Briefing to the Members of the United Nations Security Council on the 3rd report of the IIT
Statement by the Head of the IIT, Ambassador Santiago Oñate

7 February 2023

Madame Chairperson,
Excellencies,

Good morning to you all.

On 27 January 2023, the Third Report of the Investigation and Identification Team (IIT) was issued by the OPCW Technical Secretariat. On that date, the report was provided to the OPCW Executive Council and to the United Nations Secretary-General for their consideration. The report was also presented in a briefing to OPCW States Parties on 2 February.

Upon instructions of the Director General, it is now my privilege to present it to you.

This presentation does not substitute or modify in any way the Report itself, as released under S/2125/2023.

[As is known, the IIT was established by the OPCW Director-General as the mechanism required by the Decision by the Conference of the States Parties entitled “Addressing the Threat from Chemical Weapons Use” (C-SS-4/DEC.3, dated 27 June 2018).]

The IIT began its work in June 2019 and issued its first report on 8 April 2020, its second report on 12 April 2021 and on 27 January 2023 its third report.

These reports contain the investigations of five separate incidents for which the OPCW Fact-Finding Mission (FFM) had determined that use or likely use of chemical weapons on the territory of the Syrian Arab Republic occurred and for which the OPCW-United Nations Joint Investigative Mechanism had not issued a report.

The mandate of the IIT is to establish the facts related to perpetrators of the use of chemical weapons by identifying all information potentially relevant to the origin of those weapons.

It is important to keep in mind that the IIT is not a judicial body with the authority to assign individual criminal responsibility, nor does the IIT have the authority to make final findings of non-compliance with the Chemical Weapons Convention. These two essential activities in the fight against impunity belong to the policy making organs of the OPCW and to judicial entities.

In its third report the IIT presents its findings on the investigation of one incident in the town of Douma, located in the vicinity of Damascus, in the Syrian Arab Republic, on 7 April 2018.
The incident was investigated and analysed by the IIT in the period between January 2021 and December 2022.

On the basis of all the information obtained and its analysis, the IIT concludes that there are reasonable grounds to believe that, between 19:10 and 19:40 (UTC+3) on 7 April 2018, during a major military offensive aimed at regaining control of the city of Douma, at least one Mi-8/17 helicopter of the Syrian Arab Air Force, departing from Dumayr airbase and operating under the control of the Tiger Forces, dropped two yellow cylinders which hit two residential buildings in a central area of the city.

One cylinder hit the rooftop floor of a three-storey residential building (referred to in the report as Location 2) without fully penetrating it, ruptured, and rapidly released toxic gas—chlorine—in very high concentrations, which rapidly dispersed within the building, killing 43 named individuals—among them 9 young boys and 10 young girls—and affecting dozens more. The second cylinder hit the roof of a three-storey residential building (at the time uninhabited) (referred to as Location 4) and broke into the apartment below. The cylinder ruptured only partially, and started to slowly release chlorine, mildly affecting those who first arrived at the scene.

The IIT reached its conclusions on the basis of the degree of certainty of “reasonable grounds”, which is the standard of proof consistently adopted by international fact-finding bodies and commissions of inquiry.

In particular, the IIT conducted the following activities: (a) it analysed the information received from the FFM; (b) it requested information from States Parties, including the Syrian Arab Republic, and upon receipt reviewed this information; (c) it assessed the statements previously provided by witnesses and conducted interviews itself with persons of interest; (d) it obtained videos, documents, and other material from various sources; it requested analytical data underlying the FFM Report, including data mining for specific chemicals from OPCW designated laboratories, as well as new analyses, and technical assessments from a number of forensic institutes and specialists; (f) it requested and analysed satellite imagery; (g) it collected information from open sources; and (h) it consulted experts.

In carrying out these activities, the IIT relied on the same methods and procedures it had applied during the investigations described in its previous reports, including with regard to (a) its approach to obtaining and securing information (e.g., chain of custody, handling of information, security of witnesses, and sampling and analysis by designated laboratories); (b) its information and case management systems; and (c) the degree of certainty applied to the identification of perpetrators.

As on previous investigations, the collection of information in respect of the Douma incident of 7 April 2018 involved reaching out to States Parties, international and non-governmental organisations, and individuals, as well as several internationally reputable forensic institutes, experts, and other relevant entities.

