  - Discussions at the Contract & Procurement Systems Study Group
    - Consider review of various systems concerning contract, procurement and equipment cost analysis/usage by creating a cost database, in order to draw out cost reduction incentives of a private sector.

- Initiatives for reform of total labor cost
  - Streamlining of SDF operations will continue as a part of the reform of total labor cost in order to efficiently carry out SDF duties (SDF: -25 personnel)
Major equipment, etc.
## 1 Major Equipment

<table>
<thead>
<tr>
<th>Procurement type</th>
<th>FY2011</th>
<th>FY2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number procured</td>
<td>Number Procured</td>
</tr>
<tr>
<td><strong>Aircraft</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-purpose helicopter (UH-60JA)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Transport helicopter (CH-47JA)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Attack helicopter (AH-64D)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Next helicopter trainer (TH-480B)</td>
<td>28</td>
<td>–</td>
</tr>
<tr>
<td>Fixed-wing patrol aircraft (P-1)</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Patrol helicopter (SH-60K)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Minesweeping and transport helicopter (MCH-101)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Primary trainer (T-5)</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Helicopter trainer (TH-135)</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Life extension of fixed-wing patrol aircraft (P-3C)</td>
<td>(1)</td>
<td>–</td>
</tr>
<tr>
<td>Life extension of patrol helicopter (SH-60J)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Next-generation fighter (F-X)</td>
<td>–</td>
<td>4</td>
</tr>
<tr>
<td>Modernization of fighter (F-15)</td>
<td>(8)</td>
<td>(2)</td>
</tr>
<tr>
<td>Improvement of self-defense capability of fighter (F-15)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Improvement to load IRST on fighter (F-15)</td>
<td>–</td>
<td>(2)</td>
</tr>
<tr>
<td>Improvement of air-to-air combat capability of fighter (F-2)</td>
<td>(3)</td>
<td>(12)</td>
</tr>
<tr>
<td>Addition of JDAM function to fighter (F-2)</td>
<td>(12)</td>
<td>(20)</td>
</tr>
<tr>
<td>Next-generation transport aircraft (C-2)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Rescue helicopter (UH-60J)</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Destroyer (DDH)</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Submarine (SS)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Minesweeper (MSC)</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Life extension of Hatsuyuki class destroyer</td>
<td>(1)</td>
<td>(－)</td>
</tr>
<tr>
<td>Life extension of Asagiri class destroyer</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Life extension of Abukuma class destroyer</td>
<td>–</td>
<td>(－)</td>
</tr>
<tr>
<td>Life extension of Hatakaze class destroyer</td>
<td>–</td>
<td>(－)</td>
</tr>
<tr>
<td>Life extension of Towada class supply vessel</td>
<td>(1)</td>
<td>–</td>
</tr>
<tr>
<td>Function improvement of short-range SAM system on Murasame class destroyer</td>
<td>–</td>
<td>(1)</td>
</tr>
<tr>
<td>Measures related to life extension of air-cushion vehicle</td>
<td>(－)</td>
<td>(－)</td>
</tr>
</tbody>
</table>

**Vessel**

<table>
<thead>
<tr>
<th></th>
<th>FY2011</th>
<th>FY2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life extension of Hatsuyuki class destroyer</td>
<td>(－)</td>
<td>(－)</td>
</tr>
<tr>
<td>Life extension of Abukuma class destroyer</td>
<td>–</td>
<td>(－)</td>
</tr>
<tr>
<td>Life extension of Hatakaze class destroyer</td>
<td>–</td>
<td>(－)</td>
</tr>
<tr>
<td>Life extension of Towada class supply vessel</td>
<td>(1)</td>
<td>–</td>
</tr>
<tr>
<td>Function improvement of short-range SAM system on Murasame class destroyer</td>
<td>–</td>
<td>(1)</td>
</tr>
<tr>
<td>Measures related to life extension of air-cushion vehicle</td>
<td>(－)</td>
<td>(－)</td>
</tr>
<tr>
<td>Procurement type</td>
<td>FY 2011 Number procured</td>
<td>FY2012 Number procured</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>GSDF</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type-03 medium-range surface-to-air missile (SAM)</td>
<td>1 squadron</td>
<td>1 squadron</td>
</tr>
<tr>
<td>Type-11 short-range SAM</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Type-96 multi-purpose missile system</td>
<td>1 set</td>
<td>3 sets</td>
</tr>
<tr>
<td>Medium-range multi-purpose missile</td>
<td>12 sets</td>
<td>11 sets</td>
</tr>
<tr>
<td>Type-88 surface-to-ship missile system (improved)</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td>Surface-to-air missile (Patriot [excluding PAC-3])</td>
<td>¥9.1 billion</td>
<td>–</td>
</tr>
<tr>
<td>Upgrade of patriot system</td>
<td>–</td>
<td>(3)</td>
</tr>
<tr>
<td>Base air defense SAM</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

