Based on the Three Principles on Transfer of Defense Equipment and Technology, Japan promotes cooperation in defense equipment and technology with other countries in order to contribute to promoting the maintenance and enhancement of defense production and technological bases, as well as contributing to the promotion of peace and international cooperation. Japan will continue to realize effective defense equipment and technological cooperation through the strengthening of intelligence gathering such as the needs of its counterparts, cooperation including assistance for maintenance and repair of equipment, and strengthening of cooperative posture between the public and private sectors.

### Three Principles on Transfer of Defense Equipment and Technology

#### 1 Purpose of Establishment of the Three Principles on Transfer of Defense Equipment and Technology

Japan has dealt with arms exports in a careful manner, in accordance with the Three Principles of Arms Exports and their related policy guidelines. On the other hand, in individual cases, such as the participation of domestic companies in the joint development of Ballistic Missile Defense (BMD) by Japan and the United States, it has taken separate measures in which arms exports are dealt with outside the Three Principles.¹

Amidst this situation, in April 2014, based on the National Security Strategy, the Government formulated the Three Principles on Transfer of Defense Equipment and Technology as new principles replacing the Three Principles on Arms Exports etc.² and its implementation guidelines. These clarified the concrete standards, procedures and limitation.

#### 2 Main Contents of the New Three Principles

1. **Clarification of Cases Where Transfers are Prohibited (the First Principle)**

The cases where overseas transfers of defense equipment are prohibited are clarified as follows: (1) in the case of violating the obligations based on agreements signed by Japan and other international agreements; (2) in the case of violating the obligations based on the Resolution of the United Nations Security Council; or (3) in the case of transferring to the countries in conflicts.

2. **Limitation to Cases Where Transfers May Be Permitted As Well As Strict Examination and Information Disclosure (the Second Principle)**

The cases where transfers may be permitted are limited to (1) cases that contribute to the active promotion of peace contribution and international cooperation, or (2) cases that contribute to the security of Japan. The Government will conduct strict examination on the appropriateness of the destination and end user whilst ensuring transparency, and the extent the overseas transfer of such equipment.

### Table: Situations and Specific Examples

<table>
<thead>
<tr>
<th>Situation</th>
<th>Specific examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Violation of obligations under treaties concluded and other international arrangements</td>
<td>Chemical Weapons Convention, Convention on Cluster Munitions, Anti-Personnel Mine Ban Convention, Arms Trade Treaty, etc.</td>
</tr>
<tr>
<td>(2) Violation of obligations under United Nations Security Council Resolutions</td>
<td>Security Council Resolution 1718 (nuclear issue of North Korea), etc.</td>
</tr>
<tr>
<td>(3) Transfer to a nation which is party to a conflict</td>
<td>Countries which are the target of measures taken by the United Nations Security Council to maintain or restore international peace and security in the event of an armed attack</td>
</tr>
</tbody>
</table>

---

¹ In December 2011, the Statement by the Chief Cabinet Secretary on Guidelines for Overseas Transfer of Defense Equipment, etc. put in place exemptions from the Three Principles of Arms Exports based on the premise of strict control, with regard to (1) cases related to peace contribution and international cooperation, and (2) cases regarding international joint development and production of defense equipment, etc. that contributes to Japan’s security.

² The term “defense equipment” is deemed appropriate for the title of “Three Principles for the Transfer of Defense Equipment and Technology,” since possible articles of overseas transfers help peace contribution and international cooperation as was seen in the example of the provision of bulldozers and other items belonging to the SDF to disaster-stricken countries. Similarly, due to the fact that there is provision of technology in addition to goods, the term “transfer” was adopted rather than “export.”
and technology will raise concern for Japan’s security. In addition, it has been decided that important cases would be deliberated at the National Security Council and along with this, information concerning the cases that were deliberated would be disclosed.

