GSMA

REQUEST FOR QUOTATION

(RFQ)

Madagascar Early Warning System: SMS Alert Study

Requested Services and Deliverables

1. GSMA overview

The GSMA Mobile for Development Foundation, Inc. ("GSMA M4D") is a U.S. 501(c)(3) charitable organisation that seeks to relieve poverty and improve living conditions throughout the world through identifying opportunities for social, economic and environmental impact and to stimulate the development of scalable, life-enhancing mobile services. GSMA M4D is a wholly owned subsidiary of the GSM Association ("GSMA").

The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 300 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai and the Mobile 360 Series conferences. For more information, please visit the GSMA corporate website at www.gsma.com.

For this project, the successful Respondent will contract with The GSMA Mobile for Development Foundation.

GSMA's Mobile for Humanitarian Innovation (M4H) programme

The GSMA Mobile for Humanitarian Innovation (M4H) programme envisions an inclusive digital humanitarian future, where mobile and digital solutions can offer affected populations improved access to and use of life-enhancing mobile-enabled services for preparedness, response and recovery. To build an inclusive and sustainable digital humanitarian future, the M4H programme acts as the convenor between mobile network operator members and humanitarian partners.

2. Project overview

Background

Early Warnings for All (EW4All)
Climate change is driving more severe and frequent disasters – an increase by a factor of five over the last 50 years.[1] Early warning systems (EWS) are a cornerstone of disaster risk reduction (DRR) and climate change adaptation strategies. They save lives by helping people to take action or evacuate ahead of a crisis, and by affording governments and emergency responders time to prepare before hazards like tsunamis or cyclones strike.

Recognising their life-saving potential, the UN launched Early Warnings for All (EW4All) in 2022, which aims for every person to be protected by an EWS. The initiative is built on four pillars that encompass the core elements of an effective and inclusive multi-hazard EWS:

- Pillar 1: Disaster risk knowledge
- Pillar 2: Detection, observation, monitoring, analysis, and forecasting
- Pillar 3: Warning dissemination and communication
- Pillar 4: Preparedness and response capability

With 96% of the global population residing in areas covered by a mobile network and 5.8 billion unique subscribers around the world,[2] mobile technology offers a critical channel to disseminate lifesaving warnings

to large numbers of people quickly and at scale. Mobile Network Operators (MNOs) play a critical role in supporting EWS and have long worked with disaster management agencies and humanitarian organisations to effectively leverage their capacities and networks for EWS.

The GSMA M4H Programme is involved in both the strategic and operational aspects of EW4All, in particular Pillar 3, ensuring the power of mobile is fully harnessed to develop and implement lifesaving EWS. At the country level, the GSMA seeks to ensure that local (MNOs) are actively involved in EW4All design and implementation, in partnership with government and humanitarian stakeholders.

Madagascar context
Madagascar is highly vulnerable to natural hazards, including cyclones, earthquakes, droughts, and floods, and is one of the most vulnerable countries in the world to the effects of climate change. An estimated one quarter of the population lives in zones at high risk of natural hazards, and on average, three severe natural hazards (cyclones or tropical storms) strike the island each year.

Project overview
To support the dissemination of timely alerts to populations at risk of an imminent hazard, the government of Madagascar has developed a mobile-enabled EWS that utilises SMS messaging to reach targeted communities. There is a need to assess the current SMS alert system and understand the experience of end users who receive the alerts, to inform both efforts to enhance the system as well as the development of Madagascar's national early warning strategy.

The GSMA is conducting research on Madagascar's SMS-based Early Warning System (EWS). The study will be conducted in one target area (Atsimo Andrefana region) to provide an initial snapshot of system performance under optimal conditions. Specifically, it will assess reach using MNO delivery receipt data, alongside a qualitative component to understand community perceptions (such as trust, understanding and response) of SMS alerts. While these findings will not be nationally representative, they will provide a baseline to inform future research and guide the design of broader evaluations.

