sormas

Surveillance, Outbreak Response Management and Analysis System

Open **S**ource

Surveillance, **O**utbreak **R**esponse **M**anagement and **A**nalysis **S**ystem

SORMAS

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Prof. Dr. Gérard Krause

Scientific lead of SORMAS
Head of Epidemiology Department, Helmholtz Centre for Infection Research, Braunschweig, Germany

Gerard.Krause@helmholtz-hzi.de

www.sormas.org

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Objectives & Scope of SORMAS

Surveillance, **O**utbreak **R**esponse **M**anagement and **A**nalysis **S**ystem

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Surveillance, Outbreak Response Management and Analysis System

- outbreak response task management (including contact tracing)
- fully digital
- fully mobile
- independent from continuous electricity or internet
- user centered design thinking approach
- compatibility / automated interfaces:
  - Integrated Disease Surveillance and Response System (IDSR)
  - International Health Regulations (IHR)
  - District Health Information Software (DHIS2)
  - Epi Info
- open source (all source code available on GitHub)

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Response and Surveillance Work Flow Managed by SORMAS (eg. Ebola)

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Collect rumors & notifications → **Validate** rumors & notifications → **Control** e.g. isolation, decontamination

Health facility

Incoming rumour

Community

Incoming rumour

Informant

Surveillance officer

Laboratory officer

Ebola hotline

Rumor officer

Surveillance supervisor

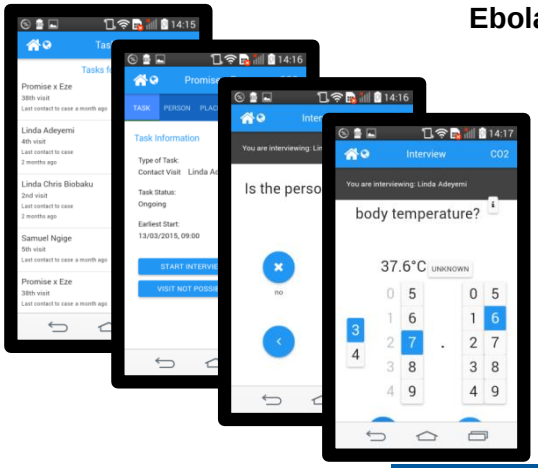
Case supervisor

Case officer

Contact supervisor

Contact officer

Contact manage -ment



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Regional and International Data Integration through SORMAS

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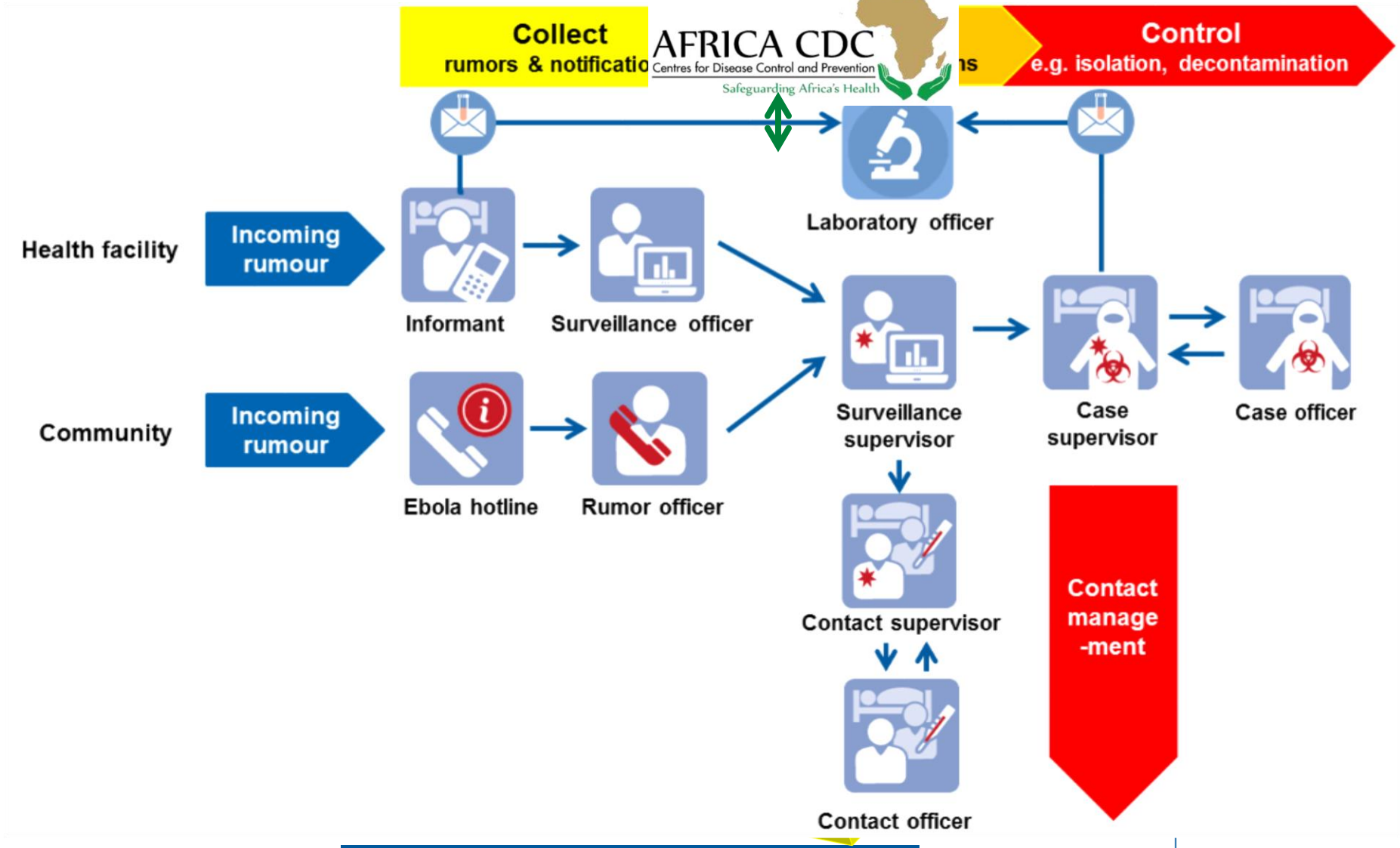

