Exercise Castle Rock
Health response: lessons learned and recommendations for review of the interim multiple Scientific and Technical Advice Cell (STAC) guidance

The aim of the paper is to review the observations made by the umpires in relation to the STAC response provided as part of Exercise Castle Rock. From these observations, recommendations are provided in relation to the review of the interim arrangements for the providing health, scientific and technical advice when multiple strategic coordinating groups (SCGs) have been established (multiple STAC guidance) that was issued in February 2010.

Exercise Castle Rock was a series of counter terrorism exercise activities sponsored by the (Home Office) Office for security and counter terrorism and as part of the UK National Counter Terrorism Exercise Programme. The live exercise took place on 7th to 9th September 2010. The scenario comprised of a deliberate CBRN attack upon the UK financial sector with subsequent overt response required including significant consequence management issues. The exercise was significant in that it tested and evaluated an overt response to a terrorist incident, alongside a concurrent covert investigation.

Several umpires were arranged by the Scottish Government NHS Resilience Team to look specifically how the STACs operated during the exercise. The observers were given several objectives to which they were asked to gather evidence of the performance of the NHS Boards and to provide recommendations for consideration based on their observations. These objectives could be liked directly back to the overall exercise objectives.

The objectives the umpires received were as follows:

- How well did the interface between Home Office chaired SAGE and STACs work? Was all information received by the primary STAC disseminated to the local STACs? If not, was there any conflict of information?
- Were staff within the STAC aware of the new structure of local STACs with one primary STAC? Did this structure work and did it feed into the SCGs and the other STACs in a coordinated and timeous manner?
- Examine:
    - The development of a consequence management strategy both at local and national level. Was a strategy set, did it have an appropriate overall aim, did it have clear supporting objectives and were these reviewed as the situation evolved?
    - How communications and a media relationship assist in achieving objectives of a CM strategy.
    - The understanding of and response to emerging media developments.
- How did the various agencies (public and private) work together, was there clear and appropriate communications between them? What was the impact/influence of the SG Liaison Officers?
- How did the ICT work? Were there any problems, did it work well, did everyone understand how to use the various pieces of communication equipment? Was restricted/secret information handled or shared appropriately?

- What impact did this incident have on the NHS in Scotland in terms of capacity and capability to respond to the crisis and consequence management phases? Could the STAC have been maintained for a prolonged period?
- What risk analysis (risk assessment, risk management and risk communication) activities were carried out by HPS and NHS Scotland and how aware of this were the staff within the STAC?
- Did STAC members understand their role and purpose? Was all information required by SCGs provided by the STAC and if so was this provided at local level or through primary STAC?
- How practical was the primary STAC arrangement in terms of providing the SCG, Scottish Government, SAGE and any other UK level bodies with all necessary advice in a timeous and coordinated manner? Did this advice conflict with advice form the local STACs or other agencies?
- Did the STAC receive all the specialist advice it required from the health protection response of NHS Boards and HPS?

An umpire report was received for each participating NHS Board and a de-brief was also received from some of the participating NHS Boards. The feedback from the umpires identified several points for consideration. Each point is described below followed by a recommendation for consideration in the revision of STAC and multiple STAC guidance.

1. Although there were technical issues around communication linkage (discussed at point 9.), the linkage between the primary STAC and SAGE appeared to be successful (subsequent to the initial meeting). These arrangements for provision of scientific advice worked reasonable well when they were required but there were some apparent issues around role clarification and coordination. SAGE would be expected to provide national information and than STAC would be able to utilise SAGE to assist in making appropriate recommendations. Differences in advice occurred between the primary STAC and SAGE and although overcome, an improved understanding of the relationship between primary STAC and SAGE is required. STAC should be better able to identify local level issues and provide advice on appropriate solutions whilst SAGE would be better placed to offer advice on issues of national significance.

Draft guidance from the Cabinet Office for the activation and operation of SAGE is being reviewed by Scottish Resilience and the relationship with STAC would fall as part of this review.

1.1 Recommendation: Guidance on activation and operation of SAGE should provide details of the interaction between SAGE and STAC (either single or multiple). This guidance should be reflected in the STAC and multi STAC guidance.

