

Government of Samoa (GoS)
Ministry of Works, Transport and Infrastructure (MWTI)
Pacific Region Preparedness, Adaptation and Resilience - Samoa (PREPARE – Samoa)
PROCUREMENT ACTIVITY: WS-MWTI-526645-CS-INDV

TERMS OF REFERENCE

Position:	Infrastructure Advisor Consultant (IA)C)
Location:	Apia, Samoa
Hiring agency:	Ministry of Works, Transport, and Infrastructure (MWTI) Project Management Division (PMD), Government of Samoa
Duration:	24 months; may be extended based upon Government needs and performance of the consultant.
Expected start date:	2026

1. Background

Samoa's frequent exposure to severe natural hazards, compounded by climate change, has caused significant economic damage, and threatens key economic sectors, particularly in vulnerable coastal areas. Over 70 percent of the population resides in low-lying coastal zones, exposed to floods, droughts, tropical cyclones, earthquakes, and tsunamis. These events have caused substantial damage and losses over the years, with major disasters occurring at an average rate of one every three years. Notably, the 2009 tsunami and Cyclone Evan in 2012 caused damages equivalent to 20 percent and 29 percent of GDP, respectively, demonstrating the severe economic impact of disasters. Between 1965 and 2015, Samoa experienced 56 disaster events, resulting in US\$543 million in economic losses, i.e., annual losses averaging 5 percent of GDP. Climate change is expected to worsen the frequency and intensity of natural and climate-related hazards, further endangering infrastructure and livelihoods, while rising sea levels and increasing temperatures threaten agriculture, fisheries, and tourism.

Samoa is experiencing challenges with managing uncontrolled urban development, which poses additional challenges, particularly as it intersects with increasing climate and disaster risks. Official statistics suggest that rural growth surpasses urban growth, with Apia's population declining by 3.8 percent between 2016 and 2021. In contrast, the population in the northwest Upolu pre-urban area and the urban corridor to Faleolo International Airport increased by 17.2 percent. This expansion, which occurs outside the formal administrative urban boundaries, has led to urban sprawl and leapfrog development along the coastal infrastructure corridors east towards Vaialele Bay and west towards Faleolo International Airport, particularly the highly urbanized Vaitele area. This pattern of peri-urban development can be attributed to the topography, the distribution of primary roadways, and the availability of customary land in the coastal plain. Without strategic planning and regulation, urbanization increases the concentration of people and assets in hazard prone areas. Therefore, it is critical to integrate urban infrastructure with national-level adaptation planning proactively to reduce the exposure and vulnerability of priority assets to climate and natural hazards.

Beyond Apia's expanding footprint, Samoa's secondary urban centers are located on the main island of Upolu and in Savai'i, resulting in disparities in educational and employment opportunities, as well as reduced municipal services on the country's other inhabited islands. Focusing investments solely in Apia and the northwest urban corridor will be insufficient to achieve the goals outlined in the Pathway for the Development of Samoa (2021-2026). This development strategy emphasizes the need for long-term planning to achieve a more spatially balanced distribution of economic opportunities across the country, while promoting overall national economic growth. Recognizing this, the Planning and Urban Management Agency (PUMA) under the MWTI intends to develop a township plan for Sālelologa on the island of Savai'i as a key area with strong economic potential. The plan would act as a catalyst for development, integrating climate and disaster resilience measures into urban investments. While the National Urban Policy 2013 guides development in Apia, there are limited policies to guide and regulate future growth in Samoa's secondary urban areas.

Integrating climate and disaster resilience into the development of Sālelologa proactively is critical, given its growing population and exposure to natural and climate-related hazards. Between 2016 and 2021, the population of Savai'i grew by 3.7 percent, reaching 45,175 (one-fifth of Samoa's population), with 34 percent of the island's population residing in Sālelologa's district of Fa'asaleleaga. However,

Sālelologa is in a low-lying area, parts of which lie within the tsunami evacuation zone, and is exposed to flooding, coastal erosion, and landslides. The town's key infrastructure—including its wharf, ferry terminal, airport, fire station, market, schools, public library, and substation—is crucial for the community's daily life and economic activity, making it essential to integrate climate and disaster resilience into its future development – including public buildings and spaces. Yet these critical public assets remain vulnerable to hazards, since they are often not designed to suit Samoa's climate and disaster risk profile (e.g., improper design standards and construction practices). Environmentally sustainable designs that adapt to the changing climate and assist in mitigating Samoa's risk profile, as well as universal accessibility standards to ensure the inclusion of all, are also needed.

