

## Annex 1 – Template for CREWS Action Presentation Note

<b>Action Title</b>	<b>Enhancing Climate Data Infrastructure and Management to Support Delivery of Climate Services in Somalia</b>
<b>Country(ies)</b>	Federal Republic of Somalia
<b>Partner Country Entity / Entities</b>	Ministry of Environment and Climate Change
<b>Implementing Partner (if submission by Implementing Partner)</b>	IGAD Climate Prediction and Applications Centre (ICPAC) Dr. Abdi Fidar, Officer-in-Charge, Email: <a href="mailto:Abdi.Fidar@igad.int">Abdi.Fidar@igad.int</a>
<b>Implementing Partner Requested (if submission by Partner Country)</b>	<p>Select at least 1:</p> <p><input type="checkbox"/> World Bank/GFDRR</p> <p><input checked="" type="checkbox"/> WMO</p> <p><input type="checkbox"/> UNDRR</p> <p><input type="checkbox"/> No preference</p>
<b>Action Type</b>	<p>Select at least 1:</p> <p><input type="checkbox"/> Continued Assistance</p> <p><input type="checkbox"/> Analyses and Assessments</p> <p><input checked="" type="checkbox"/> Advisory Services</p> <p><input type="checkbox"/> Support to Project Preparation</p>
<b>Early Warning System Element(s) Supported</b>	<p>Select at least 1:</p> <p>Monitoring, detection, analysis, and forecasting of hydro-meteorological hazards providing lead-times for action.</p> <p><input type="checkbox"/> Dissemination of timely and authoritative warnings</p> <p><input type="checkbox"/> Preparedness and response plans triggered by warnings and weather, and climate predictions.</p> <p><input type="checkbox"/> Disaster risk knowledge based on the systematic collection of data and disaster risk assessment.</p> <p><i>[Optional: provide additional information as relevant]</i></p>
<b>Contributions to CREWS Programming</b>	<p><b>CREWS Programming Principles addressed:</b></p> <p>Select all relevant:</p>

<b>Principles and Results Framework</b>	<input checked="" type="checkbox"/> People-centered <input type="checkbox"/> Gender-responsive <input checked="" type="checkbox"/> Promotes Coherence <input checked="" type="checkbox"/> Leverage <p><b>CREWS Results Framework Outputs to which the Action is expected to contribute to:</b></p> <p><i>Select at least one:</i></p> <input checked="" type="checkbox"/> A country and/or region has developed or strengthened legislative and/or institutional frameworks to support and sustain multi-hazard early warning systems. <input type="checkbox"/> Multi-hazard needs, gaps and priority assessments, analyses, and related investment plans for early warning systems in a country or region are driven by CREWS financing. <input type="checkbox"/> Partnerships and cooperation frameworks developed for financing and scaling up support to multi-hazard early warning systems. <input checked="" type="checkbox"/> Risk information and tools generated by countries to enable the delivery of impact-based early warnings. <input checked="" type="checkbox"/> Monitoring, analysis, and forecasting of hazards that threaten the country/region are improved and sustained by the countries. <input type="checkbox"/> Warnings are communicated by the countries based on common alerting protocols under agreed standard operational procedures (SOPs) <input type="checkbox"/> Warnings are received, understood and acted upon based on co-produced preparedness and response plans by the countries. <input checked="" type="checkbox"/> People of different backgrounds, gender, youth, older persons, people with disability, poor, marginalized, displaced and non-native, as well as related institutions have co-produced climate and weather information products tailored to their needs. <input type="checkbox"/> The private sector is engaged to foster innovation and sustainability in delivery of early warning services. <p><b>CREWS Programme Indicators to which the Action is expected to contribute to:</b></p> <p><i>Select at least one:</i></p> <input type="checkbox"/> Loss of life <input checked="" type="checkbox"/> Forecasting and warning capacity
---	---

<input checked="" type="checkbox"/> Access to early warning <input type="checkbox"/> Use of risk information <input type="checkbox"/> Capacity to disseminate warnings. <input type="checkbox"/> Capacity to prepare for and respond to warnings. <i>[Optional: provide additional information as relevant]</i>
---

