

SOP FOR SHOC

Standard Operating Procedures

For AFRO
Strategic Health
Operations Centre
(AFRO SHOC)



World Health
Organization

REGIONAL OFFICE FOR Africa

AFRO SHOC

AFRO SHOC

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Operations Centre
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Disease Surveillance and Response Programme Area
Disease Prevention and Control Cluster

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ACRONYMS

AAR	After-Action Review
AFRO	WHO African Region
BGAN	Broadband Global Area Network
BO	Breakout Room
COP	Common Operating Picture
COOP	Continuity of Operations
DAF	Division of Administration and Finance
DON	Disease Outbreak News
DPC	Disease Prevention and Control
DPR	Disaster Properness and Response
DSR	Disease Surveillance and Response
EAV	Epidemic Alert and Verification
EPR	Epidemic and Pandemic Alert and Response
EIS	Event Information Site
EMS	Event Management System
EST	Emergency Support Team
EOC	Emergency Operations Centre
GIS	Geographic Information System
HQ	Headquarters
ICT	Information and Communication Technology
IDSR	Integrated Disease and Surveillance Report
IHR	International Health Regulations
IST	Inter-country Support Team
IVE	Immunization, Vaccine and Emergencies
PHE	Public Health Event
PAC	Programme Area Coordinator
POC	Point of Contact
RRT	Rapid Response Team
SHOC	Strategic Health Operations Centre
SOP	Standard Operating Procedure
SITREP	Situation Report
SWOT	Strengths, Weaknesses, Opportunities, Training
TOR	Terms of Reference
VSHOC	Virtual Strategic Health Operations Centre
WebEOC	Web Emergency Operations Centre
WCO	WHO Country Office
WHO	World Health Organization

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1. BACKGROUND



1. BACKGROUND

1.1 HISTORY

The WHO African Region experiences each year on average 100 Public Health Events (PHE), of which more than 80% are of infectious origin.

The urgent need for the Strategic Health Operations Centre (SHOC) at the WHO Regional Office for Africa (AFRO) was evident during the influenza A (H1N1) pandemic in 2009. AFRO coordinated the response to the pandemic through the establishment of a Crisis Management Team. It had to designate a makeshift SHOC without adequate equipment and infrastructure for effective coordination of the response. This urgent need was duly recognized by the Regional Director, who released funding for implementation of the AFRO SHOC project in October 2009. This led to intensive collaborative efforts within AFRO, as well as with WHO HQ and CDC/Atlanta, to ensure early completion of the project. These efforts led to the completion of the SHOC project in record time (June 2010) with the subsequent inauguration of the facility by the Regional Director on 17 August 2010.

1.2 JUSTIFICATION OF THE SHOC

Effective coordination enhances timely responses to PHEs and plays a critical role in reducing morbidity and mortality. Moreover, it reduces duplication and competition, and allows different agencies and organizations to complement each other.

Given the burden of outbreaks and other PHEs in the WHO African Region, the availability of a central place for coordination of responses to PHEs that supports real time communication and information management is very crucial. The AFRO SHOC serves as a central place for coordination of responses to all PHEs that occur in the Region. It facilitates communication with the field, provides availability of real-time data and information for action, and enhances collaboration with Member States and partners. It is the central location from where AFRO provides the four critical functions in an emergency response: leadership, information, technical expertise, and core services (ref).

The primary purpose of the SHOC is to coordinate the preparation for and response to PHEs. The preparation includes planning, training sessions and exercises, while the response includes all activities related to investigation, response and recovery. When the space is not being used for these purposes, it may, with advance coordination, be used for routine meetings.

1.3 STRUCTURE OF DOCUMENT

This document describes the AFRO SHOC infrastructure and the services that it provides during public health emergency operations. These include: daily operations and PHE response operations; management and operation of the SHOC; data and information management; communication; Continuity of Operations (COOP); and preventive and curative maintenance of the facility.



2. OBJECTIVE

2. OBJECTIVE OF THE STANDARD OPERATING PROCEDURES (SOP)

The objective of these SOPs is to provide a comprehensive guidance for the management of the AFRO SHOC. It defines procedures to follow during coordination of responses to PHEs from the SHOC in order to ensure optimal and effective use and maintenance of the facility.

The document gives a step-by-step guidance for:

- day-to-day management and operations of the facility
- procedures to follow to activate the SHOC to coordinate the responses to PHEs
- operations of the SHOC during different levels of activation
- management of data and information for evidence-based decision-making
- management of resources for running the facility.

The SOPs will be reviewed and updated at least once a year, although significant changes, based on lessons learned from SHOC activations, may be made at any time.

3. TARGET



3. TARGET AUDIENCE

The SOPs is an internal WHO document, which is intended to be utilized by AFRO management to make decisions for activating the SHOC, by users who coordinate the response to outbreaks and other public health emergencies, and by the SHOC Manager. The document may also be adapted by IST SHOCs to guide their management and operations.



4. DESCRIPTION

4. DESCRIPTION OF AFRO SHOC

The AFRO SHOC is a hub for coordination of responses, information and communication during PHEs in the WHO African Region. It is equipped with Information and Communication Technology (ICT) and audio visual equipment specifically designed to support the surge capacity required during emergencies.

The SHOC brings together multidisciplinary experts to coordinate responses to PHEs. The experts are connected with Member States, ISTs, HQ and other technical partners via the available technology. The SHOC supports AFRO in receiving real-time information at a central place. The data and information received are recorded, documented, analysed, visualized and displayed for informed decision-making. Furthermore, information products are shared with stakeholders and the public and published on the WHO AFRO website. Press materials are released when needed. The main components of the AFRO SHOC, as described above, are illustrated in Figure 1.

FIGURE 1. Components of the SHOC



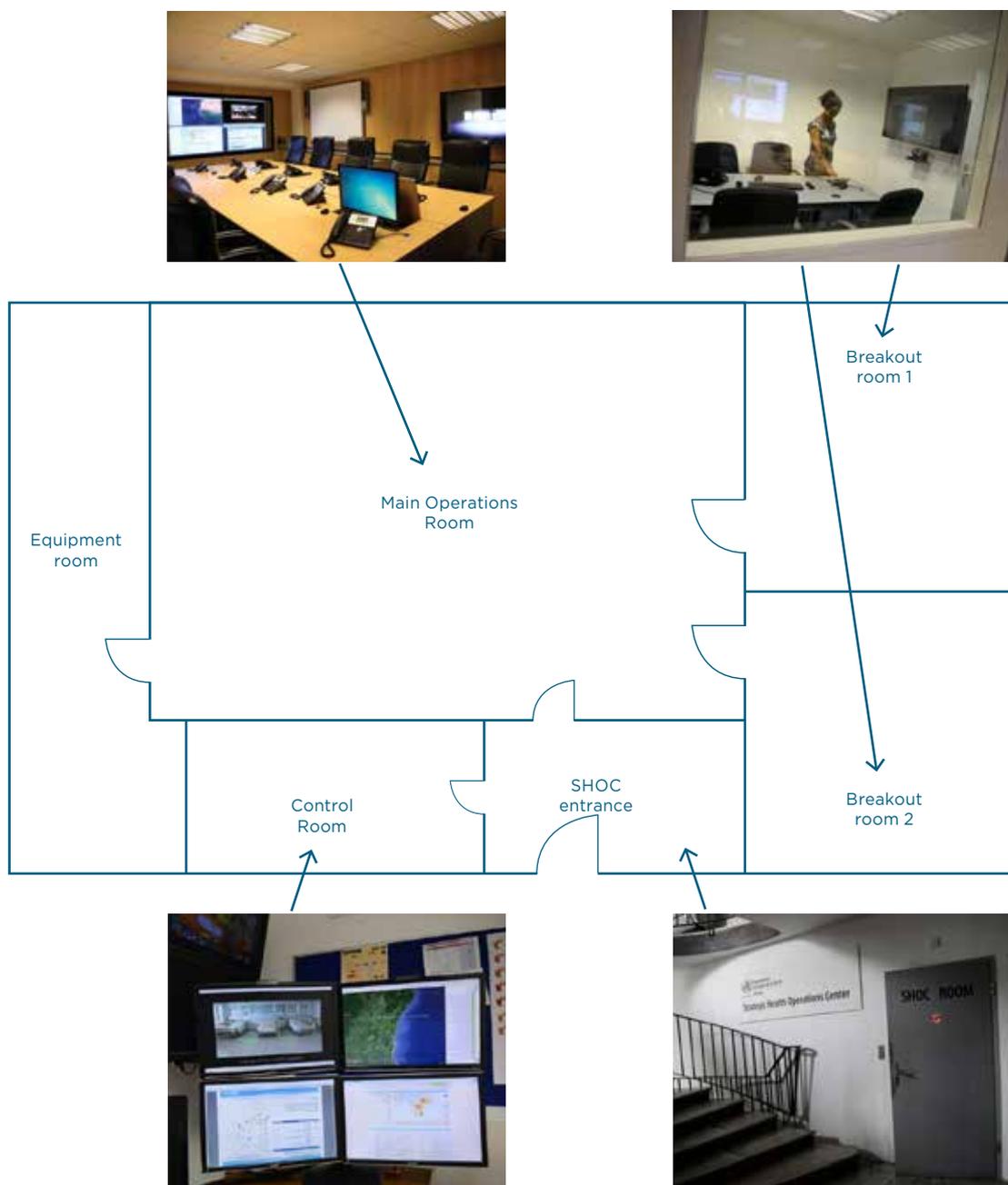
The AFRO SHOC consists of:

1. one main operations room
2. two breakout rooms
3. one control room
4. one equipment room

Detailed description of the SHOC operation rooms, available technology as well as services that it provides is provided in Annex 1. The layout of the AFRO SHOC is shown in Figure 2.

4. DESCRIPTION

FIGURE 2. WHO-AFRO Strategic Health Operations Centre (SHOC) Layout





5. MANAGEMENT

5. MANAGEMENT AND OPERATIONS OF AFRO SHOC

This section describes the different aspects of management and operations of the SHOC.

5.1 MANAGEMENT OF THE SHOC

5.1.1 SHOC MANAGER

The SHOC is currently managed by the Disease Surveillance and Response (DSR) Programme Area under the DPC Cluster. The SHOC Manager is supervised by the DSR Programme Area Coordinator (PAC) and is responsible for the day-to-day operations of the AFRO SHOC.

The roles and responsibilities of the SHOC manager are to:

- Coordinate availability of SHOC facilities in all AFRO programmes and clusters based on identified priorities;
- Carry out regular system checks, using the checklist in Annexes I, II and III;
- Manage videoconferences, teleconferences, and webconferences;
- Manage information through the Virtual SHOC (VSHOC);
- Maintain the Common Operating Picture (COP);
- Display and publish relevant information for decision-making.

5.1.2 USERS

As an Emergency Operations Centre (EOC), the SHOC is primarily utilized by the emergency programmes, namely Epidemic and Pandemic Alert and Response (EPR) and Outbreak and Disaster Management (ODM) and Polio. Services are also provided to other clusters, depending on availability of the facility.

Users are requested to fully respect the following operation rules of the SHOC:

1. Before planning any conference or meeting in the SHOC, the SHOC Manager should be informed and the subject of the conference must be communicated either by e-mail or by completing the online request form at (http://intranet.who.int/asp/datacol/survey.asp?survey_id=5666).
2. If trained users set up a connection, they must hang-up the connection when they are through with their conferences to avoid unnecessary waste of resources.
3. Users must respect the seating plan developed during activation periods.
4. Ethernet cables (cable for internet connection) should not be removed from the workstations and used for users' laptops. Only the wireless connection available in the SHOC must be used. If the wireless connection is down, users should contact the SHOC Manager if internet connection is required.
5. Drinks and food are not allowed in the SHOC. Spilling drinks on tables in the SHOC may spoil the computers placed under the tables.

5. MANAGEMENT

6. SHOC door access codes must not be shared with persons not approved for SHOC access.

Failure to comply with these rules may result in disapproval of SHOC usage requests.

5.1.3 ACCESS TO THE SHOC ROOM

The SHOC room entrance door is access code protected. During routine SHOC operations, the access code of the SHOC will be given to the following directors and programme staff on a permanent basis since they are the primary users of the SHOC.

- DPC Director
- IVE Director
- Polio staff
- DSR staff
- ODM staff
- Others (upon DSR Programme Area Coordinator's approval).

A list of staff with permanent access is attached as Annex IV.

When there is a need to grant access to the SHOC to others, the requestor should complete Form 1 (Annex VI). The requestor will provide justification for access, and also indicate whether the access will be temporary or permanent. The completed form will be submitted to the DSR Programme Area Coordinator for approval, following the routine indicated in the form. The DSR Programme Area Secretariat should transmit the approved form to the SHOC Manager for archiving.

