

# EARLY WARNINGS FOR ALL INITIATIVE (EW4All)

Roadmap and Action plan for implementation at  
the regional level

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## EW4All Country Rollout

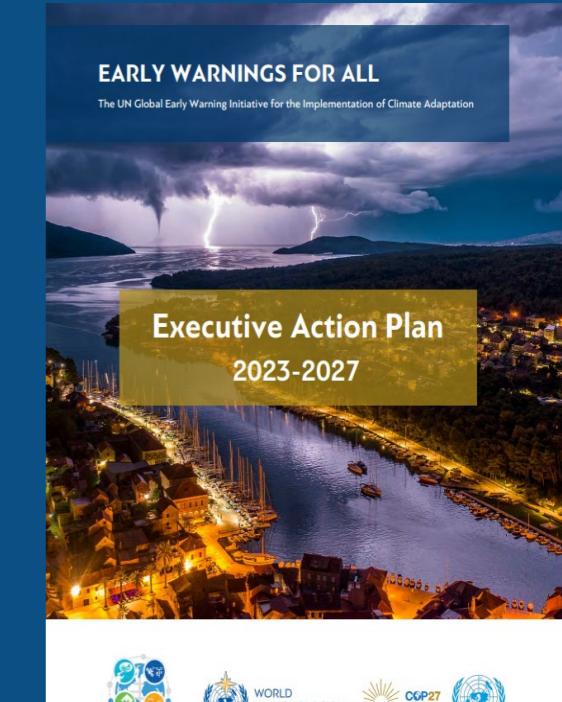
- **Multi-stakeholder consultation workshops**
- **Focus on strengthening coordination across sectors and scales**
- **Identification of immediate technical support requirements**
- **National roadmap and financing strategies**
- **Funding proposals**

# Resources

## ■ EW4All Executive Action Plan

## ■ Global status of multi-hazard early warning systems: Target G

## ■ EW4All Rollout Toolkit



Scaling up Early Warning Systems: Checklist for Gap Analysis

Core Capability for Early Warning System

EW4ALL Outcome	Question	Self-assessment
Outcome 1: Governance, policy and legislation	Is there a clear institutional, policy and legislation framework in place for the development and implementation of early warning systems?	Select
Outcome 1: Governance, policy and legislation	Is there a national legal and institutional framework in place that provides a basis for implementation of early warning systems and enables the execution of subsequent early and anticipatory action?	Select
Outcome 1: Governance, policy and legislation	Is there an institutional or legal framework covering the academic, technical/scientific, private sector, and NGOs and their roles and responsibilities?	Select
Outcome 1: Governance, policy and legislation	Are there national policies in place that provide guidance for the development and implementation of early warning systems?	Select
Outcome 1: Governance, policy and legislation	Are agreements and interagency protocols established for data exchange of monitoring systems based on open source data and datasets and baseline data necessary to produce data products for all priority hazards? (OEWIS System Indicator)	Select
Outcome 1: Governance, policy and legislation	Is there a system for cross-border exchange of warnings with neighbouring countries, through bilateral / multilateral agreements for all priority hazards? (OEWIS System Indicator)	Select
Outcome 1: Governance, policy and legislation	Do EWS policies and legislation address issues related to equity, social inclusion, and gender in the development and implementation of early warning systems?	Select
Outcome 1: Governance, policy and legislation	Does OEWIS legislation provide for the protection of personal information collected through early warning systems?	Select
Outcome 2: Coordination	Is there effective coordination between relevant agencies and stakeholders?	Select

Cover Note Cross-pillar Pillar 1 Pillar 2 Pillar 3 Pillar 4

Early Warnings  
to All  
LOGO  
PLACEHOLDER

TERMS OF REFERENCE  
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.

