## EARLY WARNINGS FOR ALL INITIATIVE (EW4AII)

# Roadmap and Action plan for implementation at the regional level

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WORLD METEOROLOGICAL ORGANIZATION









## **EW4All Country Rollout**

- Multi-stakeholder consultation
   workshops
- Focus on strengthening coordination across sectors and scales
- Identification of immediate technical support requirements
- National roadmap and financing strategies
- Funding proposals

#### Resources

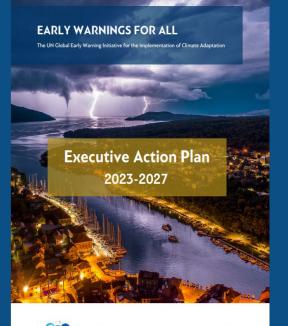
- EW4All Executive Action Plan
- <u>Global status of multi-hazard early</u> warning systems: Target G

**Early** 

Cover Note



Global status of multi-hazard early warning systems Target G



SENDAL FRAMEWORK

EW4All Rollout Toolkit

Caling up Early Warning Systems: Checklist for Gap Analysis     Early warning sitem important enabler of distater risk reduction. It can prevent loss of life and reduce the socio-economic impacts of distate marine systems need to actively involve the people and communities in trik from a range of hazards, facilitate public knowledge, and any many systems and and an early early and ensure that there is a constant state of preparedness and early action is enabled.     This Checklist is structured around the four key elements of effective early warning systems - 1). Risk Knowledge, 2) Detection, Monitoring, and products or services that and and governments can refer to whend elements of elements of ensure that the major elements of elements and ensure that the major elements of elements public.     The application of the tool would consist of the following actions:     1. Identifying the key products / services of the checklist or answering the questions of the checklist or answering the questions of the checklist provide a and priorities to scale-up (PMA in the element elements of elements public).     3. Highlighting gaps based on stakeholder experience and available documentation.     With regrets to Pillar 2 and Detection, Monothome, Analysis & Greecasting, the Checklist provide and priorities to scale-up (PMA in the element element) and element element element elements public, the relevant element elemente element element element element element element element elementel	Warnings ≱All	WORLD METEOROLOGICAL ORGANIZATION	UN Office for Disaster Risk Reduction	+C			
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Cross-pillar Pillar 1 Pillar 2 Pillar 3 Pillar 4



TERMS OF REFERENCE

WORLD METEOROLOGICAL ORGANIZATION

NATIONAL EARLY WARNING SYSTEMS TASK TEAM

[TEMPLATE TO BE ADAPTED]

#### BACKGROUND

The Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction 2015-2030 identify strengthened early warning systems as a critical component of building the resilience to disasters and crises and, by extension, contributing to sustainable development.

Early warning systems (EWS) are key elements of disaster risk reduction and climate change adaptation, as they help reduce or avoid the detrimental impacts of hazardous events. To be effective, early warning systems need to be risk-informed, target communities most at risk, disseminate messages and warnings efficiently, ensure preparedness and support early action. Early warning systems must rely on a sound scientific and technical basis and focus on the most vulnerable people and sectors. This implies the adoption of a system-based approach incorporating all relevant risk factors, whether arising from the climate-hazards or social vulnerabilities, and from short-term or long-term processes.

Early warning systems include four pillars: 1) risk knowledge, 2) observation, monitoring, analysis, and forecasting, 3) warning dissemination and communication and 4) preparedness and response capabilities.



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#### **EW4ALL ROADMAP FOR RA VI**

- Introduction:
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  - 3.2 Regional level
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  - Approaches to projects:

- Timeline:
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- Key stakeholders and their roles: (political, financial, technical)
- Risks, Challenges, and Sustainability:
- Review and Revision RA VI Process: Monitoring and Evaluation:
- Conclusion:

**EW4ALL REGIONAL ACTION PLAN** (E.g. Pillar 2 format)

#### **Goals, Scope and Objectives:**

- Goal: Every person in "Region" is protected through universal coverage of EWSs against extreme weather, climate and hydrological events within five years.
- Scope: UNDRR, WMO, ITU, and IFRC collaborate with contributing UN partner agencies across the four pillars of EW4All to create overall regional plan using existing Executive Action plan as a basis.

