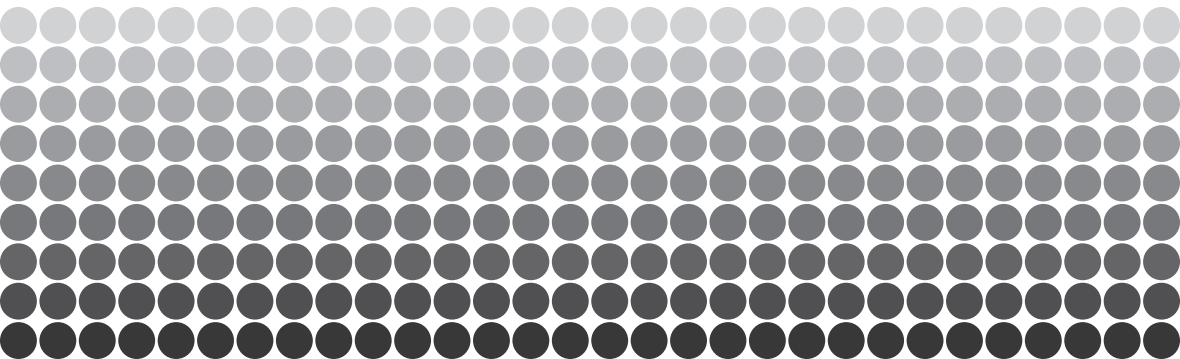


# **SIPRI YEARBOOK 2014**

Armaments, Disarmament and International Security

Chemical and biological weapon programmes

JOHN HART



# Chemical and biological weapon programmes

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## I. Chemical and biological weapon programmes

JOHN HART

Allegations of chemical and biological weapon programmes and use in 2013 were dominated by chemical weapon-related developments in Syria. However, two legal cases in the United States illustrated the scope and applicability of domestic legislation to implement the international prohibitions against the use of such weapons. In addition, in June Iraq announced it had uncovered an al-Qaeda chemical weapon plot to manufacture sulphur mustard and sarin and to carry out attacks in Europe and the USA.<sup>1</sup>

### Syria

In 2013 various chemical weapon-related allegations and incidents occurred in Syria against the backdrop of the worsening of the armed conflict. The chemical weapon aspect of the Syrian conflict played an important and public role in various institutions and frameworks with responsibility for international peace and security, including the United Nations, the UN General Assembly's Human Rights Council, the International Criminal Court, the Organisation for the Prohibition of Chemical Weapons (OPCW), the World Health Organization (WHO), and national security and defence establishments (e.g. laboratories, intelligence services, and chemical weapon detection, protection and response networks and associated capacities). While some attempts were made to keep the higher political-level considerations separated from technical and operational matters—especially the collection and analysis of samples of chemical weapons and chemical weapon degradation products—such efforts were not always successful.

A hybrid cooperative arrangement between the OPCW, the UN and the WHO evolved during the year, first as an inspection mission to investigate alleged use of chemical weapons, established in March under the authority of the UN Secretary-General. The mission was unable to enter Syria until 18 August due to disagreements on the inspection mandate. The political dynamic changed on 21 August, when it was widely and credibly reported that more than 1000 people had been affected by an attack at Ghouta, near Damascus, with an unknown chemical agent. After the UN mission reported its conclusions that chemical weapons had been used in Syria,

<sup>1</sup> 'Iraq uncovers al-Qaeda "chemical weapons plot"', BBC News, 1 June 2013, <<http://www.bbc.co.uk/news/world-middle-east-22742201>>; al-Qaisi, M., 'Iraqi security shuts down al-Qaeda chemical weapons plants', al-Shorfa.com, 12 June 2013, <[http://al-shorfa.com/en\\_GB/articles/meii/features/2013/06/12/feature-02](http://al-shorfa.com/en_GB/articles/meii/features/2013/06/12/feature-02)>; and Saeed, R., 'Syria chemical weapons pose regional threat: analysis', al-Shorfa.com, 6 Aug. 2013, <[http://al-shorfa.com/en\\_GB/articles/meii/features/2013/08/06/feature-01](http://al-shorfa.com/en_GB/articles/meii/features/2013/08/06/feature-01)>.

dual-track processes in the UN in New York and the OPCW in The Hague resulted in coordinated agreement among interested states, including Syria, Russia and the United States. On 12 September Syria agreed to join the 1993 Chemical Weapons Convention (CWC), and on 27 September the OPCW Executive Council agreed a destruction plan that called for Syria to destroy its stockpile by 30 June 2014.<sup>2</sup> The inspection mission was formally transformed into a joint OPCW–UN elimination mission.

Throughout the year, the international community (notably France, the United Kingdom and the USA) debated how to respond to developments in Syria, and whether to intervene militarily. But by the time that the use of chemical weapons was definitively established in September, the discussion of what should be done had shifted as a consequence of Syria joining the CWC (e.g. to confirming the completeness and correctness of Syria's declaration to the OPCW and how to verifiably destroy the country's chemical weapon programme and stocks).

It should be noted that while the Syrian Government did declare the possession of chemical weapons, it denied having used them.<sup>3</sup> This position was broadly supported by Russia at the UN, the OPCW Executive Council and elsewhere. Finally, the Syrian Government expressed its disappointment that the contents of its (confidential) declarations to the OPCW were referred to by other states parties and thus contributed to a politicization of the verification and destruction process that should, instead, be a technical matter.<sup>4</sup>

### *Allegations and assessments*

Following the Syrian Government's admission in July 2012 that it possessed chemical weapons, 2012 had ended with international discussion about how to secure chemical weapon arsenals and facilities in the event of the regime of President Bashar al-Assad collapsing.<sup>5</sup> In January 2013 Israel reportedly attacked the Syrian Scientific Studies and Research Centre, which is located north of Damascus and has been the target of international

<sup>2</sup> For a summary and other details of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction see annex A, section I, in this volume. Documents relating to the CWC can be found on the website of the Organisation for the Prohibition of Chemical Weapons (OPCW), <<http://www.opcw.org/documents-reports/>>.

