

**JAPAN****JAPAN'S EFFORTS AND THE PROGRESS ON THE DESTRUCTION OF
ABANDONED CHEMICAL WEAPONS IN CHINA****1. Foreword**

- 1.1 The destruction projects of abandoned chemical weapons (ACWs) in the People's Republic of China achieved significant progress in this last five years. Japan has invested enormous financial and personnel resources and made best possible continuous efforts in tackling various challenges and uncertainties to achieve tangible progress in destroying ACWs.
- 1.2 The destruction operation was started in 2010 with the first mobile destruction facility (MDF) in Nanjing (Jiangsu Province), and 35,681 items (which constituted 75.1% of 47,516 items declared at the time) were destroyed during the twenty-month operation which was completed in 2012. The destruction operation was commenced in Shijiazhuang (Hebei Province) in 2012. The excavation and recovery operations in Haerbaling (Jilin Province), the largest ACW burial site, was launched in 2012. Furthermore, on-site investigations, excavation and recovery operations as well as preparation works for future destruction operations have been carried out in various areas.
- 1.3 The destruction of ACWs is different in its characteristics from that of stockpiled chemical weapons. Therefore the Chemical Weapons Convention (hereinafter "the Convention") stipulates exceptional provisions for the destruction of ACWs under the mandate of the Executive Council (hereinafter "the Council").
- 1.4 The Council decision (EC-67/DEC.6) including its annex "The Destruction Plan for the Chemical Weapons Abandoned by Japan in the People's Republic of China Beyond 29 April 2012" (hereinafter "the Destruction Plan") provides Japan and China with the framework of the ACWs destruction projects (hereinafter "the Projects") including the proposed or expected timeframes.
- 1.5 The Projects are joint projects by Japan and China. As both Japan as the abandoning State Party and China as the territorial State Party have their own roles in implementing the joint projects, partnership, close coordination and cooperation based on a sense of trust are the keys to move forward the projects. Japan and China sometimes face difficulties in implementing the projects which have been and will be resolved by bilateral consultations.

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- 1.6 Japan reaffirms its commitment to continue its fullest possible efforts to move forward the Projects with the appropriate cooperation of China.

2. Characteristics of the ACW projects

- 2.1 The Projects entail various challenges. The Projects start with laborious and hazardous tasks of excavation, recovery and identification of the ACWs among the recovered munitions mixed with those of other kinds. ACWs are discovered in very difficult situations (e.g. mountainous areas, riverbeds). ACWs were left in the least preferable environments for preservation. Unlike stockpiled chemical weapons, most ACWs have remained under the soil or water for a long time, and they are heavily corroded or deformed. Excavation, recovery and destruction operations for ACWs require extra care and considerations in their planning and implementation.
- 2.2 As the Projects always entail hazards and challenges, the most important prerequisites for steadily and safely carrying out such unprecedented tasks are to attach the highest priority to personnel safety and protection of the environment. Japan and China have held a number of consultations to secure personnel and environmental safety of the operations. For instance, when discharge of dioxin from the off-gas stack was suspected to exceed a reference point during the destruction operation in Nanjing, the operation was suspended for approximately five months to investigate the cause. Harsh winter weather in northern China makes it difficult to carry out works for the months in the winter season.
- 2.3 Besides, Japan has to implement these projects in a manner consistent with Chinese laws and regulations. Coordination with the relevant stakeholders in China including local governments and headquarters of military districts, for which Japan mostly depends on the Chinese government, are necessary for smooth and timely operations. Local procurements are required in various cases.
- 2.4 Another prominent characteristic of the Projects is that the Projects are implemented jointly by Japan and China. Japan carries out works such as overall project management, planning the requirements for the destruction sites, procurement and operations of the destruction systems. Japan depends on the cooperation of China for works such as preparation works (e.g. designing and construction of sites) and logistics (e.g. procurement of explosives, transport of ACWs, security). Japan and China need to hold consultations on every aspect of the ground works as roles of both sides are intertwined with each other. Both sides need to cooperate through persevering consultation to resolve some issues. As safe and steady operations are carried out based on appropriate preparation works, the timing of the commencement of each destruction operation makes way for the conclusion of consultations on such works.
- 2.5 As described above, the Projects are unprecedented tasks which do not bear resemblance to the destruction of stockpiled chemical weapons. Close coordination and cooperation with China are indispensable to tackle the aforementioned challenges. In this regard the Projects cannot be moved forward without joint efforts by Japan and China.

3. The framework of the destruction of ACWs

- 3.1 The aforementioned characteristics of destruction of ACWs as well as the difference in nature between destruction of stockpiled chemical weapons and that of ACWs lead to different provisions in the Convention from those applicable to destruction of

stockpiled chemical weapons. Part IV(B) of the Verification Annex stipulates exceptional provisions for destruction of ACWs under the mandate of the Council.

