GSMA Digital Innovations for the Blue Economy
Statement of Work
May 2024

GSMA ClimateTech programme

The mission of the GSMA's ClimateTech Programme is to unlock the power of digital technology to create a low-carbon and climate resilient future. Through our research activities, we identify, promote and inform opportunities for digital innovation and develop pathways for aligning climate action with the sustainable development agenda. We also catalyse vital partnerships between the GSMA, the mobile industry, tech innovators, governments and the development sector with the aim of reducing fragmentation, facilitating scale and promoting collective action.

Context

The blue economy encompasses all economic activities directly or indirectly linked to oceans, seas, and coasts. Recognising the vast untapped potential of the oceans, the World Bank defines the blue economy as "the sustainable use of ocean resources for economic growth, improved livelihoods, and ocean ecosystem health".[1]

Despite currently receiving less than 1% of global private sector climate finance, the blue economy sector is set to gain increasing interest from investors and substantial growth over the next decade.[2] With an estimated 3 billion people globally reliant on the ocean for their livelihoods, investment in the blue economy – including improved fisheries management, sustainable aquaculture, and habitat protection – could help restore ocean productivity, creating benefits for communities in low- and middle-income countries (LMICs).[3] This not only ensures future growth, food security, and job creation for coastal communities, but also mitigates risks associated with oceanic degradation. As interest in the blue economy grows, it must navigate challenges related to sustainability and governance, including marine pollution, climate risks exacerbated by climate change, coastal erosion, and inadequate capacity and frameworks for effective management.

For the blue economy to thrive, collaboration among governments, industries, and communities is crucial to strike a balance between economic growth and ecological stewardship. Declared the 'Decade of the Blue Economy' by the United Nations (2021-2030), stakeholders worldwide are mobilising to translate this declaration into action.[4] This includes public and private sector actors developing strategies to increase engagement in the blue economy, as well as a growing start-up scene developing innovative mobile and digital solutions.

In recent years, the emergence of 'blue technologies' has played a pivotal role in strengthening efforts to monitor and preserve marine ecosystems. These can range from the use of earth observation and sensors to improve sustainable fisheries, drones to help plant mangroves, forecasting and early warning systems for coastal storms, and digital marketplaces to support fishing communities. Emerging technologies have the capacity to disrupt the blue economy by improving the management of maritime resources, managing risks associated with the blue economy and scaling impact, when applied effectively.

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[1] World Bank
[2] United Nations Environment Programme (2022). State of Finance for Nature. Time to act: Doubling investment by 2025 and eliminating nature-negative finance flows.
[3] Organisation for Economic Co-operation and Development
[4] Ocean Decade Network

While blue technology innovations primarily originate from the global North, there is significant potential to support their adoption in vulnerable coastal economies, particularly across Small Island Developing States (SIDS), Asia, Africa and Latin America. This requires investment in risk capital, development of quality data sets, awareness building, and learning from emerging global best practices within a rapidly changing technological landscape.

The GSMA has been actively exploring blue economy solutions across Africa and Asia through the GSMA Innovation Fund for Climate Resilience and Adaptation, supporting start-ups focused on enhancing value chains and food security in fisheries,[5] as well as working with coastal communities in Indonesia through our partnership with Indonesian mobile operator Indosat Ooredoo Hutchison.[6] As an emerging area of interest, the GSMA ClimateTech programme aims to develop longer-term strategies to invigorate the blue economy market through research, advocacy and partnerships.

Research objectives

With funding from the Swedish International Development Cooperation Agency (Sida), the GSMA ClimateTech programme will conduct new research to map the role of mobile and digital innovations in strengthening the blue economy sector in low- and middle-income countries. This scoping exercise will serve as a foundation for the GSMA's longer-term strategy on the blue economy.

Priority geographies to draw from include: Southeast Asia, Latin America and the Caribbean, Small Island Developing States, and East Africa.

The research will be designed to:

- Map and document global trends, innovations and examples of best practice in using digital technologies in the blue economy – with a specific focus on relevance and applications to vulnerable communities in the priority geographies listed above.
- Analyse investment sources and forecast trends for digital innovations in blue tech.
- Explore incentives, impacts and challenges that blue economy stakeholders encounter when engaging with digital innovations.
- Present recommendations for synergies between the GSMA, mobile operators, start-ups, development partners and end users to identify opportunities for longer term collaboration on the blue economy.

