# Terms of Reference: AI-Powered Safe Space App – Technical and Innovation Support

**November 2025**

## Introduction

*The GSMA*

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Solutions and Events.

*The GSMA Mobile for Development Foundation (M4D)*

The GSMA Mobile for Development Foundation, Inc. ("GSMA") is a U.S. 501(c)(3) charitable organisation. The Mobile for Development team (GSMA) operates at the intersection of the mobile ecosystem and the development sector. Our aim is to stimulate digital innovation and deliver both sustainable business and large-scale socio-economic impact. Our research and insights platform, in-market expertise and community of partners push forward digital innovations and implementations that empower underserved populations. To date, we have impacted the lives of over 220 million people.

***EmergingTech Programme***

Within M4D, the EmergingTech programme's mission is to accelerate impact and climate action by fostering the adoption of AI and emerging technologies in low- and middle-income countries (LMICs). To achieve this, the team works with public, private and third sector innovators to develop scalable and sustainable solutions that have inclusive and responsible AI at the core.

## Executive Summary

Emerging technologies such as IoT, Edge Computing and AI are showing strong potential to add value in LMICs[1]. across smart agriculture, AI-powered health diagnostics, connected classrooms and financial inclusion. Despite this potential, these technologies remain under-utilised due to challenges such as limited digital and AI skills, inadequate infrastructure and hardware, privacy and ethics concerns, and complex ecosystem collaboration.

Since 2017, the GSMA has worked with mobile network operators (MNOs) and public sector partners to leverage Mobile Big Data (MBD)[2] and AI to deliver insights, products and services to address global development challenges, from climate change and pollution to better healthcare and transport. Through this initiative, the GSMA has helped build local capacity, and ensured global best practices were adopted to maintain high ethical standards in the use of MBD analytics and AI. Learnings and public knowledge products from this work include examples of MNO-led

[1] GSMA (2023) IoT for Development: Use cases delivering impact.

[2] Mobile Big Data includes data such as (i) event data (logs recorded by an MNO when users connect to their network for calls, SMS, mobile internet, USSD mobile money transactions etc); (ii) network data on the telecom network itself (including the location of cell towers antennae and underground networks, infrastructure status and other logs of activities taking place on the network); and (iii) customer data which is usually collected by an MNO during the registration process and includes socio-economic and demographic information. These data assets are subject to strict regulation.

innovations in MBD/AI-driven solutions in LMICs[3], an AI digital toolkit[4], and common technical frameworks and guidance for implementation[5].

The emergence of Generative AI presents new opportunities but also risks widening the digital divide. In response, the GSMA EmergingTech Programme, supported by the UK Foreign, Commonwealth & Development Office, has prioritised inclusive, locally relevant AI initiatives. This consultancy will support the co-design and development of a gamified mobile learning application in partnership with **mobile operator based out of Philippines**, aimed at educating school children on data privacy, cybersecurity, and responsible use of AI.

The consultant will assess feasibility, design the technical architecture, and support prototype development of an AI-personalised learning tool to be integrated into mobile operator existing digital-education programme.

## Context & Objectives

In the Philippines, the GSMA EmergingTech Programme will collaborate with a mobile operator to enhance an existing digital citizen education programme initiative by developing a Safe Space: A Kid's Guide to Data Privacy mobile app. The app will feature gamified learning modules covering online safety, data privacy, and responsible AI use, supported by AI-personalised learning pathways.

Project aims:

- Strengthen youth digital literacy and AI awareness.
- Build capacity for AI integration in local education programmes.
- Generate lessons for replicating similar initiatives across other LMICs.

## Project Overview

The consultant will work with the GSMA EmergingTech Programme and a mobile operator in the Philippines to strengthen an existing digital-education programme by integrating an AI-powered, gamified learning application that promotes safe online behaviour, data privacy, and responsible AI use among schoolchildren.

The consultant will lead the technical design, data strategy, prototype development, and validation of the solution within the timeframe ending March 2026. The approach will blend user-centred design, agile delivery, and responsible-AI principles to ensure both technical rigour and social impact.

## Delivery Approach

To ensure effective and inclusive implementation, the consultant will apply:

- Design Thinking – to focus on user needs, accessibility, and social impact.
- Lean / Agile Principles – to enable iterative development and testing.
- Machine Learning Operations (MLOps) – to ensure efficient AI/ML model development, versioning, and lifecycle management.