<p><b>Specific Action and Objectives</b></p>	<p>ICPAC, in collaboration with the Somalia government, the World Meteorological Organization (WMO), and other global and regional partners, proposes to support this initiative through the following specific actions and objectives:</p> <p><b>Objective I: Enhancing Data Reliability: AWS Network Rehabilitation</b>  The focus of this objective is to modernize and rehabilitate some of the existing AWSs network to guarantee data integrity and operational reliability to address deficiencies accumulated over the past. The scope will include:</p> <ol style="list-style-type: none"> <li>1. Conduct a technical assessment of the existing Automatic Weather Stations (AWSs).</li> <li>2. Procure necessary basic diagnostic tools, spare parts, and maintenance kits required for routine AWS servicing, concurrently prioritizing the replacement of outdated sensors to guarantee quality-assured data collection and upgrade the unreliable communication gateway for enhanced network stability.</li> <li>3. Develop and operationalize a national AWS maintenance schedule and reporting protocol—standard operating procedures (SOPs).</li> <li>4. Provide practical, hands-on training sessions focused on system maintenance, preventive maintenance, troubleshooting, and calibration procedures essential for effective routine network management.</li> </ol> <p><b>Objective II: Strengthen Data Management Operations in Support of Climate Services Delivery</b>  The focus of this objective is to strengthen and modernize the data management ecosystem to ensure reliable data archiving, robust quality control, optimal data access, and high usability, thereby significantly enhancing the delivery of national and regional climate services. The scope will include:</p> <ol style="list-style-type: none"> <li>1. Procure and install essential computing equipment, servers and data-processing machines.</li> <li>2. Install, and configure a dedicated server infrastructure and the Climsoft CDMS to manage and securely archive all national observation data streams (including AWS data). This includes establishing robust redundancy, automatic backup procedures, and facilitating full integration with WMO-aligned regional and global data-sharing platforms, such as WIS 2.0.</li> <li>3. Conduct comprehensive training for SNMA ICT and technical personnel in critical areas, including server administration, system monitoring, data archiving procedures, and advanced troubleshooting.</li> </ol> <p><b>Objective III: Strengthen Climate Services and Dissemination</b></p>
--	--

	<p>This objective focuses on leveraging the enhanced capacity and modernized infrastructure (Outputs from Objectives 1 and 2) to improve the delivery of operational climate services. This includes advancing capabilities in high-quality climate monitoring, climate forecasting, and effective public dissemination. The scope will include:</p> <ol style="list-style-type: none"><li>1. Provide specialized training on the use of the Climate Data Tool (CDT) for merging (homogenizing) observed rainfall and temperature data, leading to the production of improved, high-resolution climate datasets for enhanced service delivery</li><li>2. Facilitate a practical attachment program for SNMA forecasters and climatologists at the ICPAC offices to gain hands-on experience in advanced regional climate modelling, monitoring, and forecasting techniques.</li><li>3. Design and implement a new, advanced, public-facing meteorological website for Somalia. This platform will be critical for the effective and timely dissemination of climate information and services across the entire country</li></ol>
--	--

<p><b>Need and Rationale</b></p>	<p>Somalia faces some of the most severe and recurrent climate-related challenges in the Greater Horn of Africa, with increasingly frequent droughts, floods, tropical storms, and extreme temperature events. These hazards continue to undermine livelihoods, disrupt essential social services, and hinder long-term development gains. The country’s dependence on climate-sensitive sectors particularly pastoralism, agriculture, and water resources makes timely, accurate, and actionable weather and climate information critical for safeguarding lives and sustaining socioeconomic stability.</p> <p>Despite significant needs, Somalia’s national weather and climate service capacity remains limited. The national meteorological institution is constrained by inadequate/fragmented observation networks, limited data management systems, insufficient forecasting tools, and a shortage of trained personnel capable of producing user-tailored climate services. As a result, early warning information is often fragmented, delayed, or inaccessible to vulnerable communities, sectoral ministries, humanitarian actors, and decision makers. This gap severely reduces the country’s ability to anticipate and manage climate risks, plan for climate-resilient development, and respond effectively to disasters.</p> <p>The proposed <b>Enhancing Climate Data Infrastructure and Management to Support Delivery of Climate Services in Somalia</b> initiative is essential for establishing an effective Somalia National Meteorological Agency (SNMA). The project aligns closely with the objectives of the CREWS Initiative, which aims to safeguard lives and livelihoods through accurate, timely, and people-centered climate risk information.</p>
<p><b>Alignment</b></p>	<p><i>[Max. 250 words articulating the alignment between the requested Action and existing/ongoing projects, programs, plans and commitments (e.g., EWS projects supported by bilateral or multilateral funds, NAP, NDC, efforts within the Santiago Network)]</i></p> <p>The proposed <b>Enhancing Climate Data Infrastructure and Management to Support Delivery of Climate Services in Somalia (ECDMSDCSS)</b> initiative is fully aligned with Somalia’s ongoing national, regional, and global commitments to strengthen climate resilience and Early Warning Systems (EWS). It directly supports the objectives of CREWS, which prioritizes accurate, timely, and people-centered risk information to safeguard lives and livelihoods.</p> <p><b>ECDMSDCSS</b> builds on and complements current investments in Somalia’s EWS, including the World Bank–supported Somalia Crisis Recovery Project (SCRIP), the Somalia Hydro-met and EWS Strengthening initiatives, and ongoing support from WMO, ICPAC, UNDP, FAO, and GCF readiness programmes. By rehabilitating the 19 AWS installed by ICPAC and improving</p>