<sup>3</sup> The Syrian statement to the OPCW in Dec. made this point. OPCW, Conference of the States Parties, 18th session, Syrian Arab Republic, 2–6 Dec. 2013, <[http://www.opcw.org/index.php?eID=dam\\_frontend\\_push&docID=16905](http://www.opcw.org/index.php?eID=dam_frontend_push&docID=16905)> (in Arabic).

<sup>4</sup> OPCW (note 3).

<sup>5</sup> On developments in 2012 see Hart, J., 'Chemical and biological weapon programmes', *SIPRI Yearbook 2013*, pp. 376–80.

sanctions because of its suspected association with chemical and biological weapon programmes.<sup>6</sup>

The number of videos of alleged chemical weapon use and commentaries on chemical weapon allegations increased throughout 2013.<sup>7</sup> On 12 March, the US Director of National Intelligence, James R. Clapper, stated before the US Senate Select Committee on Intelligence that ‘We assess Syria has a highly active chemical warfare (CW) program and maintains a stockpile of sulfur mustard, sarin, and VX. We assess that Syria has a stockpile of munitions—including missiles, aerial bombs, and possibly artillery rockets—that can be used to deliver CW agents.’ He also stated that ‘[Syria] may be capable of limited agent production. Syria is not known to have successfully weaponized biological agents in an effective delivery system, but it possesses conventional and chemical weapon systems that could be modified for biological agent delivery.’<sup>8</sup>

On 19 March allegations were made that either Syrian Government forces or rebel forces had used chemical weapons. The Russian Ministry for Foreign Affairs stated that a chemical munition filled with an unspecified agent had exploded, resulting in 16 fatalities and approximately 100 casualties.<sup>9</sup> Rebel forces reportedly stated that chemical weapons had been used in Khan al-Assal (in northern Aleppo province) and in the Ataybah area (in suburban Damascus).<sup>10</sup> Two members of the Israeli Cabinet reportedly stated on 20 March that chemical weapons had been used, but according to an unnamed senior US official, Israel’s Prime Minister, Benjamin Netanyahu, ‘had not presented conclusive evidence of an attack’ in his private meetings with US President Barack Obama, who was on a state visit to Israel at the time.<sup>11</sup>

On 20 March the UN Secretary-General, Ban Ki-moon, received a request from the Syrian Government to investigate a case of alleged chemical weapon use on 19 March at Khan al-Assal.<sup>12</sup> On 21 March the UN

<sup>6</sup> Sanger, D. E., Schmitt, E. and Rudoren, J., ‘Veil unfolds bit by bit on Israeli attack on Syria’, *International Herald Tribune*, 4 Feb. 2013, pp. 1, 4.

<sup>7</sup> For a compilation of channels see ‘Syrian channel listings’, Brown Moses Blog, 11 Mar. 2013, <<http://brown-moses.blogspot.com/2012/06/syrian-channel-listings.html>>.

<sup>8</sup> Clapper, J. R., US Director of National Intelligence, US Office of the Director of National Intelligence, ‘Worldwide threat assessment of the US intelligence community’, Statement for the record, US Senate, Select Committee on Intelligence, 12 Mar. 2013, <<http://www.dni.gov/index.php/newsroom/testimonies/194-congressional-testimonies-2013/816-statement-for-the-record-worldwide-threat-assessment-of-the-u-s-intelligence-community>>, p. 8.

<sup>9</sup> Russian Ministry for Foreign Affairs, [Comment from the Press and Information Department of the Russian MFA regarding the use by illegal armed groups of chemical weapons in Syria], Press Statement 534-19-03-2013, <[http://www.mid.ru/brp\\_4.nsf/newslines/956AFD3F61A3A6EA44257B33004BDE03](http://www.mid.ru/brp_4.nsf/newslines/956AFD3F61A3A6EA44257B33004BDE03)> (in Russian).

<sup>10</sup> Landler, M. and Gladstone, R., ‘Chemicals would be “game changer” in Syria, Obama says’, *International New York Times*, 20 Mar. 2013.

<sup>11</sup> Landler and Gladstone (note 10).

<sup>12</sup> OPCW, Executive Council, ‘Statement by the Director-General to the Executive Council at its thirty-second meeting’, EC-M-32/DG.1, 27 Mar. 2013, para. 2.

announced that it would launch an investigation—the UN Mission to Investigate Allegations of the Use of Chemical Weapons in Syria—in cooperation with the OPCW and the WHO that would ‘look into the specific incident brought to [the Secretary-General’s] attention by the Syrian Government’.<sup>13</sup> The mission was headed by Åke Sellström, a Swedish chemical weapon expert. The mission, which was based in Cyprus, was run through the UN’s Office for Disarmament Affairs (UNODA) but was composed largely of OPCW inspectors, along with a component from the WHO. Members of the UN Security Council disagreed on whether only the allegation by the Syrian Government should be investigated, or whether additional allegations made by Syrian rebel groups should also be scrutinized. France and the UK formally requested the Secretary-General to also investigate alleged chemical weapon use at multiple other locations in Syria.<sup>14</sup>

In April President Obama instructed the US intelligence community to ‘seek credible and corroborated information . . . and establish the facts with some degree of certainty’.<sup>15</sup> On 30 April he stated: ‘what we now have is evidence that chemical weapons have been used inside of Syria, but we don’t know how they were used, when they were used, [or] who used them. . . . And if we end up rushing to judgment without hard, effective evidence, then we can find ourselves in a position where we can’t mobilize the international community to support what we do’.<sup>16</sup>

