

Considering the fact that cyber attacks occur beyond national borders, it is important to continue to strengthen international cooperation in the cyber field through exchanges

of views with defense authorities of other countries and relevant organizations such as the CCDCOE, and active participation in cyber defense exercises.

Section 4

Initiatives for Arms Control, Disarmament and Non-Proliferation

The proliferation of weapons of mass destruction (WMDs) and missiles that can deliver them, as well as the proliferation of not only conventional arms but also goods and sensitive technologies of potential military use, pose a pressing challenge to the peace and stability of the international community. Moreover, many countries are working on the regulation of certain conventional weapons, considering the need to maintain a balance between humanitarian perspectives and defensive needs.

In order to deal with these issues, an international framework for arms control, disarmament, and non-

proliferation has been developed under which Japan has played an active role. Pursuant to the NDPG, Japan will further promote the initiatives in this field in cooperation with relevant countries and international organizations. Leveraging SDF's knowledge, Japan will engage in various activities related to arms control and disarmament undertaken by the United Nations and other bodies, including the discussion on Lethal Autonomous Weapons Systems (LAWS).

Q See Fig. III-3-4-1 (Framework for Arms Control, Disarmament and Non-Proliferation Relating to Conventional Weapons, Weapons of Mass Destruction, Missiles and Related Materials, etc.)

1 Initiatives Focused on Treaties Relating to Arms Control, Disarmament, and Non-Proliferation

Japan actively participates in international initiatives for arms control, disarmament, and non-proliferation in regard to WMDs, in the form of nuclear, chemical, and biological weapons, as well as missiles that can deliver them, and associated technologies and materials.

Japan has contributed to the Chemical Weapons Convention (CWC) by offering its knowledge in the field of chemical protection since the negotiating stage and dispatching GSDF personnel who are experts on protection against chemical weapons to the Organization for the Prohibition of Chemical Weapons (OPCW), which was established to continuously implement verification measures following the entry of the CWC into force. In addition, small quantities of the chemical substances under the regulation of the CWC are synthesized at the GSDF Chemical School (Saitama City), in order to conduct protection research. Thus, the school has undergone inspections ten times in total since

its establishment, in accordance with the CWC regulations.

Moreover, the whole of the Japanese Government is also working on projects aimed at disposing of abandoned chemical weapons in China, in accordance with the CWC. The MOD/SDF has seconded GSDF and other personnel to the Cabinet Office to handle this project, and since 2000, GSDF personnel with expertise in chemicals and ammunitions have been dispatched to conduct excavation and recovery projects on a total of 18 occasions.

In addition, the MOD has been cooperating in endeavors aimed at increasing the effectiveness of regulations and decisions, by dispatching MOD officials to major meetings such as those of the Biological Weapons Convention (BWC), as well as international export control regimes in the form of the Australia Group (AG) and the Missile Technology Control Regime (MTCR). At the same time, SDF personnel were

Fig. III-3-4-1

Framework for Arms Control, Disarmament and Non-Proliferation Relating to Conventional Weapons, Weapons of Mass Destruction, Missiles and Related Materials, etc.

Category	Weapons of Mass Destruction, etc.				Conventional Weapons
	Nuclear Weapons	Chemical Weapons	Biological Weapons	Delivery Systems (Missiles)	
Conventions on Arms Control, Disarmament and Non-Proliferation, etc.	Treaty on the Non-Proliferation of Nuclear Weapons (NPT) Comprehensive Nuclear-Test-Ban Treaty (CTBT)	Chemical Weapons Convention (CWC)	Biological Weapons Convention (BWC)	The Hague Code of Conduct Against Ballistic Missile Proliferation (HCOC)	Convention on Certain Conventional Weapons (CCW) Convention on Cluster Munitions (Oslo Convention) Anti-Personnel Mine Ban Convention (Ottawa Treaty) U.N. Register of Conventional Arms U.N. Report on Military Expenditures Arms Trade Treaty (ATT)
Export Control Frameworks Aimed at Non-Proliferation	Nuclear Suppliers Group (NSG)	Australia Group (AG)		Missile Technology Control Regime (MTCR)	Wassenaar Arrangement (WA)
New International Initiatives Aimed at Non-Proliferation of Weapons of Mass Destruction	Proliferation Security Initiative (PSI) United Nations Security Council Resolution 1540				



Lethal Autonomous Weapons Systems (LAWS)

No international consensus on the definition of LAWS has yet been reached. International discussions on this matter have been continuing under the framework of the Convention on Certain Conventional Weapons (CCW).

