Report on Tabletop Exercise on UNSGM Investigation of Alleged Biological Weapon Use

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Introduction

This report outlines the main conclusions and lessons identified during a tabletop exercise (TTX) on the possible challenges to investigative missions run under the UN Secretary-General's Mechanism for investigation of alleged use of chemical and biological weapons (UNSGM). The TTX focused on a scenario in which the alleged use of a biological weapon was being investigated.

The table top exercise was run by VERTIC on 31 October – 1 November 2019, as part of a study on current UNSGM capabilities to respond to alleged use of biological weapons (BW) and ways to support and build these capabilities in the future. The study examines technological developments in the biological sciences and forensic practices. The study also looks at lessons learned from responses to biological emergencies, and from investigations into chemical and biological incidents over the past two decades.

An effective UNSGM can help the international community to determine whether or not a biological weapon has been used. In either case, such a determination will be critical in planning appropriate mitigation measures. It is also hoped that findings of this study can be used more broadly to support national or international responses to biological emergencies, whether natural or deliberate in origin.

UNSGM and investigations of alleged use of biological weapons

The UNSGM was established by UN General Assembly Resolution A/RES/42/37C, adopted in 1987, which 'requests the Secretary-General to carry out investigations in response to reports that may be brought to his attention by any Member State concerning the possible use of chemical and bacteriological (biological) or toxin weapons'. The mandate is also supported by a UN Security Council resolution passed in 1988.¹

Following the establishment of the mechanism, the UN Secretary General convened a group of qualified experts to develop a set of guidelines and procedures for the mechanism, which can be found in General Assembly Document A/44/561 Annex I. The guidelines and procedures describe the role of the Secretary General in establishing standing preparatory measures for investigations under the mechanism. They also describe the steps involved in considering whether and how to launch an investigation following the receipt of a report of alleged use of chemical or biological weapons. The guidelines and procedures also outline technical procedures for conducting an investigation and preparing a final report as well as the role of qualified experts and analytical laboratories provided by UN member states.

Appendices to the guidelines and procedures provide more specific details on issues such as Member States reports, investigatory equipment and expertise, sampling procedures and interview quiestionnaires. The appendices have been updated in 1990 and in 2006.

It should be noted however that the guidelines and procedures are formulated as recommendations, with all the legal authority for UNSGM investigation stemming directly from Resolution A/RES/42/37C; this is also on recognition that the Secretary General will need to agree on practical arrangements for access and operations with the member state on whose territory the investigation unfolds.

Past UNSGM investigations have taken place in Azerbaijan (1992) and Mozambique (1992), and more recently, in the Syrian Arab Republic in 2013. The UNSGM investigation in Syria was carried out with the support of the Organisation for the Prohibition of Chemical Weapons (OPCW) and the World Health Organisation (WHO). It is worth noting that past UNSGM investigations focused on alleged use of chemical weapons.

I For a list of the key UN documents pertaining to the UNSGM, see: https://www.un.org/disarmament/wmd/secretary-general-mechanism/key_documents/ (link accessed May 2020).

As mentioned above, the UNSGM guidelines and procedures cover standing preparatory measures, and note that the Secretary General should work to maintain readiness and capacity to rapidly deploy an investigation when necessary. During the Syrian investigation, some of this capacity was provided by the OPCW and its laboratories; however, there is no equivalent organisation to the OPCW in the biological realm to provide support, and arrangements for responding to a biological incident from an investigatory angle at the international level are currently limited. Moreover, the particular characteristics of biological agents, in terms of how they can originate and spread, means that response measures and investigations may in some cases face especially complex situations.

Despite these challenges, it is important to ensure that a possible UNSGM investigation of alleged use of biological weapons is provided with all the necessary resources and expertise it needs to carry out its duties. This requires developing resources and building capacity now and over the long term in several areas. VERTIC's study is part of a broader range of initiatives meant to support this effort.

Of relevance here is also the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BTWC). Article VI of the convention provides for a complaint mechanism where a state party may report cases of non-compliance to the UN Security Council, which may decide to carry out an investigation. However, the BTWC 'lacks the functional capacities to effectively coordinate a response with the pertinent agencies and IOs.' (see BWC/MSP/2017/WP.20)

Overview of the tabletop exercise

The tabletop exercise aimed to identify and explore practical issues and challenges that could be faced by a UNSGM team during deployment in a country where an alleged use of a biological weapon had occurred. The exercise sought to gather recommendations for approaches and mitigation strategies that could be used to manage these issues and challenges and ensure the success of the investigation.

Research questions and areas of focus

The key issues the exercise aimed to investigate were:

- Interaction and coordination between the UNSGM team and national authorities, including law enforcement, national security and national public health authorities.
- Interaction and coordination between the UNSGM team with international stakeholders, including UN headquarters, international expert communities, and international humanitarian relief organisations.

The exercise was divided into three different 'stages', each focusing on a specific aspect of the activities of a deployed UNSGM team. These were:

- I. Information: Exploring how information needs and requests by the UNSGM team may be viewed by national and international stakeholders, especially during the finalisation of the mission's work plan which occurs once the team has arrived in the country;
- 2. Access: Exploring the ability of the UNSGM team to access relevant locations and carry out investigation activities, and key possible obstacles during these activities;
- 3. Samples: Exploring what conditions and circumstances may impact the collection of environmental and biomedical samples by the UNSGM team and their ability to maintain chain of custody.

UNSGM teams are granted fairly broad authority to conduct all the activities above. Nevertheless, field experience and lessons from the TTX show that difficulties may yet arise during an investigation due to a

non-cooperative or non-permissive environment. The TTX focused on technical, legal, cultural, political, practical or awareness-related challenges that may hamper cooperation by the host country authorities or international actors active in the area of investigation.