Project objectives

1) Understand the current process for disseminating SMS-based early warnings in Madagascar.
2) Assess the reach and effectiveness of the current SMS-based alerting system, mapping the strengths, gaps, and overall ability to deliver prompt, inclusive, and appropriate alerts.
3) Analyse user perceptions and experience with the alerting system, and how this varies across different segments of the target population.
4) Offer evidence-based recommendations to optimise SMS-based early warning dissemination.
5) Contribute to global best practice around how early warning systems are evaluated.

Research questions

Research Objective 1: Understand the current process for disseminating SMS-based early warnings in Madagascar.	Research Objective 2: Assess the reach and timeliness of the current SMS-based alerting system, mapping the strengths, gaps, and overall ability to deliver prompt, inclusive, and appropriate alerts.	Research Objective 3: Analyse user perceptions and experience with the alerting system, and how this varies across different segments of the target population.	Research Objective 4: Offer evidence-based recommendations to optimise SMS-based early warning dissemination.	Research Objective 5: Contribute to global best practice around how early warning systems are evaluated.
1. What are the key steps in the process?	1. Reach: How many people successfully received the test SMS alert?	1. What is overall community awareness of the SMS-based system, and how does this differ across groups?	**1.** What are the key learnings from the study that can be used to strengthen the reach, efficiency, and effectiveness of the SMS-based alert system in Madagascar?	1. What good practices and lessons learned were identified through implementing this research methodology?
2. Who are the implementing stakeholders? How do they communicate and coordinate?	2. Reach: Among the population who were sent an SMS alert but did not receive it, what were the primary technological reasons?	2. To what extent do community members value and trust the information provided through SMS alerts, and how does this differ across groups?	**2.** What stakeholder-specific recommendations are available to: • BNGRC • MNOs • GSMA • Red Cross/other humanitarian partners	2. Should anything be designed or implemented differently in future assessments?
3. What technology and infrastructure are in place?	3. Timeliness: What was the timeframe over which recipients received the test SMS alert? Did any areas experience a lag?	3. To what extent do community members find the content of potential SMS alerts to be appropriate and understandable?		3. What are the key research frameworks, indicators, or tools that can be tested in additional contexts, in order to eventually contribute to global best practice?

Research Objective 1: Understand the current process for disseminating SMS-based early warnings in Madagascar.	**Research Objective 2: Assess the reach and timeliness of the current SMS-based alerting system, mapping the strengths, gaps, and overall ability to deliver prompt, inclusive, and appropriate alerts.**	**Research Objective 3: Analyse user perceptions and experience with the alerting system, and how this varies across different segments of the target population.**	**Research Objective 4: Offer evidence-based recommendations to optimise SMS-based early warning dissemination.**	**Research Objective 5: Contribute to global best practice around how early warning systems are evaluated.**
4. What is the target coverage of the alerts, and are any areas of the country not reachable?	4. Did implementing stakeholders observe any technological or operational challenges during the test, and if so, what were they?	4. How likely are community members to act on the information provided in SMS alerts, and in what ways? How does this differ across groups?		
5. How frequently has the system been used since being established, including real and test alerts, and at what scale?		5. What are the primary barriers to **accessing** SMS alerts among different segments of the community?		
6. What is the funding model for sustaining the system?		6. What are the primary barriers to **acting on the information** provided in SMS alerts among different segments of the community?		
7. What aspects of the process work well, and where are these challenges?		7. How can the alerting system in Madagascar be improved to be more inclusive, particularly among populations with low literacy and/or digital literacy?		

3. Methodology and high-level services and deliverables requirements

This research study will employ a mixed-methods approach, combining desk research with primary data collection with different stakeholder groups to develop a holistic understanding of how the SMS-based alerting system in Madagascar operates, the extent to which it is currently achieving intended impact, and how it is perceived by end users. The study will build on existing GSMA research in building the methodology, including Making Early Warnings Work for All: People Centred Design and Enhancing inclusion in mobile-enabled risk communications. Furthermore, it will be critical the supplier chooses an appropriate analytical framework, such as WMO's Reach Model, which includes a simple four-part framework.

