# **REQUEST FOR INFORMATION**

### COUNTRY: INDIA

#### I. INTRODUCTION

Uttarakhand is a Himalayan region mountain state, that is regularly impacted by flash floods, landslides, earthquakes, wildfires, glacier lake outbursts, and cloudburst incidences. Uttarakhand's disaster vulnerability is further exacerbated by climate change, elevating the risk of wildfires, flash floods, landslides, and droughts. In this context, the World Bank-supported Uttarakhand Disaster Preparedness and Resilience Project (U-PREPARE) focuses on Enhancing the climate and disaster resilience of select critical public infrastructure in Uttarakhand and strengthening the preparedness and emergency response capacity in the State.

Uttarakhand State's rugged terrain and climate variability make it essential to have a robust Hydromet Network to provide accurate and timely weather forecasts, warnings, and alerts. The existing Hydromet Network consists of:

- 1. Weather observation stations
- 2. Rain gauges
- 3. River level monitoring stations
- 4. Weather/Doppler radars

However, the existing network faces challenges:

- 1. Limited spatial coverage
- 2. Inadequate data transmission and communication infrastructure
- 3. Insufficient maintenance and calibration
- 4. Limited capacity for real-time data analysis and forecasting requires upgradation and expansion to effectively mitigate the impact of disasters.

The Uttarakhand State Disaster Management Authority, Department of Disaster Management Government of Uttarakhand, a Project Implementing Unit (PIU) under U-PREPARE Project, aims to allocate a portion of the funds for consulting services related to the "Enhancing, Modernization & Strengthening of Hydromet Network in Uttarakhand" for tracking dangerous weather conditions within the State boundaries, analyzing hazard data and providing forecasting and warning (called as - Weather Impact Forecast Services – WIFS) in the format required by the State for making informed decisions on risk mitigation and management including dissemination of Early Warnings. Looking to huge inflow of tourists and pilgrims into the State every year, the WIFS would include effective "road advisories (both communication and publication)" component.

#### II. <u>OBJECTIVES:</u>

The Uttarakhand State receives weather and climate forecasting from designated National agencies (IMD, CWC, DGRE etc.) But there are gaps. Under this project Uttarakhand State aims to subscribe "Weather Impact Forecast Services" from the competent agency for enhancing and filling gaps in existing hydrometeorological services available.

#### III. THE FIRM SHALL BE PROVIDING FOLLOWING SERVICE:

The consultants shall be providing following services, but is not limited to:

- 1. The consultant should be able to provide forecasts (Extended, Long Range, Medium Range and Short Range), nowcasts and warnings for the following hydro-meteorological events in the state of Uttarakhand:
- 2. Precipitation induced events which will largely include flooding, flash flooding, landslides, hail and potential cloud bursts.
- 3. Meteorological events that will include forest fire, heatwave, cold wave, lightning, thunderstorms, high winds, fire, snowfall & snowstorms and potential avalanches.
- 4. While it is understandable that predicting cloud burst events and avalanches need a significant amount of ground based/satellite based/Doppler Weather Radar (Remote Sensing) data and models, the selected contractor and the USDMA will discuss and come to a mutually agreeable scope of work for these specific events.
  - a) Broadly the scope of the contractor will be to provide the forecasts, nowcasts and warnings for the above mentioned hydro meteorological events through the following:
    - i. Platform Web based platform and Mobile App (for all OS).
    - ii. Modelling for generating forecasts (preferably every 3 hours temporally) and Early Warning.
    - iii. By deploying as needed suitable ground based/ satellite based and Doppler Weather Radar remote sensing Automated instruments/sensors to increase the resolution of the forecasts and warnings in terms of spatial (precise and accurate geo-tagged).
  - b) The Consultant should be prepared to set up the service within 3 months of signing of the contract or earlier.
  - c) Conducting a thorough assessment of the existing Hydromet Network infrastructure
  - d) Designing and implementing upgrades to the network
  - e) Providing training to personnel on the operation and maintenance of the network
  - f) Ensuring integration with existing disaster management system.

### IV. EXPECTED OUTCOMES:

- 1. Improved weather forecasting accuracy
- 2. Enhanced flood and landslide warning systems
- 3. Reduced damage and loss of life from natural disasters
- 4. Strengthened disaster preparedness and response
- 5. Increased community awareness and engagement
- 6. Better-informed decision-making for disaster management

By strengthening the Hydromet Network, the U-PREPARE Project aims to reduce the vulnerability of Uttarakhand to natural disasters and promote resilient and sustainable development.

### V. OBJECTIVE OF THIS RFI:

The purpose of this RFI is to solicit information from potential consultants on their expertise, experience, and innovative solutions for Enhancing the Hydromet Network in Uttarakhand. Various mechanisms and approaches have evolved over the years for Enhancement, Modernization and Strengthening of Hydromet Network. This invitation is open to acknowledge and welcome all relevant service providers actively engaged in this field.

### VI. THE INFORMATION MUST INCLUDE THE FOLLOWING:

- 1. A detailed company profile, including information on available manpower and their expertise.
- 2. Relevant experience in Hydromet Network development and management
- 3. Proven expertise in disaster management and resilience
- 4. A comprehensive approach document addressing the above objectives in the context of the Department of Disaster Management Uttarakhand.
- 5. A strong understanding of Uttarakhand's geography and climate
- 6. A detailed Technical Approach and methodology for achieving the stated objectives.
- 7. Project timeline and milestones

### VII. SUBMISSION GUIDELINES

- 1. The information/response may be submitted by post or email on the following address on or before **15**<sup>th</sup> **November 2024.**
- 2. The subject line should read "**RFI FOR ENHANCING, MODERNIZING & STRENGTHENING HYDROMET NETWORK IN UTTARAKHAND**"
- 3. Upon receipt of information(s)/response(s), U-PREPARE will organize a conclave/Presentation meeting, where selected service providers will be invited to present their approach, project understanding, and proposed methodology. This will facilitate the preparation of a detailed Terms of Reference (ToR) and the commencement of procurement activities,
- 4. **Address:** 36 USDMA Building, 5<sup>th</sup> Floor, USDMA Building, IT Park, Sahastradhara Road, Dehradun-248143, Uttarakhand (INDIA)
- 5. Email: <u>apdudrpaf@gmail.com</u>, <u>piuusdma.uprepare@gmail.com</u>
- 6. Contact Persons:
  - Dr. Mohit Kumar Puniya, DPM, PIU-USDMA, U-PREPARE (Contract No.: 9456622571)
  - Mr. Pooja Rana, Meteorology/Climate Change Adaptation Expert, PIU-USDMA, U-PREPARE (Contract No.: 7600673987)

### Note:

- Program Director, U-PREPARE reserves the right to amend, modify, cancel, hold, alter, delete, substitute any
  clause of the RFI/RFP including scope of work, even after issuance of Work Order/contract award in public/
  administrative/ or work interest without assigning any reason thereof which will be legally acceptable or
  binding to all the bidders.
- Program Director, U-PREPARE reserves the right to will terminate the contract immediately without giving any Notice to the contractor in the public/ administrative/ or project interest.

## ---- NOTE ----

This Request for Information (RFI) is for informational purposes only, and no contract will be awarded as a result. A firm or organization's response to the RFI—or lack thereof—will have no impact on the evaluation of responses to any subsequent Request for Proposals (RFP) or Invitation to Bid (ITB) released. Responses will be used solely for information and planning purposes.

