

Proposal for the new National Defense Program Guidelines

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Nippon Keidanren

Nippon Keidanren published the “Proposal for the establishment of defense industry policy of Japan” on July 14, 2009 for the Japanese Government’s National Defense Program Guidelines and the Mid-Term Defense Program, but then, due to change of the administration, it has been decided that the National Defense Program Guidelines and the Mid-Term Defense Program will be developed toward the end of this year.

The security environment in Northeast Asia is tense and the need for the improvement of defense capabilities remains high. The threat of North Korea’s nuclear weapons and ballistic missiles is large, and especially at the moment, tensions continue in the Korean Peninsula because of the sinking of the South Korean patrol boat. Moreover, foreign submarines and other ships are increasingly active in the sea around Japan.

Internationally, the range of activities of the Japan Self-Defense Forces has been expanding such as the dispatch of destroyers and patrol aircraft for anti-piracy operations off the coast of Somalia and in the Gulf of Aden based on the Anti-Piracy Law that came into effect in July last year and participation in the international disaster relief operations to help victims of the earthquake that hit Haiti in January this year.

The Government has set up “The Council on Security and Defense Capabilities for a New Era” in February this year to hold discussions and review. A report is soon to be released for the new National Defense Program Guidelines.

Accordingly, Nippon Keidanren newly developed Proposal for the new National Defense Program Guidelines, taking the results of the “Fact-Finding Mission on Defense Industry Policies to Europe” in March this year into consideration.

1. Current state of the defense industry and environmental changes

(1) Current state

Defense capabilities are the key for national security to ensure the safety of Japanese citizens and it is the defense industry that takes a major role in the development and production of defense equipment and the support for the operation of the Self-Defense Forces. Not only major companies, but also many SMEs are involved in the industry. There are, for example, about 1,200 fighter aircraft-related companies and as many as 1,300 combat vehicle-related companies (See Figure 1).

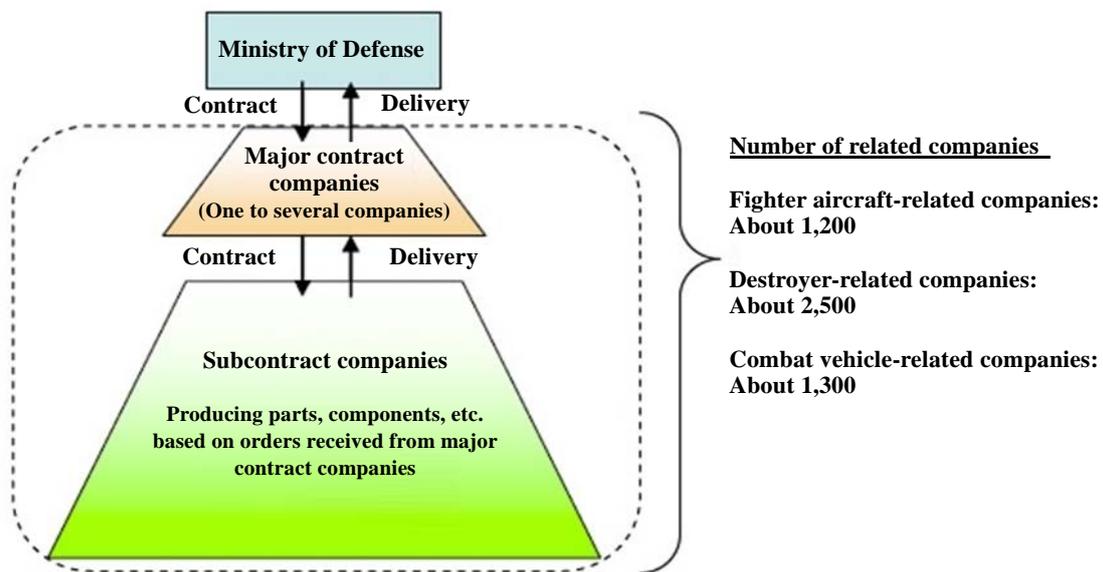
As Japan’s defense-related budget has continuously been reduced, however, the value of new contracts of major equipment, which peaked at 1.07 trillion yen in FY1990, has gradually decreased and dropped to about 680 billion yen in FY2010, which is about 60% of the peak

value. In accordance with the decrease in the volume of production, companies have worked to reduce the workforce and make use of resources in the civilian sector. It can be said, however, that companies' efforts are stretched to the limit, when the maintenance of personnel and facilities for the operational support of respective equipment is taken into consideration. Some of the companies are forced to withdraw from the production of defense equipment and the base of the Japanese defense industry is weakening. Moreover, the total volume of procurement specified in the Mid-Term Defense Program has not been achieved and the future prospect is not clear.