Since the IIT is not judicially empowered to compel the submission of information and material, it relied, once again, on the voluntary cooperation of all these parties. Regarding States Parties, the IIT expected them to provide access to relevant information and locations consistent with paragraph 7 of Article VII of the Convention.
Over the past months, the IIT has held several bilateral meetings with States Parties and other entities. It has also reviewed over 19,000 files, amounting to more than 1.86 terabytes; obtained and assessed statements from 66 witnesses, five of whom women; and requested and obtained analysis results and additional data for 70 samples related to this investigation and engaged in consultations with 10 experts.

Recognizing the role that information from the Syrian Arab Republic could also play, the IIT engaged in several good faith attempts to allow the Syrian Arab Republic to discharge its obligations under paragraph 7 of Article VII of the Chemical Weapons Convention and pursuant to United Nations Security Council resolution 2118 (2013), to cooperate fully with the OPCW Technical Secretariat by providing information to the IIT.

The IIT made extraordinary efforts to allow the authorities of the Syrian Arab Republic to discharge its obligation to cooperate and provide information and any other input they deemed relevant for the IIT work. The Syrian Arab Republic decided not to reply to the Technical Secretariat requests. Despite lack of engagement, the IIT of course did not draw any inference, for the purpose of its substantive conclusions, from this lack of cooperation.

The IIT took specific note of the position previously expressed by the Syrian Arab Republic on the incident in Douma of 7 April 2018, including information submitted in some of its notes verbales to the Secretariat, in 2018 (in the aftermath of the incident), in 2019, and in 2021. The information presented by the Syrian Arab Republic in these notes verbales was therefore considered by the IIT when analyzing possible scenarios concerning the use of chemical weapons in Douma on 7 April 2018 and is discussed in various sections of the report.

The IIT also took into due consideration the position expressed at several stages by the Russian Federation on the incident in Douma. The information presented by the Russian Federation in notes verbales to the Secretariat and other official communications and statements (e.g. to the United Nations Security Council, to the Executive Council and to the Conference) was also taken into account by the IIT in the course of its investigation when considering possible scenarios concerning the use of chemical weapons in Douma on 7 April 2018.

On 28 January 2022, the Secretariat addressed a note verbale to the Permanent Representation of the Russian Federation to the OPCW requesting any concrete information which would have been potentially relevant to establishing the origin of the chemical weapons used in Douma on 7 April 2018 and useful to identify the perpetrators, including information related to actors that might have had the capabilities to develop, produce, stockpile, and use such weapons. On 15 February 2022, the Permanent Representation of the Russian Federation to the OPCW responded via note verbale to the Secretariat, reiterating its determination that Decision C-SS-4/DEC.3 had been adopted ultra vires, and that paragraph 7 of Article VII of the Convention was therefore not applicable to any activities carried out by the Secretariat in connection with the decision. No further elaboration or supporting evidence was provided.

In preparing its investigation plan for the incident in Douma on 7 April 2018, the IIT considered various hypotheses as to how the incident might have occurred, and then proceeded to develop concrete scenarios based on all available information.
The scenarios developed for this investigation can be succinctly summarised as follows: (a) chemical weapons were prepared elsewhere, brought to—or around—the site of the incident identified by the FFM, and used; or (b) chemical weapons were air-delivered on—or around—the sites of the incident identified by the FFM; or (c) chemical weapons were launched, spread, or deployed otherwise to—or around—the sites of the incident identified by the FFM; or (d) no chemical weapons attack occurred, but conventional weapon(s) were deployed or brought to—or around—the sites of the incident identified by the FFM, while chemicals were used at the sites later to “stage” a chemical attack and blame one side of the conflict.

It is to be noted that among these scenarios, the IIT considered the views of the Syrian Arab Republic and of the Russian Federation that the incident had been “staged by terrorist armed groups” with the support of ‘Western States’, to forge accusations against the Syrian Arab Army.

In its report, the IIT starts by examining the general situation in eastern Ghouta at the time of the incident and the activities and organisation of the military forces involved in the combats that took place in and around Douma during the last months of 2017 and the first four months of 2018.

Regarding the military activities in Douma in early 2018, and with respect to the offensive referred to as “Operation Damascus Steel”, the IIT made its assessments based on accounts by witnesses, expert reports, flight observation data, as well as satellite imagery and open-source information, and through consultation with external entities and experts.

