
**GOARN Full-Scale Interregional Field Simulation
Exercise (IFX) of the Rapid Response Mobile
Laboratories (RRML) and Interregional Meeting (IRM)**

1/4

Location: Germany, Türkiye, Israel
Exercise dates: 2023

Original: English

Concept note

1. Background:

Rapid Response Mobile Laboratories (RRMLs) provide critical laboratory diagnostic support in crisis situations and are an important asset of the global emergency workforce. In 2018, the Health Emergencies Programme (WHE) at the WHO Regional Office for Europe established the RRML Network, driven by the European partner institutions of the Global Outbreak Alert and Response Network (GOARN), to advance and integrate RRMLs into existing preparedness and response structures and to standardize RRML operations in the field.

To strengthen the capacities and coordination of RRML in Europe and globally, WHE at the WHO Regional Office for Europe with Regional GOARN partner institutions and the GOARN Operational Support Team (OST) at WHO headquarters developed a conceptual framework to support RRML activities and establish minimum operational standards. These standards function to support quality operational response in the field, as well as enabling the development and strengthening of national emergency care systems in non-emergency contexts.

The minimum operational standards are to be applied across all phases of the RRML deployment lifecycle from the initial request for assistance to the end of the field mission. The standards set the basis for the development of indicators for a RRML Monitoring and Evaluation (M&E) system and will inform a forthcoming WHO recognition process for RRMLs/GOARN, as well as capacity building programme.

A simulation exercise (SimEx) programme for RRML Network consisting of four exercises of increasing complexity was developed by WHO and launched in 2021. The main objective of the programme is to test comprehensiveness, applicability, and feasibility of the proposed minimum operational standards and to explore in-field coordination procedures, aimed to strengthen GOARN deployment mechanisms. These exercises have been designed with an emphasis on adaptability and scalability and can be integrated within the existing simulation and training programmes.

The GOARN Full-Scale Interregional Field Simulation Exercise (IFX) will be the final event in the WHO SimEx programme for RRMLs. It has been developed as a set of three individual modules covering the entire RRML deployment life cycle linked by a common exercise scenario and sequence of events.

- **TTX:** The first exercise module is a hybrid table-top exercise that will walk through the pre-deployment phases of the life cycle to initiate the exercise and prepare for the subsequent field exercise.
- **IFX.01:** The second module will focus on testing RRML minimum operational standards to support coordination and interoperability with other assets of the WHO Health Emergency Workforce in the field.

- **IFX.02:** The third module will engage RRMLs to train and to test minimum operational standards during the mission execution and end of mission phase.

Each module builds on events and outcomes from the previous exercises but are designed to be easily modified to provide knowledge transfer opportunities.

Following a consultative design process, a comprehensive training package has been developed and is scheduled for pilot implementation over the course of 2023. The IFX project has been created and organised by WHE at the Regional Office for Europe in collaboration with GOARN OST, WHO Member States, and other key partners.

2. Goal:

The overarching aim of the IFX is to further strengthen RRML Network as a key global operational asset in responding to public health emergencies.

3. The objectives of the IFX:

- Test the RRML Minimum Operational Standards for comprehensiveness, applicability, and feasibility under the field conditions.
- Test coordination and interoperability mechanisms between RRML and other assets of the global health emergency workforce throughout the entire RRML deployment cycle.
- Test and apply indicators for a forthcoming RRML Monitoring & Evaluation System and RRML recognition system in line with existing tools and the International Health Regulations (2005).
- Knowledge transfer and raising awareness about RRML minimum operational standards.
- Advocate for RRMLs as key part of WHO rapid response capacities.

4. Dates and location of the pilot IFX event:

The individual modules of the IFX are scheduled to occur over a spring-summer-autumn periods of 2023 as outlined in the Table 1.

5. General programme of the IFX:

Building on previous tabletop and functional exercises, the IFX is developed around a common scenario and is set in a fictitious country named ‘The Republic of Globalland’, focusing on specific procedures in different phases of the RRML life cycle over three exercise modules (**Table 1**).

The scenario combines two emergency situations which potential could arise in future as a result climate change and continued urbanisation (**Figure 1**):

- A long-lasting drought resulting in cross-border movement of displaced population.
- An outbreak of a highly pathogenic H5N8 Influenza A Virus (IAV) representing an aerosol-transmissible zoonotic virus, which is also transmissible between humans and causes a respiratory disease with typical flu-like symptoms.