See Fig. III-4-4-2 (The Second Principle “Limitation to Cases Where Transfers May Be Permitted”)

(3) Ensuring Appropriate Control regarding Extra-Purpose Use or Transfer to Third Parties (the Third Principle) Overseas transfer of defense equipment and technology will be permitted only in cases where appropriate control is ensured, and the Government will in principle oblige the government of the recipient country to gain its prior consent regarding extra-purpose use and transfer to third parties. However, in cases where it is judged appropriate for the active promotion of peace contribution and international cooperation, cases involving participation in the international systems for sharing parts, and cases where parts are delivered to a licenser, appropriate control may be ensured with the confirmation of the control system at the destination.

2 Deepening Relationships with the United States regarding Defense Equipment and Technology Cooperation

1 Joint Research and Development, etc.

Since 1992, Japan has implemented 21 joint research projects and 1 joint development project with the United States. At present, 4 joint research projects (joint research on hybrid electric propulsion, joint research on high-speed multi-hull vessel optimization, joint research on the comparison of exposure to jet fuel and noise in unit operation, and joint research on Chemical Agent Detector-kit Colorimetric Reader) and 1 development project (Japan-U.S. cooperative development of an Advanced Ballistic Missile Interceptor) are underway. In addition, with regard to the transfer of software and parts related to the Aegis System from Japan to the United States, Japan affirmed in July 2015 that this overseas transfer falls under the case, which may be permitted, based on deliberations at the National Security Council.

See Part III, Chapter 1, Section 2-3-2 (Missile Defense of the United States and Japan-U.S. BMD Technical Cooperation) Reference 25 (Japan–U.S. Joint Research and Development Projects)
industries including the Final Assembly and Check Out (FACO) for airframe and engines, the manufacture of some engine parts (19 items) and radar parts (7 items), and the manufacture of some Electro-Optical Distributed Aperture System (EODAS) parts (3 items).

Possessing the skills and facilities required for FACO for airframe and engines is important for Japanese companies in implementing effective operational support for the F-35A fighter aircraft such as for the following reasons:

❖ The ability to offer a swift response within Japan in the event that an airframe and engines suffer damage and require work that cannot be carried out by the SDF unit itself, including the repair or replacement of major structural components, such as main wings, fuselage, and turbines without transporting the airframe and engines overseas; and

❖ The ability to carry out refurbishment work domestically, in the event that performance improvements to the F-35A fighter aircraft are sought in future.

In addition, participation of Japanese companies in the implementation of FACO and parts production will have significance in that they will be able to come in contact with the system integration technology of stealth fighter as well as the cutting-edge fighter technology and know-how. Therefore, it will also contribute to strengthening of defense production and technological bases. The F-35A fighter aircraft on which FACO was conducted for the first time in Japan is scheduled to be completed by June 2017 and deployed to ASDF air bases after implementing test flights, etc.

As global operation of F-35 fighter aircraft is anticipated, the U.S. Government plans to establish maintenance depot (regional Maintenance, Repair, Overhaul and Upgrade (MRO&U) Capability) mainly for airframe and engine in the North America, Europe, and the Asia-Pacific regions. In December 2014, with regard to regional MRO&U in the Asia-Pacific region for F-35, the U.S. Government announced the following decisions: (1) Regional MRO&U Capability for airframe and engines will be provided to Japan and Australia with both capabilities required not later than early 2018; (2) With regard to the regional MRO&U Capability for engine, initial capability will be provided by Australia by early 2018, with Japan providing additional capability at least 3-5 years later.

Establishing a maintenance depot that utilizes the FACO facility for airframe and engine within Japan, and contributing to maintenance in the Asia-Pacific region are significant from the perspectives of securing the operational support system for F-35A fighter aircraft in Japan, maintaining the foundation of the Japanese defense industry, strengthening the Japan-U.S. Alliance, and deepening equipment cooperation in the Asia-Pacific region.

(2) Initiatives towards the Establishment of a Common Maintenance Base of the Japan-U.S. Osprey

As the Planned Maintenance Interval (PMI) of the U.S. Marine Corps Osprey (24 aircrafts) deployed at Futenma is scheduled to commence roughly in 2017, the U.S. Navy carried out a public tender to select a maintenance company and decided to select Fuji Heavy Industries Ltd. as the maintenance company for this purpose in October 2015. In February 2017, the PMI commenced at GSDF Camp Kisarazu.