| **ASDF**         |                         |                         |                      |
| **Firearm, Vehicle, etc.** |                         |                         |                      |
| 9mm pistol       | 137                     | 90                      | 0.2                  |
| Type-89 rifle    | 10,033                  | 9,513                   | 27                   |
| Anti-personnel sniper rifle | 91 | 49 | 0.3 |
| 5.56mm machine gun MINIMI | 212 | 220 | 4 |
| 12.7mm heavy machine gun | 113 | 128 | 7 |
| Multi-purpose gun | – | 7 | 0.7 |
| 81mm motor L16   | 1                      | 6                       | 0.6                  |
| 120mm motor RT   | 1                      | 3                       | 1                    |
| Type-99 155mm self-propelled howitzer | 6 | 8 | 76 |
| Type-10 tank     | 13                      | 16                      | 160                  |
| Light armored vehicle | 56 | 101 | 30 |
| Type-96 wheeled armored vehicle | 11 | 21 | 26 |
| Type-B7 reconnaissace and patrol vehicle | 1 | 1 | 3 |
| NBC reconnaissace vehicle | 2 | 2 | 14 |
| Vehicle, communications equipment, facility equipment, etc. | ¥65 billion | – | 824 |
| **ASDF**         |                         |                         |                      |
| **Light armored vehicle** | 9 | 2 | 0.9 |

| **BMD**          |                         |                         |                      |
| **Upgrade of Aegis** | – | (2) | 399 |
| **ASDF**         |                         |                         |                      |
| Improvement of patriot system | (1 set for regular repair) | – | – |

**Note 1:** Prices represent amounts excluding initial expenses needed for the production of equipment, etc.

**Note 2:** Number procured: The number that is newly contracted in 2012. (The period for acquiring the item varies by equipment, but can take between two to five years.)