Field experience and lessons from the TTX also indicate that a UNSGM team's ability to fulfil its mandate may also depend on the availability of appropriate analytical or logistical resources and capacity, speed in response, situational awareness, and practical restrictions from safety and security.

Role and activity of participants

Participants invited to take part in the exercise comprised current and former professionals from government agencies and intergovernmental organisations. Participants were selected based on significant practical experience or responsibility in issues such as national public health planning and response to CBRN emergencies, national security and law enforcement planning and response to CBRN incidents, and UN logistical support operations; UNSGM investigations, and international humanitarian assistance.

Participants in the exercise were divided in small groups of 3–5 people each. Each group was assigned the role of one of the relevant stakeholder constituencies in the scenario. Participants did not roleplay the stakeholders; instead, each group was asked to consider the issues posed by the scenario from the perspective of the institutional stakeholder they represented, trying to understand the priorities and the constraints that might guide its decisions and actions. In large part, the participants played broadly the constituencies to which they belong in their professional lives. However, the scenario was abstracted from their direct experiences to enable widely applicable recommendations to be drawn. Future TTX's may use different approaches. The constituencies thus represented were:

- UNSGM field investigation team
- National public health institutions
- National law enforcement institutions
- UN headquarters and agencies, and international experts community
- International humanitarian relief organisations

Scenario

VERTIC prepared a fictional scenario to serve as a backdrop for the exercise. The scenario was intended to ground the proceedings of the TTX in a minimal level of practical and operational detail, and to focus the

discussion on the key areas of interest for the TTX. The fictional situation in the scenario featured an uncertain situation, with an outbreak that could realistically be mistaken for natural and that was relatively contained within a specific geographical region. The vector of infection used by the perpetrators was relatively unsophisticated and did not require advanced technologies. These features were chosen to focus the discussion on some of the key uncertainties that an investigation into the alleged use of biological weapons may face.

According to the scenario, the outbreak took place in a rural region on the border of a lower-middle income country. The region had been marked by long-standing acrimony between two different communities, which had broken out in sporadic violence and disorders in the past. Of the two communities, one maintained a traditional nomadic shepherd lifestyle, while the other had adapted a sedentary lifestyle, with small-scale farms and cattle farms becoming the dominant source of income. Accusations of 'land stealing' had compounded the existing rivalry. Furthermore, urbanisation trends and climate change had affected the whole region, taking a toll especially on the livelihood and security of the nomadic groups.

An outbreak of a zoonotic agent had been registered in several cattle farms and their surrounding communities. The outbreak started with animals, but quickly spread among humans. Initial difficulties in identifying the agent had caused a delay in the propagation of appropriate therapeutic protocols, causing over 300 casualties and 80 fatalities. The national government mobilised emergency resources, but these were strained and had difficulties reaching into the rural areas of the region to provide adequate care.

Suspicions of a deliberate release first arose among public health responders, who noticed that cases of the illness had appeared roughly simultaneously in a series of separate locations, some of which were distant from one another. After that, pieces of an infected animal carcass were found in an affected farm in a manner that lead the police to suspect that the infection had been spread in this way.

The background information in the scenario advanced this narrative until the point when the state submits a report of alleged use to the UN Secretary General, requesting a UNSGM investigation. The TTX covered the operations of the investigative team in the early part of its deployment in-country.

TTX Session 1 – Exchange of information

The first session of the TTX focused on information-sharing between the UNSGM team and various national and international stakeholders. In particular, it focused on the very early stages of deployment of a UNSGM team, as the team seeks further information from local authorities in order to help further refine its programme of work, although the discussion broadened to cover issues related to information-sharing throughout the investigation.

Participants were given a chart of various possible types of information on the outbreak (e.g. medical histories of patients treated, reports by first responders, witness statements collected by national law enforcement authorities, results of veterinary tests, and more), and the various constituency groups were asked to provide indications on which of these type of information they had, whether they were able to share it, and what were the main concerns that could make them reluctant to share. The UNSGM group was asked to prioritise which information was most needed.

Some of the results of this discussion were the following.

- 1. The UNSGM group noted that in the early stages of the investigation the main objective would be to confirm cases. It is also important to clarify lines of responsibilities with national authorities, gaining a sense of who owns certain information, and who is allowed to share it or speak about it.
- 2. Given the role and perspective of public health authorities, the following was noted:
 - a. Even in a condition where these are willing to cooperate with the UNSGM team, there may be concerns about the team 'taking over' operations and planning and derailing the mission of public health authorities.
 - b. Even with a clear international mandate, in many cases public health authorities would need to refer to national legislation and guidelines, and possibly coordinate with authorities at the national level.
 - c. Confidentiality concerns and consent of patients would almost certainly be raised and will need to be addressed for any information and data sharing to take place.
- 3. Regarding the role and perspective of law enforcement and national security authorities, the following was noted:
 - a. The specific mandate of the UNSGM team may make a significant difference to the willingness of national security and law enforcement bodies to engage, and even in the best scenario they would likely need to confirm their intention to cooperate with authorities at the national level.

