Elimination of Chemical Weapons Stockpiles: Lessons for Syria

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Members of the Chemical Weapons Convention who possessed chemical weapons and destroyed them have valuable experience that can be used in Syria. In both post-1991 Iraq and in Libya, the international community had to deal with dictatorships that had made attempts to hide some of their WMD military capabilities, which also may be helpful to address Syria’s behaviour. The need to trace the history of its chemical weapons programme, a reliance on simple measures to achieve fast results, and the need to secure additional sources of financing are some of the lessons learnt from the past cases.

On 14 September, the United States and Russia announced an agreement on the framework for the elimination of Syria’s chemical weapons. It envisages an ambitious timetable: the initial on-site inspections and destruction of essential equipment should be completed by November 2013, while the elimination of chemical weapons and related equipment should be achieved in the first half of 2014. The decision by Syria to join the Chemical Weapons Convention (CWC) on 12 September and submit an initial declaration of its chemical weapons capabilities did not alleviate concerns that the arrangement may fall to pieces.

The ongoing civil war will complicate the efforts to secure the weapons and assess the compliance of the regime with its obligations. Moreover, publicly available information about the size and composition of the Syrian stockpile remains sketchy. It is assumed that it includes about 1,000 tonnes of chemical weapons agents that can be delivered by aerial bombs, missiles, rockets and artillery shells, as well as by improvised means. Some of the agents may be stored in bulk containers, while others have already been weaponised.

Previous Cases of Chemical Weapons Disarmament: Before Syria, six countries had acceded to the Chemical Weapons Convention while declaring possession of chemical weapons: Russia, the United States, India, South Korea, Libya and Iraq (in 2009). The seventh, Albania, discovered communist-era chemical weapons on its territory while already being a member of the CWC. Albania, India and South Korea have already destroyed their stockpiles. Due to their size, the biggest challenge has been the destruction of the arsenals of Russia (40,000 tonnes, 74% destroyed so far) and the U.S. (about 28,000 tons, 90% destroyed). The main problems concern the safest methods, timetables and costs of completing the operation.

The most relevant lessons for Syria were provided by Libya and Iraq. Muammar Qaddafi’s December 2003 unilateral decision to give up his WMD programs had to do with the threat of regime change and the desire to break Libya’s isolation. The regime was therefore perceived as cooperative in dismantling its chemical weapons programme. Libya’s arsenal consisted of 23 tonnes of sulphur mustard, about 1,300 tonnes of chemical precursors, and more than 3,500 empty CW-capable aerial bombs. Libya managed to produce only limited quantities of the nerve agents sarin and soman. After Qaddafi’s announcement, the U.S. and the UK dispatched their own teams of experts to inspect and secure the stockpile. Importantly, inspectors with the Organisation for the Prohibition of Chemical Weapons (OPCW) were involved early on. They made the first assessment of the situation on the ground as early as February 2004. By September 2004, OPCW had verified the declaration, overseen the destruction of the munitions, and prepared plans for the elimination of the chemical weapons. Before the start of the rebellion against Qaddafi in 2011, 54% of the sulphur mustard and 40% of the precursors had been destroyed inside Libya. However, in November...
2011, the new Libyan authorities announced the discovery of an undeclared chemical weapons stockpile (about 2 tonnes of chemical agents, some loaded into artillery shells). That put into question the previous assessment of Libya’s disarmament as a “success story.”

Post-1991 Iraq provided the biggest disarmament challenge in terms of the size and complexity of its chemical weapons programme. The task of inspecting the stockpile and overseeing its destruction was given to the United Nations Special Commission (UNSCOM). After the 1991 war, Saddam Hussein was determined to preserve the possibility to re-constitute the programme. As a result, the first Iraqi declarations on its chemical weapons were incomplete, and UNSCOM encountered stiff resistance in its attempts to uncover the state of the programme. Further complicating the task, the Iraqi authorities destroyed part of the stockpile unilaterally before the arrival of the inspectors, and some of the munitions and chemical agents were entombed in bunkers that had been destroyed by Allied forces.