**Note 3:** The number in brackets represents the number related to upgrading the existing commissioned equipment.

**Note 4:** Regarding the number procured for the improvement of F-2 air-to-air combat capability and the addition of JDAM function to F-2, the upper figure represents the number of aircrafts modified, while the lower figure represents the number of pieces of equipment with improved capabilities. Regarding to the number procured for the life extension of vessels, the upper figure represents the number of vessels subject to life extension work, and lower figure represents the number of parts procured for life extension work.
<table>
<thead>
<tr>
<th>Item</th>
<th>Overview</th>
<th>FY2012 Amount (¥ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development of firepower combat vehicle</strong></td>
<td>Development of firepower combat vehicle (wheeled self-propelled howitzer) with a higher firing speed and mobility, and improved maneuverability and network capacity, in response to the decreasing number of the existing towed howitzer (FH-70)</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Research on elements of anti-aircraft gun systems</strong></td>
<td>Research on elements of anti-aircraft gun systems for close air defense against threats of air intrusion by unmanned aircraft, precision-guided missiles, and cruise missiles, etc.</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Development of new torpedo for submarine-use</strong></td>
<td>More than 20 years have passed since the development of the existing type-89 torpedo, which makes it difficult to respond to the advancement of torpedo deception devices and reduces sensor detection range in shallow water, due to sea surface reverberation, etc. Development of torpedo for submarine use aims at responding to this situation and enabling effective attacks on various vessels.</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Research on variable depth sonar</strong></td>
<td>Research on variable depth sonar for surface vessel-use aims to improve submarine detection capabilities in deep sea environs, which has been difficult with existing equipment, and to increase target detection potential.</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Development to improve support and combat capability of F-2</strong></td>
<td>In order to improve support and the combat capability of F-2, a display system for optimal release area will be developed aimed at reducing the burden on pilots when releasing Laser JDAM.</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Research on future missile warning technology</strong></td>
<td>Research on missile warning devices using infra-red radiation to be loaded on various types of aircraft, which will enable detection of new threats, such as missiles with low smoke motors.</td>
<td>2</td>
</tr>
<tr>
<td><strong>Research on CBRN threat assessment systems</strong></td>
<td>In order to respond to threat of chemical, biological, radiation, and nuclear (CBRN) contamination, research will be conducted on a system that predicts/evaluates the air diffusion of CBRN toxic substances, and enables one to identify the origin of the substances.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Research on remote-controlled small reconnaissance systems</strong></td>
<td>Research on small UGV and UAV that can conduct reconnaissance operations by going into a confined space under a CBRN contaminated environment caused by street fighting, terrorist attacks, special disasters, etc.</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Development of (improved) type-03 medium range surface-to-air missile</strong></td>
<td>Development of (improved) type-03 medium range surface-to-air missile with advanced capability to respond to cruise missile and air-to-surface missile attacks, expanded area of protection, and reduced acquisition cost.</td>
<td>11</td>
</tr>
<tr>
<td><strong>Development of new multi-purpose helicopter</strong></td>
<td>Development of new multi-purpose helicopter to replace the existing UH-1J helicopters used by the GSDF, which will be made available to division and brigade squadrons, and helicopter units of the regional armies for use in various missions, such as airmobile operations and air transportation.</td>
<td>18.4</td>
</tr>
</tbody>
</table>
### Changes in Number of Personnel

#### Changes in number of SDF personnel, etc.  
(Unit : Person)

<table>
<thead>
<tr>
<th></th>
<th>End of FY2011</th>
<th>End of FY2012</th>
<th>Increase/decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSDF</td>
<td>159,816</td>
<td>159,313</td>
<td>-503</td>
</tr>
<tr>
<td>Regular personnel</td>
<td>151,337</td>
<td>151,138</td>
<td>-199</td>
</tr>
<tr>
<td>Ready reserve personnel</td>
<td>8,479</td>
<td>8,175</td>
<td>-304</td>
</tr>
<tr>
<td>MSDF</td>
<td>45,517</td>
<td>45,517</td>
<td>0</td>
</tr>
<tr>
<td>ASDF</td>
<td>47,097</td>
<td>47,097</td>
<td>0</td>
</tr>
<tr>
<td>Joint Units</td>
<td>1,227</td>
<td>1,228</td>
<td>1</td>
</tr>
<tr>
<td>Joint Staff</td>
<td>361</td>
<td>371</td>
<td>10</td>
</tr>
<tr>
<td>Defense Intelligence Headquarters</td>
<td>1,907</td>
<td>1,907</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>247,446 (255,925)</td>
<td>247,258 (255,433)</td>
<td>-188 (-492)</td>
</tr>
</tbody>
</table>

Note 1: Figures for the end of each fiscal year are budget figures.
Note 2: The number in the brackets includes the number of SDF ready reserve personnel.

#### Number of SDF personnel (annual average)  
(Unit : Person)

<table>
<thead>
<tr>
<th></th>
<th>GSDF</th>
<th>MSDF</th>
<th>ASDF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual average</td>
<td>140,110</td>
<td>41,937</td>
<td>43,195</td>
</tr>
</tbody>
</table>

#### Number of SDF reserve personnel  
(Unit : Person)

<table>
<thead>
<tr>
<th></th>
<th>GSDF</th>
<th>MSDF</th>
<th>ASDF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDF reserve personnel</td>
<td>46,000</td>
<td>1,100</td>
<td>800</td>
<td>47,900</td>
</tr>
</tbody>
</table>

#### Number of candidates for GSDF reserve personnel  
(Unit : Person)

<table>
<thead>
<tr>
<th></th>
<th>End of FY2011</th>
<th>End of FY2012</th>
<th>Increase/decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDF reserve candidates</td>
<td>4,600</td>
<td>4,600</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Change in the quota of administrative officials, etc.  
(Unit : Person)