- b. The key concern which was raised repeatedly throughout the exercise is that nothing would be shared if doing so had the potential of endangering an ongoing criminal investigation, or of revealing sources and methods of intelligence collection. Participants characterised this by noting that at least in some cases, from the point of view of national security authorities, sharing information means losing control of it.
- c. Criminal investigations usually collect vast amounts of information and physical evidence, so there are logistical difficulties to take into account too.
- d. The culture and capacity of local law enforcement authorities can have a significant impact on the evidential value of provided information
- 4. From the role and perspective of UNHQ, participants explained that headquarters are crucial in providing informational support to the deployed team.
 - a. This includes facilitating contacts with the host country, receiving and processing relevant information from other UN member states, identifying appropriate designated laboratories³ in other member states, and helping lay out an information strategy to recognise and address information gaps and evaluate different hypotheses.
- 5. Given the role and perspective of International humanitarian relief organisations, the following was noted:
 - a. These organisations often operate in a precarious state when deployed, as they depend on the continuing approval of the national government, as well as the trust of the communities they work with. Because of this, their ability to cooperate with UNSGM teams and share information may be limited.
 - b. However, the humanitarian field is broad and diverse, and attitudes can change. Some organisations may need a clear humanitarian case for sharing, others may be very reluctant even when that is present, and others still may be less aware of the situation and limitations, and even share information accidentally.
 - c. These organisations often have good connections with local communities, and even when not sharing directly, they may be able to create a contact between the UNSGM and community leaders.
 - d. In some cases, there are differences between the national, regional and central branches of international organisations, and information does not flow freely between these, so UNSGM team will need to identify different levels of approach
- 6. **Trust-building** was highlighted as a key step to obtain information:
 - a. UNSGM team needs to reassure stakeholders of its impartiality and correctness;

While the UNSGM Guidelines and Procedures call for the designation of analytical laboratories, it must be noted that at the moment at the moment there is no international system of accreditation for diagnostic laboratories for alleged BW investigations (this point will be expanded below).

- b. Cooperation can be gained 'the hard way', by using UNSGM mandate and access to authorities at the national level to compel local authorities to cooperate. Participants stressed this is not sustainable.
- c. Instead, the UNSGM team needs to model a culture of transparency and responsibility.
- d. It is important to involve all relevant stakeholders, and build appropriate ties and confidence between them. Sometimes, it can help to send team members with the appropriate background as liaison (e.g. UNSGM team members with a law enforcement background may be best placed to negotiate with national law enforcement authorities).
- 7. **Information-sharing** can also take the form of exchanges: authorities at the local levels may lack information they need, and UNSGM team may arrange to share this with them in exchange.

TTX Session 2 – Access to locations and individuals

The second session of the TTX focused on opportunities and sensitivities arising from access to locations and individuals of interest for the investigations. In particular, it focused on the formulation of a work programme for the UNSGM team. As the team formulates and updates its work programme, UNSGM Guidelines and Procedures mandate it 'seek agreement on the operational details' with national authorities. Discussion focused on what objections national authorities may raise at this stage and the reason of these objections.

There was also a discussion on whether the mandate provided to a UNSGM team would be broad enough. Participants were given a chart of various locations relevant to the case, with their history. The constituency groups were asked to provide indications on what concerns they had about the UNSGM team accessing these locations (and/or the individuals residing there). The UNSGM group was asked to prioritise which locations would be of immediate interest.

Some of the results of this discussion were the following.

1. The UNSGM group noted the following:

- a. Before they visited areas where cases were reported, they would likely want to visit archives and first response headquarters, to further cement their understanding of the context.
- b. They also wanted to visit the hospital in due course, as that would give them access to casualties from different areas and different points in time.
- c. Samples obtained by local authorities as part of these visits would not be usable as primary evidence, but may provide interesting information.
- d. Some of the areas where cases were recorded and suspicious material indicating possible deliberate attacks were found were certainly of interest, but participants judged it unlikely to find significant new information there due to the passage of time.
- 2. Regarding the role and perspective of public health authorities, the following was noted:
 - a. Specific objections are difficult to think about 'in the abstract', but some of the relevant frameworks of operations for PH bodies are key: consent of patients, safety, continuity of provision of healthcare.

- b. Negotiation and existing protocols are key to make access possible; building on existing protocols and procedures, agreeing on escorting procedures and allowed activities.
- 3. Regarding the role and perspective of law enforcement and national security authorities, the following was noted:
 - a. As the UNSGM team starts moving and visiting locations, local authorities need to take into account public safety and public order. This is both for the protection of a UNSGM team, and to prevent disorders.
 - b. The team may be granted access that is only partial and under time constrains to locations such as crime scenes that have been quarantined, and may not be allowed to collect evidence/samples on their own. However, mediated procedures may be offered wherein local authorities collect samples under direction and supervision from UNSGM investigators.
- 4. Given the role and perspective of UNHQ, the following was noted:
 - a. UNHQ would be able to provide various types of support, including legal, medical and political.
 - b. They would be in charge of procuring further technical opinion and advice as team collects evidence and samples.
- 5. Regarding the role and perspective of International humanitarian relief organisations, the following was noted:
 - a. A visit by a UNSGM team would be extremely sensitive because of operational and political issues.
 Organisations may fear to be associated with the investigation and see their independent status tarnished.
 The main concerns would be that locals may avoid seeking treatment.
 - i. Due to the nature of operations in many field headquarters by international humanitarian organisations, UNSGM would need to access with a minimal team, if at all. A large team could be very disruptive and compromise continuity of care. It is likely that International Humanitarian relief organisations would want two visitors maximum whereas the UNSGM may range from five to twenty individuals
 - b. The presence of accompanying hosts from national authorities may be a significant difficulty, especially if these come from national security or law enforcement bodies.
 - c. Different organisation also have different guidelines; some have a blanket policy of refusing access without a court order.
 - d. Cultural and religious sensitivities may also be taken into account when arranging for access.
- 6. Most participants stressed that pre-planning and negotiation of terms is key to allow effective operations on the ground for the UNSGM team.

- 7. Despite this, it was recognised that compromises will have to be made in many cases, and that it will not always be possible to collect the best information. The team will need to show flexibility, follow methodologies rigorously wherever possible, and defend their operations.
- 8. Most participants felt that existing Guidelines and Procedures for UNSGM give investigators a broad and strong mandate to carry out their duties. At the same time, several participants underlined that the procedures do not include many technological developments occurred since the 1980s.