The assessment will include three components:

1) Mapping and documentation of the current system through desk research and interviews with the key stakeholders responsible for implementing alerts, including MNOs and government actors.
2) Dissemination of a test alert to a defined geographic area and collection of data regarding the reach and timeliness of this test.
3) Community-based interviews and focus group discussions in the SMS test area to understand community perceptions and needs.

Work plan

1. Kick-off call

A session should be scheduled within the first week of the project to align research objectives, questions and approach with all project stakeholders involved. The chosen supplier will lead this session.

Following this, weekly calls between the supplier and the GSMA M4H team will be scheduled to monitor progress and discuss any changes that may need to be made.

Deliverable 1: Kick-off deck submitted, and session completed

2. Inception phase and system mapping KIIs

This initial phase of the research is designed to provide a foundational understanding of the system and stakeholders in Madagascar, which will then inform the key research gaps and approach required during the primary data collection phases.

The supplier will:

- Conduct a desk review of all available documentation about the SMS-based system, including both public sources and those provided by the BNGRC, MNOs, and other project stakeholders. Documents of interest will ideally outline key technological and infrastructural elements, coordination mechanisms, Standard Operating Procedures (SOPs), and other operational material.
- Conduct 5-7 key informant interviews (KIIs) with representatives from BNGRC and MNOs to gain further insight into operational and coordination elements. As robust documentation for the desk review is not anticipated to be fully available, the KIIs will serve a crucial role in filling information gaps and developing a full picture of the system.

- From the KIIs and desk research aim to provide a rough estimation of the costs of sending SMS alerts.
- From the KIIs and desk research provide a rough idea of what it would take to harmonise the sender ID of SMS alerts and potential costs involved. The sender ID harmonisation would ensure that all alerts authorised by the BNGRC would have the same sender ID regardless of which MNO sent the SMS. This ID would allow the public to more easily trust the message.
- Draft an inception report providing at minimum, the following information:
    - **System overview** describing the technology and infrastructure being implemented, key processes, timelines, and stakeholders involved across the lifecycle
    - **Reported reach and effectiveness of the current system**, including any available figures for the volume of tests and actual alerts deployed, geographic scope, and previously collected user feedback
    - **Reported challenges** of implementing the current system, highlighting specific pain points for different stakeholders
    - **Remaining information gaps** that will be addressed through primary data collection
    - **Data collection plan** outlining the approach for implementing the SMS test with BNGRC and the MNOs, including community sensitisation efforts, to prepare the selected communities for the SMS test and subsequent qualitative components of the research. Clearly define which population segments will be selected for stratifying the focus groups.

Deliverable 2: Submission of inception report, KI interview documentation/transcripts, and KI interview and focus group discussion guides for subsequent phases of the research.

3. Dissemination of test SMS alert and analysis of test data

This phase will include all coordination and preparation for conducting the SMS test, as well as analysing the quantitative data collected by MNOs to understand the reach and timeliness of the test message.

To avoid potential misunderstanding with the test SMS alert, the content of the message will be simple and explain that the message is only a test and part of research to improve the alert system. The content of the message must be reviewed and approved by BNGRC before it can be sent out via the MNOs. It will also be necessary to work with the Malagasy Red Cross and BNGRC to inform the community leaders in the target area that there will be a SMS test sent out for research purposes. This test will not be evaluating message content, it will instead focus on how long it takes for messages to be sent out and how many errors are encountered (e.g. SMS that fail to be delivered due to end users' device being out of coverage, power issues, turned off, etc.). Alert content will be examined in the 4th stage of this research, *Qualitative assessment of community perceptions*.