It takes a long period of time to develop defense equipment and nurture engineers, and therefore, once lost, it is extremely difficult to recover the defense industry base. In the midst of the gradual decrease in the value of new contracts of major equipment, there is a threat that the decrease in the number of engineers and skilled workers will lead to the loss of the defense industry base.

Especially regarding the fighter aircraft whose production is scheduled to end in FY2011, the maintenance of production and technological bases will be a major issue because of the period of non-production that will follow.

Figure 1: Structure of the Defense Industry



(Prepared based on materials from the Ministry of Defense)

(2) Environmental changes

The defense industry has achieved effective development and production by sharing development and production facilities and personnel with the civilian sector based on advanced civilian technologies. Under these circumstances, the following environmental changes are taking place, which has made it necessary to maintain and strengthen the defense

sector's own operations. A clear defense industry policy of the Japanese Government is required for the development of the defense industry without depending on the civilian sector and for maintaining and strengthening the defense production and technological bases.

Firstly, offering of the latest defense technologies is being restricted even to an ally. Introduction of technologies from the U.S., which Japan has implemented mainly for major equipment, is increasingly difficult due to the restriction on the outflow of technologies. The issue of operational autonomy is becoming a matter of concern, as seen in the black-boxing of core technologies of equipment, and accordingly, the improvement of Japan's own technologies is being required.

Secondly, the severe business environment that started with the global economic crisis continues in a time when company rating, stock price, and profitability of respective business operations are regarded as important. Therefore, the management of defense business operations using technologies and resources in the civilian sector is becoming difficult to the point that it is no longer possible to fully achieve accountability to stakeholders regarding the significance and potentials of defense business operations.

2. Significance of defense production and technological bases and measures for strengthening bases taken by the U.S. and European countries

(1) Significance of defense production and technological bases

The defense industry plays a role in the entire lifecycle of defense equipment. The maintenance and strengthening of the defense production and technological bases is the critical responsibility of a nation and the significance of the bases is as follows:

1) Securing of deterrent capabilities and autonomy based on advanced technological capabilities

The procurement of defense equipment by possessing high-level technological capabilities to ensure better deterrent capabilities and diplomatic bargaining power to inhibit invasion by other countries contributes to securing national autonomy without dependence on other countries.

2) Speedy procurement, provision of operational support and improvement of equipment performance

Defense bases make it possible to implement speedy procurement activities in an emergency, respond quickly to check and repair equipment failures, and upgrade and improve equipment and its performance in line with technological advancement. As a result, higher operational availability¹ and safety can be ensured. In the case of imported equipment, some of the repairs require sending the equipment back overseas, which is time-consuming, and more often than not, various spare items required during the time result in a higher expense.

¹ The percentage of time that the equipment is operating properly when it is needed to operate. In the case of fighter aircraft: Air capabilities (Number of operable aircrafts) = Number of deployed aircrafts×operational availability.

3) Development and production of equipment suited to national geographical characteristics and state of affairs

To develop and produce equipment and provide operational support best for national defense to suit the geographical environment of the Japanese Islands, surrounded by sea in all directions and replete with mountainous areas and isolated islands, and the exclusively defense-oriented basic policy.

4) Technological and economic ripple effects

Development and production through domestic investments by utilization of defense bases will lead to the development of domestic industries and creation of employment. The development of defense technologies, which are among the most advanced technologies, will bring about new technological breakthroughs and major technological ripple effects to the civilian sector.

5) Securing of bargaining power for imports and licensed production

It will lead to the securing of national bargaining power in negotiating prices and technological disclosures for the import of equipment from other countries and licensed production in Japan.