#### a. Objectives:

- i. Work towards harmonization of the level of development and operational practise in production of early warnings in RA VI (Europe)
- ii. Engage fully, without delay, in exchange of all available observational data supporting global and regional operations
- iii. Provide, as soon as possible, access to relevant products of the European Regional Specialized Meteorological Centers to all RA VI Members states

- Strategy for implementation:
  - 1. Assessment:
  - 2. Planning:
  - 3. Operationalization of the MHEWSs in RA VI and Implementation: (Regional and National levels)
  - 4. Continuous Capacity development/building, Maintenance, and Improvement:

- Regional and National Approaches:
  - Regional Workshop(s) Kick off for Implementation (mobilize all active UN agencies,)
  - National Workshop(s)
- Partnership development: Facilitate more bilateral cooperation (TWINING projects) for quick wins
- Approaches to projects:

#### **Resources:**

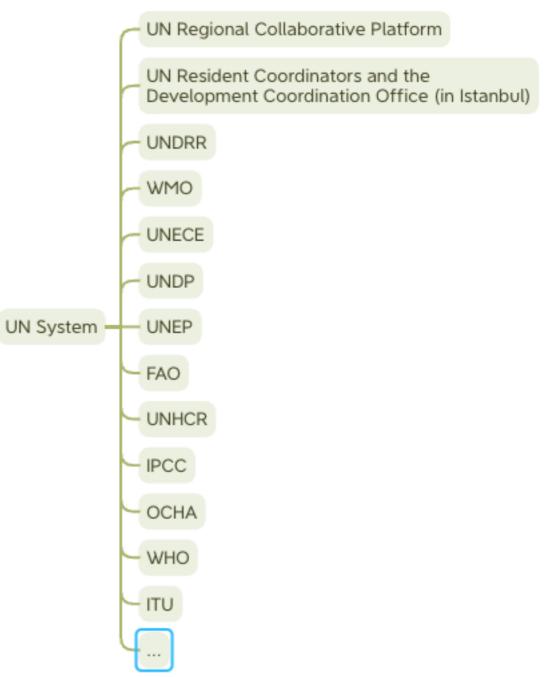
#### National

National budgets (regular activities of NMHSs, DRM agencies, and other national governmental bodies) National Science ministries / R&D institutions National research projects

#### International

World Meteorological Centers (WMCs)
Regional Specialized Meteorological Centers (RSMCs)
Regional Training Centers (RTCs)
European Meteorological Infrastructure (EMI): ECMWF, EUMETSAT, EUMETNET
European Union Horizon Europe: funding programme for research and innovation

Key stakeholders and their roles: (political, financial, technical)



