

Simulation-Based Learning Toolkit

Module 2 - Hebron Flood Response Tabletop Exercise & Digital Simulation



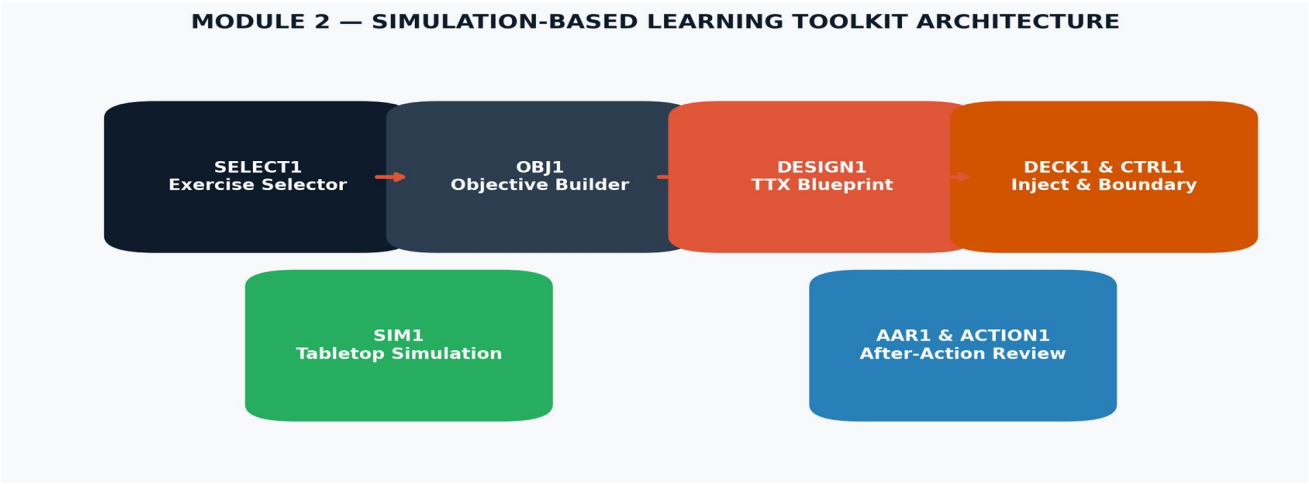
Funded by
the European Union

Preparedness is a practice.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

WP3 | EDITION 2026

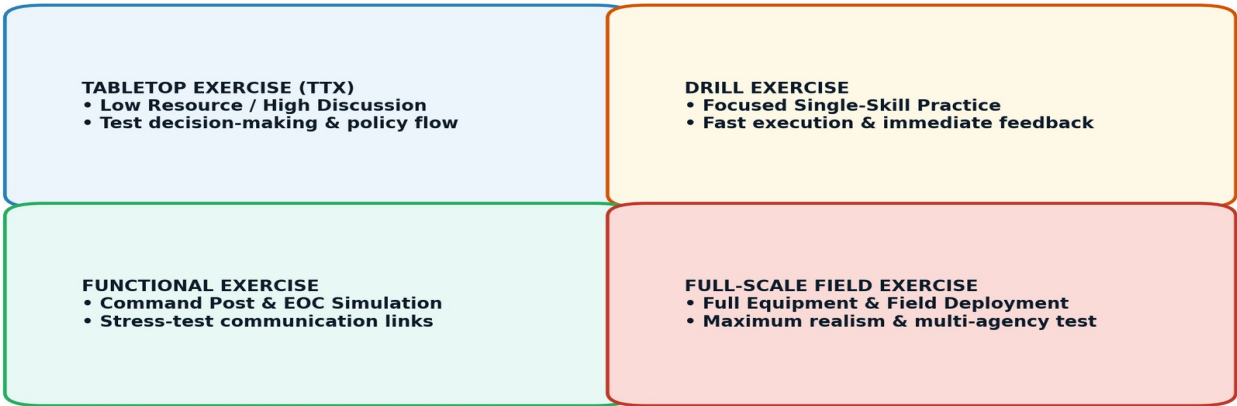
Toolkit Architecture & System Map



Toolkit Component	Core Operational Purpose	Target Participant Task
SELECT1 - Exercise Selector	Choose suitable simulation format	Evaluate TTX vs drill vs full-scale exercise
OBJ1 - Objective Builder	Define measurable training goals	Formulate SMART disaster response objectives
DESIGN1 - TTX Design Canvas	Structure scenario & timeline	Map scenario progression across 5 rounds
SAFE1 - Psychological Safety	Establish ground rules & open dialogue	Enforce non-punitive learning environment
DECK1 & CTRL1 - Inject Cards	Control exercise injects & boundaries	Release timed scenario injects
PREP1 - Control Checklist	Pre-exercise readiness check	Verify venue, audio-visuals, and role cards