User-specific interfaces for 11 different users (personas) in SORMAS

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Informant
Notifies suspect cases

Rumour Officer
Receives calls from general population

Surveillance Officer
Conducts triage on rumours, applies case definition

Surveillance Supervisor
(state epidemiologist)
Coordinates local disease control

Laboratory Officer
Assures exchange of lab results

Case Officer
Perform disease control actions (eg. isolation)

Case Supervisor
Coordinates case management

Contact Officer
Conducts contact tracing within a particular district

Contact Supervisor
Coordinates work of contact officers

National CDC
and National Emergency Operation Centre

Regional CDC
WAHO
ECOWAS

International
Africa CDC
WHO

Persona Profile: Laboratory Officer

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Tasks

- Receives collected specimens from suspected cases from Surveillance supervisor
- Coordinates the laboratory sampling procedure and collection of results in hers/his respective laboratory
- Documents tests done, test results and gives feedback to Surveillance supervisor
- Coordinates specimen referrals for higher level laboratories when needed

Needs

- to get informed about incoming samples from surveillance supervisor
- to acknowledge the received samples
- to enter the information on the samples
- to have line list of tested specimens with results

Interaction/Dependencies with/other personas

- Surveillance supervisor

Artefacts (Input/Output)

- Laboratory investigation form

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EVD Processes – Overview

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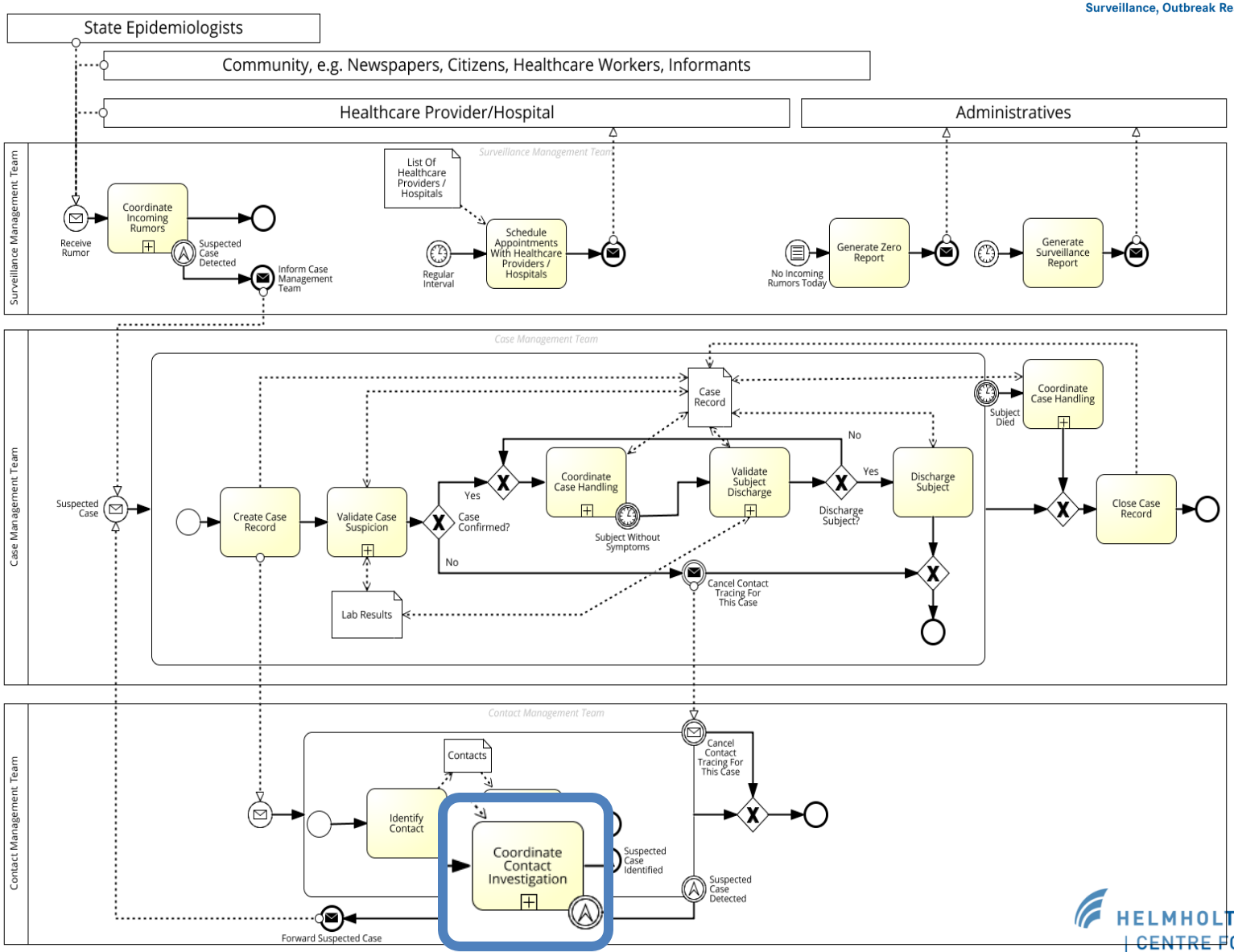

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EVD Process – Contact Investigation

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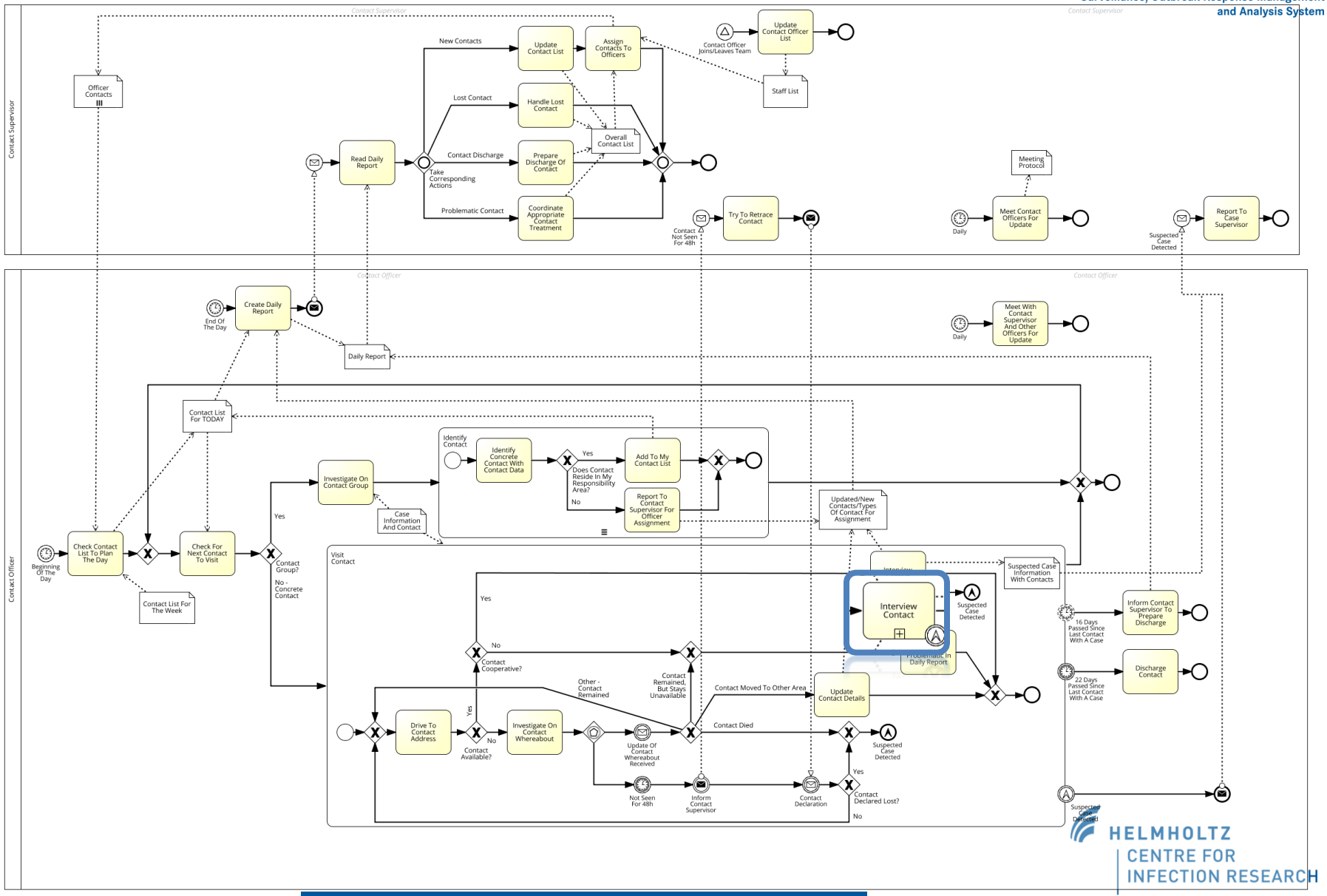