2. Some of the observations from the secondary STACs were that not all the information that had been received at the primary STAC had been disseminated. The timings of meetings appeared to cause difficulties with sharing of information between STACs and led to some inconsistency in responses. The rhythm of meetings proved difficult to ensure all STACs were represented and resulted in clashes of meetings across the NHS Boards involved. A pre-STAC meeting involving all the STAC chairs was found to be useful in ensuring information provision and requirements were met.

2.1 Recommendation: Meeting rhythms and STAC chair meeting should be established as soon into the event as possible and the primary STAC should be responsible for providing a schedule of planned meetings to the secondary STACs. This would ensure the other STACs are cognizant of the primary STAC schedule in the development of their meeting schedule. Pre- STAC chairs meetings should be scheduled to ensure a consistent interaction between chairs to allow information flow.

3. All participating NHS staff appeared to be aware and understood the structures that were utilised in the exercise. This was due to a variety of reasons (pre-exercise circulation of the interim guidance; in-house training sessions; table top exercises; etc.) that contributed to this awareness and understanding. The role of the primary STAC appears to require to be clarified and the routes for information flow into and out of the primary STAC should be clearly established. There appeared to be an understanding from the SCG chair (documented from one area) that they appreciated the need for consistency of the information provided by their STAC to that produced by the primary STAC. Frustration was caused through the observation that information was only being provided to the primary STAC but this was improved through pre- STAC chairs meetings.

3.1 Recommendation: STAC guidance (single and multiple) should make clear the responsibilities of the primary and additional STACs in relation to communication and information sharing. The primary STAC should maintain the coordination between the additional STACs and ensure that the additional STAC chairs are aware of the primary STAC responsibilities for the coordination of advice from national agencies and sharing that advice with the additional STACs established in other SCG areas. This responsibility should be clearly explained in the guidance for multiple STACs.
Clear line of responsibility for communication should be included in the guidance detailing who has the responsibility to ensure the communication is taking place and protocols should be established for teleconference/videoconferencing to ensure all necessary actions are undertaken.

4. One area had located the STAC and SCG in separate locations. This was felt to be detrimental to the success of the exercise. The co-location of the STAC and SCG was considered essential to improve the consistency, coordination and efficiency of the response.

4.1 Recommendation: STAC guidance should encourage the co-location of the STAC and SCG as this reduces potential barriers that may be detrimental to the effectiveness of the response. This should apply to both single and multiple STAC guidance.

5. The development of a consequence management strategy did not appear to be evident from the observations received. The SCG CM strategy was in development as the exercise progressed but was not clear at the outset and from the additional STACs. A Site Clearance Group was to be set up but the composition/role/remit and interaction of this group and the primary STAC had not been finalised.

5.1 Recommendation: CM SCG should be considering a consequence management strategy that provides clear objectives. The aims and objectives of the SCG should be

understood by the STAC and the STAC chair should be clearly sighted on the expectations for the STAC.

6. A NHS communications role is identified in the STAC guidance. It was observed that this role may be under resourced considering the amount of media interest that would be generated by such an event. As this role is required to ensure consistency in the message from the SCGs and STAC and also to handle the reactive media it was considered that one communications representative would be insufficient. A communications representative would ensure that the correct message is being provided to the media in line with a consequence management strategy.

The handling of local media requests was unclear as to what the role of the additional STAC NHS communications representative would be in relation to the primary STAC NHS communications representative.

6.1 Recommendation: Communications representation should be maintained from NHS as part of STAC guidance. The guidance should reflect the adaptability that is required to be built into this function, as the meeting workload and media interest may overwhelm the capability of one individual to respond effectively in the appropriate timescales. This should include the relationship with main co-ordinating group in relation to release of press statements.
6.2 Recommendation: The guidance should stipulate the arrangements for handling national and local media requests and the authorisation process to allow agreement of press statements with the main co-ordinating group.

7. Interagency cooperation was reported to be successful across all the STACs and it was observed that there was a clear understanding of their roles and responsibilities. The production of and agreement of minutes from all the STACs should be improved to ensure appropriate sharing of information between the STACs and SCGs.

7.1 Recommendation: Meeting protocols should include the circulation of draft STAC minutes and should be made available prior to joint STAC meetings to allow for ratification.

