



Annex 1

Draft Programme

AI-Powered Early Warning Systems: Building Resilient Infrastructure for All

1 -3 December 2026

Bangkok, Thailand

DAY 1:	
	Introduction and Opening
09h30-10h00	To provide an overview on EW4All progress, workshop objectives and the post-2027 consultation.
10h00-10h15	Group picture
	Session 1a: Developing a People-Centred National Alerting System
10h15-11h15	This session would provide a comprehensive overview of how modern technology and international standards can transform a nation's early warning capabilities. While establishing the fundamental need for robust, Multi-hazard Early Warning Systems (MHEWS) as a critical component of disaster risk reduction, the session would highlight the technical and policy architecture required to build a national, interoperable alerting framework. Session would address the adoption of the Common Alerting Protocol (CAP) —an international standard for emergency data exchange as an alert dissemination approach to ensure message consistency across all channels. This is complemented by an in-depth look at Cell Broadcast (CB) technology, examining its unique advantages for reaching every mobile device in a geographically targeted area instantly, without network congestion or the need for pre-registration.
11h15-11h30	Break
	Session 1b: Enabling Cell Broadcast at National Level: Regulatory Frameworks, Technical Specifications, and Implementation Pathways
11h30-12h30	The session would examine the regulatory prerequisites for CB implementation, including designating an authoritative alert aggregating agency, mandating mobile network operator participation, and addressing liability protections. The session would also cover the core technical architecture requirements and the implementation options for Cell broadcast. The session would also address critical operational considerations, including geo-targeting accuracy, multi-language support, device compatibility, and public testing.



12h30-14h00	Break
14h00-15h15	Session 2a: Responsible AI for inclusive Emergency Preparedness This session will explore how artificial intelligence can strengthen emergency preparedness and anticipatory action across the early-warning value chain, while ensuring that its use remains responsible, transparent and people-centred. It will include discussions on how AI can help shift from reactive operations to data-driven foresight can be achieved. The session will highlight how emerging AI applications can transform risk into actionable intelligence: probabilistic hazard forecasting; automated trigger systems that enable pre-emptive humanitarian action before a crisis peaks; and dynamic resource logistics platforms that optimize personnel, supplies, and financial allocation in real-time. A particular focus will be placed on warning dissemination and communication, where AI can help translate, simplify and adapt authoritative warning messages for different languages, audiences and accessibility needs; support more targeted and location-specific communication; optimise the use of multiple dissemination channels based on connectivity and reach; and analyse feedback, public response and misinformation to improve future warning strategies.
15h15-15h30	Break
15h30-15h50	Session: Infrastructure Sharing – A Solution for affordable and resilient Connectivity Administrations, especially in Landlocked Developing Countries (LLDCs), face a fundamental digital connectivity challenge i.e. dependence on robust connectivity to access global markets with constrained geography. High transit costs, reliance on neighbouring infrastructure, and limited backhaul capacity create a connectivity bottleneck that affects economic growth. This session positions infrastructure sharing as the primary solution to these challenges. By moving from isolated digital infrastructure development to collaborative models, LLDCs can overcome their geographic disadvantages. The discussion will focus on how shared fibre corridors can reduce the exorbitant costs of landlocked backhaul, how co-investment in cross-border transmission lines can eliminate duplication, and how regional infrastructure pools can provide LLDCs with affordable access to submarine cables. The session will demonstrate that infrastructure sharing is not merely an efficiency tool, but a strategic necessity for shared regional prosperity.
15h50-16h15	Session 3: Supporting data enabled MHEWS through partnerships (world Café style) The effectiveness of multi-hazard early warning systems depends not only on access to timely and reliable data, but on the ability to turn that data into trusted intelligence,



authoritative warnings and timely action. Across the early-warning value chain, relevant information is distributed across many actors: public agencies generate hazard and risk information; telecommunications operators and technology companies hold connectivity, mobility and infrastructure data; humanitarian organizations contribute vulnerability and impact information; and communities provide essential local and traditional knowledge. This World Café-style session will explore how partnerships can connect these different sources of information into end-to-end warning systems, tracing the pathway from AI-supported analysis and decision support through institutional validation, Common Alerting Protocol (CAP), Cell Broadcast and complementary dissemination channels, public response and evaluation.