TTX Session 3 – Collection and handling of samples

The third session of the TTX focused on opportunities and sensitivities during the collection and handling of samples in the investigation. In particular, it focused on the way to manage the process of collecting samples, handling them, and performing analysis in a way that provides the required level of confidence deemed necessary by the team in terms of its probative value while being acceptable for national and local authorities from a legal, practical and cultural perspective

Some outcomes of this discussion were the following.

- 1. The UNSGM group noted the following:
 - a. Broadly speaking, the team will be looking out for two types of samples:
 - i. Confirmatory samples collected *in situ* (i.e. in hospitals and similar locations)
 - ii. Broader samples, useful for contextual knowledge and secondary evidence.
 - b. If confirmation can be achieved quickly using in-country resources, a UNSGM team would likely accept that.
 - c. Storage of samples presents logistical issues: not only about having space, but refrigeration, power supply, security and access control.
 - d. Handling of samples is subject to time constraints. These include the need to confirm the nature of the agent quickly (especially for agents that are at risk of decaying), and to arrange timely shipments.
 - e. The team would seek out technical and expert support from UNHQ throughout a sampling campaign.
- 2. From a public health authorities' role and perspective, the following was noted:
 - a. The overarching requirements noted beforehand were raised in this context, too: consent of patients is key, which could pose an obstacle with collection of samples from casualties, especially for casualties who are unconscious or comatose and unable to authorise the taking of any biomedical samples and their subsequent transfer to a designated laboratory.
 - b. National authorities would likely want to receive parts of the samples collected by the investigation; moreover, they may request to be updated before anyone else in case of significant discoveries on the nature of the agent, in order to plan their response.

- c. Collection and transport of samples will also face cultural and religious requirements (e.g. collection of samples from dead bodies).
- 3. Regarding the role and perspective of law enforcement and national security authorities, the following was noted:
 - a. Law enforcement authorities will be carrying out their own investigation, with their own independent mandate and goals. Their priority, as already noted, will be not to jeopardise that.
 - b. Any information obtained by samples provided by LE authorities, or by their analysis, may not meet UNSGM evidential standard; furthermore, national LE authorities may want it not to be released until domestic proceedings are over.
 - c. Conversely, any information or samples received by LE authorities from the UNSGM team may have to be disclosed as part of a trial; this may be a problem for the UNSGM investigation's confidentiality.
 - d. Law enforcement authorities may have their own safety and security concerns and thus their requirements when it comes to the packaging and transport of samples. In addition to the actual security concerns, LE may also need to take into public perceptions of the management of sample storage and transport.
- 4. As for the role and perspective of UNHQ, the following was noted:
 - a. Participants stressed the need for a sampling campaign to be comprehensive and well planned, focusing on targeting samples that would support the investigation.
 - b. Participants expected there to be a robust and constant exchange between the UNSGM team on the field and designated laboratories on this matter, starting before the team has deployed.
 - c. There is a general expectation that out-of-country laboratories would carry out most of the analytical work. Any samples needed for evidence would have to go to reference laboratories. In-situ sample analysis is only 'confirmatory' and used to exclude alternative hypotheses. In terms of types of equipment and usability in the field, some of the participants argued that handheld sample analysis devices are not yet sufficiently reliable.
 - d. UNHQ would likely take on the role of interface between the team and any necessary technical experts required to advise the team.
 - e. UNHQ would also be able to help navigate the regulatory requirements and bureaucracy needed to arrange transport of samples. From this perspective, it is of utmost importance for the UNHQ to prepare routes and carriers or sample transport before even starting the collecting process. In this way,

- the risk of delays and obstructions from a variety of sources can be reduced. This would involve UNHQ and in-field teams plus access to refrigeration, tamper-proof, safe and secure packaging.
- f. The nature of UNSGM missions means that teams can obtain significant resources when needed; however, it was noted that currently there is no model to organise logistical support and equipment provision for UNSGM sampling activities; so far, it has been arranged on an ad-hoc basis, with the risk of being haphazard. Ideally the UNSGM should look at the CTBTO for a model to be developed since the Vienna-based organization has planning assumptions for the transport of up to about 150 tonnes of equipment to enable two on-site inspections to be investigated simultaneously along with spares for each. A challenge that may arise is 'accreditation' of equipment: in this case it is relevant to assess advantages and vulnerabilities of each item, as for example handheld sample analysis devices
- g. The issue or leveraging member state capabilities for transport of samples was raised. While this could be useful, participants noted some challenges that may need to be dealt with:
 - i. A risk of perceived politicisation of the investigation, depending on who provides the capabilities;
 - ii. Need for a model of quality control and quality assurance;
 - iii. Possibly, the need for additional chain of custody procedures.
- 5. From an International humanitarian relief organisations role and perspective, the following was noted:
 - a. International humanitarian relief organisations may allow collection by investigators, depending on various factors, including their duties to patient care and advocacy and the investigators' mandate.
 - b. Access by international investigators remains sensitive, and team size should be minimal.
 - c. International Humanitarian relief organisations would want a clear conversation before anything is agreed.
- 6. Participants noted that confirmation of BW use may likely change the dynamics in the region significantly, because of the fear and anxiety it would generate. This would complicate sampling operations too.
- 7. Participants noted that the countries willing to receive samples would be designated in advance of deployment; however, they also recognised that at the moment there is no system of accreditation for diagnostic laboratories for alleged BW investigations (whereas such a system exists for Chemical Weapons).
- 8. Participants with UNSGM experience noted that samples collection and analysis is a highly technical activity, that can look obscure to externals. It is important for the team to communicate effectively about the process and set expectations.