<table>
<thead>
<tr>
<th></th>
<th>End of FY2011</th>
<th>End of FY2012</th>
<th>Increase/decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>21,989</td>
<td>22,012</td>
<td>23</td>
</tr>
</tbody>
</table>

Note 1: Including Minister, Parliamentary Senior Vice-Minister, and Parliamentary Vice-Minister (2 persons)
Note 2: The number of increase/decrease includes the decrease of 489 through rationalization of quota.
Defense-related expenses
### Overall Defense-related Expenses

<table>
<thead>
<tr>
<th>[Expenditures (classified into 3 categories by expense)]</th>
<th>(Unit: ¥100 million)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FY2011 Budget</th>
<th>FY2012 Request for general budget + special budget allocations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YR/YR</td>
<td>YR/YR</td>
</tr>
<tr>
<td>Defense-related expenses</td>
<td>46.625</td>
<td>46.906</td>
</tr>
<tr>
<td></td>
<td>-2.01%</td>
<td>2.81%</td>
</tr>
<tr>
<td>Personnel and provisions expenses</td>
<td>20.916</td>
<td>20.872</td>
</tr>
<tr>
<td></td>
<td>6.6%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Material expenses</td>
<td>25.709</td>
<td>26.034</td>
</tr>
<tr>
<td></td>
<td>-2.66%</td>
<td>3.25%</td>
</tr>
<tr>
<td>&lt;Deferred expenses&gt;</td>
<td>(191)</td>
<td>(717)</td>
</tr>
<tr>
<td>Obligatory outlay expenses</td>
<td>16.321</td>
<td>16.024</td>
</tr>
<tr>
<td></td>
<td>-4.29%</td>
<td>-2.97%</td>
</tr>
<tr>
<td>General material expenses</td>
<td>9.388</td>
<td>10.010</td>
</tr>
<tr>
<td>(activity expenses)</td>
<td>163</td>
<td>622</td>
</tr>
<tr>
<td></td>
<td>1.8%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

(Comments)
1. Exchange rate for FY2012: US$ = JPY 89
2. ( ): share, [ ] : growth rate, < >: Expenditures that are to be expended later on.
3. The term “Expenditures that are to be expended later on.” means the extension of the payment period of a part of the obligatory outlay expenses to be paid in the respective fiscal years to later fiscal years. The above mentioned obligatory outlay expenses indicate the reduced expenses by the amount of deferred expenses.
4. In addition to the above, the SACO-related expenses are ¥10.1 billion for FY2011 and ¥10.1 billion for FY2012 (tentatively the same amount as FY2011), and the U.S. forces realignment-related expenses (portion intended to reduce the burden on the local community) are ¥102.7 billion for FY2011 and ¥102.7 billion for FY2012 (tentatively the same amount as FY2011). Therefore, the total is ¥4,775.2 billion for FY2011 (¥15.1 billion, -0.3% yr/yr) and ¥4,803.3 billion for FY2012 (¥28.1 billion, +0.6% yr/yr).
5. Furthermore, as an expenditure for restoration and reconstruction from the Great East Japan Earthquake, the government has prepared ¥29.1 billion as obligatory outlay expenses for FY2012 pertaining to the first supplementary budget for FY 2011 and ¥1.2 billion as expenditure pertaining to FY 2012 budget request. Also, there are ¥109.3 billion as obligatory outlay expenses for FY 2012 pertaining to a request from the MOD for the draft of the third supplementary budget for FY 2011.
6. Figures may not add to the total due to rounding (hereinafter the same).
7. FY 2012, ¥96 billion are requested for the special budget allocations.
8. Figures for FY 2012 include ¥0.3 billion (obligatory outlay expense) as expenditures pertaining to rebuilding of Sapporo Hospital and ¥0.7 billion for future obligation pertaining to new contracts, which are appropriated by the MOF Head Office.