In late April, anonymous intelligence estimates reported that Syria possessed 100–200 sarin-filled Scud warheads and ‘thousands’ of artillery shells filled with sarin and VX (separate fills). The town of al-Safira (outside Aleppo) was alleged to contain one of Syria’s principal facilities for the production of chemical weapons, including sarin, and al-Nusra Front units were also said to be among the opposition forces attacking the facility in April 2013.<sup>17</sup>

<sup>13</sup> United Nations, ‘Ban Ki-moon: press encounter on Syrian Government request’, UN Web TV, 21 Mar. 2013, <<http://webtv.un.org/topics-issues/un-secretary-general/watch/ban-ki-moon-press-encounter-on-syrian-government-request/2241903792001>>. The UN Secretary-General’s authority to establish such a mission is partly based on 2 resolutions: UN General Assembly Resolution 42/37, 30 Nov. 1987; and UN Security Council Resolution 620, 26 Aug. 1988. On 27 Mar. the OPCW Director-General ‘authorised the placement of OPCW resources at the disposal of the Secretary-General’ to support the investigation. OPCW, Executive Council, ‘Statement by the Chairperson of the Executive Council following the thirty-second meeting of the Executive Council 27 March 2013’, EC-M-32/2/Rev.1, 27 Mar. 2013.

<sup>14</sup> OPCW, EC-M-32/DG.1 (note 12).

<sup>15</sup> White House, ‘Statement by Deputy National Security Advisor for strategic communications Ben Rhodes on Syrian chemical weapons use’, 13 June 2013, <<http://www.whitehouse.gov/the-press-office/2013/06/13/statement-deputy-national-security-advisor-strategic-communications-ben->>.

<sup>16</sup> White House, ‘News conference by the President’, Press briefing, 30 Apr. 2013, <<http://www.whitehouse.gov/the-press-office/2013/04/30/news-conference-president>>.

<sup>17</sup> Freeman, C., ‘Syria: Al-Qaeda’s battle for control of Assad’s chemical weapons plant’, *Daily Telegraph*, 27 Apr. 2013.

In May, Carla Del Ponte, a member of the Independent International Commission of Inquiry on Syria established by the UN Human Rights Council in August 2011, told Swiss media that testimony indicated that opposition members had used sarin in the conflict, and that she did not exclude the possibility that Syrian Government forces had used chemical weapons.<sup>18</sup> On 31 May 2013 the Russian Foreign Minister, Sergei Lavrov, urged a full public explanation of chemical weapon use in Syria.<sup>19</sup>

In June the Independent International Commission of Inquiry on Syria documented the ‘use of chemical agents’. While it stated that the Syrian Government possessed chemical weapons, it acknowledged that rebel forces ‘may access and use chemical weapons’.<sup>20</sup> France, the UK and the USA reportedly provided the UN with ‘a trove of evidence, including multiple blood, tissue and soil samples’ which the USA maintained ‘proves that Syrian troops used ... sarin on the battlefield’.<sup>21</sup> Also in June the French Government stated that it had conclusive evidence that sarin had been used in Syria.<sup>22</sup> On 4 June the French Minister of Foreign Affairs, Laurent Fabius, publicized the results of analysis that ‘demonstrated the presence of sarin in a number of samples in our possession, collected, namely, following attacks in Jobar between 12 and 14 April and in Saraqib on 29 April’.<sup>23</sup> France provided this information to Sellström and wrote to the UN Secretary-General to request that the mandate of the mission

<sup>18</sup> ‘UN’s Del Ponte says evidence Syria rebels “used sarin”’, BBC News, 6 May 2013, <<http://www.bbc.com/news/world-middle-east-22424188>>.

<sup>19</sup> Russian Ministry for Foreign Affairs, [Introduction and answers to mass media questions by the Minister for Foreign Affairs of Russia S. V. Lavrov during press conference on the results of negotiations between the Deputy Chairman of the Council of Ministers and the Minister for Foreign Affairs of Bosnia and Herzegovina], Press Release 1105-31-05-2013, 31 May 2013, <[http://www.mid.ru/brp\\_4.nsf/newslne/644C2B9832AEB07F44257B7C004049A4](http://www.mid.ru/brp_4.nsf/newslne/644C2B9832AEB07F44257B7C004049A4)> (in Russian).

<sup>20</sup> United Nations, General Assembly, Human Rights Council, Report of the Independent International Commission of Inquiry on the Syrian Arab Republic, A/HRC/23/58, Advance unedited version, 4 June 2013, p. 1 and para. 138.

<sup>21</sup> Lynch, C. and Warrick, J., ‘In Syrian chemical weapons claim, criticism about lack of transparency’, *Washington Post*, 21 June 2013.

<sup>22</sup> Erlanger, S. and Cumming-Bruce, N., ‘France offers evidence of “multiple” uses of nerve gas in Syria’, *International New York Times*, 4 June 2013; and French Ministry of Foreign Affairs, ‘Syrie—Armes chimiques—Déclaration de Laurent Fabius (4 juin 2013)’ [Syria—chemical-weapons—declaration of Laurent Fabius (4 June 2013)], 4 June 2013, <<http://www.diplomatie.gouv.fr/fr/dossiers-pays/syrie/la-france-et-la-syrie/evenements-4439/article/syrie-armes-chimiques-declaration>>. See also French Government, ‘Programme chimique Syrien: cas d’emploi passés d’agents chimiques par le régime, attaque chimique conduit par le régime le 21 août 2013’ [Syrian chemical programme: past case of employment of chemical agents by the regime, chemical attack carried out by the regime on 21 August 2013], Summary of declassified national intelligence, 2 Sep. 2013, <<http://www.diplomatie.gouv.fr/fr/dossiers-pays/syrie/la-france-et-la-syrie/actualites-2013/article/renseignement-declassifie-attaque>>.