Once access has been approved, the SHOC Manager will give the door access code to the individual. This code must not be shared with persons not authorized access to the SHOC. Violations of this rule may result in removal from the SHOC access list.

During full activation of the SHOC, only staff members who are directly related to the response of the current PHE should have access to the SHOC. A list of staff with access to the SHOC to participate as part of the Emergency Support Team (EST) will be prepared and posted (Annex V).

A log book (Annex VII) will be available in the control room. During SHOC activation periods, all those coming to work from the SHOC will sign in on entry and sign out when leaving the room. This will provide a record of individual participation and SHOC usage.

The SHOC access code will be changed biannually, or if it appears that there has been unauthorized access to the SHOC facility.

5.1.4 SERVICE REQUESTS

Scheduling videoconferences, teleconferences and webconferences

All requests for use of the SHOC facility should be submitted by completing the online form in the link http://intranet.who.int/asp/datacol/survey.asp?survey_id=5666.

5. MANAGEMENT

The request will be routed to the SHOC Manager via generic SHOC e-mail: afrgoshocafro@who.int. The following information should be provided in the request form:

- a) Purpose of usage
- b) Date
- c) Resource to be used (videoconference, teleconference, meeting room, etc)
- d) Period required
- e) Number of persons expected to use the facility
- f) Number of locations to be connected.

The SHOC Point of Contact (POC), 39970, should be dialled to check availability of the SHOC before sending any request.

Routine requests should be forwarded at least two working days before the event to allow for necessary scheduling and prior preparation. Confirmation of the availability of the SHOC will be sent to the requesting unit thereafter.

Requests for support for PHE response activities have priority over routine requests and every effort will be made to accommodate them. Requestors should give the SHOC Manager as much advance notice as possible to give him enough time to connect with all necessary parties.

5.1.5 REGULAR FACILITY FUNCTIONS CHECKS

To ensure continuous functionality of the systems, so that the SHOC is always ready for activation, it is vital to carry out regular checks of the systems. Daily system checks will be performed using the schedule provided in Annex I and the checklist provided in Annex III. As part of these checks, videoconference connections will be established with selected sites from the table in Annex VII every Monday and will be recorded, using the checklist in Annexes II and III.

5.2 OPERATIONS OF THE SHOC DURING ACTIVATION

The primary purpose of the AFRO SHOC is to provide a single coordination point for response to outbreaks and other public health emergencies. During response operations, the SHOC will need to be fully engaged to facilitate effective coordination of the response. The facility will not be available to users who are not directly involved in the response. All routine conferences will be cancelled. However, programmes may request the SHOC Manager to provide a GPN bridge number in order to hold routine conferences from an alternative conference room or individual offices.

When the SHOC is activated, an information note will be published on the intranet and an e-mail notice will be sent to the five clusters and the programmes under each cluster (model e-mail in Annex VIII). The latter will be duly informed of the on-going event and inaccessibility of the SHOC services through afrgoafroshoc@who.int.

5. MANAGEMENT

5.2.1 SHOC ACTIVATION LEVELS

Based on the experience acquired from coordination of responses to PHEs in the Region, approaches used to assess severity, magnitude, scope and consequences of public health events in line with IHR, the AFRO SHOC defines three levels of activation to coordinate responses to public health events. These are:

1. Routine monitoring of PHEs

2. Partial activation

3. Full-scale activation.

The levels of activation are determined based on the results of the risk assessment. The SHOC is activated immediately after the risk assessment is completed.

Level 1 - Routine monitoring of PHEs

This phase corresponds to the normal day-to-day business activities, where the SHOC team is constantly monitoring all ongoing events through the Event Management System (EMS). During this phase, coordination of events does not exceed WCO capacity, and coordination from the SHOC is not required. However, technical support may be provided by AFRO.

At this stage, AFRO is in a constant state of readiness and preparedness to support any escalation of levels, as required. This level might correspond to monitoring events that are Ungraded or classified as Grade 1 of the Emergency Response Framework (ERF) grading scheme.

Examples of these events are Cholera outbreak in Namibia, Guinea, etc in 2013, Dengue fever outbreak in Tanzania in 2013 and flooding in Uganda in 2012 (source: EMS).

Level 2 - Partial Activation

This phase corresponds to the activation of the SHOC for coordination of responses to PHEs that result in higher morbidity and/or mortality and requires certain resource support from the Regional Office. At this stage, the capacity of the country is exceeded and the Member State requires assistance from WHO/AFRO. This level may correspond to Grade 2 of the ERF grading scheme.

Examples of these events are Ebola outbreaks in Uganda and DR Congo in 2012 and Cholera outbreak in Serra Leone in 2012 (source: EMS).

During this level of activation,

- AFRO coordinates responses through the SHOC;
- there is a designated Event Manager, from DSR or another programme, based on the nature of the event, to ensure coordination of the response;
- an EST is formed to undertake appropriate activities, based on their roles and responsibilities;
- the WCO mobilizes substantial existing resources and also requires some level of WHO international support;

5. MANAGEMENT

- the EST work extended business hours;
- priority will be given to the ongoing event for which the SHOC is activated. Most of the routine and current activities in the SHOC will be postponed or cancelled;
- the telecommunication facility and the rooms will mainly be used for this PHE. Other activities will be accorded less priority.

Level 3 - Full-scale Activation

This phase corresponds to activation of the SHOC or coordination of responses to epidemics and pandemics, as well as disasters with very high morbidity and mortality rates, which are expected to affect multiple countries or regions. This is when Member States are overwhelmed by the incident, particularly the WCO and other UN offices in the country. The WCO mobilizes its existing resources and requires substantial WHO international support. This phase may correspond to Grade 3 of the ERF grading scheme. An example of this event is the outbreak of the H1N1 pandemic in 2009.

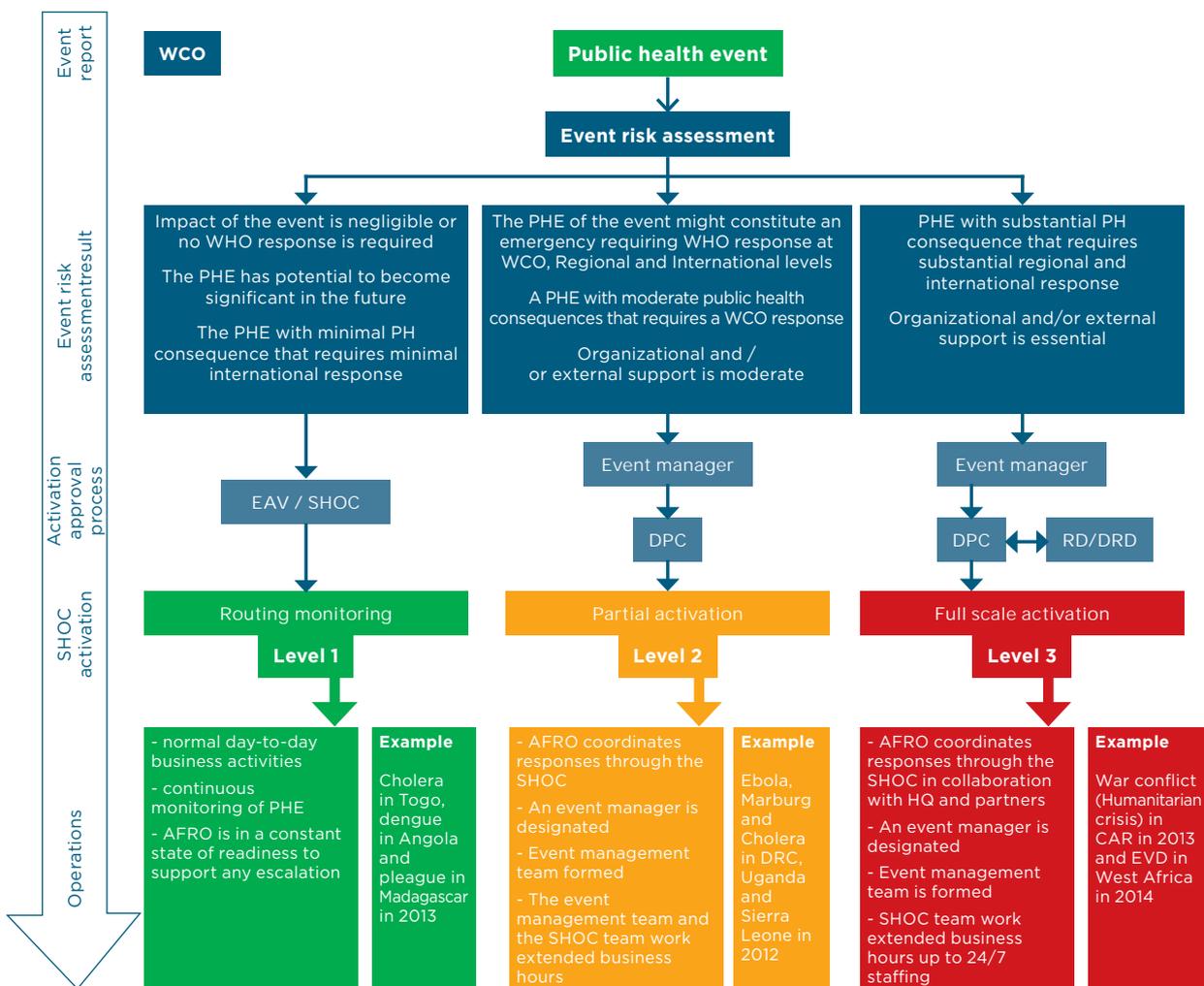
During this level of activation,

- AFRO coordinates responses through the SHOC, in collaboration with HQ and partners;
- an Event Manager is designated from a programme based on the nature of event;
- an EST is formed with the participation of different programmes and clusters, and works extended business hours, up to 24/7, if needed;
- the SHOC Team works extended business hours, up to 24/7 staffing, if needed;
- all functional areas are activated;
- the SHOC is solely dedicated to the coordination of this PHE;
- daily event summary and dashboard are prepared.

The different activation levels are illustrated in Figure 3

5. MANAGEMENT

FIGURE 3. SHOC Activation Levels, description and procedures



An activation checklist is provided in Annex IX.

5.2.2 SHOC ACTIVATION PROCEDURE

The designated event manager prepares a memorandum justifying the need to activate the SHOC in the required level, using the existing communication channel. The memorandum will be addressed to DPC for Level 2 activation and RD for Level 3 activation.

5. MANAGEMENT

In cases of complex emergencies such as disasters, the request for activation of the SHOC may arise at any given time as the event occurs. In such situations, a formal activation procedure may not be followed. Instruction to activate the SHOC could come directly from RD, DRD or DPC. In this case, the request for activation is made by phone call. The activation procedure is shown in Figure 3 above.

5.2.3 SHOC STAFFING

During activation of the SHOC, an Event Manager (EM) from the concerned programme will be designated, based on the nature of event. The EM, with the support of the SHOC Manager, will be responsible for staffing the SHOC with required experts to respond to the PHE and support the SHOC operations.

Roles and responsibilities of staff during activation

Coordination and cooperation are best accomplished by locating the significant players in one place. Clearly defining roles and responsibilities for each staff involved in the response provides unity of effort to achieve common goal, accountability, and eliminate redundancy.

The EM must carefully assess, evaluate and prioritize each issue requiring a decision in order to determine the amount of technical and financial support to be provided. Once the decision is made, it must be assigned to applicable functional positions for implementation, and also communicated to all appropriate staff. The EM is responsible for reviewing and modifying the standard TOR for each member of the EST (Annex X), as well as developing a TOR for newly-assigned functions that are considered necessary for the particular response. Subsequently, the EM develops an organizational chart of the EST that will be needed to effectively manage the response. A standard organizational chart to guide the formation of the EST is presented in Annex XI.

5.2.4 GENERIC MAIL BOXES

During activation of the SHOC, some of the critical functions should avoid using private e-mail addresses in order to ensure business continuity and keeping track of information. Generic mailboxes of key functions are therefore configured in five of the computers of the SHOC in the main operation room. These functions are EM, Epidemiologist, Laboratory, Data/GIS and Logistics. These e-mail addresses are provided in the contact list attached as Annex XIV. Other generic accounts may be created whenever needed.

5.2.5 SHOC SUPPORT OPERATIONS UP TO 24/7 STAFFING

During Level 1, the SHOC operates normal AFRO working hours (07H00-15H00). During activation Levels 2 and 3, it operates in extended business hours up to 24/7. Additional staff are assigned from the DPC and IVE clusters and the AFRO Conference Unit to support the SHOC operation. Training is regularly provided to the backup staff to operate the SHOC facility and staff members trained in SHOC operations are recorded in VSHOC under the incident "Training - SHOC operations". Detailed information on training schedules, topics, and attendance are recorded in the incident. The current list of surge staff is provided in Table 1 below. If the AFRO capacity is exceeded, additional support may be requested from ISTs, HQ, or other regional offices.