SELECT1 — Exercise Type Selector Matrix

EXERCISE TYPE SELECTOR MATRIX (COMPLEXITY VS RESOURCES)



Exercise Format	Preparation Time	Resource Requirement	Primary Training Outcome
Tabletop Exercise (TTX)	1-2 Weeks	Low (Paper/Digital)	Test coordination & decision-making
Drill Exercise	2-3 Weeks	Medium (Single Unit)	Test specific technical skill or procedure
Functional Exercise	1 Month	High (Multi-Agency)	Test command post & communication flow
Full-Scale Field Exercise	2-3 Months	Very High (Full Field)	Test complete disaster response system

OBJ1 — Objective Builder Blueprint



Objective Component	SMART Criteria Definition	Flood Exercise Example
Specific Target	Define exact operational domain	Test cross-agency flood warning dissemination.
Measurable Action	Define clear metric or output	Complete evacuation alert within 15 minutes.
Achievable Scope	Realistic for 90-minute TTX	Identify access barriers in 3 refugee camps.
Relevant Focus	Directly addresses disaster gap	Clarify inter-agency resource positioning.
Time-Bound Output	Delivered during AAR session	Produce documented action tracker by end of TTX.

DESIGN₁ — TTX Design Canvas



Canvas Section	Design Parameters	Hebron Flood Exercise Setup
1. Scenario Context	Location, weather, timeline	Heavy rainfall forecast, rising wadi water levels.
2. Target Agencies	Institutions involved	Municipality, Civil Defense, Red Crescent, UNRWA.
3. Exercise Injects	Timed event updates	5 Rounds of scenario escalations & unexpected roadblocks.
4. Facilitation Mode	Directing exercise flow	Facilitator releases injects without operational coaching.
5. Evaluation Output	Capturing lessons learned	Structured After-Action Review (AAR) wall & action tracker.

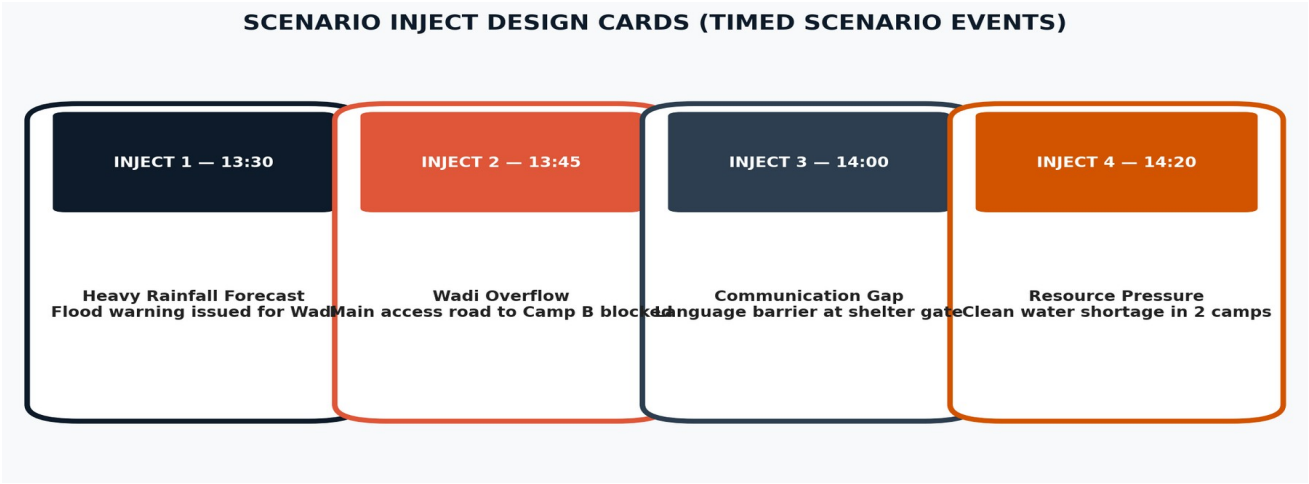
SAFE1 — Psychological Safety Agreement

PSYCHOLOGICAL SAFETY GROUND RULES FOR TABLETOP EXERCISES



Safety Rule	Core Principle	Facilitator Commitment
Rule 1: Learning Environment	Focus on system improvement, not personal blame.	Enforce non-punitive discussion.
Rule 2: Freedom to Test	Participants can test unconventional response decisions.	Encourage creative problem solving.
Rule 3: Chatham House Rule	Information shared in TTX stays within learning framework.	Maintain strict confidentiality.
Rule 4: Equal Voice	All agency representatives have equal standing in discussion.	Ensure balanced participation across all roles.