- 3.2 The Council provides the relevant States Parties with the grounds to rightfully continue the destruction of ACWs based on the Destruction Plan after 29 April 2012 which was the deadline the Council previously decided (EC-46/DEC.4). The Director-General has provided reports on the overall progress of the destruction of ACWs at each regular session of the Council in accordance with the decision by the Council (EC-67/DEC.6). Japan has duly submitted reports and delivered briefings on the progress of the Projects to each regular session of the Council in accordance with the said decision. The Council has sufficient mandate to ensure the Projects to be implemented appropriately in accordance with the Convention and has properly exercised its authority.
- 3.3 The Council adopted the decision on destruction based on the Destruction Plan which describes the roadmap toward the complete destruction including the proposed or expected timeframes instead of deadline (EC-67/DEC.6). The Destruction Plan describes the overview of the Projects including assignments for Japan and China, expected sequence of deployment of MDFs, proposed or expected timeframes, technologies to be adopted for destruction operations, arrangements to draw up the destruction plan for operations in Haerbaling, and arrangements for bilateral consultations to review the relevant matters including the timeframes.
- 3.4 The Destruction Plan describes the expected sequence and expected timeframes for destruction of ACWs which have been declared to the Organisation for the Prohibition of Chemical Weapons (“OPCW”) as at 29 April 2012 (not including those buried or stored in Haerbaling) as follows:
 - (a) Japan “will make its fullest possible efforts, with a view to achieving the proposed timeframe, which is preferably within the year 2016, of the completion of destruction of” ACWs. China “will provide appropriate cooperation for the destruction”.
 - (b) “In southern China, one mobile destruction facility (hereinafter referred to as “MDF”)", which has already been deployed in Nanjing (Jiangsu Province), “is expected to be transferred to Wuhan (Hubei Province) and then Guangzhou (Guangdong Province) for destruction operations.” “MDF has adopted a detonation chamber as the technology for destruction.” “The destruction operation in Nanjing started in October 2010 and is expected to be completed within the first half of the year 2012.” “The destruction operation in Wuhan is expected to be started and completed within the year 2012.” “A third MDF deployment location is expected to be Guangzhou.” Japan and China “are currently discussing the details including the timing for the start of the destruction operations.”
 - (c) “In northern China, another MDF is expected to be deployed in Shijiazhuang (Hebei Province) within the year 2012 followed by the operation in Harbin (Heilongjiang Province) and other locations for destruction operations.” “The destruction operation in Shijiazhuang is expected to be started and completed within the year 2012.” Japan and China “are currently discussing the details

of the destruction operation in Harbin, including the timing for the start of the operation.” “Subsequent locations for destruction in northern China are under consultation” between Japan and China.

- 3.5 The Destruction Plan describes the operations in Haerbaling (Jilin Province) as follows:
- (a) “The excavation and recovery as well as destruction operations in Haerbaling are expected to launch within the year 2012 at the earliest.”
 - (b) Japan, in consultation with China, “will draw up a destruction plan of ACWs buried in Haerbaling preferably within 3 years after the launch of excavation and recovery as well as destruction operations, taking into consideration the uncertainties such as the actual number of the ACWs buried there. This plan will include, among other things, a proposed timeframe of destruction and its accomplishment as well as future configuration of the destruction facilities.”
 - (c) “Until such time, the Government of Japan, on the premise that it will assign the highest priority to the safety of the personnel and the protection of the environment, will make its fullest possible efforts with a view to completing the destruction of ACWs in Haerbaling within the year 2022.” China “will provide appropriate cooperation for the destruction.”

- 3.6 Regarding the consultations, the Destruction Plan describes as follows:

“Taking into consideration the importance of the safety of the personnel and the protection of the environment as well as technical elements,” Japan and China “may have consultations for the review of relevant matters including the aforementioned timeframes, according to the progress of the destruction operations.”

4. The progress of the ACW Projects

- 4.1 In the past five years, the Projects achieved significant progress by joint efforts of Japan and China. The progress reports have been duly recognised by the Council. The unprecedented and extremely challenging projects cannot be carried out without close coordination and cooperation between Japan and China. In this respect, the progress of the Projects and close coordination and cooperation between Japan and China should be appreciated.
- 4.2 In southern China, Nanjing was designated in 2008 as the first MDF deployment site. After the intensive preparation works, the destruction operation in Nanjing was started in October 2010 and successfully completed in June 2012. 35,681 ACWs including those stored in the neighbouring temporary storehouses, which constituted 75.1% out of 47,516 ACWs declared as of June 2012, were destroyed during the 20 months of operation. ACWs stored in the neighbouring temporary storehouses were transported to Nanjing for destruction. The transportation operation was executed cautiously and completed safely. The difficulties encountered in this very first destruction operation which included procedural problems in custom clearance for MDF equipments, unexpected technical incidents such as cracks on the detonation chamber, suspected discharge of dioxin exceeding a reference point and incomplete detonation during destruction, were appropriately overcome by close bilateral cooperation between

Japan and China. The destruction operation in Nanjing is a great success as a result of the joint efforts by Japan and China, providing a valuable experience for future operations in other locations.