5. MANAGEMENT

TABLE 1. Surge staff for SHOC operation

S.N	Normal Function	Cluster/Programme	GPN
1	Data Manager	DPC / CDS	39337
2	Data Manager	IVE / Polio	39403
3	Data Manager	Data Manager	39754
4	Conference Assistant	GMC	39350
5	Conference Assistant	GMC	

5.2.6 MANAGEMENT OF SHIFT DURING ACTIVATION

During activation where coordination of responses from the SHOC requires working up to 24/7, qualified staff on the SHOC activities and EST will work in rotation. A complete shift of staffing will be established for the duration of the operations. The EM and the SHOC Manager are responsible for developing a rotation plan for the EST and SHOC team respectively. The shift plan will be recorded in the WHO roster of the VSHOC. It will be displayed in the SHOC and shared by e-mail (See example of shift plan in Annex XV).

5.2.7 TRANSFER OF RESPONSIBILITIES DURING SHIFT CHANGES

When a member of the EST or SHOC Team on duty transfers her/his responsibilities to another, a simple but formal transfer briefing is required. Shifts, therefore, should not exceed 8 – 12 hours and should overlap by 15-30 minutes to prevent a situation where a staff position will be inadequately relieved. A transfer briefing should summarize the activities of the previous shift, identify, “open” incidents or activities, and, if time permits, be accompanied by a short written summary. SHOC Forms 2 and 3 attached as Annexes XVI and XVII are the log sheets for shift change by the EST and SHOC Team, respectively.

5.2.8 LOGISTICS SUPPORT

a) Communication equipment

Communicating with Rapid Response Teams (RRT) is very critical during response operations. To enable the RRT to communicate with the SHOC, they need to be equipped with some of the following communication equipment: laptops, satellite phones, BGAN (if available), Blackberries, GPS and others. The Logistics Officer from DSR will be responsible for making available the communication equipment for deploying and conducting training for staff on how to operate the equipment. A checklist to ensure regular check of the functionality of the field communication equipment is provided in Annex XVIII.

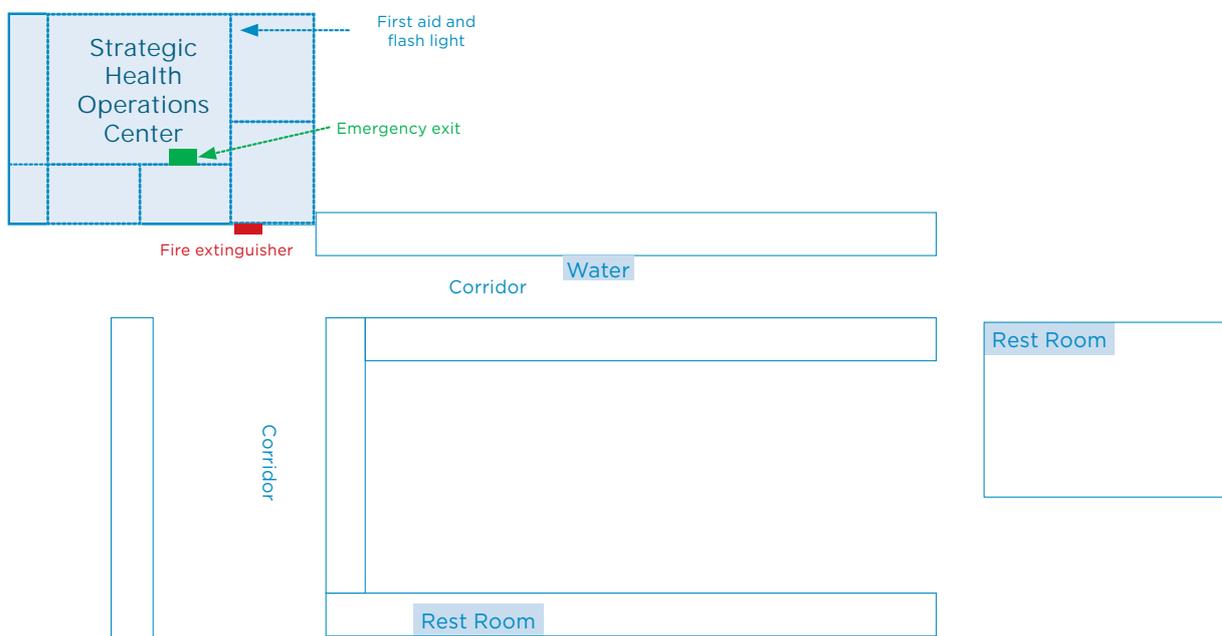
b) Staff sustainment and safety

During activation, food and beverages will be served in the WHO AFRO cafeteria in the main office to sustain staff working extended hours. The secretary for the programme that is responding to the PHE coordinates these services, following the administrative procedures for ordering food and beverage.

Locations of drinking water, toilet, flash light, first aid kit, and emergency exits are illustrated in Figure 4.

5. MANAGEMENT

FIGURE 4. Locations of first-aid kit, water and rest room



c) SHOC supplies and materials

The DPC cluster will provide administrative materials and supplies for the SHOC staff to use during routine operations.

However, when the SHOC is activated for a response, the secretary of the programme that is responding to the PHE will be responsible for providing all necessary stationery supplies such as note pads, pens, pencils, staplers, box files, punchers, flip charts, etc.

In addition, he/she will assist non WHO staff responders who joined the EST in obtaining WHO e-mail address to facilitate communication and other necessary administrative arrangements.

5.2.9 DEACTIVATION OF THE SHOC

When the emergency situation has progressed to the point that high-level coordination is no longer required, a determination will be made by the Event Manager as to whether the SHOC should be deactivated.

Suggested criteria for deactivating the SHOC include the following:

- Coordination of response activities and / or resources is no longer required;
- The event has been contained and emergency personnel have returned to regular duties;
- Working from the SHOC is no longer required.

5. MANAGEMENT

The authority to deactivate the SHOC is the same as for activation, Approval will be given by the DPC Director if it is a Level 2 activation, and by the RD or DRD in the case of Level 3 activation. Therefore, justification for deactivating the SHOC will be prepared by the EM and presented to the authority, using the existing mechanism for communication.

Once approval has been given to deactivate the SHOC, the SHOC Manager will inform AFRO staff, through the intranet, that the SHOC is deactivated. The AFRO clusters and programmes will also be notified by e-mail, using afrgoafroshoc@who.int.

5.2.10 AFTER-ACTION REPORTS

The EM is responsible for ensuring that all document records are complete and available in EMS and VSHOC. They include an After-Action Report (AAR), which will be developed following the deactivation from all Level 2 or Level 3 activations. This AAR will follow the guidance provided in the “SOP for Coordinating Public Health Preparedness and Response in the WHO African Region”.

As part of this AAR, the SHOC activities will be evaluated to determine the effectiveness of the SHOC in supporting the response. This evaluation will consider facility availability, connectivity with the field and other WHO SHOCs, availability of information, functionality of the SHOC SOP, and other aspects of the SHOC operations.

Input will be collected from the EST and SHOC staff regarding SHOC support to the response, using the form attached as Annex XIX.

If AFRO staff are deployed to the field as part of the response, they should also be offered an opportunity to make comments, using the same form.

This evaluation will also contribute to improvement of the PHE response and provision of SHOC services during future responses.

The AAR will be developed jointly by the EM and the SHOC Manager, and will be submitted to the respective cluster director.

Based on the comments received, the SHOC Manager should develop a Corrective Action Plan (CAP) in order to identify, track, and address the issues that were identified as needing improvement. He will also brief the DSR programme area coordinator quarterly on the progress made to complete the items listed in the CAP.

A sample CAP is attached as Annex XX.

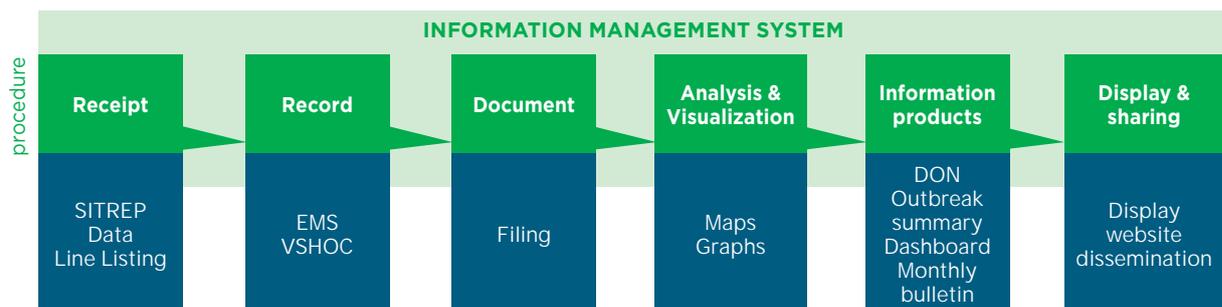


6. INFORMATION

6. INFORMATION MANAGEMENT SYSTEM

An effective information management system enhances early detection and response to PHEs. The SHOC information management system includes data and information receipt, recording, documentation, analysis and visualization, production of different information products, displaying, and sharing of information as shown in Figure 5 below.

FIGURE 5. SHOC Information Management System



6.1 RECEIPT

Receiving PHEs data and information at the SHOC in real time supports informed decision- making and immediate intervention. Real-time information is gathered through the EMS, the IHR notification mechanism, media monitoring, using the satellite TV channels, and reports or rumour surveillance from different websites, partners, and Country Offices. The information received from the media is verified with MoH through the WCO.

6.1.1 FLOW OF INFORMATION

Coordination of information on PHEs is very crucial. The SHOC should serve as a central hub for reporting public health events and coordination of information.

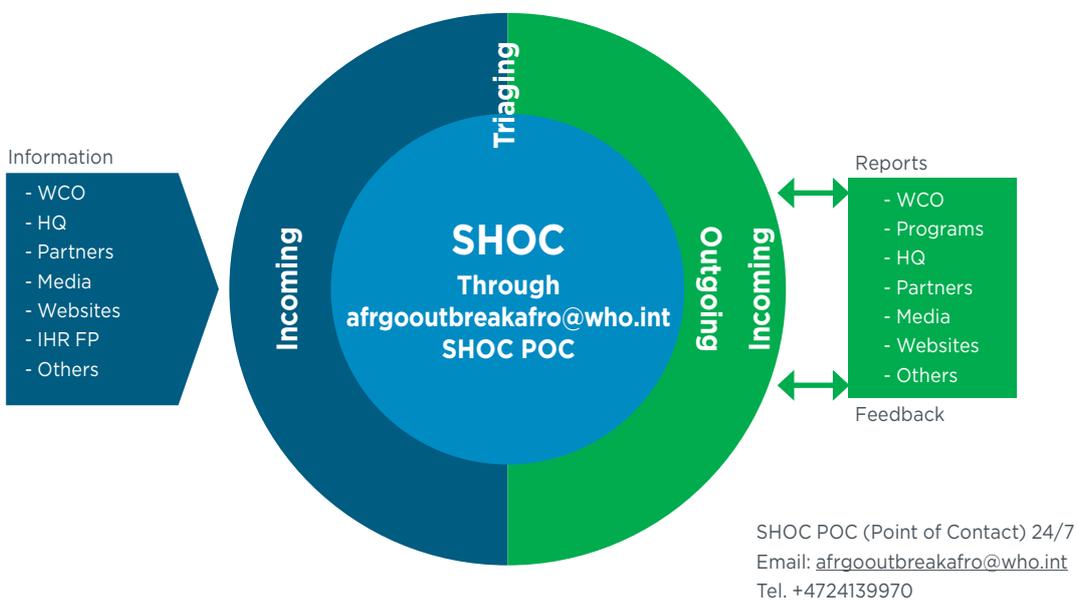
All information related to public health events in the WHO African Region must flow to the SHOC. Information may be received from WCOs, HQ, partners, media or other sources. The information must be communicated to the SHOC through the afrgooutbreakafro@who.int e-mail account or the SHOC 24/7 Point Of Contact (SHOC POC).

The person in charge of Epidemic Alert and Verification (EAV) is responsible for triaging the information, recording and routing it to the concerned programme or technical person, using the account afrgooutbreakafro@who.int. All outgoing communications, sent either from afrgooutbreakafro@who.int or the outbreak e-mail account, should be copied for all communications sent from other mailboxes. Figure 9 shows the flow of information from and to the SHOC.

During activation of the SHOC, responsibility for receiving, triaging and sharing information as well as taking appropriate action related to the specific PHE will be shifted to the designated event manager.

