

Syria/Syrian chemical programme – National executive summary of declassified intelligence¹

Paris, 3 September 2013

Cases of previous use of chemical agents by the Syrian regime

Chemical attack launched by the regime on Aug 21

This document has been produced through declassified intelligence mostly drawn from French-only sources. It includes a thorough technical analysis performed on open sources by our intelligence and technical services. It integrates, finally, some complementary elements received through cooperation with our closest partners.

Syria detains one of the world's most important operational chemical weapons stockpile, accumulated within the framework of a long-standing and diversified programme, which has been monitored for a long time by French and partner intelligence services. This programme is one of the main threats in terms of weapons of mass destruction proliferation. Countering the threat stemming from WMD proliferation is a key objective for our defence, as stated again in the recent French White paper on defence and national security.

In combats against the opposition, President Assad's regime has already used such weapons, including sarin, in limited attacks against the population, in particular in April 2013. The analysis of information we have now gathered leads us to consider that, on August 21, 2013, the Syrian regime has launched an attack on some suburbs of Damascus that were being held by the opposition forces, using together conventional means and a large amount of chemical agents.

1 – The Syrian chemical programme

Syria has long been equipped with a massive chemical arsenal, together with many related delivery systems. The Syrian regime acknowledged as much on July 23, 2012 through its Foreign Affairs spokesperson, who confirmed that: "these different weapons [chemical and non-conventional] are stockpiled and secured under the supervision of the armed forces". Syria is not part to the 1993 Convention on Chemical Weapons Ban, which 189 Nations have signed and ratified.

The Syrian chemical programme started in the 1970's by the import of chemical munitions. In the 1980's, Damascus started acquiring the materials, products and knowledge necessary to set up an autonomous and massive production capacity in that field.

Nature of the Syrian chemical arsenal

With above 1000 ton of chemical agents and precursor chemicals, Damascus has one of

the most important operational stockpile in the world, without any perspective of programmed destruction in the absence of a Syrian willingness to join the CCWB.

The Syrian arsenal is particularly massive and diversified. It includes:

- Several hundreds of tons of sulfur mustard, stockpiled in its final form,
- Several tens of tons of VX. VX is the most toxic among the known chemical warfare agents,
- Several hundreds of tons of sarin, representing the bulk of the arsenal.

Sarin and VX are neurotoxic organophosphorous compounds which are partly stocked in a binary manner, i.e. kept as two distinct chemical products, called precursor chemicals, which are mixed just before use. Such a technique and related processes reveal a high level of know-how in the chemical weapons technology by the Syrian regime.

Syrian scientists have also worked on nitrogen mustard, a first generation vesicant agent, as well as neurotoxic organophosphorus compounds with toxicity level higher than sarin.

Means of delivery

Damascus is in a position to deliver its chemical weapons through a vast range of several thousand launchers:

- Scud C missiles, with a range of 500 km, capable of delivering sulfur mustard, sarin or VX,
- Scud B missiles, capable of delivering sarin or VX at a 300 km range,
- M600 missiles, with a range between 250 and 300 km. They too can deliver the three already mentioned toxic agents.
- SS21 missiles, adapted to carry the three mentioned chemical warfare agents, at a limited range (70 km).
- Air launched bombs with a payload of sarin. Depending on the model, they can deliver between 100 and 300 litres of toxic agent,
- Artillery rockets, particularly 302 and 320 mm, aimed at delivering sulfur mustard, sarin or VX at a shorter range (50 km and under).

Some missiles are able to deliver several hundred litres of toxic agents.

Activities monitored for several years on Syrian test sites indicate that new dispersal mechanisms are being studied. Since the beginning of the conflict, our intelligence confirms the use by the regime of ammunitions carrying a lesser volume of chemical agents, adapted to a tactical use, more focused and local.

Capability to deliver chemical agents by Syrian vectors

SCUD C: VX – Sarin – Yperite – Range: 500 km

SCUD B: VX – Sarin – Range: 300 km

M600: VX – Sarin – Yperite – Range: 250-300 km

SS21: VX – Sarin – Yperite – Range: 70 km

Bomb: Sarin

Rockets: VX – Sarin – Yperite – Range: 50 km

Other tactical munitions: Sarin – Range: below 50 km.

We cannot exclude that such tests may also have been conducted with other categories of chemicals diverted from their civilian use and used at lethal doses.

2 – Chemical attacks previously lead by the Syrian regime

Cases have been documented in the recent months of the use of chemical agents by the Syrian regime in attacks against some areas controlled by the opposition, with an objective of seizing territory or inspiring terror. By doing so the regime has violated the commitments under the Geneva Protocol of 1925, which it has signed in 1968, concerning the prohibition of use at war of suffocating gas, toxic or similar weapons as well as biological weapons.

French competent services have obtained samples either biomedical (blood, urine), environmental (ground) or material (munitions debris), taken on victims or on the sites during the attacks in Saraqeb (April 29, 2013) and Jobar (mid-April 2013). Our analyses have confirmed the use of sarin.