World Bank

European Commission

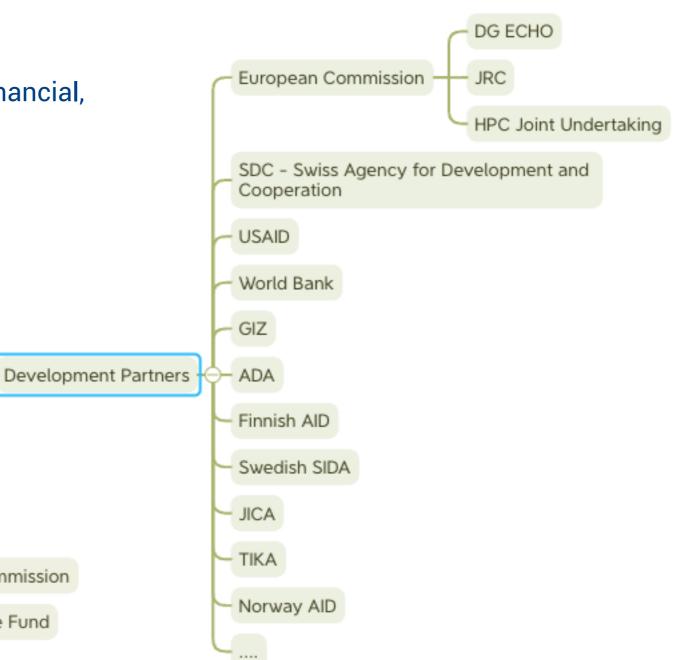
Green Climate Fund

IFI

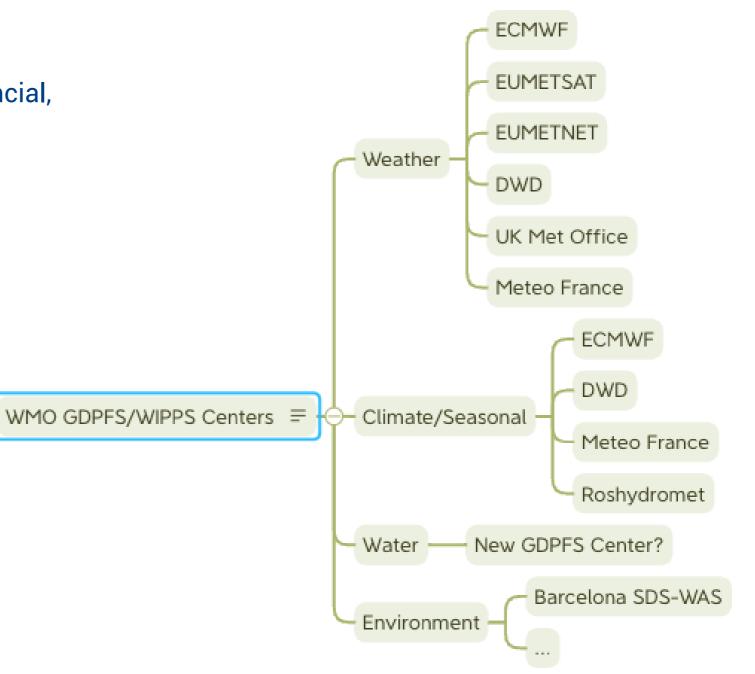
Key stakeholders and their roles: (political, financial, technical)

International Organizations and Finance

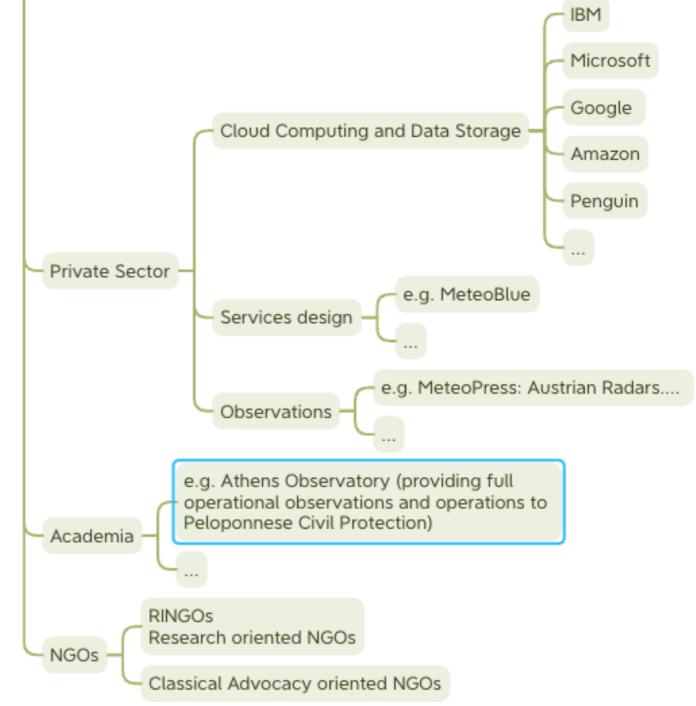
institutions



Key stakeholders and their roles: (political, financial, technical)



Key stakeholders and their roles: (political, financial, technical)



- Risks, Challenges, and Sustainability:
  - 1) Funding:
  - 2) Infrastructure:
  - 3) Capacity building:
  - 4) Inadequate understanding of the early warning system by the public:
  - 5) Cultural factors:
  - 6) Government support:

Overall, the effective implementation of the Road map and its Action plan will require a combination of suitable infrastructure, funding, technical knowledge, public participation and engagement, and government support, among other factors.

- Review and Revision Intergovernmental process in the Region:
  - Monitoring and Evaluation: Monitor and evaluate progress in implementation of EW4ALL through a strong monitoring and evaluation framework is essential to ensure that the initiative is on track to achieve its objectives.
- Intergovernmental process in the Region is important for full acceptance of the initiative by the Member states