[3] GSMA (2022) Mobile Big Data and Artificial Intelligence: Towards sustainable development in Southeast Asia
[4] See GSMA Digital Toolkit.
[5] See GSMA's work on privacy principles (2018) and AI ethics principles (2022).

***Scope of Work and Responsibilities***

The consultant will:

- Gather, analyse, and document functional, business, and technical requirements.
- Conduct technical workshops to understand and document existing infrastructure and integration needs.
- Design, build, and deploy proof-of-concept (POC) or prototype mobile applications.
- Develop, fine-tune, and localise AI/ML and LLM models, including adaptation for local languages.
- Integrate AI/ML models within existing MNO systems, APIs, and mobile apps.
- Conduct user-acceptance testing (UAT) and validate AI performance and usability.
- Prepare and submit comprehensive technical documentation, API specifications, and deployment guides.
- Provide limited technical support during the pilot and evaluation phases.

The consultant is expected to support a planned in-country workshop in the Philippines on 11–12 December 2025, in collaboration with GSMA and mobile operator teams. The workshop will focus on project scoping, stakeholder alignment, and technical discovery. The consultant will contribute to the preparation of design materials, facilitation of technical sessions, and provision of expert inputs. Participation may be in-person or virtual, with associated costs for either mode included in the proposal.

This integrated approach ensures that the project delivers a functional, user-friendly prototype aligned with local ecosystem capabilities and global best practices in responsible AI.

## Workplan and Timelines

To ensure deliverability within available time and resources, GSMA expects the consultancy to be structured around a tiered delivery model, with each stage representing a defined phase of work and cost.

| Phase | Focus Area / Key Activities | Key Outputs / Deliverables | Indicative Duration |
|---|---|---|---|
| **Phase 1**: **Project Initiation and Scoping** | • Support kick-off meetings/ workshops with GSMA colleagues (2 days in-country, Philippines).<br>• Develop stakeholder map (MNO teams – product, engineering, end-user, and/or government representatives where applicable)<br>• Assess the existing digital programme at the MNO.<br>• Review existing documentation, data and initiatives.<br>• Clarify and document project expectations.<br>• TC to participate as an observer in in-country sessions and contribute technical insights. | • Inception Report outlining project scope, goals, stakeholders, high-level timelines and phasing.<br>• Workshop summary and stakeholder mapping document. | ~1 week post-contract |
| **Phase 2**: **Stakeholder Consultation** | • Lead and facilitate six (6) technical workshops (2 hours each) over 1–2 weeks. | • Functional Requirements Document (FRD) – app | ~1–2 weeks |

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|---|---|---|---|
| **& Requirement Gathering** | • Conduct 10–20 interviews, surveys or focus groups.<br>• Gather business, functional and technical requirements and dependencies.<br>• Identify key constraints (data, infrastructure, policy etc.)<br><br>*GSMA to facilitate scheduling with customer and relevant stakeholders.* | behaviour, logic, gamification flows, user states, and content triggers. | |
| **Phase 3**: **Functional & Technical Design** | • Translate requirements into detailed functional and technical blueprints.<br>• Define system architecture layers (data model, API, front-end, back-end).<br>• Map security, privacy and responsible AI principles.<br>• Design mobile app features and integration points with AI/ML services. | • Technical Design Document (TDD) – covering architecture, data flows, API specifications, security controls and AI/ML integration model design. | ~3 weeks |
| **Phase 4**: **Data Strategy & Preparation** | • Identify and validate data sources with customer support.<br>• Define data pipelines and pre-processing workflows.<br>• Prepare training and testing datasets<br>• Evaluate data availability, quality and readiness. | • Data Governance & Readiness Report – detailing data sources, collection methods and quality assessment.<br>• Presentation to GSMA and MNO stakeholders for validation. | ~1 week |
| **Phase 5**: **Prototype Development / POC** | • Mentor customer team on POC development (environment setup, data preparation, sprint planning, evaluation checkpoints).<br>• Supervise mobile app and AI/ML lifecycle (front-end, back-end, APIs, and LLM integration).<br>• Support testing and debugging.<br>• Demo working prototype to stakeholders. | • Working Prototype demonstrating full end-to-end functionality:→ Mobile App→ AI/ML Engine (personalisation / recommendation)→ LLM Layer (text simplification / translation)<br>• Prototype presentation and validation session. | ~4 weeks |
| **Phase 6**: **Testing, Validation & User Feedback** | • Conduct user-acceptance testing (UAT) and validate AI performance and app usability<br>• Document user feedback and iterate solution.<br>• Support pilot evaluation with GSMA and MNO teams. | • Pilot Evaluation Report – including technical performance metrics (accuracy, latency, uptime).<br>• Improvement Log / Recommendations Matrix.<br>• Lessons Learned presentation for stakeholder validation. | ~3 weeks |