Despite its broad mandate and early successes in eliminating parts of the chemical stockpile (between 1992 and 1994, 38,000 pieces of munitions, 690 tonnes of chemical weapons and about 3,000 tonnes of precursors were destroyed), UNSCOM was not able to answer a number of questions related to the state of the Iraqi CW programme. The questions were not resolved by additional inspections done in 2002–2003 by a new UN body, the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC). The purported existence of a CW programme in Iraq constituted one of the main arguments justifying the 2003 war. An investigation conducted after the war concluded that the Iraqi authorities indeed had destroyed the majority of the stockpile as early as in 1991 and had not made major efforts to re-constitute the programme afterwards.

**Lessons Applicable to Syria.** It is widely assumed that the Assad regime would not be willing to fully abide by its disarmament pledges. It is therefore imperative to use the period immediately after the regime’s policy reversal to secure the most dangerous components of the programme, exactly as happened in Iraq and Libya. The official announcements by the Syrian leadership on chemical disarmament can be used to overcome the resistance of elements of the regime that could oppose the agreement. Acting fast would also give the regime less time to prepare concealment and deception strategies.

The willingness of the regime to cooperate would depend on its perception of the rationale of pursuing chemical weapons disarmament. Iraq’s Hussein came to the conclusion that UNSCOM inspectors were gathering intelligence on Iraqi defences and building the case for overthrowing the regime, so his government continued to obstruct their work. In Libya, the regime appeared to be confident that its survival was assured as long as it showed a willingness to cooperate on WMD disarmament. Later on, however, the Libyan leader reportedly felt personally offended that his decision to renounce these weapons did not bring tangible benefits. That may explain his decision to keep a small part of the chemical arsenal hidden.

Apart from inspecting and securing the materials and sites, the inspectors also need to obtain access to documents regarding the history of the programme (including procurements from abroad) and to individuals involved in the research and production. Both in Iraq and Libya, access to the documents and scientists allowed inspectors to fill in gaps in knowledge. Inspectors should also look into the Syrian regime’s claim that some of the rebel groups had gained access to or produced chemical weapons on their own.

Destruction of munitions that have not been filled with chemical agents can probably be done relatively quickly. In the Libyan case, empty aerial bombs were simply crushed by bulldozers. Installations used to produce chemical weapons or to mix the components and load them into munitions can be disabled. In Iraq, the entrances to two bunkers with dangerous chemicals and contaminated equipment were blocked with reinforced concrete, which can be a temporary solution for Syria in areas affected by fighting. It seems that the removal of chemical weapons, precursors and equipment out of the country would require more extensive preparations, including resolving legal issues (CWC states are prohibited from transferring or acquiring chemical weapons).

While a CWC member should cover the costs of eliminating its own weapons stockpile and facilities, several countries have received financial and technical support to destroy the stockpiles. Russia received funds to secure stocks and build and operate CW destruction facilities. This effort was coordinated through the G8 Global Partnership against the Spread of Weapons and Materials of Mass Destructions. The United States co-funded the destruction of Albania’s chemical weapons, and the chemical disarmament of Libya was supported by money and expertise from other countries, including the U.S., U.K., Germany and Canada. It may be necessary to establish a separate financial mechanism or adjust the scope of the Global Partnership to finance the start of chemical weapons destruction in Syria.

Strengthening the inspection and verification capabilities of OPCW is separate from destruction activities, and constitutes a short-term priority. This is an area where Poland can contribute by making additional CW experts available to OPCW. A financial contribution to the trust fund to finance OPCW engagement in Syria should also be contemplated.

**Conclusion.** The challenges of securing and destroying the Syrian chemical weapons may seem formidable, but applying lessons learnt from previous cases can increase the chances of success. The political aspect remains as important as the technical details. Switching international attention to other issues may enable the regime to derail the disarmament process (as in Iraq) or enable it to hide parts of its stockpile (Libya).