<sup>23</sup> OPCW, Executive Council, ‘France: response to the statement by the Director-General of the OPCW on the matter of chemical weapons in Syria’, EC-73/NAT.13, 16 July 2013.

include the incidents in Jobar and Saraqib.<sup>24</sup> The UK produced a similar assessment.<sup>25</sup>

On 13 June the US administration stated that, with ‘high confidence’, our intelligence community assesses that the Assad regime has used chemical weapons, including the nerve agent sarin, on a small scale against the opposition multiple times in the last year. . . . The intelligence community estimates that 100 to 150 people have died from detected chemical weapons attacks in Syria to date. . . . We believe that the Assad regime maintains control of these weapons. We have no reliable, corroborated reporting to indicate that the opposition in Syria has acquired or used chemical weapons.<sup>26</sup>

Two anonymous US officials later said that this conclusion was ‘based on scientific assessments of dozens of evidentiary samples representing multiple attacks spanning several months’.<sup>27</sup>

On 14 June, in a letter to the UN Secretary-General, the USA highlighted its updated intelligence assessment and requested that Sellström’s mission investigate the specific incidents of alleged chemical weapon use.<sup>28</sup>

On 9 July Russia submitted a detailed report prepared by its specialists to the UN Secretariat on the results of Russian analysis of samples taken in Khan al-Assal. Russia noted that ‘special attention was paid when collecting and transporting the samples to ensure the chain of custody’.<sup>29</sup> The information was also provided to Sellström.

The question of clarifying chemical weapon use was not included as a formal agenda item of the OPCW Executive Council meeting held on 16–19 July. At the meeting, the USA stated:

The fact that the use of chemical weapons in Syria is not an issue on the agenda of this Executive Council session . . . reflects very poorly on both the Executive Council and the OPCW as a whole. This is the Organisation that was established by States that were determined to prevent any further use of chemical weapons. We should be discussing the reports of chemical weapons use. The future relevance and credibility of the OPCW and the Chemical Weapons Convention are at risk.

<sup>24</sup> OPCW, EC-73/NAT.13 (note 23).

<sup>25</sup> British Joint Intelligence Organisation, ‘Syria: reported chemical weapons use’, 29 Aug. 2013, <<https://www.gov.uk/government/publications/syria-reported-chemical-weapons-use-joint-intelligence-committee-letter>>.

<sup>26</sup> White House (note 15).

<sup>27</sup> Lynch and Warrick (note 21).

<sup>28</sup> OPCW, Executive Council, ‘United States of America: statement by Ambassador Robert P. Mikulak, United States delegation at the seventy-third session of the Executive Council regarding the use of chemical weapons in Syria’, EC-73/NAT.5, 16 July 2013, p. 1.

<sup>29</sup> OPCW, Executive Council, ‘Russian Federation: statement by the delegation of the Russian Federation at the seventy-third session of the Executive Council under agenda item 3’, EC-73/NAT.17, 16 July 2013, p. 1.



The USA added that:

Some may say that so-called ‘political issues’ should be left to the UN Security Council and that the policy-making organs of the OPCW, such as the Executive Council, are only mandated to deal with technical issues. Some may argue that events on the territory of a non-State Party are not the business of the Council. We fundamentally disagree that the Council is restricted solely to technical matters. Any reported use of chemical weapons anywhere is relevant to the object and purpose of the Chemical Weapons Convention and therefore relevant to the work of the policy-making organs of the OPCW.<sup>30</sup>

In its official statement, Russia did not state whether it believed chemical weapons had been used in Syria and, if so, who had been responsible. Russia also criticized the OPCW for seeking in effect to involve itself in the Syrian matter when Syria was not a state party to the CWC. In particular it stated:

a number of delegations have spoken extensively in their statements on the subject of what the mandate of the United Nations investigation should be. Do they seriously believe the OPCW or even individual delegations have the relevant experience, knowledge, not to mention expertise, to make far-reaching conclusions on these subjects, which in no way pertain to the OPCW’s competence[?] Moreover, one of these delegations . . . suggested the ‘the OPCW must remind Syria of its international obligations in the sphere of chemicals weapons.’ It is obvious that such exhortations fall beyond the remit of the Convention, given that Syria, as a State not Party, has no obligations under this Convention. The OPCW, in turn, is not a body that has responsibility for other international treaties.<sup>31</sup>

The mention of ‘other international treaties’ was a reference to the 1925 Geneva Protocol, to which Syria is a long-standing party.<sup>32</sup>

*‘Red lines’ and the threat of force*

The discussion of whether and how the international community should react to the Syrian conflict (including through the use of military force) was initially shaped to a large extent by assessments of whether various ‘red lines’ had been crossed.

One US red line was the use of chemical weapons, according to a 2012 statement. US officials emphasized that the use of chemical weapons was unacceptable: implying that, if the use of such weapons was shown to have occurred, then military force must be employed.<sup>33</sup> Other states did not

<sup>30</sup> OPCW, EC-73/NAT.5 (note 28).

<sup>31</sup> OPCW, EC-73/NAT.17 (note 29).

<sup>32</sup> For a summary and other details of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (1925 Geneva Protocol) see annex A, section I, in this volume.