RRML minimum operational standards will be tested in five workstreams, each exploring a different aspect of RRML activity:

- **Operational Support and Logistics (OSL)**, focusing on the deployment of RRML units and in-field logistics, including custom clearance arrangements, material transport, in-field setup as well as safety and security in the fields.
- **Quality Management Systems (QMS)** through proficiency testing for RRMLs will be conducted as a pilot for RRML External Quality Assessment (EQA). The implementation of the proficiency testing will be supported by WHO Collaborating Centres.
- **Laboratory Information Management System (LIMS)** with the testing of standards supporting interoperability among different assets of the global emergency workforce. This includes data

transmission, minimal data sets for RRMLs and the establishment of efficient in-field communication.

- **Biosafety and Biosecurity (B&B)**, testing and investigating the B&B procedures and measures applied by RRML during deployment.
- **Coordination**, practising coordination mechanisms for RRML deployment and in the field.

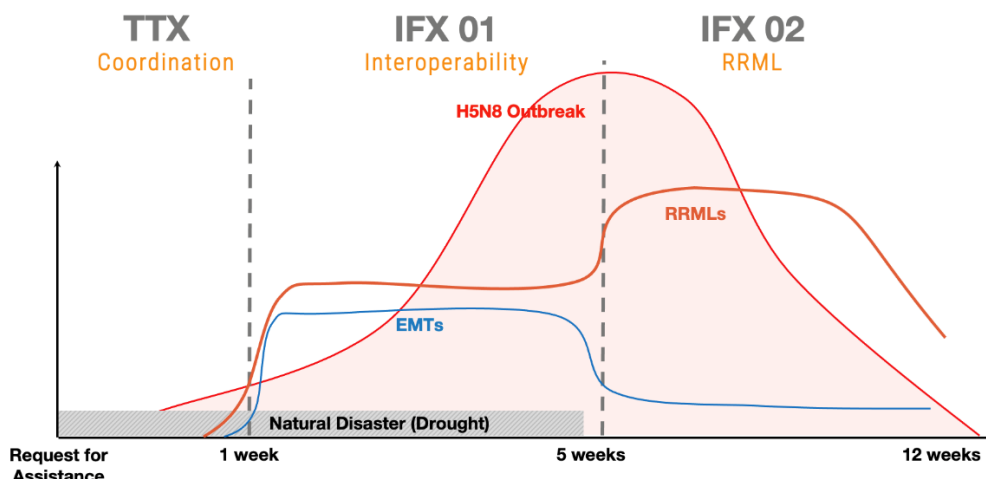


Figure 1 Overview of the cross-module exercise scenario sequence of events. Timeline represents in-scenario dates.

Table 1. Outline of exercise module formats and contents.

	Exercise Modules		
	TTX	IFX.01	IFX.02
Format	Hybrid	In-person	In-person
Dates	03 – 04 May 2023	19 – 23 June 2023	October 2023
Locations	Berlin, Germany	Istanbul, Türkiye	Tel Aviv, Israel
Duration	1.5 days	3.5 days	3 days
Target Audience	<ul style="list-style-type: none"> • RRML Coordination bodies • WHO Coordination bodies • Ministry of Health 	<ul style="list-style-type: none"> • RRML • EMT • Ministry of Health / EMTCC • RRT • WHO OSL team 	<ul style="list-style-type: none"> • RRML • WHO OSL team • Ministry of Health and technical experts
# of Participants	Approx. 100	Approx. 150	Approx. 150
Content	<ul style="list-style-type: none"> • Coordination • Planning • Exit strategies 	<ul style="list-style-type: none"> • Field diagnostics • Interoperability • Coordination in the field 	<ul style="list-style-type: none"> • Field diagnostics • Coordination in the field • Challenges in the field
RRML Life cycle phases	<ul style="list-style-type: none"> • Mission assignment phase • Mission specification phase 	<ul style="list-style-type: none"> • Mission execution phase • End of mission phase 	<ul style="list-style-type: none"> • Mission execution phase • End of mission phase

Table-Top Exercise (TTX); Interregional Field Exercise (IFX); Rapid Response Mobile Laboratories (RRML); Emergency Operation Centre (EOC); Emergency Medical Team (EMT); EMT Coordination Cell (EMTCC); Rapid Response Team (RRT); Operational Support and Logistics (OSL).

