GSMA

REQUEST FOR QUOTATION

Building a Resilient Industry: Mobile Networks Under Disruption

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Antitrust Notice

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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.

2. Project Overview

Background

The GSMA Mobile for Humanitarian Innovation (M4H) programme envisions an inclusive digital humanitarian future, where mobile and digital solutions provide affected populations with improved access to life-enhancing mobile-enabled services across preparedness, response, and recovery. The programme acts as a convenor between mobile network operators (MNOs), humanitarian actors and national governments to promote innovation, collaboration, and impact in crisis settings.

Mobile networks are critical infrastructure in disasters. They underpin emergency communications, early warning systems (EWS), access to information, digital services and coordination mechanisms essential to crisis response. As climate-related hazards increase in frequency and severity, the resilience of mobile networks under stress is critical. Natural hazards and disasters can majorly disrupt mobile networks and their operations. For example, they can cause direct damage to infrastructure, limit power supply, disrupt transport and access for repairs and result in operational impacts due to affected staff. Simultaneously, demand for connectivity typically spikes during emergencies, placing additional stress on already compromised networks.

In 2020, the GSMA Mobile for Humanitarian (M4H) programme published *Building a Resilient Industry*, which provided an important foundation for understanding how MNOs can prepare for and respond to disasters. Since its publication, the global risk landscape has evolved. Natural hazards and disasters are increasing in intensity and scale, placing greater stress on MNOs and their infrastructure. At the same time, expectations around mobile-enabled EWS have expanded, with the implementation of the

EW4All initiative and recognition of MNOs central role in public alerting. M4H acts as a key partner in delivering the EW4All initiative and has produced a substantial body of work, particularly around mobile alerting through cell broadcast. This work has highlighted that, in addition to broader network performance, a component of effective of mobile-enabled EWS is the resilience of EWS infrastructure and operational design, when operating in a potentially overloaded or disrupted environment.

Within this context, the GSMA is commissioning a piece of research to update the 2020 publication. The piece will assess the global risk landscape and provide practical guidance for MNOs on building resilience. This work will also reflect on the dependencies between network performance and EWS functionality during hazardous events and include how resilience considerations intersect with EWS design and operational decision-making. This could include, for example, ensuring redundancy in alerting infrastructure such as CBCs or backup power arrangements.

The research will be a combination of desk-based research, key informant interviews and a workshop or roundtable with MNOs. It will draw-on empirical examples and case studies from MNO partners. The study may leverage existing engagement channels, including the humanitarian connectivity charter, which could provide a potential platform for engaging MNOs and gathering insights. The study aims to produce predominantly MNO-facing guidance on natural hazard risks and building resilience for mobile-enabled EWS.

Project objectives

1. Provide a global assessment of natural hazard-related risks and the implications affecting MNOs and their networks.

2. Identify key resilience considerations and provide practical guidance for MNOs facing risks from natural hazards and disasters.

3. Identify the dependencies between network performance/service continuity and mobile early warning capability.

4. Identify considerations and provide guidance to support MNO decision-making in the technical design and operational aspects of mobile-enabled EWS

5. Capture lessons and good practices from MNOs and GSMA partners through examples and case studies.

Research questions

This study will address four core areas of inquiry. These are designed as surface considerations from a broad spectrum, including technological, operational and financial.

These are articulated in the following four overarching research questions, each supported by sub questions:

1. **What are the risks and their implications on MNOs and their networks?**

- What types of natural hazards across the globe most significantly affect mobile network infrastructure, operations and service continuity?
- What are the implications of natural hazards on the technology and infrastructure affecting network performance?
- What operational challenges do MNOs face during disasters for maintaining connectivity/business continuity?