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7 high priority epidemic prone diseases already covered by SORMAS

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- Ebola
- Lassa
- Cholera
- Measles
- Cerebrospinal Meningitis (CSM)
- Avian Flu
- Other haemorrhagic fevers

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3-Year Field Pilot Implementation in Nigeria to Start in 2017

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Participating Institutions

- African Field Epidemiology Network (AFENET)
- Nigerian Centre for Disease Control (NCDC)
- Regional Centre for Surveillance and Disease Control (ECOWAS-RCSDC)
- West African Health Organisation (WAHO)
- WHO Country Office Nigeria (WHO)
- German Agency for Technical Cooperation (GIZ)
- Helmholtz Centre for Infection Research (HZI)

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SORMAS Official Website

dex.php/en/

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Home

SORMAS-OPEN WORKSHOP
From the 15th-19th August, a presence workshop took place in Abuja/Nigeria for the whole duration ...
Read more

HONORABLE MINISTER ENDORSES SORMAS
...The Minister noted that the Centre was also pilot – testing an open source Surveillance and out...
Read more

HZI MOU SIGNING WITH NCDC & AFENET
The Representative of HZI Scientific Director, Prof. Ger... Krause signin...

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PROCESS MODELS

- Ebo...
- Proc... Cholera
- ...era
- Su... ...ischarge Ebola
- Subprocess_Measles
- Subprocess_ValidateEbola

TWEETS

Tweets by @SORMAS_open

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LATEST PUBLICATIONS

Welcome to SORMAS Website

SORMAS stands for "Surveillance, Outbreak Response Manage... ...alysis S... developed during the West African Ebola pandemic 2014/... ...AS is ...early ...ing ... management system based on flexible mobile tele... ...apps ...combin... ...wit... ...cloud technology, enabling even countries equip... ...or ...ited i... ...dation ...communication technologies (ICT)

- *To record infection out... ...del...*
- *To mo... ...plex p... ...esses to ...rupt... ...tion chains and*
- *To ...ure continuous ... ...ses o... ...epidemiological situation.*

Coordinated by the Helmholtz Centre for Infection Research (HZI), SORMAS was originally developed with support of the German Federal Ministry of Research (BMBF) in a consortium of various German and Nigerian public health and research institutions, with technical services rendered by SAP USA. Within

WH...S ONLINE

We have 4 guests and no members online

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Password

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Forgot your username?
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Please le...

HELMHOLTZ ZENTRUM FÜR

Software used for SORMAS

- **UNIX System UBUNTU** LTS 16 Server 16GB RAM, HDD efficient, 500GB
- **Data Backup** (separate system storage from the scripts using CRON JOB scripts
- **Vaadin** Web Client (vaadin.org)
- **JAVA** EE Server Payara
- **POSTGRES** Database (pgadmin)
- **CRONJOB** Backup
- **Android OS 4.0** and above
- **SORMAS android app**
- **Google Chrome Browser (**recommended)
- **Windows Operating System (**recommended)

Hardware Requirements for SORMAS

- **Computer Machine**
  - 3 Laptops (standard specification)
  - 3 internet dongles (Mobile internet sticks)

- **64-bit (x86-64) CPU** (can run the 32-bit (x86) version as well)

- **Ubuntu Server (CLI) Installation**
  - 300 MHz x86 processor
  - 192 MiB of system memory (RAM)
  - 1 GB of disk space
  - Graphics card and monitor capable of 640x480
  - CD drive

- **Mobile Phone Requirements**
  - **Android** mobile phones with large screen (at least 4 inch screens)
  - **Sim cards** for internet Data bundle plans and voice calls communication
  - Extended **Battery Life**
  - **Touch screen** feature