WORLD METEOROLOGICAL ORGANIZATION  
UN Office for Disaster Risk Reduction  
IFRC  
ITU

# Early Warnings for All: Regional Roadmap and Action Plan

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- Table of Contents
- Executive Summary:

## EW4ALL ROADMAP FOR RA VI

- Introduction:
- Goals, Scope and Objectives:
- Strategy for implementation:
  1. Assessment:
  2. Planning:
  3. Operationalization of the MHEWSs in RA VI and Implementation:
    - 3.1 National level
    - 3.2 Regional level
  4. Continuous Capacity development/building, Maintenance, and Improvement:
- Regional and National Approaches:  
Regional Workshop(s) – Kick off for Implementation  
National Workshop(s)  
Partnership development:  
Approaches to implementation:  
Approaches to projects:

- Timeline:
- Resources:  
National  
International
- 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)

# Early Warnings for All: Regional Roadmap and Action Plan

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## 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

# Early Warnings for All: Regional Roadmap and Action Plan

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- 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:

# Early Warnings for All: Regional Roadmap and Action Plan

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- 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:

# Early Warnings for All: Regional Roadmap and Action Plan

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## Resources:

- **National**

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

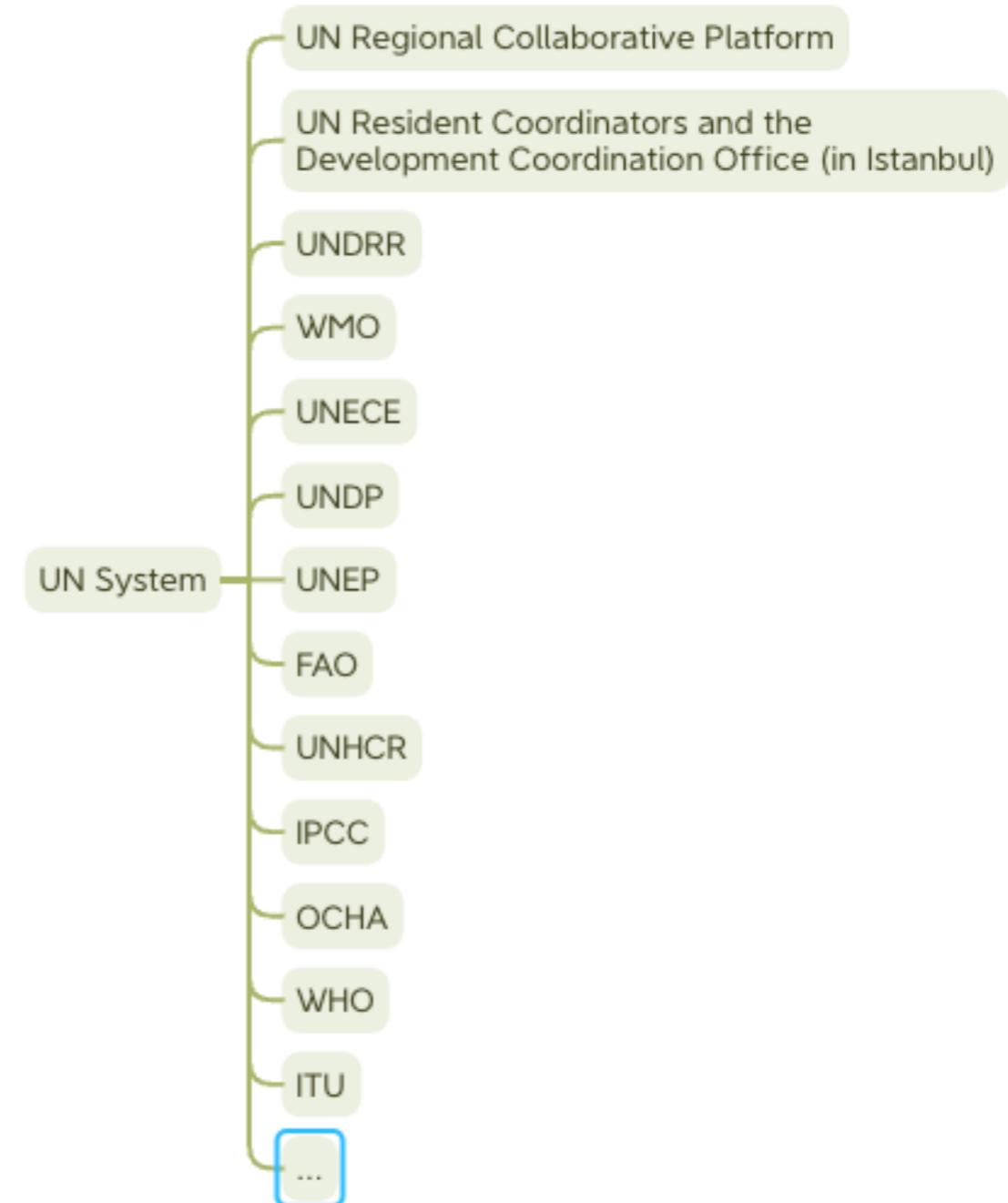
- **International**

- 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

# Early Warnings for All: Regional Roadmap and Action Plan

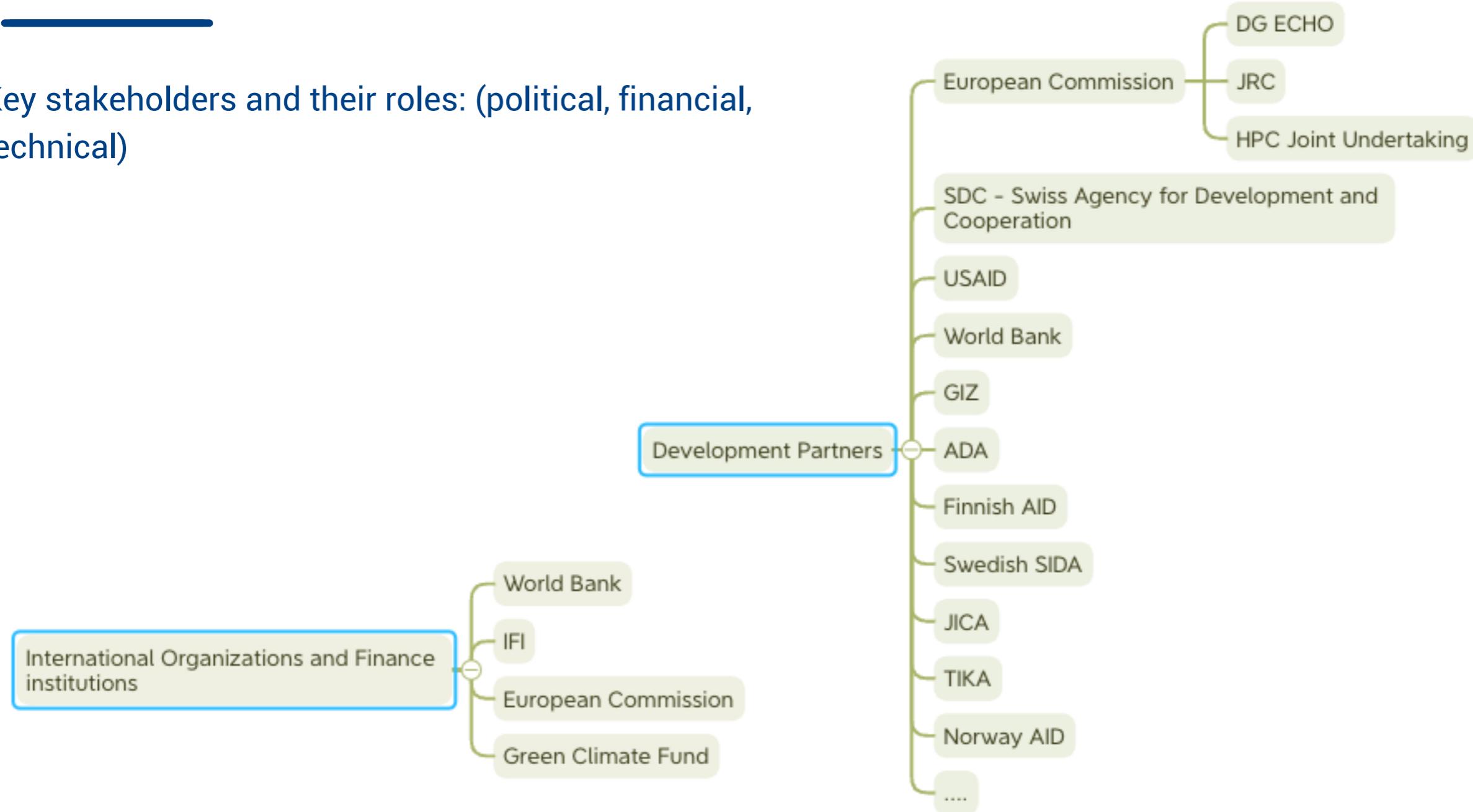
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- Key stakeholders and their roles: (political, financial, technical)