The supplier will:

- Coordinate between BNGRC, MNOs, and Malagasy Red Cross to schedule the SMS alert test date and location.
- Determine the exact location for the SMS test alert within the Atsimo Andrefana region based on consultations with BNGRC and the Malagasy Red Cross. A key aim of this study is to build on the IFRC and Malagasy Red Cross's research on community perception of alerts. It will be important to analyse available data from our partners that includes a few questions about the perception of mobile-based alerts in communities in the Atsimo Andrefana region.
- After the test, coordinate with MNOs to obtain anonymised data and consolidate key metrics: Attempted number of SMS sent, timestamp of first and last message (delta to determine the lag from the beginning to end), number of SMS that failed and error reason (if

possible. E.g. device off, no service, mailbox full, invalid number), technical and operational challenges encountered.
- Clean the anonymised data and analyse results.

Deliverable 3: Documentation of successful SMS test, documentation of community sensitisation activities conducted, submission of data analysis plan, and submission of data analysis file that includes key descriptive statistics and related data visualisations to summarise results (e.g. Excel)

4. Qualitative assessment of community perceptions

This phase will include collection of primary qualitative data through semi-structured KI interviews with community leaders and focus group discussions (FGDs) with different segments of the community in which the test SMS alert was sent. The aim is to complement and triangulate the information collected in the two earlier stages of the research to understand the reach and effectiveness of the SMS-based system from the perspective of the end-user.

The supplier will work closely with the Malagasy Red Cross to engage with community leaders, including explaining the research and obtaining buy-in, identifying participants for Key Informant Interview (KIIs) and FGDs, and determining the best timings and venue for holding these sessions. Red Cross volunteers will also be available to support the coordination and implementation of the qualitative study (a per diem will be paid to each volunteer as per standard guidelines and regulations).

The supplier will:

- Design the data collection tools, which should include separate interview guides for KIIs with community leaders and FGDs with community members
- Coordinate with the Malagasy Red Cross to identify participants and organise the individual and group discussion sessions.
- Provide training and oversight to Red Cross volunteers who are hired to support the data collection (e.g. notetaking during FGDs and debriefs after FGDs)
- Conduct 1-3 KIIs with relevant community leaders, to gain an understanding of broad demographics and dynamics within the community, gain insights about any past experience with SMS-based alerts, and to build trust and buy-in with the community leaders before wider engagement with members of the community
- Conduct 8-12 FGDs[1] with members of the community, to gain an understanding of the needs, preferences, and priorities of end-users receiving SMS-based alerts. FGDs should be stratified according to key demographic factors, such as sex, age group, literacy, mobile ownership, digital literacy, etc. The stratification of FGDs should be proposed by the supplier following the inception phase and agreed in consultation with GSMA and Malagasy Red Cross (MRC). At least two of the FGDs should consist of participants who did not receive the SMS test alert, to explore key blockers and accessibility challenges.
- Consolidate data at the end of each day. This will include daily debriefs with notetakers, as well as transcribing discussion recordings (if participants consent to being recorded).
- Analyse the data using best practice techniques and approaches for qualitative analysis. This includes coding the data according to themes, identifying the frequency of recurring information, making structured comparisons between themes and insights from different population groups, and identifying patterns and meaning from this thematic analysis.

[1] The exact number of FGDs conducted will be determined by the supplier based on reaching a point of data saturation. Data saturation is defined as the point where collecting more data will not reveal any new themes or insights; rather, the same themes are being repeated and reinforced.

Deliverable 4: Submission of data collection work plan, FGD and KII documentation/transcripts, data analysis plan, and data analysis file presenting the qualitative data in a coded and structured format, categorised by theme

5. Presentation of findings and final report

The supplier will:

- Present preliminary findings from the research to the project partners, including GSMA, IFRC, Malagasy Red Cross, BGNRC, and MNOs. Integrate feedback from GSMA and partners provided during this presentation into the drafting of the final report.
- Submit an outline to indicate the structure of the final report, which will be reviewed and approved by the GSMA.
- Deliver a final report of publishable quality (approximately 20-25 pages in length) that synthesises the data and analysis from all components of the research. A draft should be provided up to two weeks prior to the final report to allow for at least two rounds of reviews and comments from the GSMA and any other partners or stakeholders.