Methodology

The research is expected to include the following key phases. Suggestions for alternative approaches are welcomed by consultants:

1. ***Desk research and heatmap development*** – The first phase of the study will involve a comprehensive assessment of existing literature to map digital innovations for the blue economy sector, documenting trends in technologies, application, use cases and their socio-economic impacts, as well as partnerships and investment streams underpinning them in low- and middle-income countries. This should draw from academic literature, policy documents and reports from relevant organisations. This scoping should be presented in a heatmap (see GSMA's Digital Dividends for Natural Resource Management report for reference), assessing interventions against pre-determined indicators agreed between the consultants and the GSMA. This should

[5] See, for example, Aquarech and Simusolar
[6] GSMA 2023. Indonesia: Digitising Mangrove Conservation

include a ranking of use cases in terms of their potential for poverty reduction, alongside environmental benefits for different target groups (such as coastal communities).

2. ***Stakeholder mapping and interviews*** – As part of the desk research process, the consultants should identify priority stakeholders to engage for key informant interviews. This will include practitioners working directly on digital blue economy solutions across LMICs. The consultant will lead on a minimum of 25 in-depth interviews to answer key research questions. This should include a range of perspectives, such as digital innovators, practitioners, NGOs, investors and private sector actors (particularly mobile operators). Where necessary, the GSMA can support in introductions with stakeholders. Consultants are asked to specify the level of input required.

3. ***Analysis and reporting*** – Analysis of insights gathered from the desk research, heatmap development and stakeholder interviews should be translated into key insights and recommendations. The consultant will produce a PowerPoint presentation which addresses the project's key research questions. This should include practical, action-oriented recommendations for the GSMA, private sector actors (including the mobile industry), digital innovators and development organisations that will help drive progress, support sustainable development and foster impactful innovation for the blue economy. The GSMA welcomes suggestions on potential indicators of success for future interventions to support vulnerable communities through blue tech initiatives.

Key Deliverables

Insights and conclusions drawn from the scoping exercise will primarily be used for internal purposes. The initial external output from this research will be a series of blogs, written by the GSMA.

Key deliverables from the consultant will include:

- A heatmap, presented in Excel format, aligned against a template agreed with the GSMA. This will capture and categorise trends and innovations for the blue economy in LMICs against key technologies, sectors and use cases.
- A PowerPoint presentation detailing findings and recommendations. This will incorporate key trends and case studies to illustrate the outcomes from the research objectives. The specific content and length will be agreed in advance between the GSMA and selected consultant.
- An outline of proposed content for a series of three blogs intended for publication by the GSMA. Collaboration among the consultant, other partners, and the GSMA may be considered in producing these blogs.

Timeline

An indicative timeline for this study is outlined below, with a view to the full report being completed in September 2024. Consultants are invited to specific proposed dates in their submissions.

Phase	Activity	2024 Deadline
Procurement	Request for proposals circulated	16 May 2024
	Proposals received by GSMA	10 June 2024

	Supplier selected	19 June 2024
	Contracting	10 July 2024
Desk research	Kick-off meet between GSMA and consultant	11 July 2024
	Literature review and heatmap development	31 July 2024
Interviews	Stakeholder interview selection	31 July 2024
	Stakeholder interviews	August to mid-September 2024
Analysis and reporting	First draft report/PPT from consultant with key findings	20 September 2024
	Draft shared with Sida for feedback	7 October 2024
	Final report revisions	11 October 2024
	Presentation of key findings to GSMA and Sida	25 October 2024
Publication	Blog content developed x 3 with GSMA	September 2024
	Blogs published	Staggered publications from October 2024 (in lead up to COPs)

Application and selection process

Interested applicants are asked to submit a short proposal document outlining the following:

1. Details of the firm/consultants' knowledge and expertise on this topic, previous experience in this area, including reference work and clients.
2. Name and CVs of the core team working on the project
3. Proposal of plan to complete the work including:

   - High-level proposed approach and methodology
   - High-level schedule and activity timeline
   - Please note any limitations, risks and mitigations
   - Any additional considerations that you feel have been left out

4. Budget including:

   1. Personnel fees (broken down by name, role, activity, daily fee rate and proposed number of days per deliverable)
   2. The GSMA default currency requirement for all proposals is 'UK Pounds Sterling', this will be the contract currency for the successful Respondent

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.

Proposals should be submitted by **10th June 2024 5pm UK** to Anna Colquhoun [acolquhoun@gsma.com,](mailto:acolquhoun@gsma.com) Gouri Ramkumar [gramkumar@gsma.com,](mailto:gramkumar@gsma.com) and Henry Bowes [hbowes@gsma.com.](mailto:hbowes@gsma.com)

GSMA may conduct interviews in the week commencing 10th June 2024.