## Firm and proposal requirements

***Looking for:*** *Individual consultant*

***Required Experience:***

- *Proven experience in developing mobile apps, consumer facing; EdTech knowledge or experience*
- *Experience in AI/ML solution design (personalised learning systems - adaptive learning content recommendation, student progress modelling, and mobile application development, preferably in LMIC region.*
- *Able to translate business challenges into mobile app product, AI/ML and AI-LLM solutions and using agile, user-centric, and data-driven design approaches*
- *Strong understanding of end-to-end solution architecture: requirements gathering → data design → model development → API integration → front-backend delivery.*
- *Demonstrated expertise with cloud-based AI tools (AWS, Azure, GCP), open-source AI/ LLM frameworks (e.g. - TensorFlow, PyTorch, LangChain, OpenLLM) and mobile frameworks (e.g. Flutter, React Native, Android, iOS)*
- *Experience with producing functional specifications, data architectures, and technical documentations for stakeholder review.*
- *Understanding of AI for social impact, including domains such as digital inclusion, public health, agriculture, edtech, and fintech.*
- *Good understanding or experience in the Telecom industry.*
- *Experience working with multi-stakeholder ecosystems (governments, MNOs, NGOs, start-ups and tech providers)*
- *Familiarity with ethical, responsible, and inclusive AI principles (data privacy, fairness, local language data)*
- *Clear and demonstrable experience in working with mobile network operators.*
- *Full working proficiency in English, writing to publication quality.*

## Proposal Submission Requirements

Proposals should include a separate technical and financial section following this structure:

Technical proposal

1. 1 page statement of suitability, highlighting recent relevant experience.
2. 2 - 4 page proposed approach outlining analytical frameworks, data sources, case studies examples.
3. Any proposed changes to the ToR.
4. Details of relevant project experience and CVs and location proposed expert(s)
5. Workplan and Gantt chart outlining major project stages and timelines.
6. Confirmation of availability to support a planned in-country workshop in the Philippines (11 – 12 December 2025).
7. Description of how the consultant will contribute to the workshop, either through attendance or by developing design inputs and technical materials.

Financial proposal

1. Level of effort (person-day) by activity/phase
2. Fee rates (per day in GBP)
3. Total project cost (GBP), without VAT[6]
4. All costs, insurances, taxes, fees, liabilities, obligations, and risks necessary for the performance of the Services and the delivery of all outputs and deliverables.

[6] GSMA Foundation Inc is a US registered 501(c)(3) charity and is exempt from VAT.

5. All costs associated with travel, accommodation, subsistence, and participation in the planned in-country workshop (11–12 December 2025, Philippines) (whether in-person or remote) must be explicitly itemised.
6. Any other reimbursable expenses (e.g. data services, software licences, communication, or local logistics) should also be identified and included within the total price.

Due to GSMA compliance requirements, exact project budgets cannot be provided at this stage. You are, however, able to provide a few implementation/budget options that can help us assess value for money and we can align our project scope to the relevant budget after a consultant has been selected.

**Proposal assessment and selection Process**

The proposal will be scored on the following set of criteria:

| **Criteria** | **Importance** | **Weighting** |
|---|---|---|
| Cost | Proposal's value for money | 20% |
| Quality | Quality of the approach outlined in the proposal, including degree to which it addresses the engagement elements (above) | 30% |
| Time and Budget | Demonstrated experience to manage and deliver the project(s) on time and in budget boundaries | 30% |
| Relevant experience | Bidder's experience in successfully conducting similar projects | 20% |

- Proposals are to be submitted no later than 16:00 GMT on 14 November 2025 to Sumit Kohli (skohli@gsma.com) copying emergingtech@gsma.com.
- Clarification questions can be sent to Sumit Kohli; responses will aim to be provided within one working day.
- Please note: The evaluation timeline may vary depending on the volume of proposals received.
- Shortlisted consultants may be invited for clarification interviews on between 19 - 21 November 2025; interview dates will be confirmed after the submission deadline. Consultants will be notified of the final selection by the 24 November 2025.

**GSMA Mobile for Development**
Foundation Inc.
Suite 910, 3445 Peachtree Rd
Atlanta, GA 30326
United States