Deliverable 5: Preliminary findings presentation conducted, and deck submitted, submission of final report outline, submission of drafts and final report.

4. Additional requirements

The following elements are mandatory service requirements and processes through the research process.

Communication

Given the nature of this research there is a strong preference for local researchers or local research agencies. The supplier will be expected to communicate in French, Malagasy, and English:

- Excellent French and Malagasy is essential for this project, as the vast majority of communication with external stakeholders (from GSMA's perspective) will be French or Malagasy.
- All communication, both written and verbal to the GSMA, will be conducted in English (including the translation of any documents that are required by local law in the markets that are created in local language). Additionally, this includes any documentation submitted as final deliverables to the GSMA, including transcripts and research materials. Suppliers should also demonstrate their ability (either through direct employment or via partners) to bring on highly skilled bilingual researchers in various contexts to deliver detailed qualitative testing and refinement of tools.
- The slide deck and final report under deliverable 5 should be produced in French, to ensure maximum utility for local actors, who are the primary audience for the study. We may also require an English version to enable greater sharing of these insights globally.

Transparency

GSMA requires the appointed supplier to be fully transparent about local partner / fieldwork agencies they intend to use & GSMA has the power to veto selection.

Safeguarding

As part of our commitment to ensuring all those involved in research and evaluation are safeguarded, the supplier is requested to provide information on their safeguarding approach / mitigating activities to ensure the safety and dignity of any vulnerable persons. A

full safeguarding plan will be formulated together once a supplier is selected and integrated into the research tools and fieldwork plan.

Service availability

GSMA M4H requires a named project manager and ideally requires response to emails within two working days. Any delays must be communicated in a timely manner. Any changes to the required services/deliverables must have prior written approval from the GSMA contract manager.

Project management requirements

Regular weekly updates with the M4H project manager either at the GSMA London office or via video conference throughout the project. During the KII phase M4H expects weekly calls.

Ongoing support of deliverables

It is expected that the successful supplier will respond in a timely manner to GSMA for clarification of the project activities and/or deliverables for up to four weeks after the final debrief.

Licenses

The supplier will be responsible for ensuring all data collection is in line with local requirements and that they have all relevant permissions.

5. Request for Quotation

Evaluations of proposals will consider the following elements. It is unlikely the GSMA will consider proposals that do not include all elements listed.

I. **Understanding of the brief:** Suppliers should outline their understanding of the requirements and the value they believe the results will have.

II. **Approach:** Suppliers should outline how they intend to deliver the project as specified above. This should include:

   a) How you intend to meet the requirements of this document.

   b) Suggestions for alternative/supplementary approaches to address the central objectives.

   c) An indicative timeline for delivery and demonstration of capacity to meet this; and

   d) Any dependencies on GSMA staff.

III. **Team and responsibilities:** The proposed individual or team (if applicable) should be included with a short bio alongside proposed roles.

IV. **Relevant experience:** Include examples of previous work which demonstrates experience where possible with:

   a) Telecommunications &/or tech category experience;

   b) Experience of working on early warning systems;

   c) Suppliers that have experience and knowledge of the humanitarian sector; and

   d) Experience working in Japan or with the Japanese government.

V. **Risks and mitigation strategies:** All RFQ responses should include how any potential risks may be mitigated, e.g., security risks, ethical considerations etc.

VI. **Itemised quote**: Suppliers should provide a fully itemised quote. The GSMA default currency requirement for all proposals is 'UK Pounds Sterling'. It should include at a minimum a price for commissioning the project as described in Sections 2 and 3 of this document. Please note in those sections we have outlined estimated sample sizes and locations of research for costing purposes. If significant changes to budget will occur as a result of the backup locations listed in section 3, please indicate where and how those would impact the budget.

   a) All costs should clearly demonstrate breakdowns in terms of staff time, travel, direct costs and other expenses.

   b) Suppliers are also asked to provide costs for any alternative or supplementary approaches suggested in your proposal.

   c) A template can be found at the bottom of this document.