On April 29, we know that the Syrian regime lead an attack against Saraqeb, located 30 km South-East of Idleb. An helicopter flying high over the town dropped over its western part small munitions spreading white smoke. Some twenty persons were intoxicated and taken to local hospitals, where medical agents were intoxicated by transferred contamination. The analyses have confirmed the use of sarin.

Mid-April, forty people were intoxicated and evacuated from the eastern suburbs of Damascus, in the city of Jobar. The analysis of biomedical samples taken from victims of this attack and performed in conditions verified by our services, have also confirmed the use of sarin.

These confirmed use of sarin by Syrian forces have demonstrated that the Bachar El Assad regime is adapting its tactics and the munitions in its stockpiles to a terror use against civilian population.

These previous events and the simultaneous and massive use of chemical agents during the night of August 21, 2013 on the Eastern suburbs of Damascus confirm that the Syrian regime has deliberately crossed a step. Our intelligence services also have information, from national sources, leading to think that other such actions might again be undertaken.

3 – Massive and coordinated use of chemical agents against civilians on 21s August

Based on a methodical technical analysis of 47 original video tapes of the August 21 events, a first counting of the victims, area by area, has been carried out. Based on just this set of videos, no less than 281 death casualties have been recorded, located in the East Ghouta (Ain Tarma, Douma, Erbin, Jobar, Kfar Batna, Qas Alaa, Zamalka) and West Ghouta (Mudamiyat Sham).

Our own intelligence confirms that, in the Douma hospital, half of the victims were women and children and, in 50% of the cases, death was instantaneous. The doctors conclude that a high concentration of toxic agent was used.

Other independent assessments, produced for instance by the NGO “Doctors without borders” mention at least 355 deaths. Several technical numberings, from different sources, assess the final toll at approximately 1500 deaths. Work carried out by our specialists, by extrapolating an impact model of a chemical attack on the population of the mentioned sites, is consistent with these figures.

Beyond the fact that the victims do not show wounds, the death symptoms (to include generalized convulsions, nausea, vomiting, miosis, foaming from the nose and mouth, dyspnea, suffocation, loss of consciousness) are clinical signs of a poisoning due to the use of chemical agents. Confirmed cases of cross-contamination of medical assistants have been reported by several sources.

The observation of many low-age children suffering violent symptoms (convulsion among others), on eight different sites, lead to the conclusion that a falsification or manipulation by the opposition is highly improbable. These observations, as well as the multiple video sources and testimonies, exclude any possible falsification by the opposition.

The massive inflow to different hospitals of contaminated people within a very short delay, the number of victims and the fact that they were coming from different distinct areas, confirmed by the analyses on the total of information we could gather, characterize the effects of an attack led with high lethality chemical agents; they confirm that a coordinated and massive attack was launched during the night of August 21, 2013.

4 – The 21 August attack can only have been ordered and lead by the regime

The combined attack lead on August 21 corresponds to a classical tactical pattern (artillery preparation, then ground offensive) and the use of chemical agents was integrated in a tactical maneuver consistent, on a military level, with the Syrian armed forces’ doctrine. Reliable intelligence from several of our partners mentions specific preparations in the days just before August 21.

Conventional air and artillery bombardments took place between 3 and 4 am on the

Ghouta East. In parallel, the locations of Zamalka, Kafr Batna and Ayn Tarma were reached by chemical attacks. At 6 am, a ground offensive was launched by the regime against these cities.

Several sources mention the use of artillery rockets, different from those of the best known ammunition stock (missiles and bombs). Our technical analyses confirm that the rest of rockets observed on that occasion, as for some previous and local operations, allow the use of chemical agents.

The regime then lead important air and ground strikes on the attacked areas. It made efforts to delay the arrival of inspectors over several days. These elements confirm a clear willingness to destroy any evidence *a posteriori*. Furthermore, the military set off fires, aiming apparently at purifying the atmosphere thanks to the air movement generated by the intense heat.

Our intelligence confirms that the regime feared a wider attack from the opposition on Damascus at that moment. Our assessment is that the regime was trying by this attack to loosen the grip and to secure sites strategic to control of the capital. For example, the area of Moadamiyé is located close to the Mezzeh military airfield, which houses the barracks of the Air Force intelligence.

Anyhow it is clear, by examining the targets of the attack, than only the regime itself could have targeted positions that were so strategic for the opposition.

Finally, we consider that the Syrian opposition does not have the capacity to lead an operation of that size with chemical agents. No group belonging to the Syrian opposition has, at this stage, the capacity to stock and use these agents, and even more in proportions comparable to what was used on the night of August, 21 in Damascus. These groups have neither the experience, nor the know-how to implement them, particularly through vectors as those that were used during the August 21 attack.

¹Source of English translation: French Defence Ministry.