<sup>33</sup> White House, ‘Remarks by the President to the White House Press Corps’, Press Briefing transcript, 20 Aug. 2012, <<http://www.whitehouse.gov/the-press-office/2012/08/20/remarks-president-white-house-press-corps>>.

necessarily agree. During his September 2013 visit to Sweden, however, US President Obama stated that the world had set the red line of chemical weapon use.<sup>34</sup>

Rolf Ekéus, leader of the UN Special Commission (UNSCOM) on weapons of mass destruction in Iraq in the 1990s, criticized the US talk of chemical weapon use being a red line, stating ‘If you are the opposition and you hear [this policy line,] you have an interest in giving the impression that some chemical weapons have been used’.<sup>35</sup> Red line-related questions that have not been fully clarified include whether Obama moved the line, and whether and how the US thresholds were distinct from various international red lines. It was also unclear whether Obama intended to use military force in 2012 and 2013 and to what extent French pressure might have moved the US position closer to implementation of the military force option.

In March it was alleged that the USA was preparing a plan for a multinational operation to destroy Syria’s chemical weapon stockpiles. Participants reportedly included Israel, Jordan and Turkey.<sup>36</sup>

The British Government announced on 10 July 2013 that it was ‘exploring the possibility’ of supplying the Syrian opposition with ‘protective equipment against chemical and biological weapons use’.<sup>37</sup> The British Foreign Secretary, William Hague, stated that ‘We plan to equip the moderate armed opposition with 5000 escape hoods, nerve-agent pre-treatment tablets (NAPs) and chemical weapons detector paper’. He said that the gift, worth £656 000 (\$1 025 000), would be offered to the National Coalition for Syrian Revolutionary and Opposition Forces (Syrian National Coalition) and that the UK recognized this body as the ‘sole legitimate representatives of the Syrian people’.<sup>38</sup>

On 19 July 2013 the Chairman of the US Joint Chiefs of Staff, General Martin E. Dempsey, sent a letter to the Chairman of the US Senate Committee on Armed Services, Carl Levin, outlining five options for the possible use of US military force in the Syrian conflict: (a) ‘Train, Advise, and Assist the Opposition’, (b) ‘Conduct Limited Stand-off Strikes’, (c) Establish a No-

<sup>34</sup> For an overview of the nature and evolution of red lines see Kessler, G., ‘President Obama and the “red line” on Syria’s chemical weapons’, *Washington Post*, 6 Sep. 2013.

<sup>35</sup> Lynch and Warrick (note 21).

<sup>36</sup> ‘Obama to act on Syrian CW: enough is enough, US, NATO, Israel, Turkey and Jordan gird for Syria operation’, *DEBKA-Net-Weekly*, vol. 13, no. 581 (29 Mar. 2013); and Reuters, ‘U.S. officials: securing Syria’s chemical weapons could take thousands of troops’, *Haaretz*, 16 Aug. 2012.

<sup>37</sup> Hague, W., British Foreign Secretary, ‘Gifting of chemical weapons protective equipment to the Syrian Opposition’, Written Statement to Parliament, British Foreign and Commonwealth Office, 16 July 2013, <<https://www.gov.uk/government/speeches/gifting-of-chemical-weapons-protective-equipment-to-the-syrian-opposition>>.

<sup>38</sup> Hague (note 37). On supplies of military equipment to parties to the conflict see chapter 1, section II, in this volume.

Fly Zone', (d) 'Establish Buffer Zones', and (e) 'Control Chemical Weapons'. The last option

uses lethal force to prevent the use or proliferation of chemical weapons. We do this by destroying portions of Syria's massive stockpile, interdicting its movement[s] and delivery, or by seizing and securing program components. At a minimum, this option would call for a no-fly zone as well as air and missile strikes involving hundreds of aircraft, ships, submarines, and other enablers. Thousands of special operations forces and other ground forces would be needed to assault and secure critical sites. Costs could also average well over one billion dollars per month. The impact would be the control of some, but not all[,] chemical weapons. It would also help [to] prevent their further proliferation into the hands of extremist groups. Our inability to fully control Syria's storage and delivery systems could allow extremists to gain better access. Risks are similar to the no-fly zone with the added risk of U.S. boots on the ground.<sup>39</sup>

On 21 August an attack at Ghouta (near Damascus) reportedly affected more than 1000 people, who demonstrated symptoms similar to those of organophosphate poisoning.<sup>40</sup> France, the UK and the USA, among others, blamed the Syrian Government for the attack and threatened an immediate military strike in retaliation.<sup>41</sup> On 27 August the Council of the League of Arab States also blamed the Syrian Government for the attack and called on the UN Security Council to agree on action, but it fell short of recommending military action.<sup>42</sup>

Some sort of military intervention seemed likely until, on 29 August, the British House of Commons (the lower house of the British Parliament) voted against a government motion supporting British military action in Syria after the UN Security Council had debated the report of the UN mission.<sup>43</sup> The French Government remained committed to a military

<sup>39</sup> Dempsey, M. E., Chairman of the US Joint Chiefs of Staff, Letter to C. Levin, Chairman, US Senate Committee on Armed Services, 19 July 2013, <<http://www.levin.senate.gov/newsroom/press/release/gen-dempsey-responds-to-levins-request-for-assessment-of-options-for-use-of-us-military-force-in-syria>>.

<sup>40</sup> 'Syria conflict: "chemical attacks kill hundreds"', BBC News, 21 Aug. 2013, <<http://www.bbc.co.uk/news/world-middle-east-23777201>>; and Lynch and Warrick (note 21). See also Syrian Civil War, 'Live thread: stream of videos coming out of Eastern Ghouta claiming SAA chemical weapons attack', reddit.com, <[http://www.reddit.com/r/syriancivilwar/comments/1kry33/live\\_thread\\_stream\\_of\\_videos\\_coming\\_out\\_of/](http://www.reddit.com/r/syriancivilwar/comments/1kry33/live_thread_stream_of_videos_coming_out_of/)>; and Untitled webcam video, Bambuser, 21 Aug. 2013, <<http://bambuser.com/v/3832579>>.