Understanding, anticipating and overcoming roadblocks to UNSGM activities

One of the stated goals of the TTX was to explore the possible challenges that a deployed UNSGM investigatory team may face. This required an innovative approach, since it was felt that trying to predict and categorise all possible situations a UNSGM team may face during deployment may not be the right approach.

Instead, participants noted that it is possible to gain a better understanding of potential challenges, especially the ones raised by national and international stakeholders, by considering the operational requirements and the varied legal, cultural and regulatory contexts that inform, drive and constrain the work of these stakeholders.

The various constituencies and organisations involved in the response to an alleged use of biological weapons will approach the situation with different priorities, constraints, pressures and values, which at times may clash with those of other stakeholders or at least complicate an investigative team's tasks. Advance identification and consideration of these factors can help a UNSGM mission take advantage of opportunities, anticipate obstacles and identify compromise solutions.

Some members of a UNSGM investigatory team may hail from the same professions as their national counterparts and hence have a tacit understanding of some of the factors that govern their activities. This will help in managing the mission. However, each country and situation present a different set of circumstances and institutional pressures. In addition, the size of mission, speed at which it must be assembled and access to resources means that it will not be possible to share specific professional experience in a systematic and comprehensive manner during launch and deployment. Consequently, mapping potential opportunities and obstacles explicitly can provide a useful tool for training and planning, as well as aide memoire or field guides for deployed investigators.

The following is a list of factors that were identified during the TTX. It could serve as the starting point for a more detailed scoping study.

National institutional hierarchy/chain of command issues

UNSGM teams are likely to interface with a range of different points of contact in the host country, representing national stakeholders such as the ones already listed in this report, including law enforcement, national security, public health, and more such as national and international NGO humanitarian aid groups. Moreover,

these points of contact will be located at all levels of government and public and private service: some will be placed within ministries or high-level agencies, while others will be active at the regional or local level. The UNSGM investigatory team is provided a large degree of authority by its UN mandate and by the structure of the UNSGM Guidelines and Procedures; however, these may not be readily recognised by local stakeholders. This may be because they are not aware of UNSGM's full role and mandate; because the issue is seen as politically sensitive; because practices and norms at the national level and within institutions discourage direct action and require high-level assent for significant decisions. At times, local authorities will need to seek authorisation from national-level authorities even for decisions that would ordinarily be within their scope of activity.

Furthermore, national practices or political conditions may have an impact on which stakeholder, or stakeholders, have ownership over a certain process, especially if it is seen as politically sensitive or tied to foreign policy considerations, as a UNSGM investigation may be. Participants also noted that these kinds of issue can be amplified in countries where corruption or clientelism are common.

The UNSGM investigatory team will need to ensure that all the relevant stakeholders are being consulted and involved in the process, and that they understand the authority and reporting lines that their points of contact need to respect, even when these are informal or implicit. Support from UNHQ, in form of diplomatic outreach and expert advice from specialists with expertise in the host country, is likely to be important to deal with this kind of complexity.

Coordination between and within international bodies

Some participants also noted that similar considerations may apply with branches of international organisations at different levels (such as UN-related bodies or international humanitarian groups). Depending on the entity, national branches, regional hubs and central headquarters may be in close coordination or independent of one another, and the UNSGM investigatory team will need to understand what the most relevant partner to coordinate among these is. In some cases, the internal processes for sharing information and coordinating action between different branches of these organisations may not be very effective, and involving the 'wrong' branch may prove to be an obstacle.

Confidentiality

Participants confirmed that controlling and protecting sensitive information is going to be a significant priority for many stakeholders operating in the aftermath of a severe disease outbreak or an alleged biological weapon release. This includes the UNSGM investigatory team. This is likely to be an obstacle to the cooperation and

information-sharing between the UNSGM investigatory team and other stakeholders in the field, unless the team can provide the appropriate reassurances. The underlying reasons for the need of confidentiality vary between different stakeholders, and laying them out can help find the appropriate reassurances and compromises.

In the **medical/public health field**, practitioners are required to protect personal and identifying information about the patients they treat, depending on the country in question. They may seek reassurances by investigators that any information they pass on is handled to the appropriate level of confidentiality. UNSGM can draw on recent experience in this context - protecting identities - with the work done by the OPCW Fact Finding Missions operating in Syria and in adjacent countries.

In the **national security and law enforcement field**, the first priority of national authority would be to ensure that their own mission is not jeopardised. Confidentiality concerns will apply to the protection of ongoing investigations (a broader issue that deserves its own category, see below), but also to the protection of intelligence and national security assets and investigative techniques.

Consent

Under most circumstances, medical patients need to give their consent to procedures such as taking of samples of blood or tissues, and most likely will need to give their consent to be interviewed as well. This is often enshrined in national legislation, as well as in professional and deontological codes that medical doctors are bound by.

The physical condition of some patients may prevent them for being able to provide consent, for example if they are unconscious, or comatose. This can pose a significant obstacle for a UNSGM investigatory team, especially since collecting some samples may be time-sensitive, and patients affected may be incapacitated for a long time. One option for overcoming this challenge would be to seek a court order that grants a doctor the authorisations to proceed with collecting the samples, but investigators will still need to factor in time for this. In recent cases, UK courts were able to grant an order within a few days of the government's request during the Novichok investigations in order to clear the way for and OPCW Technical Assistance Visit; however, not all national stakeholders will be willing or able to be so responsive. Moreover, a participant noted, some countries have the consent requirement enshrined directly in their constitution, and offer no way to remediate it.