According to information obtained by the IIT, on 13 February 2018 the Tiger Forces began to arrive in the opposition-controlled enclave of eastern Ghouta, which had been besieged by the Syrian Armed Forces since April 2013 in what has been described as one of the longest running sieges in modern history. The Tiger Forces’ deployment to the area was corroborated through images and videos posted on accounts linked to both the Syrian Arab Army and the Tiger Forces.

On 18 February 2018, the Syrian Arab Republic Forces, alongside the Tiger Forces and other Syrian and foreign militias—and supported by Russian Federation forces—launched a full-scale air and ground assault to recapture eastern Ghouta.

Aircraft activity originating from Dumayr airbase continued until 23 March, followed by a 10-day lull. The temporary suspension of air operations coincided with negotiations taking place between Jaysh al-Islam and representatives of the Syrian Arab Republic, mediated by the Russian Ministry of Defense’s representative. Negotiations continued through early April, yielding no results. Simultaneously, on 28 March, pro-Government media reported that that Syrian forces were mobilising around Douma and preparing a major assault, should the negotiations with Jaysh al-Islam fail. As of that date, according to United Nations sources 70,000 people remained besieged in the enclave.

On 6 April, negotiations between Jaysh al-Islam and the Russian Federation broke down. Amid reports of shelling on Damascus suburbs from Jaysh al-Islam positions, intense airstrikes resumed on Douma after a 10-day break.
On the evening of 7 April, as the barrage of large-scale conventional shelling continued, reports of a chemical attack on two locations in Douma started circulating in the media. Dozens of casualties were reported by medical staff on the ground. The IIT did not obtain any information indicating that military targets had been placed in proximity to either location. A few hours after the attack, on the morning of 8 April 2018, Jaysh al-Islam negotiated its surrender with the Russian mediators.

After the attack, Syrian forces supported by Russian military police regained control of Douma.

The OPCW FFM was only allowed to visit the sites on 21 and 25 April. After their investigation, the FFM determined in its report that there were “reasonable grounds that the use of a toxic chemical as a weapon took place” on 7 April 2018 in Douma. The FFM further concluded that the toxic chemical “contained reactive chlorine” and “was likely molecular chlorine.” The FFM also assessed that it was “possible” that “two yellow industrial cylinders” found at the two sites of alleged use of toxic chemicals “were the source of the substances containing reactive chlorine.”

The IIT undertook several steps to clarify and deepen its understanding of the findings by the FFM.

It must be recalled, that during its visit to the sites, the FFM collected and obtained 49 samples from Location 2 and 20 samples from Location 4, including dry and wet wipes of surfaces, concrete debris, wood, fabric, plastic material, paint flakes, and metal and biomedical samples of victims. A subset of those samples was sent out for analysis to two OPCW designated laboratories.

Considering the FFM’s analytical findings, the IIT focused specifically on an anthropogenic subset of the identified chlorinated organic chemicals (i.e. chemicals which are not naturally present in the environment). The fact that there are no natural sources of these chlorinated chemicals means that their presence can only be due to chemical events involving reactive chlorine (i.e. industrial chemical production or release in nature by man). In addition to assessing the analytical data supporting the FFM Report, as relating to Location 2 and Location 4 (for a total of 68 samples), the IIT also undertook the analysis of two supplementary samples, i.e. an electrical copper wire from Location 2 (that was not analysed by the FFM) and a piece of concrete collected by a third party at Location 2 in Douma on 8 April 2018—and whose chain of custody the IIT was able to reconstruct between the date it was collected and the date it was first received and analysed by an OPCW designated laboratory. For its analysis, the IIT engaged a well-established chemist with specific expertise in the analysis of chlorine markers, who had not been previously involved in the analysis, assessment, and interpretation of samples from Douma) as an expert.

In light of the analytical results obtained and that are presented in detail in the report, the IIT has reasonable grounds to believe that chlorine gas was used at both relevant locations in Douma, and that the cylinders were the origin of the chlorine gas released at both locations.

For both locations, the assessment of the analytical data of 70 samples revealed the presence of chlorine gas markers whose formation and specific position at both sites can solely be explained by the release of high concentrations of chlorine gas from the cylinder. This allowed the IIT to rule out the hypothesis that the incident may have been “staged” using
household bleach products or pesticides, or that no chemical event may have taken place at all. At the two sites, identical chemical fingerprints were identified in conifer wood present in the basement of Location 2 and in the bed at Location 4, as a result of its exposure to chlorine gas.