# Early Warnings for All: Regional Roadmap and Action Plan

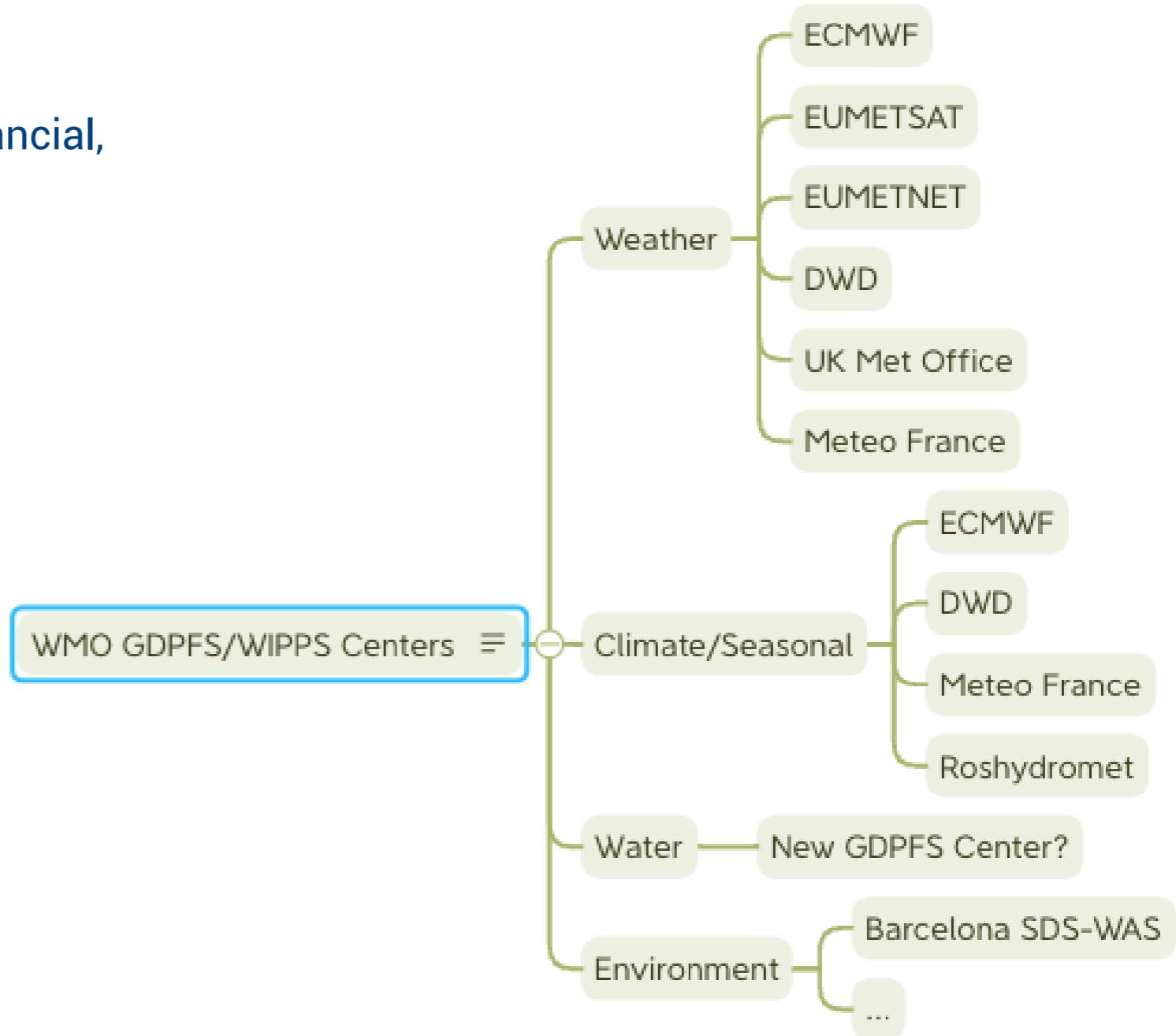
- Key stakeholders and their roles: (political, financial, technical)