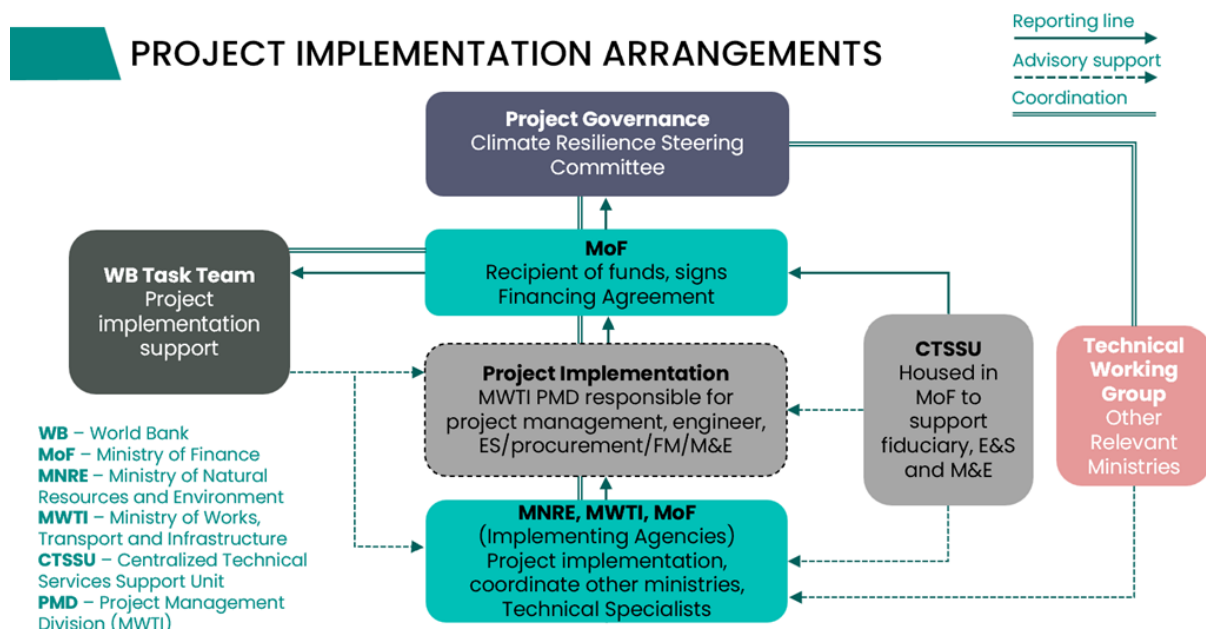
The GoS, through MWTI and the Ministry of Natural Resources and Environment (MNRE) is implementing the Pacific Region Preparedness, Adaptation and Resilience - Samoa (PREPARE), a World Bank-funded project aimed at improving capacity to prepare for and manage the impacts of natural hazards effectively, to strengthen the resilience of select urban areas, and in case of an eligible crisis or emergency, respond promptly and effectively to it. The project includes five components as set out below.

The Infrastructure Advisor Consultant (IAC) will support Components 2 and 3.

- **Component 1 – Hazard Monitoring and Early Warning Systems.** Activities under Component 1 will invest in global, regional, and country-level decision support systems, instrumentation, and capacity and institutional strengthening for multi-hazard early warning systems (MHEWS), supporting both climate-related and geophysical hazards. This includes strengthening the “upstream” end of effective MHEWS through investments in observations and forecasting, including for the Global Basic Observation Network.
- **Component 2 – Emergency Preparedness and Response.** Activities under Component 2 will enhance national and community-level response capacities to better prepare for, and respond to, future disasters. This will be achieved through supporting the “downstream” end of effective MHEWS, particularly infrastructure designed to national climate-resilient building design standards, investments in dissemination and communication, and EP&R at the country and community levels.
- **Component 3 – Resilient Lifeline Infrastructure.** Activities under Component 3 will invest in national and local activities to reduce the exposure and vulnerability of priority assets to climate and natural-related hazards. This will be achieved through risk-informed town planning, strengthening of critical public facilities, including current energy/water efficiency and natural hazard resilience standards, physical climate adaptation measures, and institutional strengthening related to infrastructure resilience. Key policy areas that will be supported under Component 3 include the development of a development of a Sālelologa Township Plan and SMP, updating and development of planning legislation, development control policies, urban design standards, land use planning policies guided by climate and disaster risk, and other relevant planning support to support the development of secondary urban areas as well as Codes of Environmental and Social Practice.
- **Component 4 – Project Management.** Activities under Component 4 will support project management and implementation support, including: (i) recruitment of consultants to provide support on project engineering, environmental and social management, procurement, financial management, monitoring and evaluation, and contract management; (ii) monitoring, review, and evaluation of the project; and (iii) capacity building and training including for operations and maintenance. Technical specialists, such as the Infrastructure Advisor Consultant, would be funded under other components.
- **Component 5 - Contingent Emergency Response Component (CERC).** The CERC will provide a mechanism: (i) for quick disbursements to meet the immediate liquidity needs of the Recipient following an eligible disaster event in order to finance critical imports; or (ii) to finance pilot adaptive social protection measures, emergency response, recovery and reconstruction works and associated services.

