

TERMS OF REFERENCE FOR CONSULTANTS

A. Introduction

1. The terms of reference for consultants describe the main tasks under this technical assistance (TA). The TA has three outputs: (i) disaster-resilient infrastructure know-how disseminated, (ii) recommendations for addressing disaster risk in infrastructure investment processes identified, and (iii) resilient recovery capacity enhanced. The TA will require a minimum total of 63 person-months of international and 42 person-months of national consulting services. Full terms of reference will be developed during implementation in accordance to the needs of the project. The selection and engagement of consultants will follow ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.

B. Output 1: Disaster-Resilient Infrastructure Know-How Disseminated

2. **Consulting services package 1** (4 international consultants, 21 person-months, intermittent). The consulting firm will be responsible for the following deliverables:

- (i) Publication on Asia and the Pacific's progress/state of play on disaster-resilient infrastructure. The report will (a) build on ADB's *Meeting Asia's Infrastructure Needs* report, recent studies supported by ADB on infrastructure climate hazard exposure, and other related literature; (b) assess achievement towards relevant Sustainable Development Goals (SDGs) and Sendai Framework for Disaster Risk Reduction targets; and (c) identify trends for policy makers in Asia and Pacific to consider in the context of building disaster-resilient infrastructure.
- (ii) Study on how multilateral development banks (MDBs) address disaster risk within their lending processes. The study will (a) provide an overview of how MDBs assess, manage and account for disaster risk, (b) review policies and approaches that enable and incentivise the treatment of disaster risk in infrastructure and the built environment, and (c) identify good practices and innovations in the field and make general recommendations to better align MDBs against commitments made on disaster resilient infrastructure.

3. The consulting firm shall adopt the following approaches, as appropriate, to produce the deliverables:

- (i) Undertake a detailed literature review, identify knowledge gaps and develop a methodology;
- (ii) Consult with experts and officials from DMCs, academia and other stakeholders (development partners, think tanks, bilateral donors, international financial institutions, UN agencies, civil society organizations) to understand the context and challenges faced in meeting the relevant SDGs and Sendai Framework for Disaster Risk Reduction targets;
- (iii) Assess and model (using advanced technology such as earth observation, where appropriate) to quantify existing and future disaster risk (spatial and temporal);
- (iv) Consult with MDBs to understand processes and challenges vis-à-vis financing and accounting for disaster-resilient infrastructure.

4. To deliver the outputs, the package will include the following indicative positions:

- (i) **Lead Researcher** (1 international, 6 person-months, intermittent). At least 10 years of relevant work experience in disaster risk reduction-related research and programs in

- the area of disaster resilient infrastructure.
- (ii) **Macro Economist** (1 international, 3 person-months, intermittent). At least 8 years of relevant work experience in economic modelling and research, preferably in the context of natural hazards and disaster resilience.
 - (iii) **Research Analyst** (2 international, 12 person-months, intermittent). At least 5 years of research experience on disaster-related issues in the context of urban development and infrastructure. Good understanding of disaster risk management-related issues and priorities required.

C. Output 2: Recommendations for Addressing Disaster Risk in Infrastructure Investment Processes Identified

5. **Consulting services package 2** (6 international consultants, 30 person-months, intermittent). The consulting firm will be responsible for the following deliverables:

- (i) Country reviews in 4 DMCs assessing existing government processes (and associated guidelines and tools) for the selection, appraisal, and design of infrastructure projects and opportunities to enhance integration of disaster risk considerations. The reviews will document existing processes, their treatment of disaster risk and implications for investment portfolios and project design, associated gaps and challenges, and recommendations for improvement within priority sectors identified by the DMCs. The completed reviews will provide a bank of case studies on practical actions and recommendations for DMCs to integrate disaster risk considerations in infrastructure project development processes.
- (ii) Guidance note for addressing disaster risk in infrastructure investment. The guidance note will (a) draw on the country reviews in 4 DMCs, (b) identify global best practice, and (c) present recommendations.
- (iii) In response to the recommendations in the country reviews, technical advisory services and capacity building will be provided to 4 DMCs. Areas of assistance are expected to include, but not limited to, the revision of urban building codes, the development of investment plans, revisions of legal and regulatory acts.