2. **What are the considerations for MNOs for building resilience to these risks?**
    - How are resilience strengthening measures currently reflected in MNO network planning and operational strategies and what has proven effective?
    - What technological considerations and guidance can be provided for MNOs strengthening network resilience (including redundancy, backup power, and alternative connectivity solutions such as satellite, HAPs, roaming, or mesh networks)?
    - What operational and organisational practices best support service and business continuity during hazard events?
    - How much investment should be allocated to the various components of building resilience?

3. **How does this intersect with early warning capability, what are the dependencies?**
    - What implications do network disruptions have for early warning dissemination capabilities?
    - What are the key dependencies between network performance and the resilience of mobile-enabled EWS?
    - What are the resilience measures most critical for maintaining mobile-enabled EWS capabilities during disasters?

4. **What are the considerations for the technological design and operations of mobile-enabled EWS?**
    - What technical design factors influence the resilience of mobile-enabled EWS in compromised network conditions?
    - What are the technical considerations for building resilience into the design of EWS? (e.g. redundancy, back-up servers)
    - What are the operational considerations for ensuring EWS capabilities can be utilised during disasters?

Scope

In Scope

- Implications of natural hazards for network performance and service continuity.
- Mobile network/infrastructure resilience in the context of natural hazards and disasters.
- Operational and planning considerations for MNO resilience
- Dependencies between network functionality and EWS performance.
- Resilience considerations for mobile-enabled early warning dissemination.
- Strengthening resilience in the design and operations of EWS themselves.
- Illustrative examples and case studies from MNOs

- Considerations around the use of satellite for network (and EWS) resilience and redundancy.
- Investment choices and cost allocation for resilience

Out of Scope

- Political, conflict-related or geopolitical risks.
- Technical evaluation of specific technologies or vendor solutions.
- Quantitative modelling or financial analysis.
- End-user behaviour or public response to alerts.
- Assessments of national disaster management systems.
- Benchmarking or performance evaluation of individual markets or operators.

3. Methodology and High-Level Services and Deliverables Requirements

It is suggested the research is conducted in five phases, including desk research, key informant interviews and a workshop with MNOs.

1. Desk research will draw on existing GSMA research, publicly available literature and industry resources. This will map the risks and hazards, their implications for MNOs and EWS, as well as identify existing understanding and lessons on building resilience in this regard. 4-6 case studies will also be selected at this stage collaboratively with the GSMA.

2. 15-20 KIIs will be conducted with selected MNOs and key stakeholders to clarify the implications of natural hazards on mobile networks and EWS, and capture operational insights, resilience approaches and emerging practices. Comparative insights from prior GSMA engagements and case studies will be incorporated where relevant.

3. 4-6 selected case studies will be carried out through KIIs with experts (4-5 per case study). This can be done through country visits or virtually (or a combination) depending on the context. The supplier should outline their suggested approach in their proposal. The case studies will specifically focus on the learning that MNOs gained in responding to major disasters and where relevant delivering early warning messages.

4. Analysis and synthesis of findings to develop draft guidance.

5. A workshop or roundtable will be conducted with MNOs to stress test initial findings and draft guidance. Scenario-based discussions will be used to evaluate the applicability of the guidance, identify potential gaps or barriers and refine it to align with MNO operational realities. The validation workshop could potentially be incorporated into an agenda item at a GSMA humanitarian connectivity charter workshop if feasible.

Suppliers are welcome to suggest refinements or alternative methodological approaches.

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. **Desk review and inception**

   As part of the inception phase, the supplier will conduct a preliminary desk review and prepare a short inception report (approximately 10 pages) as a starting point. This should include:

   - A brief literature and desk review summarising the global risk landscape, existing considerations and guidance for building resilience.
   - A preliminary mapping of network dependencies for early warning systems.
   - A proposed list of case studies for review with justification.
   - A clear research timeline and responsibility matrix.
   - A draft outline of the planned report
   - Proposed list of stakeholders for key informant interviews and Interview guides

   Deliverable 2: Inception report submitted (including literature summary, case study suggestions, report outline, workplan, stakeholder list and interview guides).