Additionally, the “staging” scenario finds no support in the chemical data considered in their totality, nor in the pattern of how the relative levels of the chlorinated chemicals are distributed. It would have been extremely difficult, if not impossible, to mimic the spread of a gas such as chlorine gas. Laborious “staging” operations would have had to be performed according to a detailed plan to produce the exact concentration gradient and pattern observed in the results, at two different locations. The IIT was unable to identify any evidence, including from opensource information or from the Syrian Arab Republic or other States Parties, which would corroborate that any of the staging actions were performed at either location. Furthermore, it would have been impossible to foresee what samples the FFM inspectors would have collected, and from where, at each location.

On its analysis, the IIT also considered in detail the symptoms of affected persons.

The IIT consulted several specialists and requested an independent expert (toxicologist) not involved in previous assessments of the incident to make their own evaluation of the reported symptoms. The IIT provided the expert with anonymised accounts and data from 55 individuals interviewed by either the FFM or by the IIT, including affected persons and others who were present at the scene or otherwise involved in the rescue operations in the hours after the incident. Furthermore, while the symptoms of the victims are consistent with chlorine exposure, the IIT considered it useful to assess possible chlorine gas dispersion from the cylinder found at Location 2, where most fatalities were reported. The IIT obtained and reviewed two sets of data and visual representation(s) of gas dispersion modelling independently elaborated based on several parameters, including locations of the crater, prevailing weather conditions, as well as variations in the filling capacity of the cylinder and of the dispersion rate of the gas. The two independent gas dispersion models considered by the IIT for Location 2 indicate that the accounts of the witnesses and the rapidity at which the symptoms began are indeed reliable, and that those persons were affected by chlorine gas used as a weapon. In particular, those who died in the building at Location 2 did so because of the exposure to chlorine gas released rapidly from the rooftop. The IIT further assessed that several among the fatalities were exposed to chlorine while seeking to escape from their shelter in the basement to upper floors, as per the common protocol “to head to higher ground in the event of chemical attacks”.

At Location 4, the absence of severe symptoms and fatalities—compared to those reported at Location 2 and in the surrounding area—can be explained by fact that the relevant building was not inhabited at the time the incident occurred, and that the valve of the cylinder found at Location 4 did not rupture (unlike the one at Location 2).

Finally, with regard to the alternative scenario in which the fatalities would have been killed elsewhere and subsequently moved to Location 2 in an attempt to “stage” an attack, the IIT notes that signs of blunt-force trauma or penetrating trauma are not visible in any of the fatalities observed in verified videos and images from Location 2, and that neither witnesses nor medical personnel recount observing blunt-force trauma or penetrating trauma in any of the fatalities, and that those signs are not observed in verified videos and images from Location 2 either. Furthermore, fully established rigor mortis, observed in fatalities being
carried out of Location 2 in the early hours of 8 April 2018, indicates that the time since death was no more than approximately 9 to 16 hours. The IIT also notes that it did not obtain from the Syrian Arab Republic or other States Parties, nor was it able to identify, any evidence—including videos, photographs, satellite or drone imagery, open-source information etc.—which would corroborate that the staging actions were performed at Location 2.

On its analysis the IIT also conducted a detailed assessment of remnants and of the impact and delivery of the munitions. For this purpose, the IIT consulted three munition specialists, one terminal ballistics expert and one missile trajectory expert to further inform its assessment as to whether the cylinders found at both locations could be identified as the source of reactive chlorine and to make a determination as to the method of their delivery.

From these assessments, the IIT has reasonable grounds to believe that the cylinders observed at both Location 2 and Location 4 were intended to be used as air-delivered munitions. Design features of both cylinders, as well as of the metal cradles fitted to them, indicate that they were intended to be delivered via aircraft. Furthermore, the orientation of the lifting lugs on the metal cradles found at both locations indicates that the cylinders were not designed to be attached to the outside of an aircraft, but rather to be pushed out of the cargo bay of either a helicopter or a fixed-wing aircraft. The presence at both locations of wheels mounted onto axles, which are intended to facilitate the handling of the cylinders, further supports this hypothesis. Mi-8/17 helicopters are particularly suitable for the purpose of delivering medium and large conventional and chemical improvised munitions, due to their large cargo bay, which can store multiple medium-large barrels.