### Future obligation pertaining to new contracts

<table>
<thead>
<tr>
<th>(Unit: ¥100 million)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>FY2011</th>
<th>FY 2012 General budget request</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YR/YR</td>
<td>YR/YR</td>
</tr>
<tr>
<td>Future obligation pertaining to new contracts</td>
<td>16.540</td>
<td>3.285</td>
</tr>
<tr>
<td></td>
<td>-8.3</td>
<td>3.285</td>
</tr>
<tr>
<td></td>
<td>[-0.5%]</td>
<td>[19.9%]</td>
</tr>
</tbody>
</table>
Projects contributing to the construction of dynamic defense

- Fuel cost for vessels, aircraft, vehicles, etc. (increments in unit price), necessary to conduct various operations, such as warning and surveillance activities, and maintenance and repair work required for maintaining and improving their maneuverability
- Projects to maintain advanced technology related to defense equipment
- Projects supporting SDF personnel on mission (increments in unit price of foodstuff)

Projects contributing to the improvement of response capability to disasters

- Development of equipment (personal protective equipment and dosimeter, etc.) to improve response capability to disasters, including nuclear disasters
- Anti-disaster exercise

Projects contributing to ensuring information infrastructure, such as improving information security

- Improvement of information security of MOD/SDF: e.g. development of computer protection system
- Improvement of information & communications infrastructure of MOD/SDF

Projects contributing to enhancement of measures towards global peace and prosperity

- Development of various equipment to readily respond to operations for international peace cooperation
- International flight training to accurately fulfill missions, such as international peace cooperation

Projects contributing to the stable operation of defense facilities for activities of SDF and U.S. forces

- Promotion of sound-proof houses
- Securing land for facilities

Contribution to regional medicine

- Renewal of medical equipment of SDF hospitals, etc.
Defence-related expenses are broadly divided into personnel and provision expenses and material expenses (program expenses). Material expenses (program expenses) are further classified into obligatory outlay expenses and general material expenses.

<table>
<thead>
<tr>
<th>Personnel and provisions expenses</th>
<th>Expenses related to personnel salary, retirement allowance, meals, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material expenses (program expenses)</td>
<td>Expenses related to the procurement, repair, and maintenance of equipment; purchase of fuel; education and training of SDF personnel; facility construction and maintenance; utilities such as lighting, heat, and water; research and development of technology; and expenses related to base measures, including measures to alleviate the burden on communities located near bases and cost-sharing for the stationing of U.S. forces in Japan</td>
</tr>
<tr>
<td>Obligatory outlay expense</td>
<td>Expense of payments made in FY2012, in accordance with contracts made before FY2011.</td>
</tr>
<tr>
<td>General material expenses</td>
<td>Expense of payments made in FY2012, in accordance with contracts made in FY2012</td>
</tr>
</tbody>
</table>

Future obligation

Build-up of defense capabilities, such as procurement of major equipment including vessels and aircraft, as well as construction of hangars and accommodation for SDF personnel, may take several fiscal years. For this reason, the MOD makes contracts which span several fiscal years (in principle less than five years), and at the time of concluding the contract, makes an advance commitment to pay the expenses at a certain time in the future. Future obligation refers to the amount which will be paid in the fiscal year(s) following the year the contract is made, in accordance with the contract of several fiscal years.

(e.g.) ¥10 billion worth of equipment is procured under a four-year contract.
Material expenses (project expenses) on contract base = General material expenses (activity expenses) + Future obligation

\[ 29,835 = 10,010 + 19,825 \]

Material expenses (project expenses) on contract base = General material expenses (activity expenses) + Obligation outlay expenses

\[ 26,034 = 10,010 + 16,024 \]
### 2. General Material Expenses (Activity Expenses)