Continuity of care

Wherever medical care is provided, one of the main priorities for medical practitioners is to ensure that it is not interrupted, and that patients are receiving the treatment they need. These locations are usually of interest to a UNSGM investigatory team, which may want to interview individuals affected by the alleged attack or to

collect biomedical samples from patients. However, such a request may raise concerns among practitioners about the team's presence disrupting their ability to care for their patients, or bringing distress to the patients themselves. This may be due to the size and planned activities of the team, to the presence of accompanying representatives of the host government, to perceived political sensitivities and security concerns, and more.

Teams will need to understand this concern and negotiate with medical practitioners on the best ways to minimise the impact of their visit. This may require a smaller scope of action, or accepting compromises such as only sending a small sub-team to the location.

Community and patient trust

Healthcare providers strive to ensure they maintain a positive relationship with their patients and the broader community. If healthcare providers believe that cooperating with UNSGM investigators could damage this trust, they are likely to be reluctant to engage with them and facilitate their activities. Sometimes this belief may be due to UNSGM investigators being seen as international actors whose mandate is not clear to the local population; other times this may be due to the presence of representatives from national authorities accompanying the investigators (as provided for under the UNSGM Guidelines and Procedures). The issue may be most keenly felt in areas where different communities or ethnic groups coexist, especially if one of these is more strongly represented in government institutions, or discrimination is common.

This issue is especially felt by international humanitarian relief groups, whose continuing operation in the area is contingent on their status as impartial parties, and on the trust of local communities and support of the host authorities.

Participants stressed that clear, transparent communication is key to addressing and managing the concerns of medical stakeholders. In some cases, healthcare providers may decide to allow access but remove themselves from the situation, in order not to be seen cooperating directly. In other cases, the UNSGM investigatory team may want to try and adopt a low profile, only sending few selected members. It was understood that trying to minimise disruption to the activities in the location would also help reduce concerns about the political sensitivity of the UNSGM investigatory team's presence, as well as the concerns about continuity of care outlined above.

Mandate of operations

Participants noted that depending on their mandate, some organisations may face additional hurdles in cooperating with a UNSGM investigatory team. This is particularly true of international stakeholders such as International Humanitarian relief organisations.

Organisation with an obligation of political neutrality may have difficulties cooperating with a UNSGM investigation in a situation where a conflict is going on, depending on the circumstances. In such cases, the UNSGM investigatory team may have to provide appropriate assurances.

Some participants also noted that confirmation of BW use may have a significant impact on the operations of International Humanitarian relief organisations in the area. Some organisations have a mandate that specifically does not include operations in case of BW, but they may have already deployed before the outbreak is confirmed to have been deliberate. What they would do in this circumstance is unclear.

Moreover, confirmation of BW use would affect the security considerations of international organisations operating in the field (as well as the provision of their insurance). The risk calculus and risk tolerance vary wildly across different organisations: some, especially state-backed ones, may be forced to leave due to security considerations, whereas others would stay even in a high-risk environment.

Integrity of criminal justice proceedings

Participants with a law enforcement and national security background highlighted that this factor is very likely to be the highest priority for law enforcement authorities in the country, and that in most cases these stakeholders will not agree to any activity or form of cooperation and information-sharing that, in their view, could potentially jeopardise it.

Concerns about protecting the integrity of national-level criminal investigations has already been mentioned as part of confidentiality; however, this issue is not limited to concerns about sharing of already-collected information. For example, they may be relevant to UNSGM investigators' requests to access areas that have been designated as crime scenes for collection of samples, or to interview individuals who have been identified by national investigations as witnesses or suspects.

Practitioners mentioned that they may only choose to share information with UNSGM investigators if this is not shared further, or if investigators commit to retain the information for a certain amount of time (to allow national-level investigatory or criminal proceedings to take place).

Participants provided examples of what a compromise solution between the requirement to protect national criminal justice investigation and the willingness to provide the UNSGM team access may look like:

- Only allowing partial access to locations, and/or requiring UNSGM investigators to be accompanied by national police or intelligence staff during their visit;
- Requiring that samples collection is performed by national staff under direction and supervision of UNSGM investigators, and not by the UNSGM investigators directly;

• Conducting interviews of individuals in custody in written form rather than face to face, submitting written questions and receiving back filtered answers.

Public order and security

Law enforcement and national security authorities are likely to have their own security assessment of the situation in relation to UNSGM team's planned activities. From this point of view, they are likely to be looking out for the welfare and security of the UNSGM investigators, but also for the consequences of their presence. For example, arranging high-profile access to a jail may destabilise the situation inside and risk provoking disorders among the inmates; or, depending on the local politics, a UNSGM visit to an area may cause protests even after the team has left.

Former UNSGM staff noted that in Syria the team took the host government's security assessments very seriously, and usually avoided visiting certain areas if the government authorities recommended against it.

Mitigation approaches and UNSGM resources

During the discussion, participants noted some key strategies and resources that a deployed UNSGM investigatory team would likely need to draw upon in order to navigate challenges posed by the factors outlined above.

Authority of head of mission

Participants noted that the head of a UNSGM mission is, by virtue of the mission's mandate, the direct representative of the UN Secretary General. As such, they are invested with significant power, prestige and authority. This, in and of itself, is a tool that in many occasions can be exploited to facilitate the work of the UNSGM team. Because of their mandate, the Head of Mission can be proactive in decision-making and in making requests to UN bodies and local officials.

Participants also noted that, in order to support and uphold this authority, a respected and authoritative figure with the appropriate qualifications and experience for the particular mission is selected, and that support from UN Headquarters to the figure and authority of the head of mission is crucial to consolidate their authority and ensure it is recognised by stakeholders at the national level, as well.