In March 2019, before the meetings of the Group of Governmental Experts (GGE) on LAWS under the framework of CCW, Japan submitted a working paper. The submission aimed to contribute to well-balanced discussions considering both humanity and security perspectives at GGE this year so that GGE can set a direction for possible future actions of the international community on LAWS. The paper describes Japan's approach to the key issues: (1) definition of LAWS; (2) definition of lethality; (3) form of human control; (4) scope of rules; (5) relationships with international law and ethics, and; (6) measures for confidence building. At the meeting, active discussions were made on the key issues but gaps remained between the positions of the countries.

The MOD, as it has indicated, has no plan to develop any fully autonomous lethal weapons systems without human involvement, nor will the ministry conduct R&D of equipment that is not permitted under international or domestic laws.

On the other hand, autonomous weapons systems do have positive security significance in terms of saving labor and reducing human error. Moving toward a common understanding in the international community, including major countries, MOD will continue to participate in making international rules actively and constructively, while considering Japan's security and clearly presenting its approach.

dispatched to training to foster substitute inspectors¹ provided by the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO).

Q See Reference 52 (Dispatch of Ministry of Defense Personnel to International Organizations)

Japan has signed various conventions on the regulation of conventional weapons such as the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (CCW),² based on humanitarian perspectives and security needs. In addition, Japan has signed the Convention on Cluster Munitions (Oslo Convention),³ which was adopted outside the framework of the CCW. With the entry of this Convention, the disposal of all cluster munitions possessed by the SDF was completed in February 2015.

The Ministry dispatches personnel to Group of Governmental Experts meetings related to LAWS and other events as necessary under the CCW framework. International discussions related to LAWS are under way on human-machine interaction in the use of LAWS, issues pertaining

to international humanitarian law, and other matters. Japan intends to continue its active involvement in the discussions, while also considering the standpoints of national security.

Furthermore, the MOD has actively cooperated in the initiatives of the international community that focus on the problem of anti-personnel mines by submitting annual reports that include data on Japan's exceptional stocks to the UN.

In addition, the MOD/SDF participates in the meetings under the frameworks of the UN Register of Conventional Arms, the UN Report on Military Expenditures and Arms Trade Treaty (ATT) with the purpose of increasing the transparency of its military preparedness and military expenditure, and provides the requisite reports. It also dispatches personnel as needed to governmental expert meetings and other meetings for reviewing and improving these systems. Since April 2018 the MOD/SDF has been sending a Senior Fellow of the National Institute for Defense Studies as a member of the Group of Experts⁴ of the 1540 Committee established pursuant to the UN Security Council Resolution 1540⁵ (Resolution 1540). In order to promote implementation of the resolution, the researcher handles reviews of reports from UN member countries, responses to technical questions, and other activities.

¹ Experts in relevant fields registered with the Comprehensive Nuclear-Test-Ban Treaty (CTBT) Organization, in preparation for the implementation of On-site Inspections (OSI) following the effective date of the CTBT. They are also expected to become inspectors who conduct OSI after the CTBT enters into force.

² CCW: Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to have Indiscriminate Effects

³ Major producers and owners of cluster munitions such as the United States, China and Russia have not signed the Oslo Convention.

⁴ Group of experts who support implementation of the mandate of the 1540 Committee set up under the UN Security Council Resolution 1540 (Resolution 1540). Nine experts (usually their term is two years) handle reviews of reports from UN member countries, respond to technical questions, support implementation, and conduct other activities.

⁵ Adopted in April 2004 to prevent the proliferation of weapons of mass destruction (nuclear, biological, and chemical weapons and their means of delivery [missiles]) to non-state actors. The resolution imposes obligations on all states to (1) refrain from providing any form of support to terrorists, etc. that attempt to develop, acquire, manufacture, possess, transport, transfer or use weapons of mass destruction, etc.; (2) adopt and enforce appropriate effective laws which prohibit terrorists, etc. from developing weapons of mass destruction; and (3) take effective measures to establish domestic controls (protection measures, border and export controls, etc.) to prevent the proliferation of weapons of mass destruction, etc.