#### Details of General Material Expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>FY 2011</th>
<th>FY2012 Requests for general budget + special budget allocations</th>
<th>YR/YR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>4,148</td>
<td>4,486</td>
<td>3.38</td>
</tr>
<tr>
<td>• Petrol</td>
<td>932</td>
<td>1,224</td>
<td>2.92</td>
</tr>
<tr>
<td>• Repair</td>
<td>1,784</td>
<td>1,756</td>
<td>-2.7</td>
</tr>
<tr>
<td>• Education &amp; Training</td>
<td>2,71</td>
<td>2,74</td>
<td>3.0</td>
</tr>
<tr>
<td>• Medical Care</td>
<td>2,45</td>
<td>2,51</td>
<td>6.0</td>
</tr>
<tr>
<td>• Utilities</td>
<td>916</td>
<td>979</td>
<td>6.4</td>
</tr>
<tr>
<td>Base Measures</td>
<td>3,898</td>
<td>4,119</td>
<td>2.21</td>
</tr>
<tr>
<td>• Community Grants</td>
<td>908</td>
<td>993</td>
<td>8.5</td>
</tr>
<tr>
<td>• Host Nation Support</td>
<td>1,703</td>
<td>1,757</td>
<td>5.5</td>
</tr>
<tr>
<td>• Rent, Compensation Costs</td>
<td>1,287</td>
<td>1,368</td>
<td>8.1</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>2,55</td>
<td>2,55</td>
<td>-1</td>
</tr>
<tr>
<td>Equipment Acquisition</td>
<td>2,15</td>
<td>2,99</td>
<td>8.4</td>
</tr>
<tr>
<td>Facility Improvements, etc.</td>
<td>1,97</td>
<td>1,98</td>
<td>1.0</td>
</tr>
<tr>
<td>Other (computer rentals, etc.)</td>
<td>6,76</td>
<td>6,54</td>
<td>-2.2</td>
</tr>
<tr>
<td>Total</td>
<td>9,388</td>
<td>10,010</td>
<td>6.22</td>
</tr>
</tbody>
</table>

Note: SACO-related expenses and the portion pertaining to the reduction of local burden in the U.S. forces realignment-related expenses are excluded from this table.
### 3 Material Expenses (Contract Base)

Material Expenses (Contract Base) = General Material Expenses (Activity Expenses) + Future Obligation concerning New Contracts

#### Details of Material Expenses (Contract Base)

(Units: ¥ 100 million)

<table>
<thead>
<tr>
<th>Classification</th>
<th>FY2011</th>
<th>FY2012 Requests for general budget + special budget allocations</th>
<th>FY/FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>10,973</td>
<td>13,310</td>
<td>2,337</td>
</tr>
<tr>
<td>Petrol</td>
<td>932</td>
<td>1,224</td>
<td>292</td>
</tr>
<tr>
<td>Repair</td>
<td>8,227</td>
<td>10,280</td>
<td>2,053</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>1,813</td>
<td>1,805</td>
<td>-8</td>
</tr>
<tr>
<td>Base Measures</td>
<td>4,276</td>
<td>4,481</td>
<td>205</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>1,272</td>
<td>1,494</td>
<td>221</td>
</tr>
<tr>
<td>Equipment Acquisition</td>
<td>4,562</td>
<td>5,466</td>
<td>903</td>
</tr>
<tr>
<td>Aircraft Acquisition</td>
<td>2,096</td>
<td>1,443</td>
<td>-653</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>760</td>
<td>1,795</td>
<td>1,035</td>
</tr>
<tr>
<td>Facility Improvements</td>
<td>1,055</td>
<td>1,009</td>
<td>-46</td>
</tr>
<tr>
<td>Other (computer rentals, etc.)</td>
<td>933</td>
<td>831</td>
<td>-103</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>25,927</td>
<td>29,835</td>
<td>3,907</td>
</tr>
</tbody>
</table>

Note: SACO-related expenses and the portion pertaining to the reduction of the local burden in the U.S. forces realignment-related expenses are excluded from this table.

#### (Reference) Details of Future Obligation Concerning New Contracts

(Units: ¥ 100 million)