2. Implementation Arrangements

The Ministry of Finance (MOF) will serve as the Executing Agency, with the MNRE and MWTI designated as the Implementing Agencies. MNRE would manage Components 1 and 2, while MWTI would oversee Component 3. The day-to-day project management functions, including financial management, procurement, environmental and social management, and monitoring and evaluation, will be centralized under the PMD of MWTI with funding support from Component 4. Technical support for project implementation will be provided by experts housed within the relevant divisions of MNRE and MWTI, including this Infrastructure Advisor Consultant. MOF, through the Central Technical Services Support Unit (CTSSU), will continue to provide coordination and management oversight.



3. Purpose of the Assignment

The purpose of the Infrastructure Advisor Consultant (IAC) is to provide overall management and oversight of the engineering works to support implementation of the PREPARE – Samoa project (specifically for component 3). The IAC will deliver consulting services by (a) providing expert advice, technical inputs, and guidance; (b) managing and representing the project (Government of Samoa) in the execution of infrastructure and civil work contracts as required by the implementing agencies; and (c) working closely with stakeholders, including the Ministry of Works, Transport and Infrastructure (MWTI), Ministry of Natural Resources and Environment (MNRE), other members of the PREPARE – Samoa Project Team, Central Technical Services Support Unit (CTSSU), the Climate Resilience Steering Committee, Technical Working Group (TWG), and the World Bank Task Team (WBTT). The IAC will support the Government of Samoa in the planning, implementation, supervision, management, monitoring, and review of civil engineering works specifically under Components 2 and 3. In addition, the IAC will support MWTI in capacity building initiatives and contribute to technical studies as needed by the Ministry.

The IAC will report to the Assistance CEO of MWTI's Project Management Division (PMD) on daily coordination and technical collaboration across civil works activities.

4. Objectives of the Assignment

The Infrastructure Advisor Consultant (IAC) will provide overall management and technical oversight of civil and building works under the PREPARE – Samoa Project (Components 2 and 3). Working under MWTI's direction, the IAC will lead planning and implementation of engineering activities, deliver expert guidance across design, procurement, and construction, conduct technical studies and feasibility assessments, and monitor progress, risks, and compliance with safeguards. The role also includes coordinating stakeholders, building capacity through training and mentorship, strengthening institutional systems for project management, and ensuring accountability through regular reporting and transparent advisory outputs.

Under the guidance of the PMD, specific responsibilities will include (but not limited to):

Client Representation

- a. Act as the Government of Samoa's representative in overseeing civil works projects.
- b. Provide impartial oversight of the supervising firm's performance, ensuring compliance with contract provisions.
- c. Safeguard the client's interests by monitoring quality, timelines, and budget adherence.

Oversight of Supervision Firm

- d. Review and validate supervision firm deliverables such as but not limited to: (inspection reports, QA/QC documentation, certification records, MWTL's requirements).
- e. Monitor the firm's adherence to contract's provisions and MWTL requirements.
- f. Identify gaps or risks in supervision activities and recommend corrective measures.
- g. Ensure transparent and defensible certification decisions by the supervising firm.

Capacity Development

- h. Facilitate structured training for MWTL staff on contract administration, QA/QC.
- i. Develop guidelines, checklists, and manuals to strengthen institutional capacity.
- j. Mentor staff to independently manage future supervision contracts.
- k. Deliver training workshops to include the following:
 - Principles of load paths, bending, shear, and deflection.
 - Application of Samoa National Building Code and international standards.
 - Structural engineering review of a residential, commercial and multi-storey building;
 - Concrete, steel, timber, and masonry behavior.
 - Durability, resilience, and climate-appropriate material choices.
 - Hands-on training in tools such as ETABS, SAP2000, or STAAD.
 - Modeling, simulation, and interpretation of results.
 - Earthquake-resistant design principles.
 - Wind load calculations and detailing for resilience.
 - Building Site inspection techniques.
 - Building Material testing, workmanship verification, and documentation.
 - Balancing safety, functionality, and cost.
 - Practical exercises in optimizing structural solutions.
 - How to perform site inspections and regular/routine building checks.
 - How to perform existing building assessments.
 - Identifying structural defects during liability periods.
 - Developing maintenance schedules for long-term sustainability.
 - Geotechnical analysis.
- l. Develop a repository of lessons learned, technical notes, and best practices for future projects.