<sup>41</sup> Reals, T., 'Syria chemical weapons attack blamed on Assad, but where's the evidence?', CBS News, 30 Aug. 2013, <<http://www.cbsnews.com/news/syria-chemical-weapons-attack-blamed-on-assad-but-where-s-the-evidence>>.

<sup>42</sup> Reuters, 'Arab League blames Syria's Assad for chemical attack', *Daily Star* (Beirut), 27 Aug. 2013; and League of Arab States, Council, Resolution 7651, 27 Aug. 2013, <<http://lasportal.org/wps/wcm/connect/7fb4fe0040e61714bd2abf5cbcbca77a/las+res+syria+7651.pdf?MOD=AJPERES>> (in Arabic).

<sup>43</sup> British House of Commons, 'Order of business', 29 Aug. 2013, <<http://www.publications.parliament.uk/pa/cm201314/cmagenda/ob130829.htm>>; and 'Syria crisis: Cameron loses Commons vote on Syria action', 30 Aug. 2013, <<http://www.bbc.com/news/uk-politics-23892783>>.

response.<sup>44</sup> While the US Senate Committee on Foreign Relations endorsed the US administration's request to use force in Syria on 4 September, the request prompted domestic US debate that revealed significant levels of opposition in the Congress and US public opinion to the use of force.<sup>45</sup> The 2013 summit of the Group of 20 Finance Ministers and Central Bank Governors (G20) on 5–6 September could not agree language on Syria, but 11 states at the summit issued a joint statement calling for 'a strong international response'.<sup>46</sup>

### *International inspection and verification activity and results*

After repeatedly urging that the UN mission to be given full and unfettered access to Syria, on 31 July the UN Secretary-General's office announced: 'On the basis of the information evaluated by the Mission to date and further to the understanding reached with the Government of Syria, the Mission will travel to Syria as soon as possible to contemporaneously investigate three of the reported incidents, including Khan al-Asal'.<sup>47</sup> On the same day it was reported that the UN had received reports of 13 instances of chemical weapon use in Syria.<sup>48</sup> These include at Khan al-Assal (Aleppo) and Uteibah (Damascus) on 19 March, in the Sheikh Maqsood neighbourhood (Aleppo) on 13 April and at Saraqib (Idlib) on 29 April.<sup>49</sup>

The UN mission led by Sellström entered Syria on 18 August. A few days later, the attack on Ghouta—the scale of which exceeded any previous allegation—meant that the mission's mandate shifted to investigation of the new incident. The timing prompted speculation that the alleged attack was intended to coincide with the arrival of the inspection mission.

The UN mission presented its findings in two reports, which focused on the alleged use of two munition types.<sup>50</sup> One type was a non-standard,

<sup>44</sup> Ridgewell, H., 'French Government pushes for Syria response', Voice of America, 4 Sep. 2013, <<http://www.voanews.com/content/french-government-pushes-for-syria-response/1743543.html>>.

<sup>45</sup> US Senate, Committee on Foreign Relations, Business meeting, 4 Sep. 2013, <<http://www.foreign.senate.gov/hearings/2013/09/04/business-meeting>>; and Landler, M., Weisman, J. and Gordon, M. R., 'Split Senate panel approves giving Obama limited authority on Syria', *International New York Times*, 4 Sep. 2013.

<sup>46</sup> Joint Statement on Syria by Australia, Canada, France, Italy, Japan, South Korea, Saudi Arabia, Spain, Turkey, the UK and the USA, 6 Sep. 2013, <<http://www.whitehouse.gov/the-press-office/2013/09/06/joint-statement-syria>>.

<sup>47</sup> United Nations, Secretary-General's Office, 'Notes to correspondents on Syria', 31 July 2013, <<http://www.un.org/sg/offthecuff/index.asp?nid=2908>>.

<sup>48</sup> 'Syria allows UN weapons inspectors to visit sites of suspected chemical attacks', *Daily Telegraph*, 31 July 2013.

<sup>49</sup> United Nations, A/HRC/23/58 (note 20).

<sup>50</sup> United Nations, General Assembly and Security Council, Report of the United Nations Mission to Investigate Allegations of the Use of Chemical Weapons in the Syrian Arab Republic on the alleged use of chemical weapons in the Ghouta area of Damascus on 21 August 2013, A/67/997-S/2013/553, 16 Sep. 2013; and United Nations, General Assembly and Security Council, United Nations Mission to Investigate Allegations of the Use of Chemical Weapons in the Syrian Arab Republic, Final Report, annex to A/68/663-S/2013/735, 13 Dec. 2013.

'home-modified' rocket motor with a canister welded onto the front that possessed a holding capacity of 5–6 litres. The second type was a 144-millimetre rocket, originally designed and produced by the Soviet Union in the 1950s, that existed in conventional, smoke and chemical weapon variants. The symptoms of the Ghouta attack victims that were reported by medical experts included loss of consciousness, shortness of breath, blurred vision and convulsions. The UN mission found that 14 per cent of those it examined had miosis ('pinpoint' pupils). The OPCW cooperated with 'several partner laboratories' to perform more than 300 analyses in support of the UN mission's investigation.<sup>51</sup> The UN mission noted the trajectories of selected rocket hits at Ghouta and estimated that the rockets had travelled approximately 1 kilometre.<sup>52</sup> On 25–29 September the mission also conducted fact-finding missions on allegations of chemical weapon use in Ashrafiah Sahnaya, Bahhariye, Jobar, Khan al-Assal, Saraqib and Sheikh Maqsood. This latter activity included the carrying out of interviews at a military hospital in Damascus and the taking of blood and DNA samples at the facility.