6. INFORMATION

FIGURE 6. SHOC Information Flow



Critical Information Requirements (CIRs)

In AFRO, the CIRs include collection, analysis and dissemination of relevant information on public health risks, epidemic investigation and response, needs assessment, overall health sector response, gaps, and performance. The list of CIRs below has been approved by the DPC Director as important items that require prompt reporting by SHOC team and are monitored on regular basis.

- All notifiable diseases under the international health regulation;
- All PHEs of international concern in accordance with IHR requirements;
- Any acute PHE that requires assistance from WHO;
- Media interest for any PHE in the African Region;
- Accidental death/injury of AFRO personnel deployed in the field;
- Any event affecting AFRO installation activities/operations;
- A new PHE with WHO Grading of 1 or higher;
- Upward or downward change in grade of a current PHE.

6. INFORMATION

During a PHE, a separate list of CIRs is developed to guide information gathering and reporting for that event. The SHOC Manager will meet with Programme area coordinators and develop template lists of CIRs for common PHEs that the SHOC is involved in.

When the SHOC is activated to support response to a PHE, the SHOC Manager will meet with the EM and review the template list of CIRs for that event to determine if changes are needed. Once the CIRs are approved, the SHOC Manager will post them to VSHOC and ensure that members of the EST are aware of the list.

If the PHE is prolonged or changes in magnitude, complexity, or severity, the SHOC Manager will meet with the EM Manager to review the CIRs and make any changes necessary to ensure that the list continues to identify those items of information essential to effective decision-making.

6.2 RECORDING

Proper recording of data and information related to PHEs supports After Action Review. The recording of information on PHEs in the SHOC is done using web-based applications called Event Management system (EMS) and WebEOC (VSHOC).

6.2.1 EMS:

The SHOC supports event-based surveillance through the Event Management EMS in order to rapidly capture information and take timely action. The EMS is a WHO web-based application that supports the process of epidemic intelligence, detection, verification, risk assessment and monitoring. The Epidemic Alert and Verification officer is responsible for ensuring that all the PHEs reported from Member States of the WHO African Region are created in EMS and all relevant data and information are available in the system.

FIGURE 7. Screenshot of the EMS interface



The screenshot shows the EMS interface with a navigation menu and a table of ongoing events. The navigation menu includes 'Regions' (selected), 'Events', 'Diseases/Conditions', 'Contacts', and 'Reports'. Below the menu, there are tabs for 'GLOBAL', 'AFRO' (selected), 'AMRO', 'EMRO', 'EURO', 'SEARO', and 'WPRO'. The table below is titled 'Ongoing Events' and contains the following data:

<input type="checkbox"/>	Event ID	Updated ▼	Country / Area	Hazard	Syndrome	Disease / Condition	Aetiology	Date Created
<input type="checkbox"/>	2013-E000233	2013-12-31	Uganda	Infectious	Acute Jaundice Syndr...	Acute hepatitis E	Hepatitis E virus	2013-12-31
<input type="checkbox"/>	2013-E000231	2013-12-31	Madagascar	Infectious		Plague, pneumonic		2013-12-27
<input type="checkbox"/>	2013-E000232	2013-12-30	Uganda	Infectious	Acute Febrile Syndro...		Flaviviruses	2013-12-30
<input type="checkbox"/>	2013-E000230	2013-12-27	South Sudan	Disaster		Sequelae of war operations		2013-12-27

6. INFORMATION

6.2.2 VSHOC:

is a Web Emergency Operation Centre (WebEOC) online application that enhances real time linkage to the field. It is a powerful management application, which includes the following key features: emergency contacts list, deployment manager, interactive scheduler, activity log, interactive mapping, and others. This facilitates management of the data and information generated during outbreaks and emergencies.

When coordination of responses through the SHOC is involved, an incident is created in VSHOC. The standard naming system of an incident is as follows: “Name of a country - event - year”, E.g. Uganda - Ebola - 2012. Activity log, contacts, deployment, conference schedules and documents related to an incident are recorded. All data and information related to the event are properly documented in the system.

- a. **Activity log:** The Activity Log is used to record key incidents, decisions, reports, and actions taken by EST members during SHOC activations. The purpose of this log is to improve the coordination, management of response and assist with recreating the event for after-action reviews when response operations have been concluded. An example of activity log is shown in Figure 8.

FIGURE 8. Example of activity log

South Sudan Humanitarian Crisis 2013 Activity Log		VSHOC
<input type="button" value="New Record"/> <input type="button" value="Show all activities"/> <input type="button" value="Show AFRO SHOC Manager's activities"/>		
Event type:	Humanitarian	27 December 2013: Staff deployment plan finalized and shared with HQ and WCO. AFRO SHOC Manager - tekestes at 11:11:05 on 27/12/2013
Attachments:		
Location:	Important	<input type="button" value="Update Record"/>
south sudan details		
This information is not for public disclosure and is intended for authorized VSHOC users only		
Event type:	Humanitarian	26 December 2013: Teleconference between AFRO and HQ to discuss implication of the grading. AFRO SHOC Manager - tekestes at 11:10:07 on 27/12/2013
Attachments:		
Location:	Important	<input type="button" value="Update Record"/>
south sudan details		
This information is not for public disclosure and is intended for authorized VSHOC users only		
Event type:	Humanitarian	26 December 2013: WCO re-purposing plan sent to the WR AFRO SHOC Manager - tekestes at 11:09:13 on 27/12/2013
Attachments:		
Location:	Important	<input type="button" value="Update Record"/>
south sudan details		
This information is not for public disclosure and is intended for authorized VSHOC users only		
Event type:	Humanitarian	26 December 2013: The Regional Director declared grade 2 Emergency for South Sudan AFRO SHOC Manager - tekestes at 11:07:33 on 27/12/2013
Attachments:		
Location:	Critical	<input type="button" value="Update Record"/>
south sudan details		

- b. **Contacts:** Incident contacts are used to trace who is involved to respond to the outbreak at different levels. The Contact List is entered and regularly updated in the VSHOC and shared with all the contacts (Figure 9).

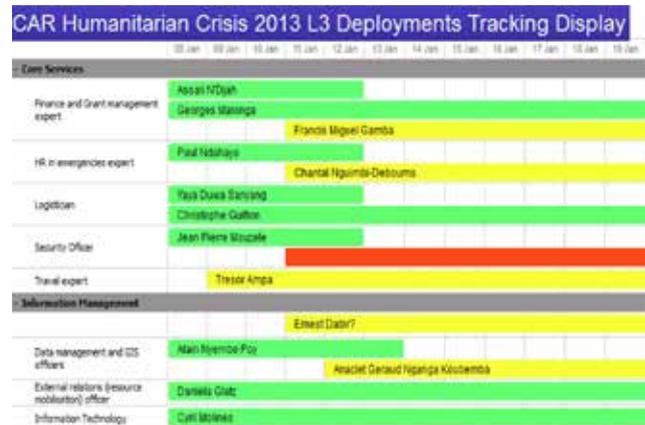
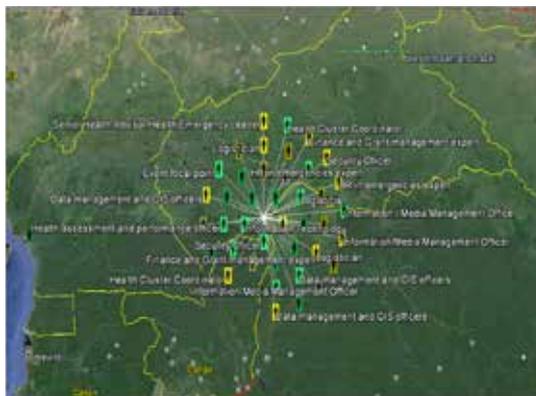
6. INFORMATION

FIGURE 9. Example of contacts list

South Sudan Humanitarian Crisis 2013 Contacts							
Name	Job title	Function	GPN	Office phone 1	Business mobile	E-mail 1	Deployment details
AIRD Emergency Support Team							
Ab Ahmed Yabaya	Medical Officer Epidemiologist	Technical expertise, epi & surveillance	30248		+242 053 480147	abahmedy@who.int	
Abulad Abdoulkarim	Regional Advisor	Technical expertise	36902	+256 413 39968	+256 719 94295	abulada@who.int	
Bagayoko, Magaran Morison	Scientist	Technical expertise, data manager	34521		+242 003 8729	bagayokom@who.int	
Boakye-Agyemang, Collins	Communications Officer	Information lead, Communications	39400	+47 241 39400	+242 003 142401	boakye@who.int	
Makinde Bin Kapaanga, Valentin	MEP Coordinator					makindav@od.who.int	Duty type: Deployment; Position: Regional Office surge support; Start time: 17-12-2013 12:00 AM (GMT +1 00); End time: 10-02-2014 12:00 AM (GMT +1 00); Location name: WCO CAR; Address: Bangui; Description:
Niemo, Sebastiana Dos A K T Da Gama	MVI Regional Advisor	Technical expertise, Public health in emergencies	28593	+47 241 39603	+242 009 740968	dagamas@who.int	

c. **Deployment:** all deployments related to an incident are recorded in the VSHOC and used to update the deployment rotation plan. This helps keep track of who were deployed to respond to PHE, where they went, and when. It is very important to include information on geographic coordinates of the deployment location. This information will be used to map the deployment in Google Earth. The map for the deployment will be displayed on the screen (Figure 10).

FIGURE 10. Example of deployment rotation plan



6. INFORMATION

- d. Schedule:** planned conferences are recorded in the VSHOC Scheduler and displayed for information (Figure 11). This ensures the staff are aware of upcoming meetings, have time to prepare, and arrange a replacement if they are unable to attend.

FIGURE 11. Screenshot of VSHOC scheduler



A report on utilization of the SHOC is generated through the interactive scheduler and shared with DSR, DPC and other concerned stakeholders on a quarterly basis.

6.3 DOCUMENTATION

It is extremely important to accurately document actions taken during outbreaks and emergencies. This will assist in tracking and monitoring the effectiveness of the response activities. Hence, all documents related to an event will be properly archived through the dynamic file management system available in VSHOC and EMS.

6.4 DATA ANALYSIS AND VISUALIZATION

Data analysis: The SHOC utilizes different statistical packages such as Excel, Tableau, SPSS and Epi Info for data analysis. The data and information received in the SHOC are rapidly analysed by the data manager. The latter forwards the analysis to the epidemic alert and verification officer for interpretation and appropriate action.

Production of maps: PHEs are visualized using the Geographic Information System (GIS). This mapping system supports identifying exact geographic locations of PHEs and their cross-border implication. The data manager is responsible for producing the maps on PHEs.

In addition, VSHOC provides interactive mapping capability, using Google Earth. Data is uploaded in VSHOC and mapped in Google Earth.

6. INFORMATION

6.5 INFORMATION PRODUCTS

Several information products are produced to support informed decision-making. These include daily summary of health events, Disease Outbreak News, EIS, dashboards, monthly outbreak bulletin and others, as well as video clips on outbreaks and emergencies. All the information products have to be systematically routed to the SHOC through outbreak@afro.who.int. The epidemic alert and verification officer coordinates with the different technical units and ensures the availability of these products in the SHOC.

6.6 INFORMATION DISPLAY AND SHARING

Once the information products are received in the SHOC, they are displayed to support decision-making during response. The SHOC Manager will be responsible for displaying the information.

There are two display screens in the Main Operations Room: the video wall and the u-touch screen.

1. Video wall

The video wall can be split into four screens. During routine operations, the following information is displayed in each of the four screens:

1. **Top left:** TV / video clips
2. **Top right:** AFRO major activities
3. **Bottom left:** dashboards of ongoing outbreaks and emergencies
4. **Bottom right:** ongoing PHEs from EMS (static).

During activation Levels 2 and 3, information on the current PHEs will be displayed in the video wall as follows:

1. **Top left:** deployment (dynamic)
2. **Top right:** maps and trends of the events from VSHOC (dynamic)
3. **Bottom left:** dashboards of current outbreaks / emergencies
4. **Bottom right:** ongoing PHEs from EMS (static).

U-touch screens:

These will be used to display dashboards on current disease-specific PHEs, monthly outbreak bulletin, public health laboratory capacity and networks in the Region and other information, as needed.

2. Control room

There is a pair of screens in the control room. These screens are used to monitor displayed information or video call in any of the operation rooms by displaying information in parallel.

When there are no current activities in the SHOC, AFRO Major Activities and TV are displayed.

7. COMMUNICATION



7.1 CLEARANCE

Clearance for dissemination and publication of information is given by the director of a cluster under which the events are managed.

The DPC Director has given blanket clearance to the DSR Programme Area Coordinator to publish and disseminate information related to disease outbreaks.