- 4.3 Following the completion of the destruction operation in Nanjing, Japan has been undertaking the disposal works of the contaminated waste, which is not the mandatory object for the destruction under the Convention, based on the bilateral consultation with China. Additional systems were installed for this purpose and some of them have been attached to the MDF in Nanjing. The disposal works of contaminated waste have been taking a longer time than expected due to technical incidents. After the completion of all the necessary works in Nanjing and the completion of remaining preparation works in Wuhan, the MDF will be redeployed to Wuhan. Approximately 240 ACWs including those currently stored in the neighbouring temporary storehouses are expected to be destroyed in the operation in Wuhan.
- 4.4 In northern China, the second MDF was installed in Shijiazhuang by October 2012. During the process of the preparation works before the installation, a series of bilateral consultations on the site-related designs proposed by Chinese companies in response to the request by Japan took a longer time than expected. The initial visit by the Technical Secretariat was carried out in early December 2012. The destruction operation in Shijiazhuang was started in December 2012. 250 ACWs were destroyed before the winter season suspension. Severe winter weather prevents the full operation until the spring season. Approximately 1,450 ACWs are to be destroyed in Shijiazhuang including those currently located in neighbouring trust storehouses.
- 4.5 In Haerbaling, a mountainous area in northeastern China and the largest ACW burial site, joint efforts have been made by Japan and China for the excavation and recovery as well as destruction operations. The facilities for excavation and recovery operations became operational in November 2012 after prolonged construction works by Chinese companies were completed. The operations were launched in December 2012. The operations are being suspended during severe winter seasons. 300 to 400 thousand ACWs are currently estimated to be buried in Haerbaling and a more accurate estimate will become available as the operations proceed.
- 4.6 Regarding the destruction operation in Haerbaling, two types of technologies, which are the detonation chamber and the static kiln detonation furnace, are adopted for destruction. The two units were manufactured by 2011 and 2012 respectively. On the design of the buildings to house the test destruction facility, Japan and China had a series of bilateral consultations based on the design which a Chinese company proposed in response to the request by Japan. The consultations on the proposed design took a longer time than expected for a number of adjustments. The persevering consultations were finally brought to a conclusion in September 2012. The destruction operation will commence upon completion of the rest of the preparation works including the construction of the buildings with appropriate cooperation of the Chinese side. Once the destruction operation is launched and proceeds along with the excavation and recovery operations, future configuration of the destruction facilities will be determined and be described in the destruction plan for Haerbaling operations.
- 4.7 On-site investigations as well as excavation and recovery operations in various areas have been carried out with the cooperation of China. More than 110 such operations

resulted in recovery of 49,529 ACWs as of December 2012. Such investigations, excavation and recovery operations are still ongoing. With respect to those ACWs already confirmed through joint investigations and to be declared to the OPCW as well as those which may subsequently be confirmed through such investigations, Japan will faithfully implement, in accordance with the Convention, obligations as the Abandoning State Party.

4.8 Japan has made every effort to collect information on the whereabouts of ACWs in order to facilitate discoveries of ACWs and prevent accidents. Although more than half a century has passed since the last war and lots of historical documents had been disposed or lost, Japan has made efforts in examining historical documents and interviews with veterans of the former Japanese Army. Information acquired has been provided to China. Japan also provided China with some outreach tools such as posters and leaflets for the purpose of alerting local authorities and population about the hazards of chemical weapons.

5. Measures for smooth implementation of the ACW Projects and efforts for ensuring transparency

5.1 As the Projects have been implemented jointly by Japan and China, close bilateral coordination and cooperation are indispensable in order to move the Projects forward. In this respect, a number of bilateral consultations between Japan and China at various levels have been contributing to maintaining and enhancing partnership on the ground and transparency of the Projects.

5.2 The Japan-China Joint Working Group Meetings are held annually by the representatives of both countries to review the result of past activities, to draw on best practices and lessons, and to discuss the prospects of future activities. A lot of consultations by implementing authorities and experts are also held to discuss implementation of projects.

5.3 In addition to the bilateral consultations, Japan, China and the Technical Secretariat hold biannual trilateral meetings. These meetings provide the venue to share the information on the status and outlook of each project so that transparency of the Projects and appropriate verifications are ensured.

5.4 The Council decision (EC-67/DEC.6) describes that Japan and China “welcome visits of the Chairperson of the Council, the Director-General and a delegation representing the Council to destruction facilities.” Japan regards it important to realise such visits for better understanding of the status of the Projects and furthering transparency. Japan and China are consulting on appropriate times and places for the visits taking into account the progress of the Projects.

6. Conclusion

Japan reaffirms its commitment to continue its fullest possible efforts to move forward the projects with the appropriate cooperation of China.