People in Need

TERMS OF REFERENCE

Supply of Nation-wide Cell Broadcast-based Emergency Warning System

Background

Basic information about PIN

We are a non-governmental, non-profit organization founded on the ideals of humanism, freedom, equality and solidarity. We consider human dignity and freedom to be fundamental values. We believe that people anywhere in the world should have the right to make decisions about their lives and to share the rights expressed in the Universal Declaration of Human Rights.

People in Need (PIN) organization was established in 1992 by a group of Czech war correspondents who were no longer satisfied with merely relaying information about ongoing conflicts and began sending out aid. It gradually became established as a professional humanitarian organization striving to provide aid in troubled regions and support adherence to human rights around the world.

Throughout the 30 years of its existence, People in Need has become one of the biggest non-profit organizations in Central Europe. In addition to humanitarian aid and human rights, it now also targets education and helps people living in social exclusion.

We are part of Alliance2015, a strategic network of seven European non-governmental organizations engaged in humanitarian aid and development projects. This collaboration increases effectiveness, both in working in the target countries and in campaigns aimed at influencing the attitudes of politicians and the general public in Europe.

Basic information about PIN country programme

This assignment is part of PIN Early Warning System (EWS) Programme in Lao PDR, aimed at strengthening disaster preparedness through improved early warning dissemination and coordination. The programme supports national and sub-national authorities, including the Department of Meteorology and Hydrology (DMH) and the Ministry of Agriculture and Environment, to enhance timely and accurate delivery of warnings to at-risk populations.

The programme is implemented in hazard-prone provinces and focuses on scaling up early warning infrastructure, improving last-mile communication

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channels (including Cell Broadcast), and strengthening institutional and community capacities. The main beneficiaries are vulnerable communities and government stakeholders responsible for disaster risk management.

Objective and Scope of the Technical Proposal

The objective of this assignment is to design, supply, deploy, and operationalize a national Cell Broadcast-based Emergency Warning System (EWS) in Lao PDR. The system shall enable the rapid dissemination of location-based emergency alerts to the population via mobile networks, ensuring timely, reliable, and secure delivery of critical information during disasters and emergencies.

The assignment aims to establish a fully functional Cell Broadcast platform, including both the Cell Broadcast Entity (CBE) hosted by the Government and the Cell Broadcast Center (CBC) integrated with all Mobile Network Operators (MNOs). The system will support message creation, approval workflows, geographic targeting, real-time monitoring, and multi-language alert dissemination, while ensuring compliance with international standards and interoperability across all mobile network technologies.

The contractor will also ensure that the system is secure, resilient, and scalable, with appropriate redundancy and disaster recovery mechanisms. In addition, the assignment includes capacity building for relevant government authorities and MNOs, development of operational procedures, and support for testing and validation to ensure the system is fully operational and sustainable.

This assignment is intended to provide a robust technical foundation for the national EWS, ensuring that alerting capabilities are effective, timely, and aligned with national disaster management frameworks and international best practices.

Scope of Services

1. Under this assignment, the contractor will work in close collaboration with the designated Government authority (e.g., NDMO/DMH) and Mobile Network Operators to design, implement, and operationalize the Cell Broadcast system. The contractor will be responsible for delivering all components required for a fully functional nationwide alerting platform, including system deployment, integration and testing.
2. The scope includes the provision and configuration of the Cell Broadcast Entity (CBE), a secure web-based platform enabling authorized users to create, approve, and broadcast emergency messages, and the Cell Broadcast Center (CBC), which interfaces with mobile network infrastructure to deliver alerts to end users.
3. The contractor will ensure full integration with all participating MNOs across 2G, 3G, 4G, and 5G networks using relevant standardized interfaces (CBSP, SBc-AP, and N50) and will establish secure communication between the CBE and CBC using encrypted channels.
4. The assignment further includes the development of message workflows, including message definition, geographic targeting, approval processes, and broadcast execution, as well as the implementation of system monitoring, logging, and reporting capabilities.
5. Additional tasks include the configuration of geographic targeting tools based on cell coverage and GIS data, establishment of predefined message templates and alert zones, implementation of security mechanisms such as multi-factor

authentication and role-based access control, and deployment of redundancy and high-availability configurations to ensure uninterrupted operation.

Methodology

The evaluation will focus on the technical delivery, integration, and testing of the Cell Broadcast system, using a combination of document review, system data analysis, and targeted stakeholder consultations.