This is consistent with the findings reached by the IIT in both its First and its Second Report, in which it concluded that chlorine-filled cylinders similar to the ones found in Douma were dropped by Mi-8/17 helicopters operated by the Syrian Arab Republic in Ltamenah and Saraqib.

At Location 2, the damage observed on the cylinder was consistent with what would have been expected from the drop from an aircraft, rather than e.g. from an adjacent building. At Location 4, the overall damage to the cylinder indicates that it was air delivered and impacted horizontally.

The hypothesis of manual placement at both locations is inconsistent with the damage observed on both cylinders, as well as with the totality and consistency of the evidence obtained and analyses performed in relation to both sites. Based on combined assessment by the IIT’s munitions, terminal velocity, and missile trajectory experts, the IIT has reasonable grounds to believe that the cylinders found at Location 2 and Location 4 in Douma were dropped by a helicopter.

Fourteen witness statements allowed the IIT to situate the attack on Douma between 19:10 and 19:38 (UTC+3) on 7 April 2018. In that time frame, flight observation data shows that at least five Mi-8/17 were seen circling over the city. The IIT considered that out of the seven airbases whose distance from Douma would have been within the range of an Mi-8/17 helicopter, Dumayr airbase was the only one observed as active in the relevant time frame. Analysis of flight observation data, corroborated by witness statements and other sources, shows that on the evening of 7 April 2018, between 19:00 and 19:38, five Mi-8/17 helicopters took off from Dumayr airbase flying in a south-westerly direction. The IIT found
that the relevant take-off times are consistent with the observation of five Mi-8/17 helicopters circling over Douma between 19:10 and 19:38, considering the time needed for an Mi-8/17 helicopter to depart from Dumayr and reach (and circle over) Douma, which has been assessed to be between 8 to 15 minutes. Information obtained by the IIT from spotters, witnesses, military analysts, and other sources indicates that, in the time frame in which the incident occurred, the airspace over Douma was exclusively controlled by the Syrian Arab Air Force and the Russian Aerospace Defence Force. The IIT has not obtained any information suggesting that any forces opposing the authorities of the Syrian Arab Republic or international coalition aircraft were present in the Douma airspace on 7 April 2018. The IIT has not received any conclusive information indicating that the Mi-8/17 helicopters that were observed flying over Douma during the time frame in which the incident occurred were operated by any air force other than the Syrian Arab Air Force.

More specifically, the IIT received credible information suggesting that the Tiger Forces set up operations in Dumayr airbase. Further, credible information indicates that the Tiger Forces were assigned a helicopter squadron at Dumayr airbase consisting of at least seven Mi-8/17 helicopters, to support their operations throughout the eastern Ghouta offensive. Information received by the IIT from several independent sources indicates these helicopters, while belonging to the 63rd Brigade of the Syrian Arab Air Force, operated under the direct command and control of the commander of the Tiger Forces.

Finally, satellite imagery captured on 20 February 2018 further indicates the presence of helicopters on aprons at Dumayr airbase, which had previously been unoccupied. This coincides with the deployment of the Tiger Forces to eastern Ghouta and with the start of the offensive.

Credible information obtained by the IIT further indicates the presence of a barrel bomb production or loading facility at Dumayr airbase at the time of the incident of 7 April 2018.

All along its investigations, the IIT actively pursued the scenario whereby the two chlorine-filled cylinders were carried or delivered to both locations by the “White Helmets” and/or by members of armed groups, with the support of Western States, to “stage” the incident and forge accusations against the Syrian Arab Army. However, the IIT was unable to identify any reliable information (including satellite imagery, video or photographic footage, intercepts etc.) supporting the allegations of “staging” by armed groups or other entities with no aerial assets in Douma in April 2017 or corroborating that any of the required “staging” actions were performed at either location.

Let me be clear, to reach its conclusions, the IIT did not limit itself to focusing on one area, or one set of information and only drawing conclusions from that. The IIT instead adopted a holistic approach, which means evaluating as a whole and against each other the various pieces of information to assess the various hypotheses (or scenarios). This has been consistently done, in all three of the IIT Reports. In relation to the incident at hand, the conclusions derive from information and analysis related to the several areas of inquiry (general situation in the area and military context, chemical analysis of samples, analysis of symptoms of the affected persons, assessments of the munitions found at the site, their delivery, and impact; and other information related to any aircraft and its flight path).

I thank you for your attention and stand ready to answer any questions.