<table>
<thead>
<tr>
<th>Classification</th>
<th>FY2011</th>
<th>FY2012 General budget request</th>
<th>FY/FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>6,825</td>
<td>8,824</td>
<td>1,999</td>
</tr>
<tr>
<td>Repair</td>
<td>6,443</td>
<td>8,524</td>
<td>2,081</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>3,82</td>
<td>3,00</td>
<td>-82</td>
</tr>
<tr>
<td>Base Measures</td>
<td>379</td>
<td>362</td>
<td>-16</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>1,017</td>
<td>1,239</td>
<td>222</td>
</tr>
<tr>
<td>Equipment Acquisition</td>
<td>4,365</td>
<td>5,219</td>
<td>854</td>
</tr>
<tr>
<td>Aircraft Acquisition</td>
<td>2,088</td>
<td>1,404</td>
<td>-684</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>750</td>
<td>1,781</td>
<td>1,031</td>
</tr>
<tr>
<td>Facility Improvements</td>
<td>858</td>
<td>811</td>
<td>-46</td>
</tr>
<tr>
<td>Computer Rentals, etc.</td>
<td>258</td>
<td>184</td>
<td>-74</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16,540</td>
<td>19,825</td>
<td>3,285</td>
</tr>
</tbody>
</table>

Note: SACO-related expenses and the portion pertaining to the reduction of the local burden in the U.S. forces realignment-related expenses are excluded from this table.
Notes
1. Above figures are on an expenditure basis.
2. In addition to the above, SACO-related expenses are
   ¥26.5 billion for FY2003, ¥26.6 billion for FY2004, ¥26.3 billion for FY2005, ¥23.3 billion for FY2006,
   ¥12.6 billion for FY2007,
   ¥18.0 billion for FY2008, ¥11.2 billion for FY2009, ¥16.9 billion for FY2010, ¥10.1 billion for FY2011,
   ¥10.1 billion for FY2012’s general
   budget request (tentatively the same amount as FY2011).
   And the portions pertaining to the reduction of the local burden in the U.S. forces realignment-related
   expenses are ¥7.2 billion of FY2007, ¥19.1 billion for FY2008, ¥60.2 billion for FY2009, ¥90.9 billion
   for FY2010, ¥102.7 billion for FY2011, ¥102.7 billion
   for FY2012’s general budget request (tentatively the same amount as FY2011).
3. In FY2012, the amount of ¥96.0 billion was requested for special budget allocations.
Changes in the three categories

General Material Expenses
Obligation Outlay Expenses
Personnel & Food Provisions Expenses

( ) : YR/YR growth rate (%)
[ ] : Share of expenses budget (%)
{ } : YR/YR increase/decrease
《 》 : Expenditures that are to be expended later on

Notes
1: SACO-related expenses and the portion pertaining to the reduction of the local burden in the U.S. forces realignment-related expenses are excluded from this table.
2: In FY2012, the amount of ¥96 billion was requested for special budget allocations.
## Breakdown by organization

(Reference)

<table>
<thead>
<tr>
<th>Classification</th>
<th>FY2011</th>
<th>FY2012 Requests for general budgets + special budget allocations</th>
<th>YR/YR</th>
<th>Growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense expenditures</td>
<td>46,625</td>
<td>46,906</td>
<td>281</td>
<td>0.6</td>
</tr>
<tr>
<td>Ministry of Defense</td>
<td>46,625</td>
<td>46,904</td>
<td>279</td>
<td>0.6</td>
</tr>
<tr>
<td>(Ministry of Defense Head Office)</td>
<td>46,441</td>
<td>46,711</td>
<td>270</td>
<td>0.6</td>
</tr>
<tr>
<td>GSDF</td>
<td>17,817</td>
<td>17,916</td>
<td>99</td>
<td>0.6</td>
</tr>
<tr>
<td>MSDF</td>
<td>11,008</td>
<td>11,187</td>
<td>179</td>
<td>1.6</td>
</tr>
<tr>
<td>ASDF</td>
<td>10,602</td>
<td>10,452</td>
<td>-150</td>
<td>-1.4</td>
</tr>
<tr>
<td>Sub-total</td>
<td>39,427</td>
<td>39,554</td>
<td>128</td>
<td>0.3</td>
</tr>
<tr>
<td>Internal Bureau</td>
<td>4,844</td>
<td>4,866</td>
<td>23</td>
<td>0.5</td>
</tr>
<tr>
<td>Joint Staff</td>
<td>2,355</td>
<td>2,400</td>
<td>5</td>
<td>2.1</td>
</tr>
<tr>
<td>Defense Intelligence Head Quarters</td>
<td>5,288</td>
<td>5,100</td>
<td>-18</td>
<td>3.4</td>
</tr>
<tr>
<td>National Defense Academy</td>
<td>1,47</td>
<td>1,48</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>National Defense Medical College</td>
<td>2,07</td>
<td>2,18</td>
<td>11</td>
<td>5.5</td>
</tr>
<tr>
<td>National Institute for Defense Studies</td>
<td>16</td>
<td>17</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Technical Research and Development Institute</td>
<td>9,59</td>
<td>1,081</td>
<td>122</td>
<td>12.7</td>
</tr>
<tr>
<td>Equipment Procurement and Construction Office</td>
<td>74</td>
<td>71</td>
<td>-3</td>
<td>4.6</td>
</tr>
<tr>
<td>Inspector General’s Office of Legal Compliance</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>5.9</td>
</tr>
<tr>
<td>Sub-total</td>
<td>7,014</td>
<td>7,157</td>
<td>142</td>
<td>2.0</td>
</tr>
<tr>
<td>(Regional Defense Bureaus)</td>
<td>1,84</td>
<td>1,93</td>
<td>9</td>
<td>4.8</td>
</tr>
<tr>
<td>Ministry of Finance</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(Ministry of Finance Head Office)</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Note: SACO-related expenses and the portion pertaining to the reduction of the local burden in the U.S. forces realignment-related expenses are excluded from this table.
# Promotion of base measures, etc.