6. The consulting firm shall adopt the following approaches, as appropriate, to deliver the outputs:

- (i) Undertake a detailed policy and literature review in the 4 selected DMCs as well a review of global best practice.
- (ii) Consult with relevant government, development partners, and non-governmental organizations (national think tanks, bilateral donors, international financial institutions, UN agencies, civil society organizations) to understand the current approach and practice.
- (iii) Assess historical data and modelling of future impacts, to understand different scenarios vis-à-vis cost benefits.
- (iv) Consult with industry and private sector stakeholders to identify good practices and document challenges in realizing disaster resilient infrastructure, in the given sector/area under review.

7. To deliver the outputs, the package will include the following indicative positions:

- (i) **Disaster Risk Management Advisor / Lead** (1 international, 6 person-months, intermittent). At least 10 years of relevant work experience in disaster risk reduction-related research and programs in the area of disaster resilient infrastructure and sustainable development.
- (ii) **Infrastructure Economist** (1 international, 3 person-months, intermittent). At least

8 years of relevant work experience in the economics of infrastructure, preferably in the context of natural hazards and disaster resilience.

- (iii) **Legal Specialist** (1 international, 3 person-months, intermittent). At least 8 years of relevant work experience in the legal and regulatory environment related to infrastructure sectors.
- (iv) **Engineer** (1 international, 6 person-months, intermittent). At least 8 years of relevant work experience in developing and advising of national building codes in the urban sector, with a focus on seismic risk.
- (v) **Disaster Risk Management Analyst** (2 international, 12 person-months, intermittent). At least 5 years of program and advisory experience on disaster-related issues in the context of urban development and infrastructure.

D. Output 3: Resilient Recovery Capacity Enhanced

8. **Consulting services package 3 through Single-Source Selection** (3 international consultants, 12 person-months, intermittent; 4 national consultants, 24 person-months, intermittent). Output 3 will (i) develop and implement tailored recovery plans that aim to strengthen the capacity of four DMCs in managing priority aspects of post-disaster response and (ii) design a post-disaster needs assessment (PDNA) training package that is specifically relevant to the Asia and the Pacific region and focused on infrastructure-related support. The United Nations Development Programme (UNDP) has been identified to implement output 3 and will undertake the following tasks:

- (i) develop 4 comprehensive country-specific post-disaster recovery plans, based on detailed consultations and needs assessment to ensure that support builds on existing efforts and is well coordinated;
- (ii) design and delivery of capacity building workshops (including related materials) for government officials and other stakeholders in disaster recovery planning, including PDNA, with focus on relevant infrastructure-related sectors, in each of the 4 DMCs;
- (iii) provide technical inputs to the governments on developing their financial preparedness planning and post-disaster budget execution capabilities, in close collaboration with relevant ministries and private sector organizations; and
- (iv) design and publish PDNA learning materials (such as guidance note(s), simulation exercise, tools) in the context of Asia and the Pacific.

9. Package 3 will be comprised of the following positions:

- (i) **Disaster Recovery Specialist and Team Leader** (1 international, 6 person-months, intermittent). With a postgraduate degree in economics, social sciences, applied sciences, or equivalent; preferably with 8 years of international experience in disaster recovery and disaster risk reduction. Experience of implementing similar projects in Asia and the Pacific countries would be an advantage. Fluency with PDNA methodology and experience in delivering trainings and developing learning materials is required.
- (ii) **Learning and Development Specialist** (1 international, 3 person-months, intermittent). With a postgraduate degree and/or training in education or equivalent; preferably with at least 5 years of relevant international experience, including in developing disaster-related training products. Familiarity with disaster recovery approaches and the PDNA methodology is required.
- (iii) **Disaster Financing Specialist** (1 international, 3 person-months, intermittent). With a postgraduate degree in economics and/or finance; and at least 5 years of experience in undertaking post-disaster financing related activities. An

understanding of disaster financing approach in developing countries, as well as involvement in similar projects in Asia and the Pacific is required.

- (iv) **Disaster Recovery Coordinator** (4 nationals, 24 person-months, intermittent). With a postgraduate degree in economics, social sciences, applied sciences, or equivalent; preferably with 5 years of experience in disaster recovery and disaster risk reduction programming. Work experience on similar projects would be an advantage. Experience in planning and delivering trainings is required.

E. Overall Coordination

10. **TA Coordinator** (1 national, 18 person-months, intermittent): The consultant will be responsible for providing direct coordination-related support to the TA team and will require experience in handling projects in disaster risk reduction and resilience. Experience of coordinating ADB projects will be preferred. The consultant will be based in ADB headquarters. Tasks will include the following:

- (i) Review all TA outputs, ensuring consistency with project requirements;
- (ii) Review claims of consultants to facilitate the payment process; and
- (iii) Assist in coordinating workshops organized under the TA.