(2) Measures for strengthening bases taken by the U.S. and European countries

Amid mounting security issues, including terrorism, proliferation of weapons of mass destruction, and piracy, the U.S. and European countries are promoting measures to strengthen defense production and technological bases.

The U.S. pointed out for the first time the need to strengthen the base of the defense industry in the QDR (Quadrennial Defense Review: Review of the defense program of the United States conducted every four years) released by the Department of Defense (DOD) in February this year. Moreover, the Review evaluated the abilities of the defense industries of the allies and requested deepening of cooperation.

Nippon Keidanren's Fact-Finding Mission on Defense Industry Policies to Europe investigated how respective governments develop the defense industry policy and work to strengthen bases based on the significance of defense production and technological bases. European countries, for example, the U.K. and France, have clarified the areas on which to focus investment as a nation and to promote international joint development and have successfully established an environment that enables the business community to set up a long-term vision. Moreover, they are enhancing the competitive capabilities of the defense industry by, among others, promoting joint programs of member countries within the frameworks of NATO and the EDA (European Defense Agency), which is an organization of the EU.

Thus, European countries have clearly established procurement policies for respective equipment. They either efficiently and preferentially acquire the most advanced equipment

through the framework of international joint development or depend on imports from other countries, while maintaining the domestic bases through a focused investment in research and development of those for which it is necessary to maintain production and technological bases within the country.

Japanese defense-related industry companies would be able to efficiently and stably develop and produce equipment based on well-planned investments and employment by such a policy. Activities of European countries serve as a very useful reference for the defense industry policy of Japan.

3. Necessity of defense industry policy of Japan

(1) Clarification of the areas of focused investment

In a severe financial situation, on the premise that a reasonable-size budget is secured and based on the significance of defense production and technological bases, it is necessary to clarify the areas of focused investment by our country as part of the defense industry policy.

Five areas may be listed as the areas of focused investment, consisting of system integration capabilities, the most advanced component technologies, technologies to address specific operational requirements, operational support capabilities, and technologies to ensure international advantage (See Table 1). The Government, on the premise of an equipment system initiative to be required in the future, should define specific technologies and equipment in respective areas of focused investment.

Table 1: Areas of focused investment

| Exclusive use/Dual use | Important technological areas | Reason why necessary |
|---|---|---|
| Technologies exclusively for defense use (They require a sizable long-term investment and are difficult to recover once lost.) | System integration capabilities | To integrate individual component technologies as a system of equipment and to ensure autonomy, taking operations into consideration |
| | The most advanced component technologies | Application of radars, sensors, new raw materials, etc. |
| | Technologies to address specific operational requirements | To address operational requirements to suit the national geographical characteristics and state of affairs such as the topography and defense-oriented basic policy of our country |
| | Operational support capabilities | Supply and support in peace and emergency |
| Dual-use technologies for both civil and defense purposes | Technologies to ensure international advantage | To ensure comprehensive international advantage by making investments in technologies for both civilian and defense purposes, as a nation based on the creativity of science and technology |

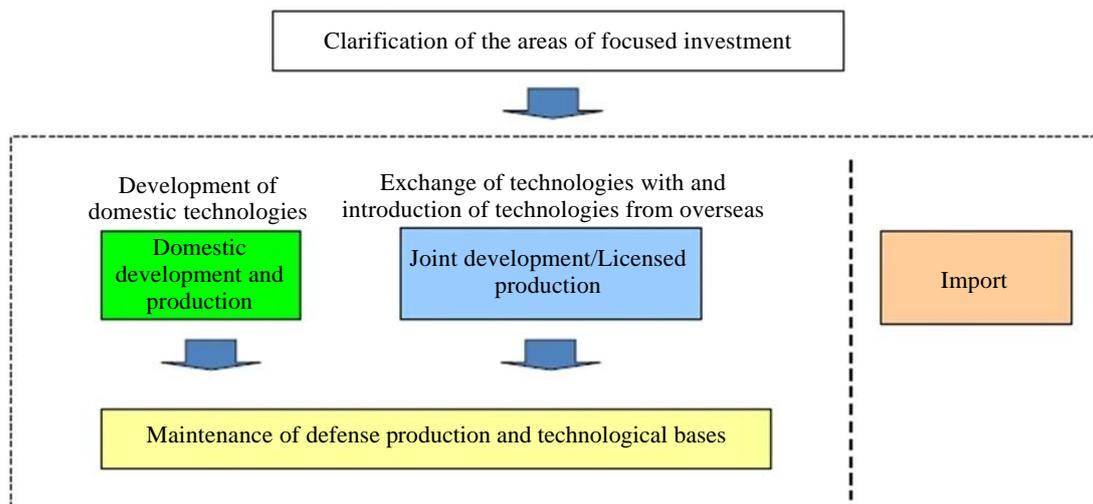
Selection and concentration based on the clarification of the areas of focused investment are essential as part of the defense industry policy. It is appropriate to develop in particular technologies for both civil and defense purposes under industry-government-academia collaboration because of potentially large economic effects. Defense-related technologies should be clearly positioned as technologies related to the safety and security of Japanese citizens in the development of the 4th Science and Technology Basic Plan as well.