	<p>data quality, the action reinforces regional efforts to integrate Somalia into IGAD’s climate monitoring and forecasting systems.</p> <p>The project is fully consistent with national policy frameworks, including the Somalia National Adaptation Programme of Action (NAPA), the Nationally Determined Contribution (NDC), and the National Disaster Risk Reduction Strategy, all of which emphasize strengthened observational networks, data management, and climate services as foundational for risk-informed development. SORICS also supports priorities identified under the Santiago Network, particularly capacity strengthening and technical support for climate risk management.</p> <p>By enhancing data infrastructure, upgrading computing systems, and building SNMA staff competencies in climate service generation and dissemination, SORICS accelerates Somalia’s transition toward a functional, nationally led EWS. The initiative complements existing programmes while filling critical gaps in observation reliability, data governance, and service delivery—ensuring that Somalia meets its national commitments and contributes effectively to regional and global early warning architectures.</p>
<b>Timeframe</b>	12-months
<b>Action Cost (To be completed by Implementing Partner)</b>	<i>[Action amount requested in USD, including Implementing Partner fees]</i> <b>USD 247,830.36</b>
<b>Attachments</b>	<i>[Country Endorsement Letter or similar<sup>1</sup> if submission by Implementing Partner]</i>

<sup>1</sup> This can include existing Letters or Frameworks in place between the Implementing Partner and Partner Country or Countries in the event that the scope of engagement includes the specific early warning system Action being requested. For Regional Action requests, the Endorsement Letter or similar existing Letter or Framework can originate from relevant regional institutions.

## Attachment 1: Activity List

This table outlines the intervention outcomes, outputs, activities, indicators, and timelines for strengthening the Somalia National Meteorological Authority to deliver reliable weather and climate services.

OUTCOMES	OUTPUT	ACTIVITY	TIMELINE	INDICATORS
<b>1.0: Enhanced Capacity of Staff and Reliability of Meteorological Observation Networks in Support of Improved Climate Services.</b>	<b>1.1: Enhanced skill of staff and robust meteorological observation Network.</b>	<b>1.1.1:</b> Conduct a technical assessment of the existing Automatic Weather Stations (AWSs)	Month 1–3	Assessment report.
		<b>1.1.2</b> Procure all necessary basic diagnostic tools, spare parts, and maintenance kits required for routine AWS servicing, concurrently prioritizing the replacement of outdated sensors to guarantee quality-assured data collection.	Month 2-4	Number of tools and spare parts delivered to Somalia.
		<b>1.1.3</b> Replace outdated sensors to guarantee quality-assured data collection and upgrade the unreliable communication gateway for enhanced network stability.	Month 5-7	Installed gateway
		<b>1.1.4</b> Develop and operationalize a national AWS maintenance schedule and reporting protocol—standard operating procedures (SOPs).	Month 3-7	SOPs developed.
		<b>1.1.5</b> Provide practical, hands-on training sessions focused on system maintenance, preventive maintenance, troubleshooting, and calibration procedures essential for effective routine network management.	Month 5-6	Training reports.
		<b>OUTCOME 2: Reliable Collection, Archival, Retrieval</b>	<b>2.1: Enhanced skills and well-established</b>	<b>2.1</b> Procure and install essential computing equipment, servers and

<b>and Use of Climate Data that Support the Production of Quality Climate Services for Timely and Informed Decision Making</b>	climate data management infrastructure to support the generation of quality climate services.	data-processing machines.		procured and installed.
		<b>2.2</b> Install and configure a dedicated server infrastructure and the Climsoft CDMS to manage and securely archive all national observation data streams (including AWS data).	Month 4-6	Server configured and Climate data management system installed
		<b>2.3</b> Conduct comprehensive training for SNMA ICT and technical personnel in critical areas, including server administration, system monitoring, data archiving procedures, and advanced troubleshooting.	Month 7–9	Training reports.
<b>OUTCOME 3: Enhanced Climate Services and Dissemination of Early Warning Information to Users.</b>	<b>3.1</b> Enhanced skill of SNMA staff to produce and disseminate early warning information	<b>3.1</b> Provide specialized training on the use of the Climate Data Tool (CDT) for merging (homogenizing) observed rainfall and temperature data, leading to the production of improved, high-resolution climate datasets for enhanced service delivery.	Month 6–10	Training reports, certificates, participant evaluations.
		<b>3.2</b> Facilitate a practical attachment program for SNMA forecasters and climatologists at the ICPAC offices to gain hands-on experience in advanced regional climate modelling, monitoring, and forecasting techniques.	Month 9–11	Training report, products produced by participants.

		<p><b>3.3</b> Design and implement a new, advanced, public-facing meteorological website for Somalia. This platform will be critical for the effective and timely dissemination of climate information and services across the entire country.</p>	<p>Month 5-12</p>	<p>Website developed.</p>
--	--	--	-------------------	---------------------------

**Attachment 2: Budget**

Provided in the excel document.