RFQ timeline

The RFQ timeline below is subject to change at GSMA's sole discretion.

Time and Date	Action
August 11	RFQ Issued
August 15	Submit questions to GSMA by this date
August 19	Questions and answers circulated back to all respondents
August 27	Deadline (COB) for proposals to be received by GSMA
September 4	Estimated invitation to contract
September 19	Contract fully executed

Note: Timeline is subject to change

GSMA Contact details

All correspondence and queries in relation to this RFQ must be emailed to:

Bryce Hartley (bhartley@gsma.com) ("GSMA contact")

Angela Nkonu (ankonu@gsma.com) ("GSMA contract")

Queries are accepted in written form by email, and GSMA's responses will be copied to all respondents, including an anonymous version of the query. No queries will be answered outside of the timeframe specific, except in extraordinary circumstances within GSMA's sole discretion.

RFQ submission details

Respondents should submit a full documentation package via email no later than 1700hrs (GMT) 27th August 2025. Electronic submission should not exceed more than 5 MB in size per email and should be sent to: bhartley@gsma.com; ankonu@gsma.com. Acknowledgement of receipt of electronic submission will be sent by the next day of receipt before Close of Business. In case the Respondent encounters a problem in its electronic submission, please contact Angela Nkonu by telephone at +44 (0)7855 985 016. If, following submission of the tender, the information contained therein changes, please advise the GSMA Contacts immediately. Where proposals are incomplete or not supplied, they may not be considered for evaluation. By submitting a response, the respondent agrees to respond to any other questions issued by GSMA in connection with this RFQ within the stated deadlines.

Milestone payment details

For the avoidance of doubt, GSMA's payment terms are contained in the GSMA Standard Terms & Conditions ("T&Cs"), and are thirty days from receipt of an undisputed invoice, which should be raised following acceptance of Services and/or Deliverables.

Please note, GSMA does not make advance payments prior to completion of the Services and Deliverables unless the payment requested is specifically traceable to purchase of items required to perform the Services or provide the Deliverables, which would otherwise be a loss for the Respondent. Any specific payment requirements must be notified as part of the RFQ response.

The Respondent's Total Price is inclusive of all costs, insurances, fees, costs, expenses, liabilities, obligations, risks, and all financial requirements for the performance of Services and provision of Deliverables. Any charge not stated in this Proposal, which extends above to the Total Price, is not permitted. Total Price is exclusive of VAT but inclusive of all other taxes.

Summary of proposed timeline and payment milestones

Based on expected outputs outlined in Section 3, please find below the summary of proposed payment milestones to be made to the supplier upon delivery of outputs. The following will be amended based on the supplier's proposal.

Proposed payment milestone	Corresponding deliverable	Date
Milestone 1: Kick off call	Deliverable 1: Kick-off deck submitted, and session completed	September 2025
Milestone 2: Inception phase and system mapping KIIs	Deliverable 2: Submission of inception report, KI interview documentation/ transcripts, and KI interview and focus group	October 2025

Proposed payment milestone	Corresponding deliverable	Date
	discussion guides for subsequent phases of the research.	
Milestone 3: Dissemination of test SMS alert and analysis of test data	Deliverable 3: Documentation of successful SMS test, documentation of community sensitisation activities being conducted, submission of data analysis plan, and submission of data analysis file that includes key descriptive statistics and related data visualisations to summarise results (e.g. Excel)	October 2025
Milestone 4: Qualitative assessment of community perceptions	Deliverable 4: Submission of data collection work plan, FGD and KII documentation/transcripts, data analysis plan, and data analysis file presenting the qualitative data in a coded and structured format, categorised by theme	November 2025
Milestone 5: Presentation of findings and final report	Deliverable 5: Preliminary findings presentation conducted, and deck submitted, submission of final report outline, submission of drafts and final report.	November/December 2025

Itemised budget template

Please provide the total price and the breakdown by unit cost as per the table below.

Item/Title	Unit/Activity Description	Standard Base Rate	Discount Applied	Discounted Rate	Volume	Total Charge