## EW4ALL Regional Action Plan (E.g. Pillar 2 format)

#### PILLAR 2: OBSERVATION & FORECASTING

Activity area OUTCOMES	OUTPUT Deliverable	Action	Responsible	Timeline/Importance	Resources
INFRASTRUCTURE (Meteorology and Hydrology) wigos, wis, whos, wipps (MET and HYDRO)           INF-OUTCOME I: Observation gaps are closed to meet the data needs for monitoring hazards           INF-OUTCOME I: Observation gaps are closed to meet the data needs for monitoring hazards           INF-OUTCOME I: Observation gaps are closed to meet the data needs for monitoring hazards           INF-OUTCOME I: Observation gaps are closed to meet the data needs for monitoring hazards           INF-OUTCOME I: Observation gaps are closed to meet the data management and processing for forecasting and warning systems	Deliverable INF No.1 Example: Quality checked observational data available to WIPPS centers in RA VI (includes MET data and HYDRO data for model calibration and validation)	Action INF No. 1.1 Establish and start operations of RWC in RA VI	WG Infrastructure TT WIGOS	Short-term / High	ROE/MS EUMETNET, Bosnia and Herzegovina, Kazakhstan, Turkiye, Romania
		Action INF No. I.2 Share all managed data with the RA VI WIPPS(GDPFS) centers	TT WIGOS EUMETNET RWC	Mid-term / Normal	MS/ROE/INF/WIGOS RWC
		Action INF No. I.3			
		Action INF No. 1.4			
		Action INF No. 1.5 Example	TT WHOS	Short-term / High	
		Action INF No. 1.6			
		Action INF No. I.x			
	Deliverable INF No.2 Necessary products for operation of EWSs available to all RA VI Members	Action INF No. 2.1 RA VI WIPPS centers make access to their products to RA VI Members	ECMWF, MetOffice, Meteo France, Roshydromet	Short-term / High	none
		Action INF No. 2.2	TT WIS	Mid-term / High	MS/ROE/INF
		Action INF No. 2.3			
	Deliverable INF No.3 WIS 2.0 tested and ready for operations in 50% of the RA VI Members	Action INF No. 3.1 Setup a WIS 2.0 pilot project in 5 less developed countries in RA VI	WG Infrastructure	Shart-term / Medium	ROE/MS
		Action INF No. 3.2 Instal the WIS 2.0 system in all RA VI NMHSs	WIS branch, TT WIS, ROE	Mid-term / Medium	ROE/MS
	Deliverable INF No.4 All major River catchments in RA VI Members	Action INE No. 4.1			

Θ

	Svardske to dir nær vir hennders	Action INF No. 5.2	TT SOPPS	Long-term / High	MS/ROE/DPFS
SERVICES (Meteorology and Hydrology) SER-OUTCOME 1: All country priority hazards are forecasted SER-OUTCOME 2: Warnings produced and disseminated in an efficient and timely manner for each priority hazard	Deliverable SER No.1 Example	Action SER No. 1.1	WG Services	Short-term / High	ROE/MS
		Action SER No. 1.2	WG Services	Short-term / Medium	ROE/MS
		Action SER No. 1.3 Example	TT Flood Forecasting	Short-term / Medium	ROE/MS
	Deliverable SER No.2	Action SER No. 2.1	WG Services	Shart-term / Medium	ROE/MS
	Deliverable SER No.3	Action SER No. 3.1	WG Services	Shart-term / Medium	ROE/MS
		Action SER No. 3.2	WG Services	Short-term / Medium	ROE/MS
	Deliverable SER No.4	Action SER No. 4.1	WG Services	Shart-term / Medium	ROE/MS
		Action SER No. 4.2	WG Services	Shart-term / Medium	ROE/MS
		Action SER No. 4.3	WG Services	Short-term / Medium	ROE/MS
		Action SER No. 4.4	WG Services	Short-term / Medium	ROE/MS
RESEARCH (Meteorology and Hydrology)	Deliverable RES No.1 SDS-WAS Research Node for SW Asia	Action RES No. L1	WG Research	Short-term / Medium	ROE/MS
		Action RES No. L2	WG Research	Shart-term / Medium	ROE/MS
	Deliverable RES No.2	Action RES No. 2.1	WG Research	Shart-term / Medium	ROE/MS
	Deliverable RES No.3 Example	Action RES No. 3.1	WG Research	Short-term / Medium	ROE/MS
		Action RES No. 3.2 Example	WG Research FP on Hydrology	Mid-term / Medium	ROE/MS
		Action RES No. 3.3	WG Research	Short-term / Medium	ROE/MS
	Deliverable RES No.4	Action RES No. 4.1	WG Research	Short-term / Medium	ROE/MS

## Early Warnings JAll



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## **Early Warnings for All: Partners**





Pillar 2



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Pillar 3



Led by

Led by

Pillar 4







Risk-informed Early Action Partnership





Food and Agriculture Organization of the United Nations











**GSMA** 

IOM • OIM



GEO GROUP ON EARTH OBSERVATIONS

unicef







Weather and climate data for resilience