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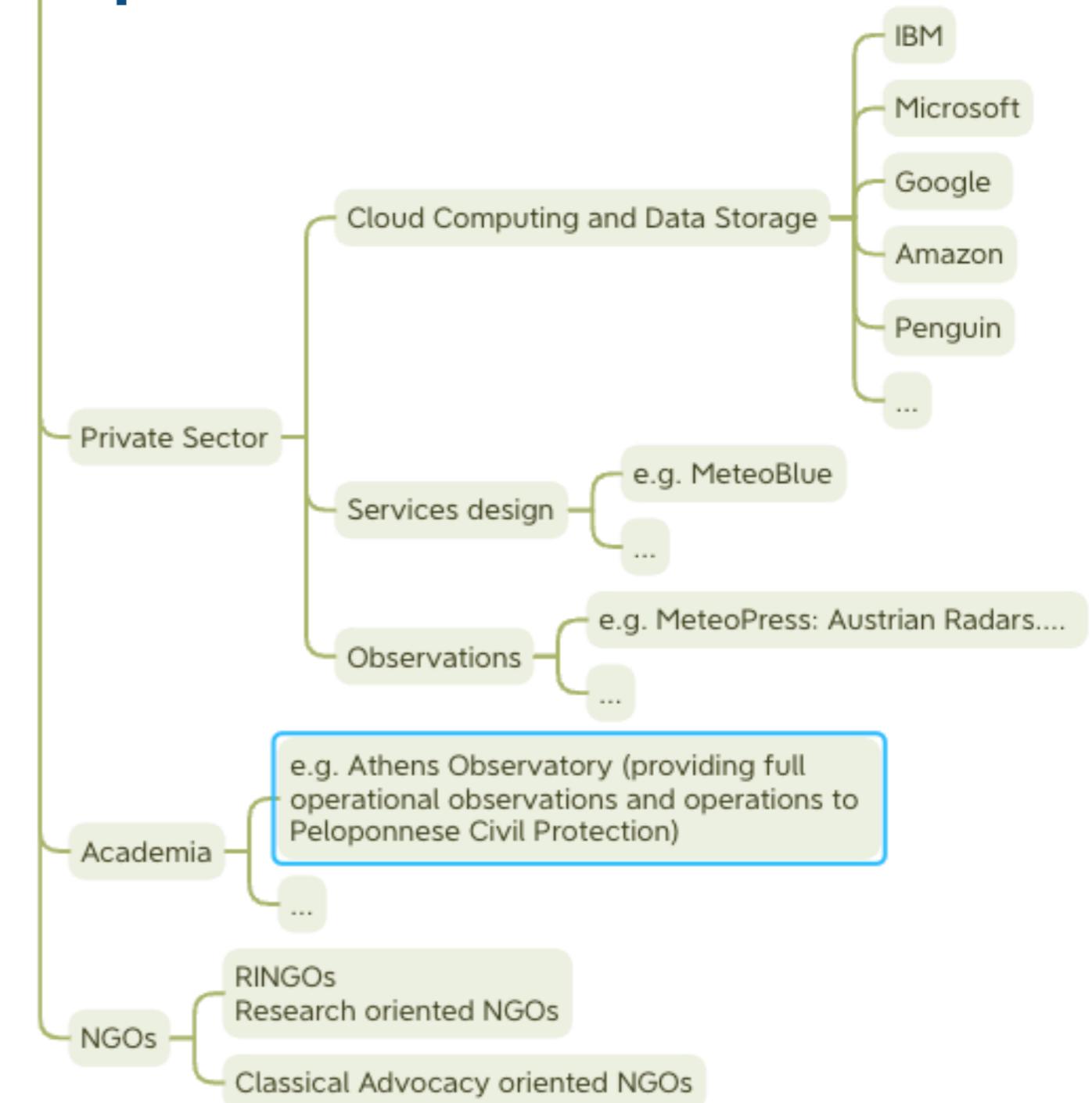
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- Key stakeholders and their roles: (political, financial, technical)