The mission concluded that there was 'clear and convincing evidence' that chemical weapons had been used at Ghouta. On the other sites, the mission had 'collected credible information that corroborates the allegations' at Khan al-Assal, 'collected evidence consistent with the probable use' at Jobar, 'collected evidence that suggests' use at Saraqib and at Ashrafiah Sahnaya, 'cannot corroborate' the allegations 'in the absence of any positive blood samples' at Bahhariye, and 'cannot corroborate' the allegations 'in the absence of further information relevant to the incident' at Sheikh Maqsood.<sup>53</sup>

Following intensive international negotiation and consultation among most interested parties at the UN, the OPCW and elsewhere, the modalities for Syrian accession to the CWC were finalized. On 12 September Syria agreed to accede to the CWC, and it became a party on 14 October.<sup>54</sup> A joint Russian–US framework understanding agreed on 14 September specified that Syria must provide a comprehensive listing of its chemical weapons within one week; that equipment for the production, mixing and filling of chemical weapons must be destroyed by November 2013; and that Syria's chemical weapon materials and equipment must be destroyed by 30 June

<sup>51</sup> OPCW, Conference of the States Parties, 18th session, Opening statement by the Director-General, C-18/DG.17, 2 Dec. 2013, para. 76.

<sup>52</sup> See the interview of Åke Sellström by Gwyn Winfield in 'Modern warfare', *CBRNe World* (Feb. 2014), pp. 11–12.

<sup>53</sup> United Nations, A/68/663-S/2013/735 (note 50), pp. 19–21.

<sup>54</sup> OPCW, 'OPCW to review request from Syria', 13 Oct. 2013, <<http://www.opcw.org/news/article/opcw-to-review-request-from-syria/>>; and OPCW, 'Syria's accession to the Chemical Weapons Convention enters into force', 14 Oct. 2013, <<http://www.opcw.org/news/article/syrias-accession-to-the-chemical-weapons-convention-enters-into-force/>>.

2014.<sup>55</sup> The OPCW reviewed the draft Syrian destruction plan (which was developed in consultation with members of the Executive Council and technical experts of the Technical Secretariat) and developed a verification regime based on a decision taken by the Executive Council on 27 September in consultation with UN officials and others.<sup>56</sup> It envisaged the destruction of toxic chemicals on board a specially equipped ship in the Mediterranean Sea. On the same day the UN Security Council passed a resolution that encouraged UN member states to ‘provide support, including personnel, technical expertise, information, equipment, and financial and other resources and assistance’.<sup>57</sup>

Syria declared to the OPCW on 19 September and 4 October the possession of sulphur mustard agent, sarin precursors and VX precursors. It declared having 41 facilities at 23 sites, 18 chemical weapon-production facilities, 12 chemical weapon storage facilities, 8 mobile filling units, 3 chemical weapon-related facilities, 1000 tonnes of category 1 chemicals (mainly precursors), 290 tonnes of category 2 chemicals, 1230 unfilled munitions and 2 cylinders not claimed by the Syrian Government and possibly filled with chemical weapons. It also provided site diagrams for chemical weapon storage facilities.<sup>58</sup>

It is notable that Syria’s declaration to the OPCW did not include the two weapon types examined by international inspectors in Ghouta in August. With the exception of sulphur mustard, the chemical weapons declared were organophosphorus nerve agent precursors. In an interview for a US television channel in September, President al-Assad said that he had not authorized the use of chemical weapons.<sup>59</sup> German intelligence sources agreed.<sup>60</sup> There was also discussion as to whether the early videos of alleged casualties were taken prior to the 21 August attack.<sup>61</sup>

<sup>55</sup> Russian–US Framework for Elimination of Syrian Chemical Weapons, 14 Sep. 2013, <<http://www.state.gov/r/pa/prs/ps/2013/09/214247.htm>>.

<sup>56</sup> OPCW, Executive Council, ‘Destruction of Syrian chemical weapons’, Decision, EC-M-33/DEC.1, 27 Sep. 2013.

<sup>57</sup> UN Security Council Resolution 2118, 27 Sep. 2013.

<sup>58</sup> OPCW, Executive Council, ‘Progress in the elimination of the Syrian chemical weapons programme’, Note by the Director-General, EC-M-34/DG.1, 25 Oct. 2013. Further information on the Syrian stockpile and infrastructure is available via OPCW public tenders for expression of interest by private companies to dispose of toxic chemicals. E.g. OPCW, ‘OPCW awards contracts to two companies for destruction of Syrian chemicals and effluents’, 14 Feb. 2014, <<http://www.opcw.org/news/article/opcw-awards-contracts-to-two-companies-for-destruction-of-syrian-chemicals-and-effluents/>>.

<sup>59</sup> Interview with Bashar al-Assad, President of Syria, *Charlie Rose Show*, PBS, 9 Sep. 2013, <<http://www.charlierose.com/watch/60263639>>. For a transcript see Syria Arab News Agency (SANA), ‘President al-Assad’s interview with American CBS news’, 10 Sep. 2013, <<http://sana.sy/eng/21/2013/09/10/501729.htm>>. See also Rushe, D., ‘Assad chemical weapons interview is just latest scoop for Charlie Rose’, *The Guardian*, 8 Sep. 2013.

<sup>60</sup> Tisdall, S. and Le Blond, J., ‘Assad did not order Syria chemical weapons attack, says German press’, *The Guardian*, 9 Sep. 2013.

<sup>61</sup> For insightful critique of such videos see Brown Moses Blog, <<http://brown-moses.blogspot.com/>>.