8. SG liaison officers were found to be supportive throughout the exercise. Police liaison officers were additionally found to useful and provided an excellent contribution in relation to the STAC arrangements. Defence Science and Technology Laboratory (DSTL) were considered to be guarded in the provision of some information to the STAC.

8.1 Recommendation: Police liaison officers should be maintained as core STAC group members. Scottish Government Liaison Officers were found to be useful and contributed to the response particularly with the primary STAC.

9. ICT equipment particularly teleconferencing facilities proved problematic throughout the exercise. Systems dropped out of use and resulted in key information not being disseminated across all the STACs. The quality of the calls were also restrictive and resulted in speakers having to move to make themselves heard resulting in lengthening of calls and inhibiting the flow of the teleconference. Meeting notes were not received until the afternoon following morning meetings which meant

if key aspects had been missed then there would be a delay or misdirection in the resulting action (if required).

9.1 Recommendation: Teleconferencing facilities should be consistent and fit for purpose and should be tested on a regular basis to ensure it is functional and can be used easily by STAC members. During a response these facilities should be tested at the start of the day by the STAC manager or Support team.
9.2 Recommendation: The timescales for the distribution of notes should be agreed in advance of the teleconference.

10. There was no interoperability between host systems (NHS or PNN) which resulted in difficulties in accessing and producing information. Access had been pre-arranged for the exercise but in the event of a real response the access would be difficult to achieve quickly. Access to wireless connectivity (if available) was not permitted to partner agencies and this resulted in an increased volume of telephone calls.

10.1 Recommendation: Appropriate IT facilities that are required for co-location of STAC with SCGs should be discussed and necessary arrangements put in place to ensure these facilities are available (including generic mail boxes). Templates from STAC guidance could be created and uploaded on to different IT systems to improve preparedness.

11. There was some mis-understanding of the restricted/secure marking arrangements and although understood by many involved some individuals had little awareness of the markings and handling/ sharing implications.

11.1 Recommendation: Briefing on security marking could be incorporated into STAC training or as a part of briefing pack for STAC members.

12. The observers noted that although there was no difficulty in maintaining the capacity and capability of the response there were concerns that this would not be sustainable over a longer period of time. This was particularly evident of the NHS Public Health Departments who were servicing and supporting the STAC. It was felt that without mutual aid it would be unlikely that the STACs would be unable to be maintained to service the SCGs. It was suggested that should a primary STAC be in operation that the additional or secondary STACs should function as a mechanism to interpret and interrogate the Primary STAC information and advice for the local command structures. This would help to alleviate some of the pressure on sustainability that may be created through a protracted response.

12.1 Recommendation: Surge capacity (mutual aid) arrangements should be made between NHS Boards to aid in the response to any extended response. This would be geographically based and is likely to be in place in the NHS Boards.

13. The multiple STAC guidance should review the need for secondary STACs that would perform the full STAC functions but as a secondary STAC should be considered to consist of a small scale STAC (perhaps Chair and several others) to allow the interrogation and interpretation of the information and advice from the primary STAC for the local SCG. The secondary STAC would be scalable in membership to allow to manage the demands placed upon it. All NHS Boards must

maintain the capacity to provide staff to a STAC but if they are in a situation where their requirement is for a secondary/additional STAC then the membership of this group required could be reviewed/amended.

13.1 Recommendation: The terminology for the secondary STAC should be altered to reflect the change in action that this group would be expected to take. This group should act as a mechanism to interpret and interrogate the information from the primary STAC and provide a direct linkage between their SCG and the primary STAC in relation to all scientific and technical information. The function of interpretation would afford the primary STAC with peer support and reduce the need for multiple experts as these views would be provided through the primary STAC.

The multiple STAC structure will need to be reviewed to accommodate this change in the responsibility of the secondary STACs. The aim of the secondary groups when a primary STAC is in place should be clearly defined in the review of the guidance.

14. Observations made in relation to the risk analysis conducted by HPS and NHS Scotland was positive. The co-location of HPS and other experts ensured sound risk analysis was given to problems encountered. Wider issues must continue to be approached on a regular basis and revisited to ensure new information presented would not change the course of action taken. All STAC reported that they had sufficient information to make the necessary decisions for their respective population.