DECK1 — Scenario Inject Design Cards



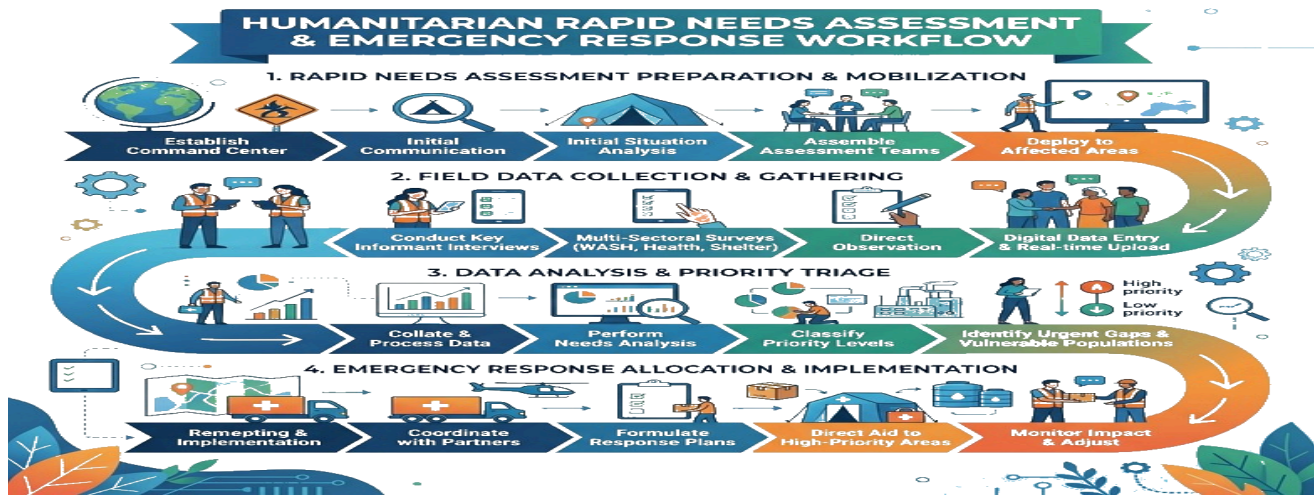
Inject Card	Simulated Event Update	Trigger Time	Expected Response Action
Inject 1	Heavy rainfall forecast; flood warning issued for Wadi Al-Samn.	13:30	Activate joint operations center & notify camp leaders.
Inject 2	Wadi overflows; main access road to Camp B flooded.	13:45	Reroute evacuation convoys via East Bypass Road.
Inject 3	Language & communication barrier at UNRWA shelter entry.	14:00	Deploy multi-lingual community liaison officer.
Inject 4	Clean water shortage reported in 2 evacuation camps.	14:20	Prioritize emergency water tanker dispatch.

CTRL1 – Facilitator Boundary Cards



Boundary Card	Facilitator Action	Boundary Rule
OBSERVE	Silent monitoring of role discussions	Do not interfere during active round decision-making.
TIME-KEEP	Announce remaining round time	Strictly enforce 15-minute limits per scenario round.
ESCALATE	Release unplanned scenario complication	Use only if group resolves initial inject too quickly.
DEBRIEF	Transition group from scenario to AAR	Stop exercise at scheduled time regardless of completion.

PREP1 – Exercise Control Checklist



Checklist Phase	Verification Item	Readiness Status
T-3 Days	Venue booked & audio-visual screen tested	[VERIFIED]
T-1 Day	Participant role badges & inject cards printed	[VERIFIED]
T-2 Hours	Table alignment, projector, and video link verified	[VERIFIED]
T-15 Mins	Participant sign-in & psychological safety brief	[READY]

SIM1 — Fixed Tabletop Simulation

Title: Hebron Flood Response Tabletop Exercise

Format: Multi-agency TTX

Duration: 90 minutes execution + 35-45 minutes AAR

Participants: Municipality, Civil Defense, Red Crescent, UNRWA, camp committees, NGO liaison

Setting: Heavy rainfall forecast, rising water levels in wadis, three camps at risk.

Simulation video

Open the linked file in your browser or media player.



[\[OPEN VIDEO — CLICK TO PLAY \]](#)

Fixed objectives

1. Test cross-agency warning and information flow.
2. Clarify evacuation authority and escalation routes.
3. Identify access and language barriers.
4. Test resource prioritisation and pre-positioning decisions.
5. Produce documented improvements through the AAR.

Simulation rule: Participants act in their assigned institutional role. The facilitator releases each round at the stated time and records decisions without operational coaching.