The MOD intends to establish common maintenance base for both Japan’s and the United States’ Osprey by allowing the maintenance company to use the hangar at GSDF Camp Kisarazu for aircraft maintenance of the U.S. Marine Corps Osprey and also to implement the future aircraft maintenance of the GSDF Osprey at the same camp from the following perspectives: (1) Smooth introduction of the GSDF Osprey (V-22); (2) Smooth and effective operation of the Japan-U.S. security arrangements; and (3) Enhanced efficiency in maintenance. The establishment of common maintenance base at GSDF Camp Kisarazu would be extremely significant in that it will lead to the realization of the reduction of Okinawa’s burden as well as the “Strengthening the basis to repair and maintain common equipment” stated in the new guideline.

3 Electro-Optical Distributed Aperture System (EODAS), comprising six built-in cutting edge infrared sensors per aircraft, realizes 360-degree spherical situational awareness, and enables missile detection and tracking.
4 The regional MRO&U for airframe in Japan is scheduled to be located at Mitsubishi Heavy Industries Ltd. (Komaki-minami factory in Aichi Prefecture)
5 The regional MRO&U for engine in Japan is scheduled to be located at IHI Corporation (Mizuho factory in Tokyo)
6 The company was renamed SUBARU Corporation on April 1, 2017.
7 GSDF will introduce 17 tilt-rotor aircraft (Osprey (V-22)) that can complement and strengthen the capabilities of transport helicopters (CH-47J) in terms of cruising speed and range. In June 2015, a contract regarding 5 aircraft out of the 17 was signed with the United States Department of the Navy, and these 5 aircraft will be delivered by the end of FY2018.
Building New Defense Equipment and Technology Cooperation

1 Defense Equipment and Technology Cooperation with Major European Countries, etc.

Defense equipment and technology cooperation with major European countries, which have competitive defense industries, will contribute to the strengthening of security and defense cooperation with these countries as well as the maintenance and strengthening of the defense production and technological base in Japan. Therefore, Japan seeks to establish and deepen relationships with these countries.

(1) United Kingdom

In July 2013, the Governments of Japan and the United Kingdom concluded a bilateral Agreement on the Transfer of Defense Equipment and Technology. In the same month, the two countries also started joint research on chemical and biological protection technology, marking the first time that Japan had engaged in such research with a country other than the United States.

Also, in July 2014, technology information on air-to-air missile seeker technology for joint research with the United Kingdom was determined by the National Security Council as a case where overseas transfer may be permitted as stipulated in the Three Principles on Transfer of Defense Equipment and Technology. Responding to the said decision, in November of the same year, a letter of arrangement was formulated in relation to “Japan-U.K. co-operative research project on the feasibility of a joint new air-to-air missile” and the joint research was commenced. In July 2016, the joint research on personnel vulnerability evaluation (PVE) in relation to the research and development of personal equipment was launched.

Furthermore, an arrangement on the Japan-U.K. joint preliminary study on potential collaborative opportunities for future combat air system (FCAS)/future fighter between the defense authorities of the two countries was signed in March 2017. Based on the agreement of this arrangement, the two countries will conduct information exchanges regarding future fighter and the FCAS that are under study by Japan and the United Kingdom respectively, and exchange opinions about the potential for future collaboration.

(2) France

Japan and France established a committee on cooperation in the field of defense equipment and a committee on export control in January 2014, and signed the Agreement concerning the Transfer of Defense Equipment and Technology in March 2015. In addition, during the Third Japan-France Foreign and Defense Ministers’ Meeting in January 2017, the two countries confirmed their expectations for early materialization of the cooperation regarding unmanned underwater vehicle (UUV) for mine detection.

(3) Italy

At the Japan-Italy Summit Meeting held in March 2017, the two countries agreed to start negotiations on an agreement on the transfer of defense equipment and technology, and signed the Agreement in May 2017.

2 Defense Equipment and Technology Cooperation, etc., with Partner Countries in the Asia-Pacific Region

As partner countries in the Asia-Pacific region have expressed their interest and expectation regarding defense equipment and technology cooperation with Japan, the MOD proactively seeks to build relationships with these countries.