Document Review

Review of key technical and project documents, including:

- System design and architecture documentation
- Deployment and integration plans
- Test plans and test results (pilot and nationwide tests)
- Acceptance and commissioning reports

Technical Data Review

Analysis of system performance data, such as:

- Alert delivery time and speed
- Coverage across networks and geographic areas
- System availability and reliability
- Review of integration status with Mobile Network Operators (MNOs), including connectivity with relevant network elements

Stakeholder Consultations

Short technical interviews with:

- Supplier/contractor
- PIN technical team
- Government counterparts (e.g. DMH)
- Mobile Network Operators (Lao Telecom)
- Validation of: system functionality, integration performance, testing outcomes and issues

Testing Verification

Review and validation of system testing, including:

- Pilot and live test broadcasts
- End-to-end functionality (message creation to delivery)
- Monitoring and reporting capabilities

Data Sources

- Primary data: technical consultations with stakeholders
- Secondary data: system logs, test reports, and project documentation

Expected Deliverables

- Inception report outlining system design, implementation plan, and integration approach.
- System Architecture and Design Documentation describing CBE, CBC, network integration, and security framework.
- Deployed and fully operational Cell Broadcast System, including CBE (government side) and CBC instances integrated with all participating MNOs.
- MNO Integration Reports confirming successful connectivity with network elements (BSC, RNC, MME, AMF) and compliance with required interfaces.
- Configured Alerting Workflows including message templates, approval procedures, targeting mechanisms, and user roles.
- Testing and Validation Report documenting system performance, including delivery speed, coverage validation, and results of pilot and nationwide tests.
- Operations and Maintenance Manual including standard operating procedures, monitoring guidelines, and system administration instructions.
- Monitoring and Reporting Tools including dashboards, logs, and audit mechanisms for tracking alert dissemination and system performance

Supplier Profile Requirements

The bidder should demonstrate relevant qualifications and experience to successfully deliver the assignment. Requirements include:

- Proven experience in the design, deployment, and integration of Cell Broadcast or similar emergency communication systems
- Strong technical expertise in telecommunications networks (2G, 3G, 4G, 5G) and system integration with Mobile Network Operators
- Experience in delivering similar projects for governments or public authorities is an advantage
- Capacity to provide training, technical support, and system maintenance
- Availability of qualified technical and project management staff

QUALIFICATION AND EVALUATION CRITERIA

Criteria which bidders must meet in order to progress to the next round of evaluation. These criteria are scored as ‘Pass’ / ‘Fail’.

Each bidder must meet and properly prove the following **qualification criteria** with relevant documentation:

- Signed and stamped Eligibility sworn statement;
- Business licence/registration;
- Submission of technical proposal along with financial offer (**Technical Proposal** outlining the proposed methodology, implementation approach, budget consisting of all costs estimation and indicative timeframe, in line with the requirements of this tender)

Evaluation criteria

The bidders who pass the qualification stage will be evaluated against these criteria. The selected supplier will be chosen on the basis of the following **evaluation criteria**:

A. Technical Evaluation (60%)

Criterion	Description	Weight
Understanding of Requirements	Demonstrated understanding of the objectives, scope of work, and institutional context in Lao PDR	10%
Proposed Technical Solution	Appropriateness and completeness of the proposed Cell Broadcast solution and functionalities	20%
System Architecture & Scalability	Quality of system design, integration approach, scalability, reliability, and security	15%
Implementation Approach	Feasibility of work plan, timeline, coordination, and risk mitigation	10%
Training & Support	Approach to training, knowledge transfer, and post-implementation support	5%
Total Technical Score		**60%**

A. Financial Evaluation (40%)

Price	Total cost of the proposal, including all implementation and travel costs	40%
Total Financial Score		**40%**

Contract and duration

The award and signing of the service contract is conditioned upon the receipt of the donor grant by the contracting authority.

Time frame for delivering all services is up to **9 months**.

Logistics

The evaluator/contractor will be responsible for organizing all logistics required to complete the assignment. This includes international and local travel to Lao PDR, accommodation, and local transport within project areas.

All related costs should be included in the financial proposal. PIN will provide support with coordination of meetings and access to key stakeholders where needed.

Application process

- Deadline for submission of application: **June, 1st, 2026, before 17:00, Lao Local time.**
- **Email should be addressed to:** secure.bid@peopleinneed.net
  - The subject of the email should be "Request for Proposals – Cell Broadcasts"/'Bidder Name'/'Date''.
  - All attached documents should be clearly labelled so it is clear to understand what each file relates to. Emails should not exceed 15 MB – if the file sizes are large, please split the submission into two emails or more.
- Contents of application package:
  - Signed and stamped Eligibility sworn statement;
  - Business licence/registration;
  - Technical proposal along with financial offer

  Technical Proposal outlining the proposed methodology, implementation approach, budget consisting of all costs estimation and indicative timeframe, in line with the requirements of this tender;

- For questions, contact: Tomáš Ďuraňa, tomas.durana@peopleinneed.net

PIN reserves the right to proceed with contract award and sign the agreement with the successful supplier once the donor grant has been officially confirmed.

Payment modality

%	Milestones
20%	Following the signing of the Contract on Service Provision
30%	After the Inception report has been submitted and approved by PIN
50%	After all the remaining deliverables are approved by PIN
PIN reserves the right to deduct up to 0.5% of the total contract price for each day's delay in meeting the deliverables specified. This deduction shall be applied to the last payment of 50% of the contract price.	