6. Testing interoperability:

This complex emergency scenario allows a comprehensive investigation of RRML interoperability with other assets of the Health Emergency Workforce (HEW) by providing an opportunity for direct engagement with Emergency Medical Teams (EMTs) and Rapid Response Teams (RRTs). The IFX.01 will provide an interface for other first responders in emergencies to test and train together on relevant elements of interoperability.

The IFX.01 provides an opportunity for participants to contribute to testing RRML minimum operational standards while also testing their own procedures, including isolation and medical evacuation capacities and testing and refinement of HEW deployment procedures under remote field conditions.

Table 2 provides an overview of interoperability training goals and objectives for RRMLs and proposed exercise content for EMTs and RRT participating in the exercise.

Table 2 Proposed interoperability exercise objectives and trainings content during IFX.01.

Objectives for RRMLs	Proposed objectives for EMTs	Proposed objectives for RRTs
<ul style="list-style-type: none"> • Test of different deployment mechanisms (jointly vs standalone) • Test joint coordination with EMTs and RRTs in the field • Diagnostic sample reception and transport • Data exchange with HEWs including minimum data set • Joint in-field logistic support in the field 	<ul style="list-style-type: none"> • Test diagnostic sampling techniques • Test specimen transfer and transport • Test procedures for point of care testing • Test isolation protocols and procedures • Test of biosafety procedures including decontamination • Test of logistic procedures and coordination with other HEW in the field • Test waste management of infectious material in the field • Test medical evacuation procedures in the emergency response settings 	<ul style="list-style-type: none"> • Test coordination in the field with other HEW • Practice data management and exchange • Test of logistic procedures and coordination with other HEW in the field • Test procedures for point of care testing

The IFX scenario and exercise injects cover exercise content and objectives for RRMLs. Participating HEW units other than RRMLs will actively support RRML objectives throughout the exercise and are invited to develop exercise modules linked to the overall exercise scenario to address proposed objectives above.

7. Interregional Meeting (IRM):

An Interregional Meeting (IRM) will be held **on the 20th of June 2023** as part of the IFX.01, bringing together senior-level representation from WHO and GOARN partner institutions across WHO Regions with existing RRML capacities, as well as representatives from key donor agencies. The aim of this 1-day meeting is to:

- convene RRML Network members and rapid response stakeholders to champion a new era of rapid response capacities and discuss the progression of the RRML Network
- set the stage for the development of the RRML Network's vision and values
- advocate for RRMLs as a global operational asset during public health emergencies and in preparedness.

In addition to the strategic discussions, participants of the meeting will have the opportunity to observe RRMLs under field conditions, the labs test and applying emergency response coordination procedures together with other assets of the Health Emergency Workforce in a realistic scenario.

8. Participants:

The exercise will bring together operational partners of from all WHO regions to strengthen coordination and interoperability during emergencies, and to showcase RRML activities and procedures.

The IFX programme will focus on RRML Types 1 and 2, the small and medium size box-based units, given their successful past deployment and future likelihood to be mobilised through the GOARN deployment mechanism. To test and train coordination and interoperability in the field additional operational partners in the field will be sought to participate in the exercise including medical professionals, epidemiologists and experts in disaster management.

In addition, the 1-day IRM will bring together decision makers, WHO and GOARN senior management, technical experts, and donors to observe the IFX as part of an exhibition and to discuss the future of the RRML Network.

Table 3 provides an overview of participants for both events.

Table 3: Overview of IFX and IRM participants

IFX.01 participants (approx. 100 person)	IRM participants (approx. 50 person)
<ul style="list-style-type: none"> • GOARN partner institutions and RRML teams • Rapid Response Teams (RRTs), • Emergency Medical Teams (EMTs), • EMT Coordination Cell pool. 	<ul style="list-style-type: none"> • Member States • International technical experts, • International Organizations & Donor-agencies, • WHO senior management and technical staff, • Regional WHO GOARN, EMT, EMTCC and Lab Focal Points,

9. Language of the IFX:

The working language for the IFX and IRM will be English.