Role of UNHQ and reach-back support

Throughout the exercise, participants made it clear that UNHQ has a crucial role to play in enabling and supporting the operations of the UNSGM team. Many noted that the deployed UNSGM team and UNHQ personnel out of country should not be seen as two distinct teams, but two sides of the same unit. Former UNSGM investigators noted that contact between the team and UNHQ should be frequent and systematic.

One of the key roles of UNHQ is to take care of mission planning, before the team is even deployed. This includes establishing the appropriate points of contact at the national level, mobilising political support as well as the necessary equipment, collecting information and briefing the UNSGM team on the specifics of the situation in the affected area, including political and cultural dynamics.

The breadth of scope required from UNHQ during planning also applies to the so-called 'reach-back' support made available to the team once the UNSGM mission is deployed. Often, 'reach-back' support is

represented in literature around UNSGM as advice on specialised scientific and technical issues or additional analysis of particular team questions or hypotheses; however, participants noted it should also cover other issues that are just as crucial to the investigators' work, including diplomatic support, linguistic support, and expert advice on the politics and culture of the affected area and how to liaise with specific stakeholders or navigate tricky situations. Expertise on the specific national legal and institutional framework could also be very useful as a feature at HQ or in the field.

UNHQ also has a role in controlling the narrative and public perception around the UNSGM mission at the international level, and should support the team in this. It was noted that the UN has become increasingly capable at managing ongoing media reaction to a CRBN incident and at assessing how a deployed team should interact with media attention. This capability should be encouraged and kept fit for purpose in the rapidly evolving media landscape.

UNSGM team decision-making: 'adapt and explain'

Participants noted that conditions in the field are bound to be complex, and place competing demands on the UNSGM team. Because of this, the team will need to be able to make decisions based on their assessment of what would best serve their mission at the time. One participant summarised this dynamic by saying that the team should have the flexibility to 'adapt and explain' their decisions. When the team deviates from expected procedure, they should document and justify the reasons for their decision to do so, and explain what alternative course of action they took.

For example, participants noted that UN Headquarters are likely to expect the deployed UNSGM investigatory team to document the various hypotheses made about the alleged attack, including those that the team decided to discard or not pursue. The team is likely to be asked what activities were undertaken to confirm or disprove a particular hypothesis, and what the results of these activities were. Furthermore, when the team decides not to further investigate any hypothesis, it will likely be required to explain in detail on what grounds it was discarded.

Evidential value of information and material collected

All participants recognised the importance of using strong, rigorous methods to collect the best possible evidence and preserve its admissibility and evidential value, but recognised that in the field this is not always possible. Participants offered an example of when this may be the case: law enforcement authorities may allow the UNSGM partial access to a site of interest that has been designated as a crime scene, but may not allow them

to directly collect samples from the area, as this may risk contamination or raise suspicion that the scene has been tampered with. In such a case, law enforcement officers may offer to take the samples for the UNSGM team.

Participants with UNSGM experience noted that when it is not possible to collect evidence in such a way that preserves its full admissibility, this may still be useful. In some cases, material and information collected by the team will not be directly useable as evidence. This may be because it has been obtained by other sources, and so the team cannot prove complete chain of custody from collection to analysis; or because the operating conditions in the field did not allow the UNSGM investigatory team to follow all the required procedures to ensure quality control and assurance on the evidence collected. In these cases, this material can be used by the team to put other information in its context, to substantiate or eliminate hypotheses, and to decide which other leads should be followed up on. In this context, it is worth noting that should there ever be an associated tribunal, it would be this body that would ultimately decide on the admissibility of evidence.

Modelling UNSGM values: trust, inclusion and transparency

Participants repeatedly noted that building trust with national stakeholders is key to navigate their concerns and objections, and ensure that the UNSGM investigatory team can fulfil its obligations. In order to do so, the investigators need to show political and cultural sensitivity, as well as the highest standards of honesty and rigor. Demonstrating that the team acts in a transparent manner, and that the investigation is conducted in a culture of transparency and honesty, was seen as an imperative. Participants also noted that the team needs to approach and communicate with all necessary stakeholders.

Interfacing with diverse communities

Participants noted that in most cases, UNSGM investigators will operate in areas where communities are diverse along several different axes: ethnicity, culture, religion, political representation, gender and more. Depending on conditions on the ground, official authorities may not represent all these perspectives equally. As such, UNSGM teams should make efforts to engage with different segments of the population. This may give them access to information that might not available or readily represented in official accounts, and is key to building trust with the local communities, which will be important to facilitate the work of the UNSGM team during deployment.

Recommendations on building capacity for UNSGM

The primary observations to be taken into account and recommendations to be considered from the TTX discussions are:

Knowledge-capture and procedures

Participants discussed the issue of whether Standard Operating Procedures should be developed for the UNSGM. Most noted that full-scope detailed SOPs would in most cases not be appropriate for the Mechanism, as they may not offer the flexibility in operations that UNSGM teams will require on the ground. This is also because many international inspection regimes that use SOPs feature very focused, repeated activities, whereas the UNSGM was designed to provide an adaptable UN response to a broad range of possible incidents.

Participants noted that current thinking within the UN has identified a "hybrid approach" as most suitable. Some procedures, especially those that require a high degree of precision to preserve evidential value, such as collection of samples, should be covered by SOPs or instructions.

Other areas of the UNSGM team operations may be covered by checklists and aide memoirs. These would help to ensure that issues anticipated during training and preparedness exercises are immediately and permanently available to the team during launch and deployment. Such documents would allow for flexibility and ad hoc updating as lessons are identified.

Some participants also noted that the international community has developed resources that could be used in the UNSGM context; for example, the health and safety guidelines in the Comprehensive Test Ban Treaty Organisation's (CTBTO) on-site inspection documentation could readily be adapted for use under UNSGM.