# Early Warnings for All: Regional Roadmap and Action Plan

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



# Early Warnings for All: Regional Roadmap and Action Plan

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- 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.

# Early Warnings for All: Regional Roadmap and Action Plan

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- 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 &amp; FORECASTING

5

Activity area <b>OUTCOMES</b>	OUTPUT Deliverable	Action	Responsible	Timeline/Importance	Resources
<b>INFRASTRUCTURE</b> (Meteorology and Hydrology) WIGOS, WIS, WHOS, WIPPS (MET and HYDRO)  <b>INF-OUTCOME 1:</b> Observation gaps are closed to meet the data needs for monitoring hazards <b>INF-OUTCOME 2:</b> Enhanced global, regional and national data management and processing for forecasting and warning systems	<b>Deliverable INF No.1</b> 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  Action INF No. 1.2 Share all managed data with the RA VI WIPPS(GDPPS) centers  Action INF No. 1.3  Action INF No. 1.4  Action INF No. 1.5 Example  Action INF No. 1.6  Action INF No. 1.x ...	WG Infrastructure TT WIGOS	Short-term / High	ROE/MS EUMETNET, Bosnia and Herzegovina, Kazakhstan, Turkiye, Romania
	<b>Deliverable INF No.2</b> 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
	<b>Deliverable INF No.3</b> 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	Short-term / Medium	ROE/MS
	<b>Deliverable INF No.4</b> All major River catchments in RA VI Members	Action INF No. 4.1			ROE/MS

Overall to all IHA VI Members		Action INF No. 5.2	TT SOPFS	Long-term / High	MS/ROE/DPPFS
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	Short-term / Medium	ROE/MS
	Deliverable SER No.3	Action SER No. 3.1	WG Services	Short-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	Short-term / Medium	ROE/MS
		Action SER No. 4.2	WG Services	Short-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. 1.1	WG Research	Short-term / Medium	ROE/MS
		Action RES No. 1.2	WG Research	Short-term / Medium	ROE/MS
	Deliverable RES No.2	Action RES No. 2.1	WG Research	Short-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 for All



WORLD  
METEOROLOGICAL  
ORGANIZATION



UNDRR  
UN Office for Disaster Risk Reduction



# Early Warnings for All: Partners

## Pillar 1



Led by



**UNDRR**

UN Office for Disaster Risk Reduction



Risk-informed  
Early Action  
Partnership



United Nations Office  
for the Coordination of  
Humanitarian Affairs

## Pillar 2



Led by



**WORLD  
METEOROLOGICAL  
ORGANIZATION**



**Food and Agriculture  
Organization of the  
United Nations**



## Pillar 3



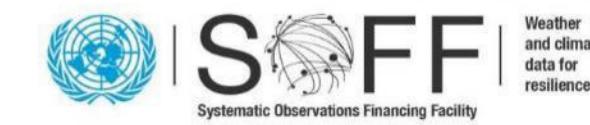
Led by



## Pillar 4



Led by



Weather  
and climate  
data for  
resilience