

# CAP Implementation

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**Online meetings of the TOWS-WG inter ICG  
Task Team on Disaster Management and Preparedness (TTDMP) and on Tsunami  
Watch Operations (TTTWO)**

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**Early  
Warnings  
for All**





# Early Warnings for All

Protecting everyone on Earth through multi-hazard early warning systems

## About EW4All

In March 2022, the UN SG set an ambitious target to ensure that everyone on Earth is protected by **multi-hazard early warning systems**.

- Four Pillars led by: **UNDRR, WMO, ITU, IFRC**
- ITU leads Pillar 3 on **Warning Dissemination and Communication** to support countries to enhance the “last-mile” delivery of alerts.



## Key Figures



**97.9%** of the world population is covered by a mobile network

Yet...



**4 out of 5** people in the world own a mobile phone



**30%** of people globally receive **no warning at all**

## Turning ICT Networks into Lifelines

**ITU supports countries to implement trusted, inclusive, and effective warning systems using multi-channel dissemination, leveraging open standards and AI.**

- Deploying multi-channel public warning systems through technologies like **Cell Broadcast** and standards like **CAP**.
- Working hand-in-hand with **Governments and partners** like **GSMA, Microsoft, Google** and others
- Fostering communities of practice through TEG-CB, AI for EW4All subgroup, etc.
- Key products like **Early Warnings Connectivity Map (ECM)** - developed with Microsoft AI for Good Lab, IHME & Planet Labs & leveraging **AI and satellite** imagery to reveal populations that are beyond the reach of mobile networks



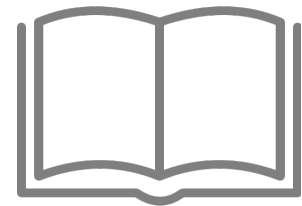
# Library of Service

# of activities

	INDICATOR	Yes
Phase 1: Foundational work	EW4All Pillar 3 capacity gaps assessment	33
	EWS roadmap that includes implementation of mobile-based alerting, such as Cell Broadcast	27
	National Emergency Telecommunications Plan (NETP)	45
		105
Phase 2: Risk Assessment	Legislative/regulatory/policy framework on EWS and/or assessment on such frameworks	2
	Subnational connectivity gap assessment (Disaster Connectivity Map/AI)	20
	Assessment on National ICT Resilience and Affordability	9
	Subnational assessment on inclusion in mobile-enabled risk communications	2
		33
Phase 3: Technical and Feasibility Studies	Feasibility study for mobile EWS	15
	Functional Requirements or Technical Specifications Studies for EWS	6
		21
Phase 4: Tender support	Mobile EWS tender documents	0
		0
Cross-cutting: Capacity Building	Trainings/Guidelines for the dissemination of alerts to persons with disabilities	0
	Training conducted on CAP/warning dissemination workshops	11
		11
		170