7.2 PUBLICATION AND DISSEMINATION

Information products are posted on the WHO/AFRO website at www.afro.who.int. A link namely Outbreak news is available in the WHO/AFRO website home page, which directs users to the Outbreak News page. (www.http://afro.who.int)

In addition, these products are widely disseminated within the WHO African Region, HQs, other Regions and partners through the e-mail account afrgoshocafro@who.int. All routine and response reporting products are given in Table 2.

The communications unit in AFRO provides technical support in editing contents before dissemination.

TABLE 2: Information products

Information product	Source of information	Frequency of Report	Distributed to
Routine Reporting			
Daily summary of health events	Member States	Daily (Monday - Friday)	WCOs, Regional Office, HQ, other region partners
Disease Outbreak Summary	Member States	Every Friday	Senior Management
Disease Outbreak News (DON)	Member States	When info available	Public (publication on the website)
Dashboards on specific events	Member States	When info available	Public (publication on the website)
Monthly Outbreak Bulletin	Member States	20th of every month	WCOs, Regional Office, HQ, other region partners
Response Reporting			
4W Matrix	WCO	Within 72 hours of Graded Event	WCOs, Regional Office
Joint Health Assessment	WCO	Within 15 days of Graded Event	WCOs, Regional Office
Situation Reports	WCO	Within 48 hours of Graded Event, then 2x weekly	WCOs, Regional Office
Weekly Epidemiological Bulletin	WCO	Within 7 days of Graded Event, then weekly	WCOs, Regional Office
PHE summary		Daily	Senior Management



8. EMERGENCY

8. EMERGENCY SITUATION

8.1 EXITING FROM THE SHOC DURING EMERGENCY

There is a Security and Safety Plan for the main building where the SHOC is located. Moreover, automatic fire detection and an alarm system were installed and are functional. A fire extinguisher is placed at the entrance of the SHOC.

An emergency exit sign is posted at the main entrance to the SHOC, which serves as an emergency exit. The door opens when the exit button is pressed. A sign “Press to open” is posted on top of the button.

In the event of an emergency, an alarm will sound and staff in the SHOC will exit through the main entrance. The SHOC Manager will contact the AFRO security immediately.

8.2 POWER FAILURE

In the event of a temporary loss of power in the SHOC, an Uninterrupted Power Supply (UPS) located adjacent to the Control Room, will maintain power to the computers and displays, and allow SHOC operations to continue.

If power is lost to the HQ building, a generator will automatically start and will supply power to the entire building. The UPS will also engage so that power is maintained to computers and displays during the transition from normal power to the generator.

8.3 CONTINUITY OF OPERATIONS (COOP)

In case of technological failure or problems in the building that do not allow use of the SHOC, the DPC training room in Estate will be utilized as a temporary SHOC until the problem is fixed. The space is approximately the size of the main operations room in the SHOC and has GPN access and computers.

If the situation requires the use of this space, the SHOC Manager will request the AFRO Conference and Protocol Office for use of the space.

The DPC training space should be available for use within approximately four hours after the request is approved.

During circumstances of failure in the AFRO building, when operations from AFRO are not possible, WCO Congo could be used as a backup SHOC. The WCO office has access to GPN and web applications used in the SHOC and would allow staff to quickly resume management of PHE response operations.

During circumstances where response operation is not possible from Congo, the SHOC in IST ESA (Harare) will be used as a backup.

9. MAINTENANCE



9. PREVENTIVE AND CURATIVE MAINTENANCE

9.1 PREVENTIVE MAINTENANCE

To maintain a minimum downtime of services in the SHOC, service contract agreements with Multimedia, Air Conditioning and WebEOC service providers are in place. A summary of each agreement is provided below, and contact information for company technical representatives is presented in Annex XXV.

a. Multimedia:

The Multimedia equipment in AFRO SHOC was supplied and installed by Electrosonic, based in London, UK. The SHOC has an annual service contract agreement for preventive maintenance of this equipment, which includes 24/7 phone call technical support, remote troubleshooting, and one annual on-site visit.

b. Air Conditioning:

The Air Conditioning (AC) system is essential for the proper operation of the computers and other information technology equipment installed in the SHOC. The AC system was installed by a local company called SOGECO and requires regular check-up and cleaning. The SHOC has an annual service contract that includes monthly preventive maintenance services (on the 17th of every month) as well as emergency service visits.

c. WebEOC:

The VSHOC database is a software application called WebEOC, developed by ESI, based in Atlanta, USA. The SHOC has an annual software support service contract with ESI that includes 24/7 phone call technical support and troubleshooting.

9.2 CURATIVE MAINTENANCE

Parts of the Multimedia, IT or AC systems may fail at any time and need to be replaced. Funds have been allocated in the Biennial Work Plan to meet these needs.



10. RESOURCE

10. RESOURCE MANAGEMENT

10.1 HUMAN RESOURCE

WHO AFRO uses the Integrated Diseases Surveillance and Response (IDSR) system and the EMS to receive data and information, which must be analysed in the SHOC on regular basis. The results of this analysis are critical for early detection and prompt response to PHE.

The recommended minimum human resource capacity to effectively run the facility and use the incoming information for effective decision-making is as follows:

1. SHOC Manager - Management of operations of the SHOC
2. Epidemiologist - analyst
3. Data manager - situation awareness
4. Communications - emergency communication
5. Logistician - outbreak and logistics.
6. SHOC assistant

10.2 FINANCIAL RESOURCES

The DPC cluster is responsible for covering the operational cost of the SHOC. Budget is allocated in the biennial work plan. However, as the other emergency programmes are utilizing the SHOC, they need to contribute to the cost of SHOC operations.

11. ANNEXES

I. WEEKLY EQUIPMENT CHECK SCHEDULE

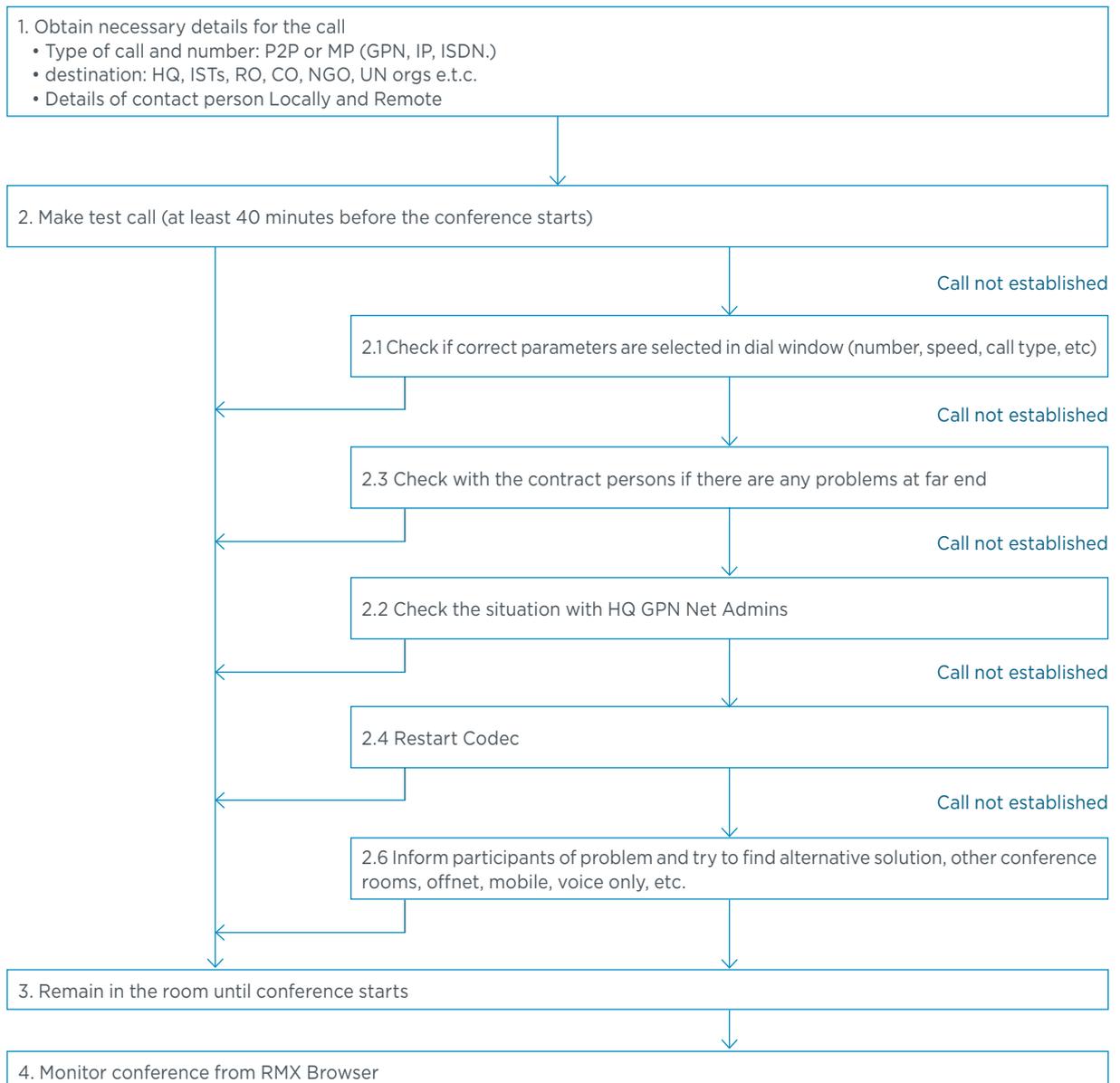
Weekly equipment check schedule					
Monday	Monday	Tuesday	Wednesday	Thursday	Friday
Main and BO SHOC Check : • Crestron • PCs (PC, audio, wireless Keyboard and mouse) • Teleconference bridge • Video Conference bridge and P2P Microphones • TV channels • All displays • All IP phones • Printer • DVD player • Latest information displayed	Main and BO SHOC Check : • Crestron • Teleconference bridge • Video Conference • Microphones • All displays • Printer • Latest information displayed	Main and BO SHOC Check : • Crestron • Teleconference bridge • Video Conference • Microphones • Printer • Latest information displayed	Main and BO SHOC Check : • Crestron • Teleconference bridge • Video Conference bridge and P2P Microphones • TV channels • All displays • All IP phones • Printer • DVD player • Latest information displayed	Main and BO SHOC Check : • Crestron • Teleconference bridge • Video Conference • Microphones • All displays • Printer • Latest information displayed	Main and BO SHOC Check : • Crestron • Teleconference bridge • Video Conference • Microphones • All displays • Printer • Latest information displayed

11. ANNEXES

II. VIDEO AND TELE CONFERENCE CHECKLIST

During audio and video conferences, the following procedure should be followed

VC/TC checklist flow chart



11. ANNEXES

III. SHOC DAILY OPERATIONS CHECKLIST

SHOC Daily Operations Checklist				Date:
Item	Operational (Y/N)	Action to Restore	Date Restored	Remarks
Main Control Room				
Crestron				
PCs (PCs, audio, wireless keyboard and mouse)				
Teleconference bridge				
Video Conference bridge and P2P M				
microphones				
TV channels				
All displays				
All IP phones				
Printer				
DVD player				
Latest information displayed				
Breakout Room 1				
Crestron				
PCs (PCs, audio, wireless Keyboard and mouse)				
Teleconference bridge				
Breakout Room 2				
Crestron				
PCs (PCs, audio, wireless keyboard and mouse)				
Teleconference bridge				

11. ANNEXES

IV. AFRO SHOC ACCESS ROSTER - PERMANENT

AFRO SHOC Access Roster - Permanent				Date:
Name	Position	Organization	Phone	Remarks

V. AFRO SHOC ACCESS ROSTER - TEMPORARY

AFRO SHOC Access Roster - Activation for:				Date:
Function	Name	Organization	Phone	Remarks
Epidemiologist				
IHR				
Lab				
Communications				
Logistics				
Admin/Finance				
Technical				

11. ANNEXES

VI. SHOC ACCESS CODE REQUEST FORM

SHOC Access Code Request Form			
Requester Name: _____			
Programme: _____			
Request Date (mm/dd/yyyy): _____			
Purpose: _____			
Duration of access:			
Permanent: _____		Start Date: _____	Ending Date: _____
Temporary: _____			
Comment: _____			

Signature	Requester	SHOC Manager	DSR PM
Date			
Approved			
Disapproved			
Reason for Disapproval:			
For SHOC Manager Use			
Date requestor notified of decision and provided access code:			
Remarks:			
AFRO SHOC Form 1			

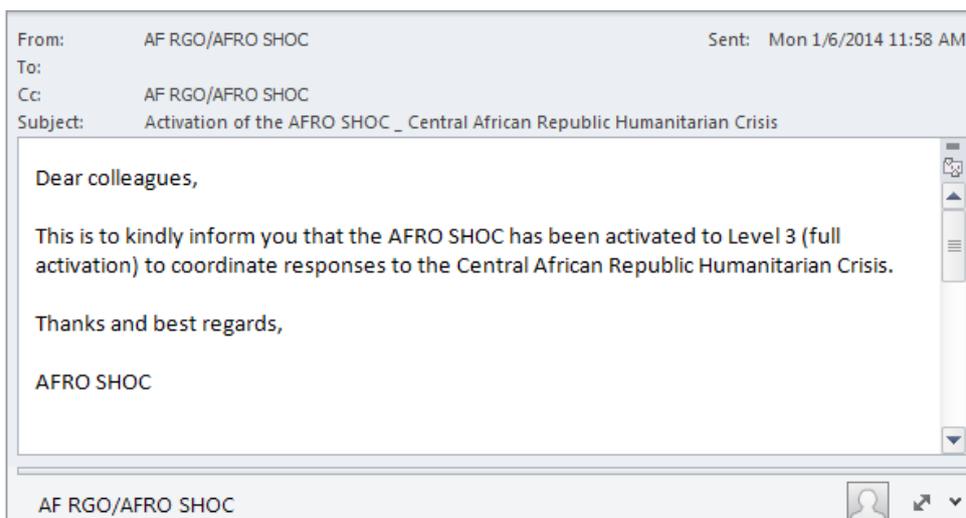
11. ANNEXES

VII. SIGN-IN SHEET

The Sign-in sheet is used to keep a record of all persons utilize the SHOC. The purpose of this log is to assist with recreating the event for after action reviews after response operations have concluded. Each individual must sign in and out upon entering and exiting the room.