Moreover, the size of the defense-related research and development budget of Japan is small compared to that of other countries, and accordingly, it is necessary to increase the research and development budget for the above-mentioned areas of focused investment.

Currently, the conversion to civil use of aircraft developed by the Ministry of Defense such as transport aircraft and amphibious planes is being discussed. Many dual-use technologies for both civil and defense purposes are used for the development of aircraft, and therefore, it is effective on a long-term basis to promote conversion to civil use from the viewpoint of the maintenance and strengthening of defense production and technological bases.

A clear policy for acquiring equipment should be set up by clarifying the areas of focused investment and classifying equipment into groups: 1) Those for which production and technological bases should be maintained in Japan to maintain the ability to autonomously operate equipment; 2) Those developed jointly with other countries or produced under license through technological exchanges with and technological introduction from overseas; and 3) Those imported from overseas (See Figure 2).

Figure 2: Policy for equipment acquisition



(2) Establishment of new arms export control principles

Based on the Three Principles on Arms Exports in 1967 and the unified government view on

arms exports in 1976 (hereinafter referred to as the Three Principles on Arms Exports, etc.²), arms exports and arms technology transfer have essentially been totally banned except in certain cases.

On the other hand, the Japan-U.S. joint development and production of the ballistic missile defense system have been made an exception in the progress of security cooperation between Japan and the U.S. Moreover, patrol boats to Indonesia, using the ODA, have been provided from the viewpoint of contribution to developing countries to deal with terrorism and piracy. In addition, provision of patrol boats to Yemen to address piracy off the coast of Somalia and in the Gulf of Aden is being discussed.

Currently, multinational joint development projects of fighter aircraft and other equipment are in progress, due to the sophistication of equipment and increase of development expenses. Japan, however, is unable to take part in such international joint development because of the Three Principles on Arms Exports, etc., which renders our country in a state of so-called national isolation in terms of technologies. Therefore, it should be made possible for Japan to positively take part in international joint research and development with the U.S., European countries, etc. by focusing on the aspect that arms export and transfer of arms technologies make it possible to strengthen the collaboration between allied countries and prevent conflicts to contribute to international security and peacekeeping.

In such cases, it is essential to improve Japan's own technological capabilities in order to play an important role in international joint research and development, and accordingly, the strengthening of technological bases through investment in research and development is required. Moreover, it is necessary to consider re-export from joint production partner countries at the stage of joint production that follows the joint development stage. At present, it is not possible to respond to any request from a licensing country to supply equipment produced under license from a U.S. or European company, and as such, handling of such requests should also be reviewed.

Therefore, the Government should establish new arms export control principles to replace the current Three Principles on Arms Exports, etc. The business community's attitudes toward the above topic are as follows (See Table 2).

² "The Three Principles on Arms Exports," stated by then Prime Minister Sato at the Committee on Audit in the House of Representatives in 1967, is the government's policy not to permit arms exports to: (1) communist bloc countries; (2) countries to which arms exports are prohibited under U.N. Resolutions; and (3) countries which are involved in or likely to be involved in international armed conflict. In 1976, then Prime Minister Miki stated at the Budget Committee in the House of Representatives "the unified government view on arms exports" to refrain from arms exports to areas other than those that are applicable to the Three Principles on Arms Exports. The above two are collectively called "the Three Principles on Arms Exports, etc."