(Reference) 

<table>
<thead>
<tr>
<th>Classification</th>
<th>FY2011</th>
<th>FY2012 Requests for general budget + special budget allocations</th>
<th>YR/YR</th>
<th>Growth rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion of base measures</td>
<td>&lt; 4,276&gt; 4,337</td>
<td>&lt; 4,481&gt; 4,456</td>
<td>&lt; 205&gt; 119</td>
<td>&lt; 4.8&gt; 2.7</td>
<td></td>
</tr>
</tbody>
</table>

(1) Expenses related to measures for local communities

<table>
<thead>
<tr>
<th></th>
<th>FY2011</th>
<th>FY2012</th>
<th>YR/YR</th>
<th>Growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential sound insulation</td>
<td>398</td>
<td>429</td>
<td>31</td>
<td>7.7</td>
</tr>
<tr>
<td>Improvement of surrounding environment</td>
<td>&lt; 727&gt; 787</td>
<td>&lt; 750&gt; 787</td>
<td>&lt; 32&gt; 0</td>
<td>&lt; 4.4&gt; 0.0</td>
</tr>
</tbody>
</table>

(2) Cost-sharing for the stationing of U.S. forces in Japan

<table>
<thead>
<tr>
<th></th>
<th>FY2011</th>
<th>FY2012</th>
<th>YR/YR</th>
<th>Growth rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Measures Agreement</td>
<td>1,384</td>
<td>1,395</td>
<td>10</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Labor cost</td>
<td>1,131</td>
<td>1,139</td>
<td>7</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>249</td>
<td>249</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Training relocation cost</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>68.3</td>
<td></td>
</tr>
<tr>
<td>Facility improvements</td>
<td>&lt; 210&gt; 206</td>
<td>&lt; 255&gt; 206</td>
<td>&lt; 45&gt; 0</td>
<td>&lt; 21.6&gt; 0.0</td>
<td></td>
</tr>
<tr>
<td>Measures for base personnel, etc.</td>
<td>268</td>
<td>270</td>
<td>2</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

(3) Facility rentals, compensation expenses, etc.

<table>
<thead>
<tr>
<th></th>
<th>FY2011</th>
<th>FY2012</th>
<th>YR/YR</th>
<th>Growth rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 1,289&gt; 1,293</td>
<td>&lt; 1,373&gt; 1,370</td>
<td>&lt; 85&gt; 77</td>
<td>&lt; 6.6&gt; 5.9</td>
<td>Rental cost of land used for defense facility and compensation for loss of fishermen’s income, etc.</td>
</tr>
</tbody>
</table>

## Notes
1. The figures are on expenditure basis (general material expenses + obligatory outlay expenses), and figures in < > indicate contract-based amount (general material expenses + future obligation pertaining to new contract). 
2. In FY2012, the amount of ¥12.3 billion was requested for expenditure-based special budget allocations.