Date	Name	Programme	Sign in time	Sign out time

VIII. SAMPLE E-MAIL - SHOC ACTIVATION NOTIFICATION



11. ANNEXES

IX. SHOC ACTIVATION CHECKLIST

This checklist is available in and monitored from VSHOC (<http://vshoc.afro.who.int>)

Operational phase (Level 1 Activation)

- Conduct daily system checks and correct any deficiencies.
- Conduct communication checks.
- Monitor all ongoing events through Event Management System (EMS).
- Regularly review weekly Integrated Disease and Surveillance Report (IDSR) data.
- Prepare for any escalation of events.
- Regularly produce information products (DONs, dashboards and monthly outbreak bulletin).
- Properly record conferences, meetings, and visits made from the SHOC.

Activation phase (Levels 2 and 3)

SHOC team

- Incident created VSHOC.
- Notification is sent to all clusters and information posted on intranet that the SHOC is activated.
- Seating plan prepared and displayed.
- Develop Response Organization Chart.
- Ensure all equipment is ready for operation (using the equipment checklist).
- Display maps and dashboards on the screen.
- Orientation provided on the SHOC to responders.
- SHOC shift plan is prepared and shared.
- Develop SHOC access roster for the event and distribute door code.

Event Management Team

- Event Manager designated.
- The event is graded based on Emergency Response Framework (ERF).
- SHOC activation level is recommended.
- Event Management Team (EST) formed.
- SHOC staffing levels and work shift is determined.
- Event created and updated in EMS.
- SOP for coordination of PHEs is implemented.
- Outbreak Summary is prepared daily and shared with senior managers.
- Disease Outbreak News (DON) and dashboards are daily published and disseminated.
- Shift change briefing is done
- (Communication and dissemination) - Press release is done.
- Contacts and deployment data recorded in VSHOC.
- Endure key actions are recorded in activity log in VSHOC.
- Properly document all relevant information in VSHOC.

Deactivation

- Notify all clusters and post on intranet that the SHOC is deactivated.
- EST provides input to the After Action Report.
- Deactivate the EST.
- Conduct system checks using Daily Checklist to ensure all systems functional for next event.

11. ANNEXES

X. EXAMPLES OF ROLES AND RESPONSIBILITIES OF AN EMERGENCY SUPPORT TEAM (EST)

Function	Responsibility
Event leader	<ul style="list-style-type: none"> - Provide overall emergency policy and strategic direction to the Event Coordinator (Event Manager) - Participate in meetings of the GEMT - Formally request for support /resources from the AFRO senior management group - Set expenditure limits - Authorise activation and deactivation of AFRO SHOC - Provide direction for public risk communication activities
Event coordinator	<ul style="list-style-type: none"> - In consultation with the Team Leads, set operational priorities, establish event management objectives and strategies, set operational periods, approve the deployment of resources - Implement strategic decisions from senior management - Define roles and responsibilities of the AFRO Emergency Support Team (EST) for the event - Establish the appropriate staffing level for the EST and continuously monitors operational effectiveness of the AFRO response - Activate the SOP for coordinating Public Health Event Preparedness and Response in the WHO African Region - Ensure effective coordination within the SHOC, with the WCOs and HQ, and with other partners - Ensure availability of daily PHE summary for senior management - Ensure availability of end of PHE after action report - Prepare final debriefing note of the event - Provide technical WHO guidelines and standards to RRT, - Ensure availability of information products for dissemination and publication following the clearance - Submit proposal on deactivation of the SHOC to DPC for decision
SHOC Manager	<ul style="list-style-type: none"> - Enable the response, up to 24/7 if required, by providing multimedia Information and Communication Technology (ICT) tools and services in the SHOC and for maintaining the readiness of SHOC between responses. - Implement SHOC SOPs - Staff the SHOC in collaboration with the Event Manager - Display the event management web applications, e.g. EMS, V-SHOC, and provide training in their use if needed - Ensure documentation of all relevant information in VSHOC, - Ensure that relevant information is received and displayed to support decision making such as epidemic curves, maps, graphs, images and case definitions (see also Information Management) - Provide access to the EST to event SharePoint, VSHOC, mailing list etc. - Ensure seating plan is prepared, staffing chart is posted, and that arriving staff are assigned appropriate seats - Ensure notification of information to the cluster directors and programme managers - Ensure information on activation of the SHOC is posted on the intranet - Ensure users are briefed and necessary material is shared - Access to the necessary document is provided - Disseminate information and post on the web in a timely manner
Epidemiologist	<ul style="list-style-type: none"> - Collate, analyse, interpret and report summary data (e.g. daily counts of cases/deaths) - Generate descriptive epidemiology and data visualisation - Work with GIS to map key epidemiological parameters - Work with leadership team, subject matter experts and countries on risk assessment, reporting requirements, information system and data management needs, type and frequency of data analysis, design of epidemiological studies as needed - Consolidate global methodologies, indicators and tools for data collection, tracking, validation and analysis. Provide support in using methodologies and validation data. - Harmonize information products and provide technical input and expert review of donor-related proposals, Health Cluster bulleting, reports and other communications. - Support field assessments and surveillance systems in the field.
Logistics	<ul style="list-style-type: none"> - Maintain overall situational awareness of the event as well as the location and status of all deployed resources - Ensure that all deployed personnel have the materials needed for operation in the field - Ensure that all supplies and equipment needed in the field are shipped properly, clear customs in the Member States and delivered to deployed staff in a timely manner - Provide logistic support to RRT/GOARN deployments as needed - Support logistics requests from the WCO in emergency procurement if required - Review the logistics component and corresponding budget in the Flash Appeal, CERF and other funding proposals. - Organize and follow up on shipments.

11. ANNEXES

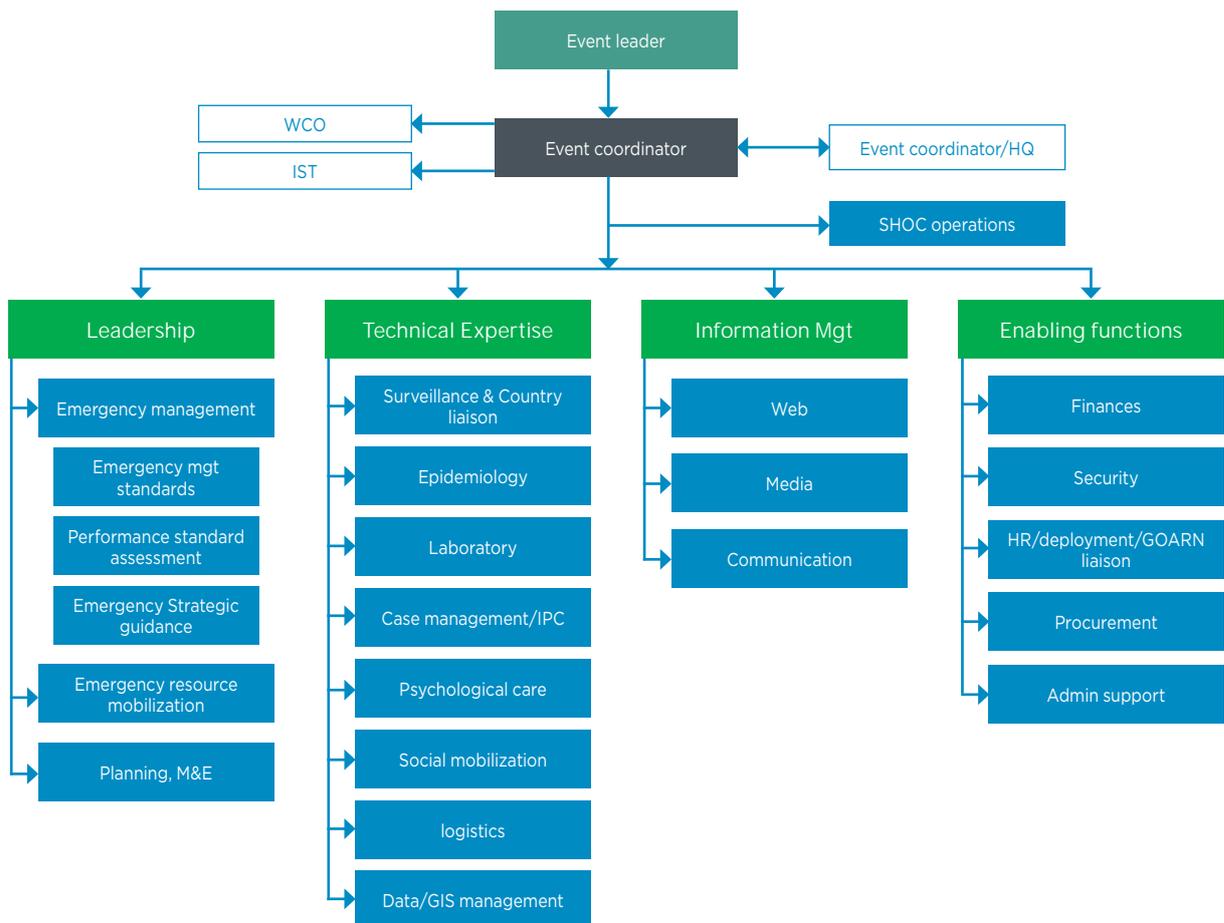
Laboratory expert	<ul style="list-style-type: none"> - Advise on known laboratory capacities and capabilities - Monitor laboratory support being provided to the response and provide subject matter laboratory expertise - Develop/adapt and distribute testing algorithms and guidelines for EVD as needed - Facilitate procurement of specialized reagents, test kits and general laboratory supplies in coordination with Enabling Functions (Logistics) as needed - Facilitate links with national, regional and international reference laboratories as needed - Coordinate the transportation of lab specimens in coordination with Logistics, as needed.
Social mobilization	<ul style="list-style-type: none"> - Monitor country implementation of social mobilization and health education activities - Review the Ebola social mobilization plan for the country - Develop or Revise IEC materials to be used at field level in collaboration with WCO
Data management / GIS	<ul style="list-style-type: none"> - Maintain secure copies of all files and documents for ready retrieval and archiving - Work with surveillance and epidemiology to map and visualise data - Manage database including content, structure, file location, backup system.
Website	<ul style="list-style-type: none"> - Develop a webpage for emergency on AFRO website - Regularly update information products on the AFRO website - Produce tweets and other online communication products - Monitor online communications regarding the emergency
Media	<ul style="list-style-type: none"> - Advise the WHO Representative (WR) on media developments and approaches for media relations, and provide support in his interactions with media. - Assist in developing and disseminating WHO information products to broaden awareness of humanitarian issues and the role of WHO in close collaboration with the Event Leader and Event Manager - Coordinate AFRO Management Team international media interviews - Identify information and communication expertise - Lead country-level messaging development in consultation with WR and key stakeholders - Organize media field trips, press events, interviews and other outreach initiatives - Organize media coverage of key issues and WHO activities on the ground - Assess media presence and keep updated contact lists - Build and maintain media relationships within country/region - Conduct regular media monitoring - Represent WHO in relevant Communications forums (e.g, UN interagency mechanisms and NGO outreach) to enhance outreach on the humanitarian issues - Undertake any other duties that will be assigned by the WR-
Finance	<ul style="list-style-type: none"> - Mobilise and manage financial resources in collaboration with HQ and WCOs - Organise rapid transfer of fund to WCOs if required - Work with WCOs and technical team on funding proposals and ensure they meet the requirements of APHEF and/or donors - Organise petty cash for staff deployed to the field (for emergency procurement in the field and /or cash advance on per diem) if needed - Monitor expenditure for the response, including cash flows, and work with WCOs on cost-sharing arrangements - Clear all financial documents.
HR expert / GOARN liaison	<ul style="list-style-type: none"> - Arrange urgent recruitment of external consultants as required, drawing on RRT database and other sources - Work with the GOARN Operational Support Team to coordinate the deployment of technical experts - Prepare APWs and other contractual documents - Negotiate and process secondment agreements - Ensure all staff deployed to the field are briefed on their emergency entitlements and other HR aspects of their assignment - Process staff secondments from other parts of WHO if necessary - Work with the GSC and WHO's central HR department to process priority recruitments - Organize travel administrative arrangements [TR, per diem, ticket, etc]
Procurement	<ul style="list-style-type: none"> - Ensure procurement of outbreak preparedness and response supplies based on the list proposed by the Technical Expertise Group - Provide regular update on procurement progress -
Administrative support	<ul style="list-style-type: none"> - Ensure office administration and support to the EST - Handle all routine correspondence related to the operation - Monitor and maintain office supplies - Ensure that printers, copiers and faxes are functional and stocked with paper - Ensure that all memos, letters and other documents related to the outbreaks are handled effectively, rapidly and disseminated accordingly - Prepare and maintain a rotation plan for administrative staff beyond normal hours in line with the SHOC SOPs - Update arrival and departure dates of deployment in VSHOC-
Security	<ul style="list-style-type: none"> - Provide regular security situation update in the affected districts - Provide guidance to RRT staff being deployed - Share key documents/factsheet on security mater to the field team
Others	- -