On 16 October the UN inspection mission was formally transformed into the OPCW–UN Joint Mission for the Elimination of the Chemical Weapons Programme of Syria, headed by Sigrid Kaag, a Dutch diplomat, as Special Coordinator.<sup>62</sup> Major elements of the inspection and verification effort (which was hindered by the lack of effective security measures in the country) focused on ensuring the completeness and correctness of the declarations, completing the destruction of empty shells, containers and the like in 2013, and making arrangements for the transfer of toxic chemicals to a shipboard hydrolysis unit in the Mediterranean Sea. Denmark and Norway agreed to transfer the toxic chemicals from the Syrian port of Latakia, while the USA provided a ship that was specially fitted with a chemical weapon-destruction hydrolysis unit.<sup>63</sup> The degradation products formed during hydrolysis of the chemical agents—known as hydrolysates—are to be used for peaceful purposes by private companies that have been awarded public tenders circulated by the OPCW.

The transportation of priority chemicals from Syria began on 7 January 2014.<sup>64</sup>

### US domestic legal cases

The first of the two US cases concerned implementation of the international ban on chemical weapons, and the second case concerned biological weapons.

In the first case, *Bond v. United States*, the US Supreme Court considered and remanded to a lower court the question of whether Title 18, Section 229 of the US Criminal Code (which codifies into US law the 1998 Chemical Weapons Convention Implementation Act) can be interpreted so as not to cover ‘ordinary poisoning cases’.<sup>65</sup> In 2006 Carol Anne Bond had attempted unsuccessfully to poison Myrlinda Haynes, her former friend and later mistress of her husband, by placing a mixture of 10-chlorophenoxarsine and potassium dichromate on objects touched by Haynes (including her mailbox, house door handle and car door handle). A major underlying legal

<sup>62</sup> OPCW–UN Joint Mission for the Elimination of the Chemical Weapons Programme of the Syrian Arab Republic, ‘UN Secretary-General, OPCW chief appoint Sigrid Kaag Special Coordinator’, Press release, 16 Oct. 2013, <<http://opcw.unmissions.org/CommunicationsCentre/Newsroom/PressReleasesandBulletins/tabid/193/ctl/Details/mid/635/ItemID/157/Default.aspx>>.

<sup>63</sup> US Department of Defense, ‘With encouragement from Hagel, Cape Ray leaves for Syria mission’, American Forces Press, 28 Jan. 2014, <<http://www.defense.gov/news/newsarticle.aspx?id=121548>>.

<sup>64</sup> OPCW, ‘Director-General: removal of priority chemicals in Syria marks “important new phase” in work of joint mission’, 8 Jan. 2014, <<http://www.opcw.org/news/article/director-general-removal-of-priority-chemicals-in-syria-marks-important-new-phase-in-work-of/>>.

<sup>65</sup> *Code of Laws of the United States of America*, Title 18, *Crimes and Criminal Procedures* (US Government Printing Office: Washington, DC, 2012), Chapter 11B ‘Chemical weapons’, sections 229–229F; and Chemical Weapons Convention Implementation Act of 1998, Division I of US Public Law no. 105–277, signed into law 21 Oct. 1998, <[http://www.cwc.gov/cwc\\_authority\\_legislation.html](http://www.cwc.gov/cwc_authority_legislation.html)>.

concern in the US courts is whether or how the executive branch's authority to conclude and implement treaties might be undermined if such cases are excluded from prosecution under the Chemical Weapons Convention Implementation Act.<sup>66</sup>

The origin of the second prosecution began in April when three letters tainted with the protein ricin were sent to US President Barack Obama, US Senator Roger Wicker and a Mississippi judge, Sadie Holland. On 17 April the Federal Bureau of Investigation (FBI) arrested Paul Kevin Curtis at his home in Corinth, Mississippi.<sup>67</sup> However, he was later released and another individual, Everett Dutschke, was then arrested. The men had had a long-running personal dispute and, it later transpired, Dutschke had attempted to frame Curtis. Dutschke had ordered 50 castor beans in December 2012 on eBay, an online marketplace. He also possessed a coffee grinder and information on ricin processing in his computer. US authorities charged Dutschke with attempted use of a biological weapon under Title 18, Section 175(a) of the US Criminal Code, which reads

Whoever knowingly develops, produces, stockpiles, transfers, acquires, retains, or possesses any biological agent, toxin, or delivery system for use as a weapon, or knowingly assists a foreign state or any organization to do so, or attempts, threatens, or conspires to do the same, shall be fined under this title or imprisoned for life or any term of years, or both. There is extraterritorial Federal jurisdiction over an offense under this section committed by or against a national of the United States.<sup>68</sup>

It remained uncertain whether US authorities will in the future prosecute non-politically motivated killings using statutes implementing international obligations against chemical and biological weapons. Although these cases are US-specific, they have the potential to shape how the prohibitions against such weapons are understood and implemented domestically by other countries.

<sup>66</sup> For legal summaries (pro and con) for applying the CWC Implementation Act see Bond, C. A. and Clement, P. D., 'Can the US Government use the Chemical Weapons Convention to prosecute routine domestic crimes?', *Cons*, *Supreme Court Debates, a Pro & Con Monthly*, vol. 16, no. 9 (Dec. 2013), pp. 23–43; and Verrilli, D. B., 'Can the US Government use the Chemical Weapons Convention to prosecute routine domestic crimes?', *Pros*, *Supreme Court Debates, a Pro & Con Monthly*, vol. 16, no. 9 (Dec. 2013), pp. 13–22.

<sup>67</sup> US Federal Bureau of Investigation, 'Arrest made in suspicious letters investigation', Press release, 17 Apr. 2013, <<http://www.fbi.gov/jackson/press-releases/2013/arrest-made-in-suspicious-letters-investigation-1>>.

<sup>68</sup> US District Court, Northern District of Mississippi, 'In re: United States' criminal complaint and application for an arrest warrant for James Everett Dutschke, affidavit in support of criminal complaint', Case 3:13-mj-00020-SAA, doc. no. 1-1, filed 26 Apr. 2013; and *Code of Laws of the United States of America*, Title 18 (note 65), Chapter 10 'Biological weapons', Section 175, p. 40.