(1) Australia

With Australia, the Agreement between the Government of Japan and the Government of Australia concerning the Transfer of Defence Equipment and Technology was signed in July 2014. In addition, Japan commenced the joint research in the field of marine hydrodynamics in December 2015.

Meanwhile, at the Japan-Australia Defence Ministerial Meeting held in October 2014, it was agreed to seek multifaceted defense equipment and technology cooperation, including the following: (1) exploration of potential cooperation opportunities in the F-35 program; (2) acquisition reform dialogue with the Defence Material Organisation of Australia; (3) at the request

---

8 Official name: Agreement Between the Government of Japan and the Government of the United Kingdom of Great Britain and Northern Ireland Concerning the Transfer of Arms and Military Technologies Necessary to Implement Joint Research, Development and Production of Defence Equipment and Other Related Items

9 A missile component device for searching, detecting and tracking targets.

10 Generic name of the whole future fighter aircraft system in the United Kingdom.


of the Australian side, exploration of the possibility of Japanese cooperation in the Australian Future Submarine Program; (4) defense technology exchanges with the Defence Science and Technology Organisation of Australia (marine hydrodynamics field and exchanges among engineers and scientists); and (5) talks between defense industries in both countries.

Furthermore, based on a request from the Government of Australia during the Japan-Australia Defense Ministerial telephone conference in May 2015, Japan submitted the proposal for the Future Submarine Program in November 2015. Afterwards, in April 2016, the Government of Australia announced that they selected a French company as their international partner for the Program. The Government of Australia explained this decision by stating that this company had demonstrated the most suitable capabilities to fulfill the overall requests on capabilities which were specific to Australia.

(2) India

With India that has been considering the acquisition of amphibious search and rescue aircraft, the establishment of the Joint Working Group (JWG) to facilitate bilateral cooperation for the US-2 rescue aircraft was decided during the Japan-India Summit Meeting held in May 2013. So far, three JWG meetings have been held. At the Summit Meeting in December 2015, the Agreement between the Government of Japan and the Government of India concerning the Transfer of Defence Equipment and Technology was signed. In August 2016, the second Japan-India JWG on Defence Equipment and Technology Cooperation was held, and discussions for determining specific items are underway.

At the Summit Meeting in November 2016, Prime Minister Modi expressed the view that US-2 amphibian aircraft was technically impressive. In addition, in the Japan-India Joint Statement signed after the meeting, Prime Minister Modi conveyed his appreciation for Japan’s readiness to provide its state of the art defence platforms such as US-2 amphibian aircraft. This symbolizes the high degree of trust between the two countries, and the distance that Japan and India have covered in advancing their bilateral defence exchanges.

(3) ASEAN Countries

Between Japan and ASEAN member states, exchanges of views take place regarding defense equipment and technology cooperation in non-traditional security sectors, such as humanitarian assistance, disaster relief and maritime security through the Japan-ASEAN Defense Vice-Ministerial Meetings and other occasions. Participating countries have expressed their expectation for Japan’s cooperation in effectively dealing with these issues. In the “Vientiane Vision” announced by Japan at the ASEAN-Japan Defence Ministers’ Informal Meeting held in November 2016, it is stated that Japan’s defense equipment and technological cooperation with ASEAN countries would be promoted with a focus on the following three points: (1) equipment and technology transfer, (2) human resources development, and (3) holding seminars on defense industries. As a specific initiative with the Philippines, an official agreement was made on the transfer of MSDF’s TC-90 training aircraft to the Philippine Navy at the Japan-Philippines Summit Meeting in September 2016, and TC-90 pilot training has been conducted for pilots from the Philippine Navy at the MSDF Tokushima Air Base since November of the same year. Since February 2017, training for maintenance personnel from the Philippine Navy was carried out, and maintenance and repair assistance by a Japanese maintenance company has also been provided. Furthermore, two aircrafts were transferred to the Philippine side in March 2017, and the remaining three aircraft is planned to be transferred by the end of FY2017. Between Vietnam, the Terms of Reference (TOR) for regular consultations concerning defense equipment and technological cooperation was signed during the Japan-Vietnam Defense Vice-ministerial Level Meeting in November 2016, while with Indonesia a seminar on the defense industry on the theme of maritime security was
Educational Support for Philippine Navy Pilots:
Transfer of MSDF Training Aircraft TC-90