11. ANNEXES

XI. EST ORGANIZATION CHART

Below is the standard organization chart that will guide the formation of the EST for a PHE. Once the decision is made to activate the SHOC, the Event Manager will determine the additional staff and organizational structure that will be needed to effectively manage the response.

Afro Emergency Support Team Organogram



11. ANNEXES

XII. CRITICAL RESPONSE FUNCTION PERFORMANCE STANDARDS FOR REGIONAL OFFICES

PHE Name:

Activities By Time Date Graded: (Note: Timeline begins when PHE is Graded)					Date Graded:
Critical Functions					
Leadership	Information	Technical Expertise	Core Services	Date Due	Date Complete
Within 24 hours					
	Establish and lead all communications between WCO, AFRO, and HQ; Establish mechanism for information sharing; Websites, share point, e-mail and contact lists; Provide meeting summaries and action points of all internal meetings (on-going)				
	Expedite clearance and dissemination processes of all internal and external communications (on-going)				
Within 48 hours					
	Support for WCO preparation of preliminary health sector analysis				
	Quality control and editing for first WCO SITREP; Disseminate information to regional partners and relevant AFRO staff				
Within 72 hours					
	Provide the tool and technical support for WCO update of 4W matrix	Provide coordinated technical input from relevant departments to WCO for use in preparation of health sector objectives and priorities for first 3 months (Provide through EST for Grade 2 or 3)	Provide administrative support for contracts/travel for deployment of a team to reinforce or replace re-purposed WCO staff		

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Leadership	Information	Technical Expertise	Core Services	Date Due	Date Complete
Within 72 hours					
	Technical support for WCO joint health assessment; Disseminate results to regional partners and relevant AFRO staff		Deploy a surge team to provide emergency administrative, human resources, grant management, and logistics services.		
			Deployment of supplies from regional stockpiles if identified as a priority intervention		
			Provide technical support on implementation of SOPs		
			Manage grants that pass through AFRO and ensure timely reporting		
			Approve allocation of US\$500,000 to HL from AFRO rapid response account		
Within 5 days					
		Provide coordinated technical input from relevant departments to WCO for use in preparation of health sector response strategy and action plan, with preventative and control interventions for first 3 months (Provide through EST for Grade 2 or 3)			
Within 7 days					
	Quality control and editing for second WCO SITREP; Disseminate information to regional partners and relevant AFRO staff (2x per week thereafter)	Provide coordinated technical input from relevant departments to WCO for providing coordinated specialized assistance, including logistics, for implementation of prevention and control interventions (on-going)			

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Leadership	Information	Technical Expertise	Core Services	Date Due	Date Complete
Within 7 days					
		Provide coordinated technical input from relevant departments to WCO for use in adapting/strengthening surveillance and early warning systems in the affected area; Produce first weekly epidemiological bulletin. (Provide through EST for Grade 2 or 3)			
		Provide coordinated technical input from relevant departments to WCO to promote and monitor application of protocols, standards, and best practices. (Provide through EST for Grade 2 or 3)			
Within 15 days					
	Disseminate the results of the WCO joint health assessment regionally				
Within 60 days					
Ensure arrival in-country of Surge Team 2 members to reinforce or replace Surge Team 1 members	Provide methodologies, tools, and technical support for WCO conduct of in-depth, health-specific assessment	Provide coordinated technical input from relevant departments to WCO to develop a health sector transition strategy from response to recovery. (Provide through EST for Grade 2 or 3)			
Support WCO preparation of funding appeal, as required					
Finalize longer term staffing, as required					
Support WCO development of health sector transition strategy, from response to recovery, with logical framework, technical input, writing, editing, and budgeting					
After removal of Grade					
Conduct evaluation mission					

11. ANNEXES

XIII. QUESTIONS / ANSWERS - DURING RESPONSE OPERATIONS

Questions	Answers / Remarks
What processes/response actions were planned and what were actually put in place? (including SOP performance indicators, WHO wide performance standards for emergency response)	
Were there any variations from the processes/response actions that were initially proposed, and if so, why?	
How might the response be improved?	
What were the observable short-term outcomes of the response?	
To what extent were the response objectives achieved?	
Were there any unintended outcomes/consequences?	
What factors helped and hindered in the achievement of response objectives?	
What measures, if any, have been put in place to promote the sustainability of the response deliverables/outcomes? (Have all sources of risk for the PHE been identified and managed? What are the sources of residual risk?)	
What lessons have been learned from the response and how might these be of assistance to other responses/ response partners?	

XIV. LIST OF RESPONDERS AND CORRESPONDING GENERIC E-MAIL ACCOUNT

AFRO SHOC Activation for:				Date:
Function	Phone	E-mail	Name	Organization
Event Manager	39489			
Epidemiologist	39957			
IHR	39970			
Lab	39974			
Technical	39423			
Technical	39649			
Communications	39616			
Logistics	39664			
Admin/Finance	39679			
Technical	39681			
Breakout Room 1	39438			
Breakout Room 2	39589			

11. ANNEXES

XVIII. FIELD COMMUNICATION EQUIPMENT CHECKLIST

The functionality of the field communication equipment in AFRO and the ISTs will be monthly checked

Field Communication Equipment				Date:
Item	Serial Number	Phone Number	Status	Remarks
AFRO SHOC				
BGAN				
Laptop				
Satellite Phone				
Mobile Phone				
GPS				
IST West				
BGAN				
Laptop				
Satellite Phone				
Mobile Phone				
GPS				
IST ESA				
BGAN				
Laptop				
Satellite Phone				
Mobile Phone				
GPS				
IST Central				
BGAN				
Laptop				
Satellite Phone				
Mobile Phone				
GPS				

11. ANNEXES

XIX. FEEDBACK ON SHOC OPERATION

AFRO SHOC - Corrective Action Programme After Action Comment Submission Form

Name: _____ Exercise/Event: _____

Role in Exercise/Event: _____ Location: _____

Issue: Simply state the observation or problem: _____

Discussion: Describe the observation or problem in detail. If an expected action did NOT occur, please provide why you think it did not occur. If an action occurred that was unexpected, please provide why you think it occurred and the positive or negative effect it had on the situation. Please provide specific information that may be used for follow-up (dates/times, locations, names, etc.): _____

Recommendation: Provide your assessment of what action(s) should be taken to correct/resolve the problem and who should be involved in implementing your recommendation: _____

Are you willing to be contacted to provide additional information if necessary? Yes ___ No ___

Contact telephone # _____ Contact e-mail _____

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XX. CORRECTIVE ACTION PLAN

Corrective Action Plan			
Characterize	Issue#	Issue:	
	System name:		Date:
	description:		
Cause & Implication	Root cause		
	Results and implications:		
Corrective action	Immediate corrective action:		Date:
	Long-term corrective action:		Date:
	Preventive action:		Date:
Closure	Conclusion:		

11. ANNEXES

XXI. LIST OF OPERATIONS CENTRES THAT THE SHOC CONNECT TO

The SHOC room establishes video and teleconference links with the organizations and operation Centres listed in the table below. Detailed contact information of each of the Centre is also included. Every Monday, from 8:00H - 10:00H, communications checks take place with some of these sites. This information is also available in the codecs of the VTC facilities.

Country	Duty station	Region	Contact	IP address	GPN	E-mail

XXII. RECORD OF VIDEOCONFERENCE SYSTEM COMMUNICATIONS CHECKS

Record of Videoconference System Communications Checks

Date:

Name	Country	Region	GPN	Business Mobile	IP address	Audio and Video Signal Status
HQ SHOC, 24/7 Point of Contact	Switzerland	HQ	15533	+41 227 915533	7173@10.28.23.105	

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XXIII. MESSAGE LOG

The Message Log allows keeping record of messages sent and received in the SHOC related to a PHE. These forms will be created in VSHOC to enable electronic recording. A paper copy of this form may be used to record activities as they occur, for later input into the VSHOC.

Event name:			Operational period: ddmmyyyy __/__/_____ to __/__/_____		
Name:			Cluster/Programme:		
SN.	Date	Time	Received from	Message subject	Remarks

XXIV. PROBLEM LOG

This form is intended to allow SHOC users to report problems to the SHOC Manager and allows the SHOC Manager to track those problems until resolved. By reviewing these logs on a periodic basis, trends may be identified and systemic solutions implemented.

Problem Log

SN	Date	Name	Programme / Cluster	Problem Description	Problem Resolution

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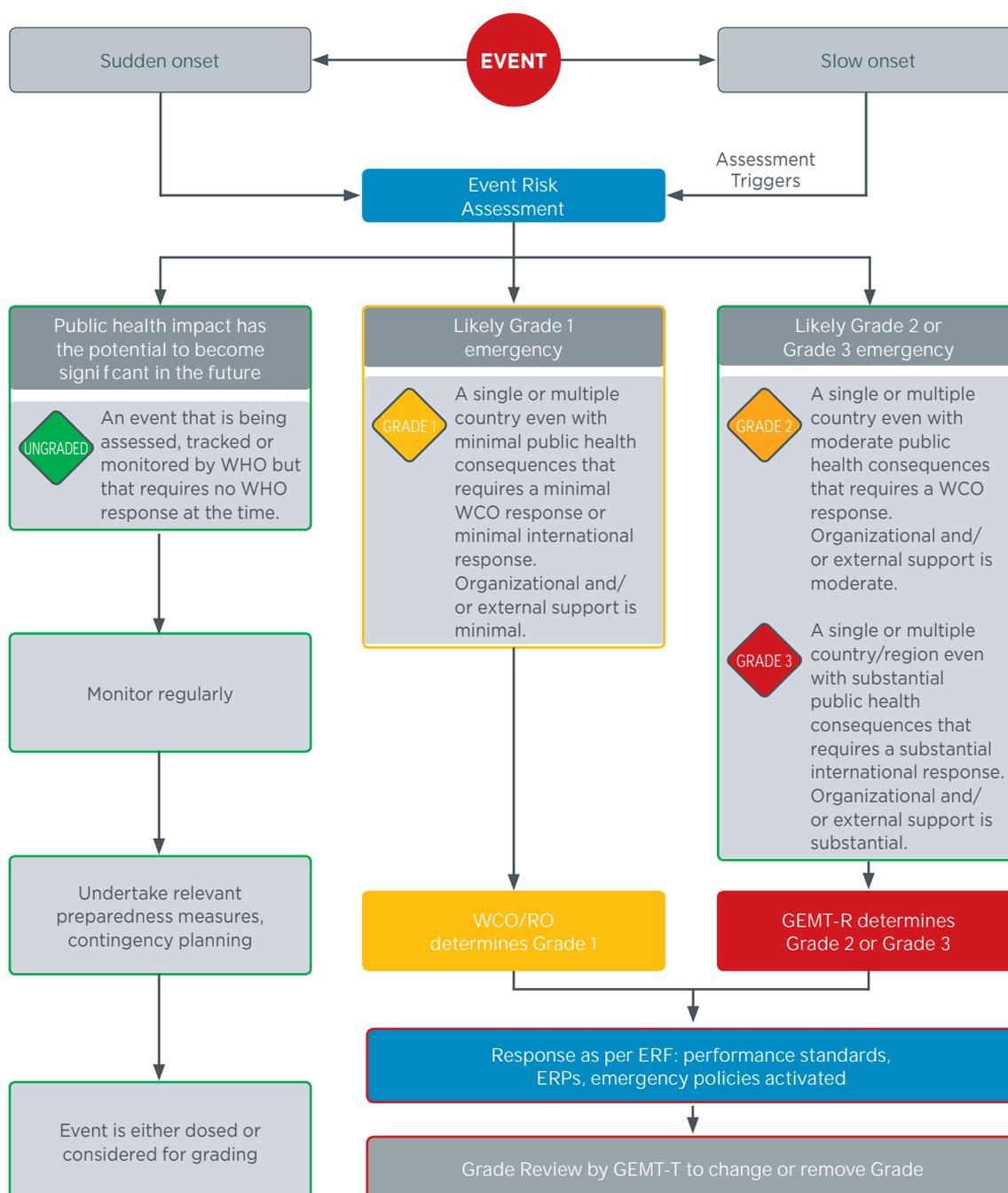
XXV. CONTRACT DETAIL OF COMPANIES THAT HAVE SERVICE AGREEMENTS WITH AFRO/SHOC