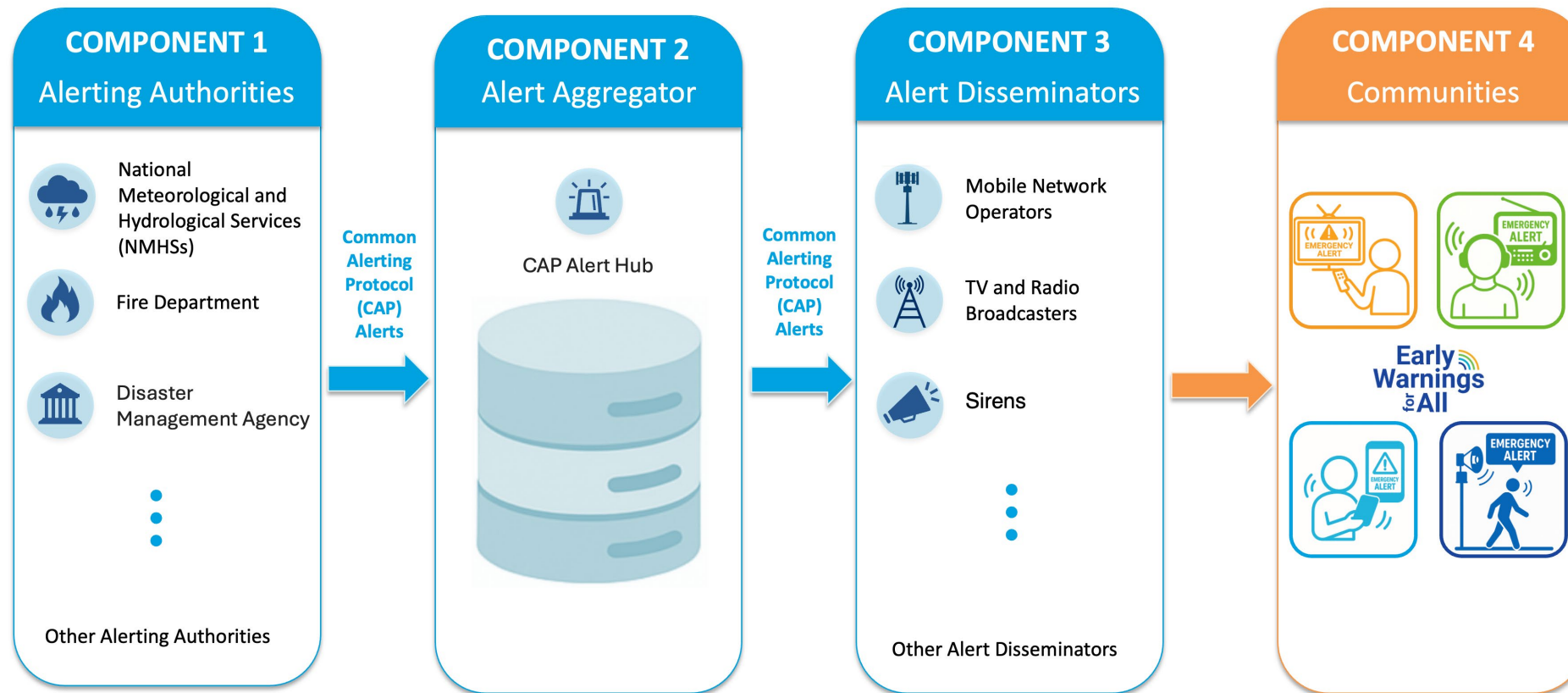
# Progress indicators Q4 2025

- **36 countries have a functioning CBS by 2025** +11 in its final stage of development.
- 33 countries with a Pillar 3 gap analysis assessment (baseline).
- 27 countries with a Pillar 3 Roadmap.
- 166 activities carried out by ITU + 4 activities carried out by partners (GSMA, IFRC).
- **11 CAP Trainings already done** in: Mozambique, Bangladesh, Nepal, Haiti, Madagascar, Mauritius, Somalia, Comoros, Liberia, Mauritania and Djibouti.
- This service library is made available to the countries we support.



# Integrating Common Alerting Protocol (ITU-T X. 1303)

ITU-T Recommendation X.1303 *bis* was approved in March 2014 by ITU-T Study Group 17



# ITU 1 Day training on CAP dissemination

SESSION	FOCUS
<b>1. Why Early Warning &amp; CAP Matter</b>	UN's "Early Warnings for All" initiative, strategic value of CAP, and national examples of implementation
<b>2. CAP Dissemination Workflow &amp; Key Actors</b>	The CAP Standard (Structure and XML), Dissemination Workflow, and the Key Actors
<b>3. Aggregation and Dissemination</b>	The Role of a CAP Aggregator, then Choosing the right channels: Cell Broadcast, LB-SMS, Internet Channels, etc. Focus on the Mobile Alerting Technologies.
<b>4. Practical Exercise</b>	Extract a real CAP from the SWIC and transform it for a mobile-based alert CB (length, order). Learn how to validate any CAP thanks to the Google CAP validator.
<b>5. Security, Trust, and Governance</b>	Essential Security Measures, Register of Alerting Authorities, CAP policies
<b>6. Case Studies, SOPs, and Future</b>	Case Studies , Standard Operating Procedures on CAP dissemination for mobile alerts channels, and Innovations

# Thank you!



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