Lieutenant Commander Ryan Tumanda and Lieutenant
Commander Zyril Villacorta, Philippine Navy

The transfer of TC-90 is a pioneer project for defense equipment
and technology transfer between the Government of Japan and
the Government of the Philippines. As part of the agreement for
transferring five TC-90 aircraft to the Philippines, training for Philippine
Navy pilots and maintenance personnel has been conducted.

We are greatly honored to have been selected by the Philippine
Navy to participate in the recent MSDF training. Being able to learn
about the maneuverability and operating procedure of TC-90 from
MSDF pilots was a wonderful experience, which also expanded our
horizons. We think that MSDF instructors’ high skills and professionalism in relation to TC-90 maneuvering are worthy of respect,
and we cannot say enough about how lucky we were to receive guidance from them. While acquiring the maneuverability of TC-90
was quite challenging, we felt that it was a fantastic opportunity for us to deepen our knowledge about maneuvering aircraft. This
transfer will dramatically improve the capability of the Philippine Navy in performing various maritime activities. TC-90 will not only
complement islander aircraft (*) currently operated by the Philippines, but will also serve as appropriate transfer aircraft with a view to
acquiring maritime patrol aircraft. With respect to the transfer of TC-90, the Government of the Philippines and the Philippine people,
as well as us, are grateful to the Government of Japan and all of the people of Japan.

(*) Aircraft operated by the Philippine Navy for nearly 40 years.

Training for Philippine Navy Maintenance Personnel:
Transfer of MSDF Training Aircraft TC-90

Takashi Murakami, Section Chief, Technology Team, Technology Development Office, Aircraft Maintenance Group,
Jamco Corporation

Jamco performs aircraft maintenance and manufactures aircraft
interior equipment and components. I belong to the department in
charge of the overall aircraft maintenance technology within the
Aircraft Maintenance Group. I have been involved in the transfer
of TC-90 to the Philippines due to the company’s involvement in
the remodeling, renovation, and periodic repair of TC-90. In this
connection, I served as a training instructor for Philippine Navy
maintenance personnel.

A major difference between TC-90 and the aircraft (Islander)
possessed by the Philippine Navy is that the former is turboprop
aircraft while the latter is reciprocating aircraft. During the training,
Philippine Navy personnel worked hard to acquire the skills for
maintaining the aircraft while struggling with the differences between the two aircraft. The personnel participating in the training
will be instructing others in their home country, so they requested my explanation of any unsure points until they understood them
completely. Some of them listened to the explanation standing so as not to fall asleep. I was greatly impressed by their serious attitude
towards the training.

Since TC-90 maintenance skills cannot be acquired overnight, I imagine that the Philippine Navy will need to make a great deal
of efforts. If there are opportunities for us to support the Philippine Navy using our technology, we will be happy to do everything we
can. We will feel privileged to play a role as a bridge of friendship between Japan and the Philippines through such initiatives.
held in July 2016. Going forward, the MOD will continue to promote cooperation for humanitarian assistance and disaster relief as well as the maritime security area through these initiatives.

3 Establishment of Regulations on Equipment Cooperation with Developing Countries

Surrounded by an increasingly severe security environment, it has become even more important for Japan that the nations which have a cooperative and friendly relationship with Japan in terms of security and defense have appropriate capabilities. It is also critical to develop a foundation that will serve as the basis for the international community to cooperate towards improving the security environment. Among these friendly nations, some have difficulties in acquiring the adequate level of defense equipment by their own because of their economic and financial situations. Some of these states are requesting to use SDF’s equipment which are no longer used. However, Article 9, Paragraph 1 of the Public Finance Act stipulates that the Government shall receive reasonable consideration when transferring or leasing any governmental properties including the SDF’s equipment to other countries. Therefore, a transfer for lower price than the current price is not allowed unless otherwise provided.