Participants will consider both the technical and institutional conditions required to make this pathway work in practice. Particular attention will be given to governance, interoperability, the responsible use of private-sector data, integration of locally held knowledge, and sustainable operating models that move beyond short-term pilots.

Key Questions

- **AI based workflows:** How can AI-supported analysis be integrated into institutional workflows in ways that strengthen, rather than bypass, human validation, accountability and official warning authority?
- **Innovation & Inclusion:** What new partnerships—especially with the private sector and civil society—can bring innovative data sources (e.g., mobile network data, social media trends, IoT sensors) into early warning systems, while ensuring they serve the most marginalized?
- **Capacity & Localization:** How can partnerships strengthen local and national capacities to generate, analyse, and act on data—transforming communities from passive recipients to active participants in the warning chain?
- **Sustainability:** What institutional, financing and operating models can ensure that data and technology partnerships become part of nationally owned MHEWS rather than remaining isolated pilots?

DAY 2:

Session 4: Country progress on MHEWS and pathways to 2030

09h15-
10h45

Country presentations will examine progress across the full early-warning value chain, including the status of Common Alerting Protocol (CAP) implementation, Cell Broadcast and other public warning channels, the use of AI and digital technologies, available evidence on reach and effectiveness, institutional and financing arrangements, and priority milestones towards 2030. The session will also highlight practical lessons on what has enabled progress, where implementation gaps remain, and what types of technical assistance, partnerships and financing are needed to move from pilots or partial systems towards sustainable, nationally owned and people-centred MHEWS.

1. Country 1: XXX
2. Country 2: XXX



3. Country 3: XXX

10h45-11h00	Break
11h00-12h30	Session 4: Panel: Developing resilient future ready digital infrastructure As countries accelerate their digital transformation journeys, the need for resilient, sustainable, and intelligent digital infrastructure has become more critical than ever. This session will explore how organizations and governments can build future-ready digital ecosystems by combining hybrid cloud, edge computing, AI-driven operations, and resilient data centre infrastructure. Particular attention will be given to the unique challenges faced by Landlocked Developing Countries (LLDCs), which often depend on neighbouring countries for international connectivity and face constraints in developing robust digital infrastructure. The discussion will examine how resilient data centres and Internet Exchange Points (IXPs) can reduce external dependencies, localize traffic, improve redundancy, and strengthen national digital sovereignty. Key themes will include leveraging AI for predictive maintenance and self-healing networks, ensuring sustainable and energy-efficient power infrastructure, enhancing resilience against threats and climate-related disruptions, and balancing the increasing demand for high-performance computing with environmental sustainability objectives. Moving beyond infrastructure deployment, the session will discuss how to design and operate digital infrastructure that is scalable, secure, adaptive, and climate-resilient, serving as the foundation for critical services such as financial systems, healthcare, government services, connectivity, and digital innovation.
12h30-14h00	Break
14h00-end	From implementation to 2030: financing sustainable MHEWS and shaping the next phase of EW4All This session will explore what is required to move from early-warning pilots and partial systems to sustained national implementation and long-term operation and then use those lessons to inform a strategic dialogue on the future of Early Warnings for All beyond 2027. The first part will focus on the real costs and institutional arrangements needed to operationalise MHEWS at scale. Discussion will cover capital and operating expenditure, procurement models, the role of mobile network operators and other private-sector partners, regional platforms and shared services, system maintenance, staff training, public testing and the recurrent costs required to keep warning systems functional over time.



Short interventions from governments, donors, MNOs or tech partners: Two or three concise examples showing what implementation actually costs, what has been difficult to sustain, and where financing gaps remain.

The second part will look ahead to regional priorities through 2030, considering how EW4All should evolve beyond its current 2027 horizon. The discussion will explore national ownership, inclusion, expansion of Cell Broadcast and other public warning systems, responsible use of AI, sustainable financing, stronger links to anticipatory action and clearer milestones for implementation.

Moderated discussion on regional priorities through 2030, including:

- nationally owned end-to-end MHEWS
- universal and inclusive warning reach
- expansion of Cell Broadcast alongside complementary channels
- CAP interoperability
- responsible AI across the warning value chain
- sustainable financing models
- measurable regional milestones to 2030

Participants identify the top five regional priorities to 2030 for Pillar 3 and, ideally, one or two measurable milestones for each.

Day 3	
All day	- CB solutions CBE Thailand (MDES/NDMO) - Visit to AIT GIS center and AI Lab