Institutional Strengthening

- m. Support MWTL in establishing systems for milestone tracking, deliverable registers, and performance monitoring.
- n. Introduce best practices for dispute avoidance, variation management, and defensible certification.
- o. Assist in drafting TORs and procurement documentation for future consultancy and supervision services.

Stakeholder Coordination

- p. Liaise between MWTL, supervision firm, contractors, and donor partners to ensure effective communication.
- q. Support follow-up actions from World Bank missions and technical reviews.
- r. Represent the client in technical meetings, ensuring issues are documented and resolved.

Risk Management & Advisory

- s. Identify risks in supervision and construction phases (delays, disputes, cost overruns).
- t. Advise MWTL on mitigation strategies and contractual remedies.
- u. Provide independent technical advice on feasibility, value engineering, and compliance with safeguards.

- v. Conduct feasibility studies, preliminary assessments including but not limited to structural assessments of buildings, and support planning activities, value engineering exercises for proposed infrastructure works.
- w. Prepare and develop concept designs that align with the project's objectives and MWTI's requirements, in close collaboration with relevant government agencies and stakeholders.
- x. Deliver accurate preliminary cost estimates and Bills of Quantities (BoQs) to inform budgeting and procurement planning.
- y. Provide technical input to the review and finalisation of the Drafted Building Legislation of Samoa when requested by MWTI.

Reporting & Accountability

- z. Submit regular reports to the ACEO-PMD and Director General on supervision firm performance.
- aa. Document lessons learned and recommendations for future projects.
- bb. Ensure transparency in all advisory outputs, strengthening donor and committee confidence.

5. Reporting Obligations and Deliverables

The IAC will report to the ACEO of MWTI-PMD. The deliverables of the IAC will include but not be limited to:

- a. Engineering and supervision inputs through technical notes, memoranda, field notes, sketches, drawings, feasibility study reports and other documents as reasonably requested by the ACEO of MWTI-PMD.
- b. Progress reports on specific activities that require the IA's expertise as required and other project reporting including technical reviews of consultant/contractor/documentation as required.
- c. Intellectual documents and plans including conceptual designs, bill of quantities, cost estimates, technical reports.
- d. Provide inputs to Government's six-monthly reports for the PREPARE - Samoa for submission to the World Bank.
- e. Monthly Work Plan of activities to be conducted by the IAC and supervising firm for the coming month in advance to be submitted to the ACEO of MWTI-PMD.
- f. Monthly Progress and completion reports on civil/construction works.
- g. Works contract certificates and documents such as payment certificates, completion certificates, notices for contractor etc.
- h. Provide input to key project documents.
- i. Oversight reports on civil works, compliance with quality, timelines, and budgets.
- j. Validated inspection/QA reports, risk notes, and transparent certification records.
- k. Training workshops, manuals, checklists, and mentorship records for MWTI staff.
- l. Systems for milestone tracking, best practice notes, and draft TOR/procurement templates.
- m. Meeting minutes, donor follow-up reports, and coordination records.
- n. Risk registers, mitigation strategies, and independent technical advice reports.
- o. Regular performance reports, lessons learned documentation, and transparent advisory outputs.

6. Duration of Assignment

The IAC will initially be recruited for an initial period of 24 months, with a possible extension subject to performance appraisal and MWTI-PMD's project needs. It is anticipated that the IA will commence by December 2026 on a full-time basis. A time-based contract will be signed in which both parties will agree on a monthly rate.

The position would be subject to a probationary period of three months, with an annual performance review by the Implementing Agency to determine whether the contract would be renewed.

The position is based in Apia but will require travel to Savai'i and other islands for site visits to project activities.

7. Performance of the Infrastructure Advisor Consultant (IAC)

During the term of engagement, the IAC shall work during office hours (9.00 am to 5.00 pm Monday to Friday) and shall diligently and effectively perform the required duties to the highest acceptable standard. Extra hours may be required during site visits and any urgent situations. MWTI reserves the right to evaluate the IAC's performance and to maintain a record of the performance evaluation to refer

to if the IAC is considered for re-engagement. Contribution to institutional capacity building and knowledge sharing will also be considered as part of the IAC's performance review.