All Observers reported that the STAC members understood their roles and acted accordingly. STAC chair training ensured that the staff had the appropriate skills and knowledge to act as chairs. An observation was made that support staff may have benefitted from more training or familiarisation with STAC arrangements. The separate location of the STAC and SCG in one area raised issues around the provision of timely advice and as to whether all the information required by the SCG was provided. As the secondary STAC were not directly producing advice for their SCG there is a need to understand what the STAC is there for and to focus their activity on the role that they should be delivering. Communication with national bodies such as Scottish Government, SAGE etc should be through the primary STAC in order to avoid conflicting or misinformation.

14.1 Recommendation: The review of the multiple STAC guidance should incorporate the observations made as to the role of the secondary groups. The guidance should reflect the aims of these groups to ensure that they act to interpret and interrogate the advice from the primary STAC and ensure the scientific and technical advice required by their SCG is being provided by the primary STAC. The role of the primary STAC in relation to communication and relationships with other SCGs, national agencies and Scottish Government should be clearly defined in the guidance.

15. The primary STAC, who were co-located with specialist advisors were well informed. Secondary STACs felt that although a HPS colleague was present and dealt directly with information requests that some wider HPS advice was not being shared. The location of a representative from DSTL should be considered if possible as there was some delay in the receipt results in relation to the samples presented.

15.1 Recommendation: The primary STAC should have access to national experts and then any appropriate information should be cascaded to the secondary groups. The presence of a local HPS representative at the secondary groups was positive and should be recommended if possible to assist in the interpretation and interrogation of the primary STAC information.
DSTL representative should remain as an optional specialist advisor to the STAC. This would only be to the primary STAC and the secondary groups would receive the advice through the linkage with the primary STAC.

16. The interim multiple STAC guidance additionally describes a second option that could be used in the response to an incident that involves multiple SCGs. This option involves the creation of a SGoRR-STAC where a STAC would be formed at the Scottish Government. The formation of such a group would result in the movement of specialist advisor from the local STAC structure and place them into Scottish Government. The Chief Medical Officer or Senior Medical Officer from the Chief Medical Officer and Public Health Directorate would chair the SGoRR-STAC and who also is expected to attend SGoR(O) and CSC-SGoR. Additionally the Chief Medical Officer and Public Health Directorate would be responsible for providing secretarial support for SGoRR-STAC and for recording and producing minutes or actions arising from the meetings. There are issues relating to the accommodation of the SGoRR-STAC; the ICT requirements for the SGORR-STAC to function; and the availability of staff to chair and attend the STAC and to provide the necessary secretarial support for the SGoRR-STAC.

16.1 Recommendation: the SGoRR-STAC option should be removed and the primary STAC option be considered as the model to be used when there is an incident that involves multiple SCGs.

17. The information exchange between the primary STAC and the Scottish Government was slow at the outset of the exercise. This responsibility for the maintenance of the flow of information falls to the Chief Medical Officer and Public Health Directorate. This should be detailed in the multiple STAC guidance to ensure awareness of this role is had by both the primary STAC and the Scottish Government Directorate. The primary STAC should anticipate the linkage with the Scottish Government and additionally provide advice to the SCG and Scottish Government concurrently.

17.1 Recommendation: Multiple STAC guidance should clearly describe the communication structure required to ensure that the primary STAC provides linkage to the secondary "STACs" and with the Scottish Government. The guidance should describe how effective information exchange can be achieved to enable the Scottish Government to be informed without duplication of work/effort from the primary STAC.

The 17 recommendations that are made above should be considered during the review of the arrangements for the provision of scientific and technical advice when multiple strategic coordinating groups have been established. The recommendations should be considered centrally with input from all agencies who may be asked to provide expert advice into a STAC. As a STAC may be led by other agencies in addition to health, it

should be considered that the arrangements should be suitable in the event that health is not leading the STAC supporting the SCG.

The review of the interim arrangements for the provision of health, scientific and technical advice when multiple strategic coordinating groups have been established should produce guidance that will compliment the Preparing Scotland STAC Guidance. This revised guidance can then be adopted in the continued STAC training to ensure that the multiple agencies involved are appropriately trained in the structure and function of STAC in an incident involving multiple SCGs.