3. **Key informant interviews and initial analysis**

   - Key informant interviews will be carried out with MNOs and relevant stakeholders to further understand the implications of natural hazards, and operational insights for building resilience.
   - Additional key informant interviews will be carried out with individuals with experience from the specific case studies to delve deeper into the learning that MNOs gained in responding to a major disaster and disseminating emergency alerts where relevant.

   Following the interviews an initial analysis of findings will be undertaken to provide high level considerations for MNOs and a revised outline for the final report (if applicable). These findings and draft guidance will be presented to MNOs for feedback in the next phase.

   Deliverable 3: Interview notes/transcripts, emerging findings and draft guidance, revised report outline.

4. **Validation workshop**

   The supplier will host a workshop or roundtable with MNOs to share the draft guidance and obtain feedback. The workshop will also facilitate knowledge sharing and peer learning amongst MNOs and the GSMA.

   Deliverable 4: Attendance list, notes and photos from the workshop.

5. **Draft reports**

   The supplier will submit the first full draft of the final report on building a resilient industry for GSMA review and feedback. This draft should include a global assessment of natural hazard risks, MNO facing guidance for building resilience supported by empirical examples, and a select number of in-depth MNO case studies. Following submission of the first draft, the supplier will incorporate feedback for up to three rounds of reviews.

   Deliverable 5: First draft of the final report submitted for review by GSMA.

6. **Final report**

   Following up to three rounds of reviews from the GSMA, the supplier will deliver the final report.

   Deliverable 6: Final report delivered and approved by GSMA.

4. Additional Requirements

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

Communication
All communication, both written and verbal to the GSMA, to 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.

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 below:

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) Experience conducting research, technical analysis or policy work in the telecommunications or digital technology sector
   b) Experience analysing early warning systems, particularly in relation to mobile-based dissemination or public alerting frameworks
   c) Demonstrated understanding of MNO operational structures, including network planning, operations, and service continuity considerations (experience working within an MNO or closely with MNOs is highly desirable)

d) Experience engaging with MNOs, infrastructure providers, regulators or emergency/disaster management stakeholders through research, consultancy or advisory work.

e) Familiarity with technologies and strategies relevant to resilience and continuity (e.g. backup power, redundancy, satellite/ NTN, HAPs, roaming, or alternative connectivity solutions)

f) Familiarity with or experience in the humanitarian or development sector**,** particularly where digital technologies intersect with emergency preparedness or response

g) Familiarity with disaster risk management, humanitarian contexts or climate adaptation/resilience frameworks, particularly where digital or communications technologies play a role

h) Experience conducting qualitative research, including key informant interviews, stakeholder consultations, and facilitating expert workshops or roundtables

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
27 February	RFQ Issued
6 March	Cutt off for questions to be submitted to GSMA
9 March	Answers circulated with suppliers

Time and Date	Action
17 March	Cut off time and date for proposal to be received by GSMA
20 March	Estimated invitation to contract
10 April	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:

Susanna Acland (sacland@gsma.com) ("GSMA contact")

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

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) 17th March 2026**. Electronic submission should not exceed more than 5 MB in size per email and should be sent to: sacland@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.*	17 April
Milestone 2: Desk review and inception	*Deliverable 2: Inception report submitted (including literature summary, case study suggestions, report outline, workplan, stakeholder list and interview guides).*	1 May
Milestone 3: Key informant interviews and analysis	*Deliverable 3: Interview notes/transcripts, emerging findings and draft guidance, revised report outline.*	29 May
Milestone 4: Validation workshop	*Deliverable 4: Attendance list, notes and photos from the workshop.*	12 June
Milestone 5: Draft report	*Deliverable 5: First draft of the final report submitted for review by GSMA.*	3 July

Proposed payment milestone	Corresponding deliverable	Date
Milestone 6: Final report	*Deliverable 6: Final report delivered and approved by GSMA.*	24 July

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