The IAC will be required to keep detailed time sheets showing inputs and deliverables resulting from each input. In evaluating the IAC's invoices for payment, the PMD will pay particular attention to whether time claimed for each input matches the level and quality of the corresponding deliverable.

8. Data, services, and facilities to be provided to the IAC

MWTI will provide to the IAC: the PREPARE-Samoa Project Appraisal Document, World Bank Mission Reports, relevant environmental and social safeguards documents, Project Procurement Strategy for Development (PPSD), Project Operations Manual, and all other reports and materials related to PREPARE - Samoa. GoS will provide the office space, including office furniture, access to IT equipment, stationery, internet, communications, and related utilities for the IAC.

The IAC is fully responsible for the cost of local transportation (e.g., to/from the office). If required to travel to other islands and as approved by MWTI, travel-related costs aligned with the relevant policies of the Government of Samoa would be funded by the project.

9. Qualification, Experience and Skill Requirements

The Infrastructure Advisor Consultant (IAC) will be expected to possess the following qualifications, experience, and skills:

Minimum experience and capability:

- Bachelor's degree in civil and/or structural engineering (or relevant discipline) with a minimum 15 years of progressively responsible professional experience in leading and managing complex engineering projects as a government or private sector employee, consultant, or contractor.
 - Holder of a Chartered Engineering Membership and registration with IPES or similar (e.g. CPEng) in Civil or Structural Engineering.
 - Demonstrated experience in design, contract administration and construction supervision of at least 5 major civil or structural infrastructure projects.
 - Proven work experience with Government or development partner-funded projects and other relevant institutions.
 - Minimum 5 years of experience integrating climate resilient, disaster risk reduction and hazard risk reduction development.
 - Demonstrated experience in designing or working in countries with cyclonic, volcanic, and seismic activity with involvement in at least three (3) relevant projects.
 - Proven track record in reviewing and approving complex civil and structural engineering detailed designs, including compliance with applicable international and national standards and codes.
 - Experience in delivering workshops and training particularly the module list detailed in the Terms of Reference.
 - Served as Engineer or Superintendent to the Contract or equivalent role on at least five (5) infrastructure projects valued at US\$1 million or more, covering design-build, design and supervise, and build only contract arrangements.
 - Demonstrated experience in project risk management, including identification, assessment mitigation, and monitoring of technical, financial, environmental and social risks.
 - Proven knowledge and practical experience in applying Environmental and Social Safeguards, environmental management, social risk assessment, stakeholder engagement, and compliance monitoring processes.
 - Fluent in written and spoken English.
- Minimum five (5) years of professional experience working in developing countries

Skills and competencies:

- Demonstrated proficiency in the use of Microsoft Office Suite (e.g., Word, Excel, PowerPoint, Outlook), with a minimum of five (5) years of professional application for technical reporting, project management, communication, and data analysis.
- Proficient in AutoCad, or another professional drawing applications software, demonstrated through application on a minimum of five (5) civil or structural engineering projects.

- Minimum five (5) years of hands on experience with using structural assessment software such as ETABS, SAP2000, or STAAD or similar, for structural assessment, modelling, design verification, and seismic or wind loading analysis.
- Demonstrated knowledge in occupational health and safety in construction projects.
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- Analytical skills: understanding of building works construction difficulties and situational analysis, and providing the most accurate and cost-effective technical solutions to ensure achievement of project objectives.
- Excellent professional oral and written communication skills in English, including via email, audio/video conference, and face-to-face with World Bank and Government officials.
- Demonstrated experience in managing, supervising, or coordinating the work of consulting firms, multidisciplinary engineering teams, or contractors on at least three (3) infrastructure projects.
- Proven organizational and project management skills, including the ability to work independently and proactively to manage own workload. and
- Willingness and ability to undertake regular travel within Samoa for visiting sites and inspection of project works.

Desirable qualifications, experience, and skills:

- Prior experience working in the Pacific islands or on Small Island Developing States (Samoa experience highly regarded) with participation in at least three (3) infrastructure, urban development, climate resilience or community development projects. Prior experience in Samoa will be considered a distinct advantage.
- Minimum five (5) years of professional experience working within an international organization, multilateral bank, or any other donor-financed projects, related to urban, infrastructure, community development and/or climate change adaptation and resilience.
- Proven experience in construction and quality control management of public buildings, and public space improvement projects, with involvement in at least five (5) completed projects values at US\$1 million or more. and
- Demonstrated working knowledge in World Bank/Government of Samoa procurement rules and regulations, or other international donors, evidenced through participation in at least three (3) donor-funded projects.