Under these circumstances, to respond to the needs of such friendly nations, a special provision to Article 9, Paragraph 1 of the Public Finance Act was created in the SDF. This provision enables the MOD to grant or transfer to the governments of developing states the SDF’s equipment which are no longer used for a lower price than the current price. (Legislation for the partial revision of the Act for Establishment of the Ministry of Defense and other Acts including this provision was approved in May 2017).

Even in the case of granting or transferring equipment for lower price than the current price pursuant to this provision, whether or not to transfer such equipment and to which government such equipment to be transferred will be determined on a case-by-case basis in light of the Three Principles on Transfer of Defense Equipment and Technology and other regulations. In addition, an international agreement must be concluded between the Governments of Japan and the recipient countries to prevent extra-purpose use and third party transfer of the transferred equipment without the prior consent of Japan.

4 Adapting Defense Equipment for Civilian Use

With regard to aircraft involving many technological bases shared between the defense and the civilian sectors, the MOD has been considering the civilian use of aircraft developed by the MOD from the perspective that taking measures to contribute to the revitalization of the civilian sector will contribute to maintaining and activating the production and technological bases of Japanese aircraft, and by extension, to maintaining and strengthening the defense production and technological base in Japan. In August 2010, the MOD compiled a set of guidelines for the development of a concrete system for converting aircraft to civilian use, while in 2011, it also developed the application procedure for private companies interested in civilian use. So far, technical data related to the civilian use of the US-2 amphibian rescue aircraft and the F7-10 engine that are mounted on P-1 maritime patrol aircraft have been disclosed and released in response to requests from the implementing companies. In December 2016, ATLA and IHI Corporation, a manufacturing company of F7-10 engine, signed a contract for the civilian use of the F7-10 for sales to JAXA for the first time in Japan.

The MOD will consider the possibility of civilian use of equipment other than aircraft based on the intention of the defense industry.

---

15 Article 9, Paragraph 1 of the Public Finance Act (Act 34 of 1947)

16 As of June 2017, Japan has signed the agreement concerning the transfer of defense equipment and technology with the United States, United Kingdom, Australia, India, the Philippines, France, and Italy.
5 Technology Control

In promoting defense equipment and technology cooperation internationally, the MOD will properly evaluate the sensitivity and strategic value of defense technology and dual-use technology, and protect these technologies that should be protected as strengths of Japan. At the same time, from the perspective of Japan’s security, the MOD will strengthen technology control in cooperation with the Ministry of Economy, Trade and Industry, in order to avoid the risk of the diversion of technologies into weapons.

6 Participation in International Defense Equipment Exhibitions

From the viewpoint of promoting defense equipment and technology cooperation, ATLA participates in international defense equipment exhibitions to introduce Japan’s defense equipment policies and advanced technology. These initiatives have led to the deep understanding of foreign government officials regarding Japan’s equipment policies and technology.

So far, ATLA has participated in Eurosatory in France and Langkawi International, Maritime and Aerospace exhibition (LIMA) in Malaysia to exhibit the policy measures taken by ATLA, the outcomes of research and development regarding domestic equipment, and advanced technology possessed by Japanese manufacturers. Domestically, ATLA also participated in the Japan International Aerospace Exhibition 2016 that took place at Tokyo Big Sight in October 2016. At the exhibition, the Commissioner of ATLA delivered his keynote speech, while ATLA also invited the leaders of equipment acquisition organizations from Europe, ASEAN, and other regions (from 15 countries in total) to provide a tour at the exhibition venue, hold bilateral meetings in collaboration with JSDF, and conduct a tour of C-2 transport aircraft. Furthermore, ATLA participated in MAST Asia 2017 held at Makuhari Messe in June 2017. Also ATLA held bilateral and multilateral meetings for promoting defense equipment and technology cooperation going forward. The Commissioner of ATLA and other officials participated in symposiums to disseminate information on Japan’s measures concerning defense equipment and technology.