SIM1-G – Simulation Decision Log



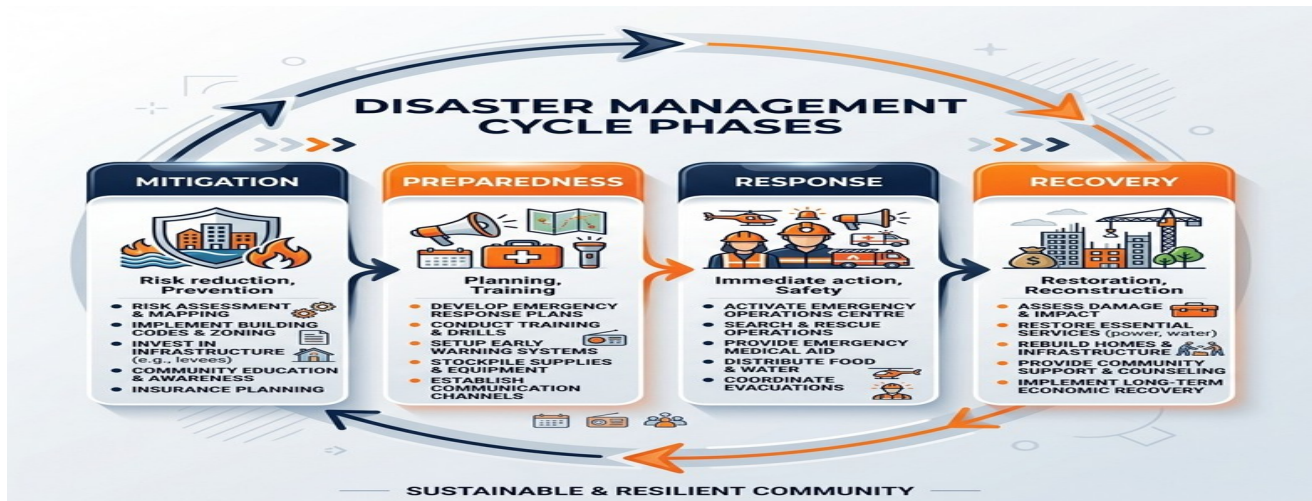
Scenario Round	Key Event Inject	Logged Decision	Assigned Agency
Round 1 (13:30)	Heavy rainfall warning	Activate joint EOC & notify camp leaders	Civil Defense / Municipality
Round 2 (13:45)	Wadi overflow & road block	Reroute evacuation buses via East Bypass	Traffic Police / Red Crescent
Round 3 (14:00)	Language barrier at shelter	Deploy multi-lingual UNRWA liaison	UNRWA / NGO Liaison
Round 4 (14:20)	Clean water shortage	Dispatch 4 emergency water tankers	Water Authority

AAR1 & ACTION1 — After-Action Review Wall



Observed Gap / Success	Root Cause Analysis	Corrective Action Required	Target Deadline
Slow warning flow to Camp C	Unclear radio frequency assignment	Establish dedicated inter-agency VHF channel	14 Days
Language barrier at shelter	No multi-lingual volunteers on site	Pre-assign multi-lingual team per camp	30 Days
Water tanker delay	Congested primary access route	Pre-position water supply units near high-risk wadis	30 Days

EVAL1 & EVAL2 – Exercise Design Rubric



Evaluation Criterion	1 - Weak	2 - Developing	3 - Effective	4 - Strong
Scenario Realism	Unrealistic events	Basic scenario setup	Highly realistic injects	Immersive simulation context
Inter-Agency Flow	No communication	Partial coordination	Active multi-agency flow	Seamless inter-agency action
AAR Action Output	No tracker produced	Basic notes recorded	Structured AAR tracker	Fully assigned 30-day action plan

EVAL₃ & FOLLOW₁ — 30-Day Transfer Tracker



Transfer Goal	Implementation Action	Target Review Date	Status
Update Camp SOPs	Integrate TTX flood warning lessons into agency SOP	Day 15	[IN PROGRESS]
Joint VHF Channel	Procure & configure shared emergency radio frequencies	Day 30	[COMPLETED]
Multi-lingual Pool	Establish roster of bilingual emergency translators	Day 30	[IN PROGRESS]
Transfer Tracker Note: The 30-day transfer tracker ensures that simulation findings lead directly to institutional policy changes and operational readiness upgrades.			

FAC — Facilitator Quick Guide & References

- UNDRR (2020). Disaster Risk Reduction and Simulation Exercise Guidelines for Humanitarian Agencies.
- UNOCHA (2019). Tabletop Exercise Design & Facilitation Manual for Emergency Management.
- WHO (2017). Emergency Preparedness and Simulation Exercises in Health Sector Response.
- IFRC (2018). Guidelines for Simulation Exercises in Disaster Risk Management.

Digital adaptation note: Each worksheet, exercise selector, inject card, and AAR tracker can be published as an independent web component under WP3. SIM1 is suitable for timed online scenario updates, role selection, and post-simulation reflection.



Preparedness is a practice.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

WP3 | EDITION 2026