Table 2: New Arms Export Control Principles

| | |
|----------------|--|
| Policy | <ul style="list-style-type: none"> • To revise the state of an essentially total ban on arms exports and arms technology transfer based on the Three Principles on Arms Exports, etc. and comprehensively examine each case from the viewpoints of contents, final destination, and application of each item. • To set up a system to control arms exports and arms technology transfer for the prevention of the proliferation of weapons of mass destruction, elimination of the threat of terrorism, etc. and to establish Japan’s own activities within the international framework. |
| Criteria | <ul style="list-style-type: none"> • To make decisions on a comprehensive basis from the viewpoints of the security of Japan and international society and the contribution to peacekeeping. |
| Control system | <ul style="list-style-type: none"> • The export control authorities should work for better information exchange and collaboration between the ministries and agencies concerned and for the improved transparency of export control through the clarification of control targets, announcement of concept of examination of each case, etc. |

(3) Improvement of acquisition and procurement policy

Due to the lower production efficiency caused by the reduced volume of procurement of defense equipment and decreased procurement budget, companies in the defense industry are having difficulties in recovering the cost of equipment production, which is leading to a reduction in company earnings. Therefore, the improvement of acquisition and procurement policy is a major issue that should be addressed.

Contracts of much of the defense equipment are based on competitive bidding even after the start of production, and accordingly, companies cannot make forecasts for the following fiscal year and beyond nor make well-planned investments and employment. Thus, companies find it difficult to operate on a long-term perspective and make efficient production. At least for major equipment, it is conducive for efficient production and cost reduction to keep the contract with the company selected for the first contract for the following fiscal year and beyond, and as such, it is necessary to introduce long-term equipment procurement plans and multi-year contracts.

For contracts as well, the acquisition and procurement policy should be improved to lead to more reasonably priced and higher-quality equipment by modifying the detailed audit and examination of companies that are resulting in the complex contract system and increase of indirect cost on the part of the companies and by encouraging the voluntary efforts of companies for the improvement of management.

4. Promotion of space development and utilization in defense

The role that space development and utilization play in ensuring security is becoming increasingly large. In Japan as well, it is increasingly important to promote space development and utilization for defense purposes due to the threat of North Korea's ballistic missiles and other tense situations in Northeast Asia.

The Basic Plan for Space Policy developed in June last year based on the "Basic Space Law" includes research of sensors for early warning capabilities, promotion of the use of various satellites for dual use for defense and civil purposes, etc. as new space development and utilization in the area of security. As pointed out in the "Proposal for the promotion of space development and utilization as a national strategy" by Nippon Keidanren (April 12, 2010), it is necessary to include in the National Defense Program Guidelines and the Mid-Term Defense Program, space development and utilization for the purpose of defense using early warning satellites, intelligence satellites, communications satellites, rockets, etc. and improvement of launching sites as infrastructure. As for the budget, setting up a special budget for the Government to use positively should be discussed.

5. Expectations on the new National Defense Program Guidelines

The security policy is the basis of a nation and the Government should take responsibility for the maintenance of defense production and technological bases to guarantee security. We ask the Government to include in the National Defense Program Guidelines the development of defense industry policy based on a long-term perspective and implement the above policy, after clarifying the basic security principles of our country.

In developing the defense industry policy, based on the above basic security principles, it is necessary in the first instance to assume the future international security environment and clarify the necessary defense capabilities to address the environment. Based on the above, the Government should discuss and review the most advanced equipment to be required and develop a defense industry policy that will help maintain and strengthen the defense production and technological bases through the clarification of the areas of focused investment. The defense industry should work for close collaboration with the Government and positively provide cooperation in the development of the defense industry policy through the provision of information and technological review of the most advanced equipment.

It is time for Japan to take a step forward in terms of policy so that the defense industry will have a sense of mission and be proud to play a role in defense to protect the safety and security of Japanese citizens and contribute to the establishment of a rock-solid security system. Moreover, the Government should work for the better recognition and right understanding of the role and importance of the defense industry by the citizens.

Nippon Keidanren, on its part, will promote companies' voluntary research and development and improvement of managerial efficiency, eyeing not only the strengthening of

security but also economic effects through the advancement of the defense industry.