(The AFRO SHOC point of contact for contract administration is Senait Tekeste, tekestes@who.int , tel. +242068805214)

Company name and Contract #	Contact person	Title	Address	Telephone number	Web/E-mail

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XXVI. ERF GRADING FLOWCHART



11. ANNEXES

XXVII. DETAILED DESCRIPTION OF AFRO SHOC OPERATION ROOMS, TECHNOLOGY AND SERVICES

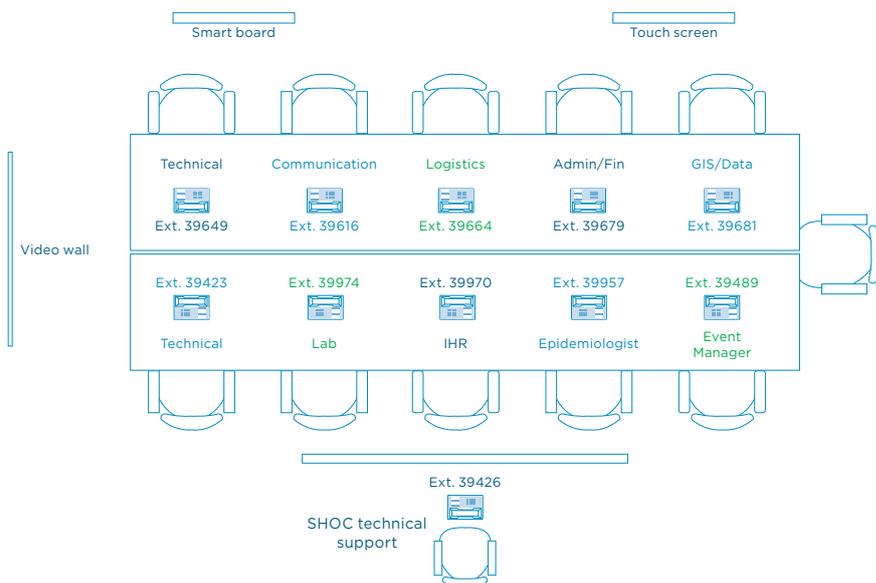
1. OPERATION ROOMS

1.1 THE MAIN OPERATION ROOM

This room is the biggest in the SHOC and is equipped with: 10 workstations, a video wall, a U-touch screen and a smart board. Each of these are described below.

- **Work stations:** the conference table in the main operation room is equipped with 10 work stations. Each of the workstations is equipped with a computer, GPN phone and miniature microphones (fixed to the table) for conferencing purposes. Each computer is connected to the internet and each monitor contains built-in webcam to enable web conferencing. When the SHOC is activated, a seat will be assigned to each of the functions on the response team as shown in Figure 3 below.
- **Video wall:** The video wall in AFRO SHOC is the main display and video conference screen. It can be used for video conferencing or for displaying information from computers at the conference table or Breakout Rooms. It can be adjusted to display up to 5 images simultaneously.
- **U touch screen:** The U touch is a multi-display, touch sensitive screen, with built in PC. It has videoconferencing functionality and receives signals from workstation computers and a laptop.
- **Smart board:** The smart board is a board for interactive presentation. It has a USB connector which enables connection to a PC or laptop and contains 2 microphones.

FIGURE 3. Layout of the Main Operation Room with sample of functional seat assignments



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1.2 THE BREAKOUT ROOMS

The Breakout Rooms (BO) 1 and 2 are smaller rooms for concurrent operations, equipped to provide similar services as the Main Operations Room. BO 1 is normally assigned for use by senior management and BO 2 is normally used for small meetings. The layout of the BO rooms are shown in Figures 4 and 5.

FIGURE 4. Breakout Room 1

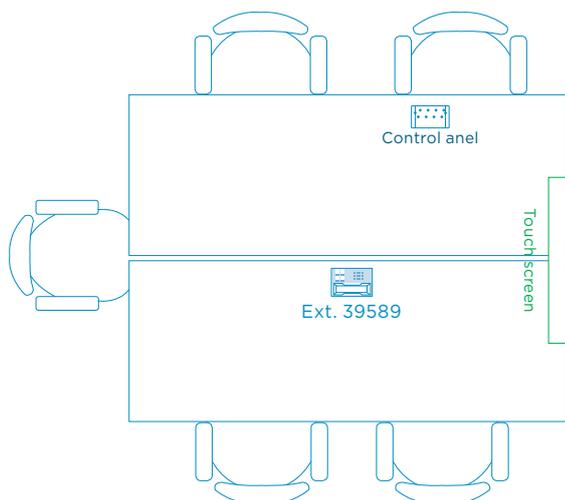
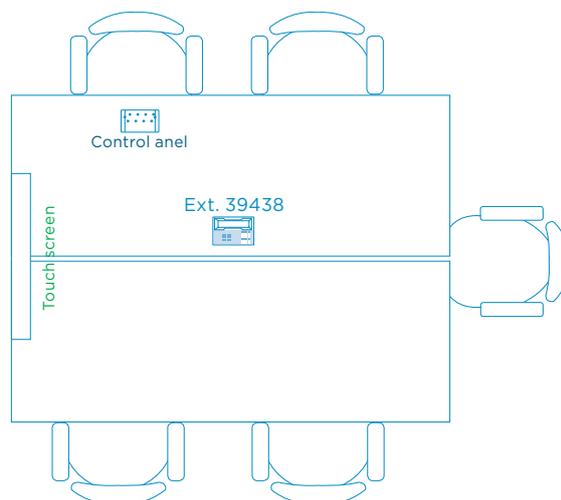


FIGURE 5 . Breakout Room 2



Each of the breakout rooms consists of:

1. plasma multi display touch screen
2. a computer (with wireless mouse and keyboard),
3. one GPN telephone is available in each room for making calls within WHO GPN network, to the outside, and can also be used as backup if the virtual teleconference bridges are not working.

1.3 CONTROL ROOM:

The control room consists of a pair of screens, Creston control panel, a printer, and a 4-display computer.

Two screens: these screens are able to display any of images from any one of the outputs. Information displayed on any of the screens in the Main Operation Room, Breakout Rooms, or Control Room can be displayed in parallel. This parallel display enables the SHOC manager to control the functionality during ongoing operations.

Creston wireless touch panel: operation of video conferences, teleconferences, and the display system in the SHOC is controlled from the Creston control panel, which also controls sending video played from the DVD player in the Control Room rack, and selection of different TV channels.

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A printer: this printer is shared on the network. All computers in the SHOC are connected to this printer.

Four-display computer: there are 4 screens connected to a computer. This is used to display information on PHEs. Content on these screens can be sent to any of the display screens in the Main Operations Room, BO Rooms, and the Control Room.

1.4 EQUIPMENT ROOM

The equipment room consists of a rack with all the equipment running behind the system, and also provides limited storage space for administrative supplies.

2. AFRO SHOC TECHNOLOGY AND SERVICES

The SHOC has been equipped with a multi-display video wall and multi-purpose touch screens. All of this equipment and software already installed interface to provide the following services:

- Multi-point Video conferencing

This equipment enables setting up multi-point video conferences, including management of several virtual conference video-rooms. It supports up to 12 parallel connections at a time, meaning that:

- one videoconference can take place involving the Main Operations Room, both Breakout Rooms, and up to 9 external parties, or
- two simultaneous video conferences (for example, each Break Out Room has a separate video conference with different external parties), or
- three simultaneous video conferences (one from the Main Control Room and one from each Breakout Room).

- Multipoint Telephone conferencing

AFRO SHOC has two teleconference virtual rooms:

- +41227918603 / GPN 18603
- +41227918609 / GPN 18609.

Each can accommodate a maximum of 15 callers without adversely affecting call quality.

- Web conferencing

The AFRO SHOC has two WebEx licenses. This application is utilized to carryout online training, attending web conferences, and connecting to Rapid Response Team (RRT) in the field with internet connectivity.

- Scheduling Videoconferences, Teleconferences, and Web Conferences

To schedule these activities, please see Requesting SHOC Services, Section 5.1.4 on page 16.

- Communication with the field

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During response to PHEs, RRT are deployed to the field. Communicating with the RRT enhances effective response, so AFRO has prepositioned a set of field communication equipment in each of the ISTs and in the Regional Office. This equipment is deployed to the field whenever needed and includes a BGAN, a laptop, a Satellite phone, a mobile phone and a GPS. A list of the items and phone numbers assigned to each is listed at Annex XVIII.

- Wireless internet connection

A wireless internet connection is available in the SHOC for laptop and smart phone users.

AFRO staff should use the “Staff” wireless network and use their normal userid and log-in.

Non-AFRO staff will use the “Guest” network and must contact the SHOC Manager for access.

- Satellite TV channels

There are three satellite TV channels installed in the SHOC to allow staff to monitor media reporting during disease PHEs. This will assist the Communications staff in constructing messaging for the public, health care providers, and other partners.

- Multi-display capability

The SHOC has the capability of concurrently displaying information from different sources. This allows response staff to have access to the same information at the same time and is known as a Common Operating Picture (COP). If all staff and leaders have the same COP, it will improve the effectiveness of decision making during the response.

Contents can be displayed from the following sources:

1. three laptop outputs (one in the Main Operations Room and one in each of the Breakout Rooms)
2. the four-display computer in the Control Room
3. the two computers nearest the video wall in the Main Operations Room
4. the computers in each of the Breakout Rooms
5. three TV channels
6. DVD player

Contents can be displayed in the following screens:

- a. The video wall (can be split to show up to five displays at the same time)
- b. The u-touch screen in the Main Operations Room
- c. The u-touch screens in each of the Breakout Rooms
- d. The four displays computer in the Control Room
- e. Pair screens in the Control Room

12. GLOSSARY

Audiovisual	It refers to works with both a sound and a visual component, the production or use of such works, or the equipment used to create and present such works.
CODEC	is a device or software that enables compression or decompression of digital video
Continuity Of Operations (COOP)	It is to continue operation of essential response functions under a broad range of circumstances including all-hazard emergencies as well as natural, man-made, and technological threats and security emergencies.
Critical Information Requirement	is information requirements identified by the commander as being critical in facilitating timely information management and the decision-making process that affect successful mission accomplishment.
Event management system	It is a WHO web-based application that supports the process of epidemic intelligence detection, verification, risk assessment and monitoring.
Multi display	It is the use of multiple physical display devices, such as monitors, televisions, and projectors, in order to increase the area available for computer programs running on a single computer system.
Multi media	The use of computers to present text, graphics, video, animation, and sound in an integrated way.
Multipoint control unit	It is a device commonly used to bridge videoconferencing connections.
Multi-point TC/VC	A teleconferencing or videoconferencing with more than two sites connected.
Point to Point (P2P) VC / TC	P2P VC/TC is limited to only two participants in different locations, hence the name "point to point". It is the cheapest and most commonly implemented type of tele/videoconferencing system.
Video wall	It consists of multiple computer monitors, video projectors, or television sets tiled together contiguously or overlapped in order to form one large screen.
Web based system	refers to those applications or services that are resident on a server that is accessible using a Web browser and is therefore accessible from anywhere in the world via the Web
Web conferencing	refers to a service that allows conferencing events to be shared with remote locations over the internet.
webEOC	WebEOC is a Web-Enabled crisis information management system.

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AFRO SHOC



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