Problems in identifying and learning lessons from previous missions

Participants noted that an ongoing challenge is in the lack of transmission of knowledge, experience and lessons learned between successive 'generations' of UNSGM inspectors. UNSGM records are kept confidential, and little to no official follow-up to UNSGM missions has been done to identify and apply lessons. One

participant proposed that this would be a valuable effort, and that a field manual could be written based on the results of such work.

Standing capacity of UNSGM

Participants discussed existing measures to maintain a standing capacity within the UNSGM, especially in the light of similar initiatives in the context of other international instruments. It was agreed that the UNSGM may not need a full-standing, extensive repertoire of equipment, like the one possessed by the CTBTO, and that UN member states or UN agencies may be able to supply equipment as necessary in case of a UNSGM mission. However, participants also welcomed areas where UNODA has already applied lessons from other instruments, such as setting up training cycles for rosters of experts. The range of skills may need to include preparedness for the level and type of scrutiny that team members may face.

International scrutiny and attacks on investigations' credibility

Participants agreed that possibly the most relevant, and most difficult, lesson learned in the last years of UNSGM mission, is that UNSGM investigators are going to work under an unprecedented level of constant, and at times adversarial, international scrutiny. Some of this scrutiny will be malicious, and politically motivated to attack the impartiality, comptence and legitimacy of the mission. This has an impact both on operational demands, as investigators will need to be especially careful and accurate in the discharge of their duties to justify the findings of the mission, as well as on the welfare of the investigators themselves, as the scrutiny can lead to high stress situations, and may be accompanied by accusations in the media, fabricated news, and harassment over the internet. Participants recognised that this development had not been foreseen when the UNSGM was created in the late 1980s.

Participants unanimously recognised how pernicious this can be for a UNSGM mission, and that the UNSGM team and UNHQ need to take it into account and cooperate strongly on this, handling public relations and providing investigators with the support, security and training they need to bear with this.

Role of equipment and technological advancement

Participants noted that the main challenge to deploying equipment may not be primarily the availability of advanced technologies, but appropriate certification that such equipment is reliable and free from contamination. Equipment used by UNSGM investigatory teams needs to be certified by appropriate international

standards, in order to ensure the reliability and quality of the results it provides. Without this type of certification, the results obtained by using this equipment may not carry a strong evidential value.

Often, new technologies cannot be employed in support of an investigation because they have not been certified to an appropriate standard – or because no such standard exists for that type of equipment yet.

One participant noted that in the past, expert communities have been successful in pursuing certification of relevant equipment by exploiting their potential use as medical equipment or in other areas, and having it certified by professional standards that are equally rigorous but less subject to political scrutiny.

Another participant noted that equipment with insufficient certification may still be used to support analysis and decision-making by the mission, even if the results would not have evidential value and would need to be replicated or confirmed with certified equipment.

Recommendations for future work

Some possibilities for useful practical follow-up work using the TTX format and the scenario developed by VERTIC were outlined. These are the following:

I. Repeating the TTX to investigate capabilities, priorities and perspectives across regions:

- a. *Developing regions*: the TTX could be repeated in other regions, each focusing on drawing together experts and government officials from that area. With this approach, the TTX format will help collect information on the perspective, capabilities and sensitivities of a broad and representative range of countries, and will help raise awareness for UNSGM. It will also be useful to understand the reactions of national responders who are much less familiar with the international processes and actual CBRN response spectrum than the participants who took part in this initial TTX, especially since the former make up the majority of responders worldwide.
- b. *Developed regions*: in addition, since the TTX has only been held once, it would be very helpful to run it in other countries with mature BW response and investigation capabilities as well to identify key differences and similarities in responses by national authorities.
- 2. Repeating the TTX to investigate capabilities, priorities and perspective using constituencies such as international humanitarian relief organisations. There were rich discussions between the participants from the UNSGM headquarters, former UNSGM investigators deployed in the field, and participants representing international humanitarian relief organisation. A TTX tailored to highlight the role, involvement and sensitivities of international humanitarian relief organisations and involving practitioners from that sector could help to identify and mitigate specific concerns from the community.
- 3. **Repeating the TTX with UN Staff to test UNSGM procedures at different stages of mission**: the TTX scenario presents several challenges that could be useful to test earlier phases of the UNSGM. These include:
 - a. the period immediately after the UN Secretary General receives a report from a member state alleging the use of a biological weapon. At this stage the UNSG and their team must weigh the information they have in hand to make a decision to launch the UNSGM or not. Such a decision could be particularly

- challenging in the case of an alleged use of BW compared with CW due to possibility of an outbreak being natural, accidental or deliberate.
- b. The period immediately after a decision to launch an investigation has been made by the UNSG and UN staff when expert consultants must put a plan of action into motion to carry out a successful and safe investigation.
- 4. A comprehensive mapping of normative frameworks, operational requirements and other factors that influence decision-making of national and international stakeholders. Further research could build on the discussion from the TTX and on the basis established in VERTIC's forthcoming report. Additional reviews of literature and reports from previous international investigations, including interviews and consultations with practitioners from a range of countries and professional background could be useful. The final product may be used as training material or compiled in a field guide, to help members of future UNSGM team plan their approach with different actors involved in the response to the incident.
- 5. **Investigating 'win-win' mitigation measures**. Some of the participants to the TTX highlighted that in some cases, even when the UNSGM team and local stakeholders have conflicting or mismatched priorities, it is possible to find solutions that bring positive utility to all actors involved. For example, the UNSGM mission may be able to share information that national authorities are not equipped to collect on their own in exchange for information or material collected by national authorities before the UNSGM mission was deployed. Building on the research outlined in point 4 (on factors that influence decision-making of stakeholders), and carrying out case studies and interviews with practitioners, further research may offer blueprints for resolving conflicts during deployment.