

## TERMS OF REFERENCE FOR CONSULTANTS

### A. Scope of Work

1. As part of the analytical work pertaining to the advancement of maritime cooperation among the member countries of the South Asia Subregional Economic Cooperation (SASEC) Program, consultants will be engaged to collect information, undertake analyses, make recommendations and prepare reports.
2. The table below lists the consultants and the indicative person-month requirements for each position to be hired under the technical assistance. The corresponding terms of reference are summarized below.

<b>List of Consultants</b>	
<b>Expertise</b>	<b>Person-Month</b>
<b>Consultancy Firm Selection</b>	
<b>Study on Port Logistics and Hinterland Connectivity</b>	
International Consultants	
a. Infrastructure Specialist and Project Team Leader	4
b. Transport Specialist	4
c. Trade Logistics Specialist	4
d. Port Logistics Specialist	4
<b>Consultants to be Recruited as Individuals</b>	
<b>Study on Maritime Legal and Regulatory Framework</b>	
International and National Consultants	
• Legal and Regulatory Reform Specialists (Maritime) (2 persons)	6
<b>Study on Port Community Systems</b>	
International and National Consultants	
• Port Information and Communication Technology Specialists (2 persons)	6
<b>Study on Cruise Tourism Demands in South Asia Subregional Economic Cooperation Ports</b>	
International Consultant	3
• Cruise Tourism Specialist	
<b>Study on Greening Technologies for Ports</b>	
International and National Consultants	
• Environmental Specialists (Ports) (2 persons)	6

Source: Asian Development Bank.

### B. Consultancy Firm Selection

#### **Study on Port Logistics and Hinterland Connectivity**

3. As part of the analytical work on advancing maritime cooperation in the SASEC region, a consulting firm will be hired to undertake a comprehensive study of port logistics and hinterland

connectivity relating to the maritime sector, with the focus being on ports as the key transport node and the reduction in container dwell times at the subregion's gateway ports. The consulting firm will form a qualified team of expert international consultants in the following positions and disciplines.

**4. Infrastructure specialist and project team leader (international, 4 person-months).**

A project team leader will be engaged to lead the preparation of a comprehensive study on port logistics, land-based transport connectivity and any supporting inland infrastructure needed to enhance the performance of the SASEC maritime sector. The project team leader will:

- (i) assemble all the outputs of consultants to formulate a roadmap for enhancing the supporting transport and logistics infrastructure that will increase the competitiveness of SASEC maritime ports;
- (ii) prepare a strategy for infrastructure development covering port and hinterland logistics addressing in-port operations, 'last mile' surface-based connectivity and 'inland' support facilities such as off-dock container freight stations and inland container depots;
- (iii) prepare a phased plan for implementation of relevant transport and logistics projects, including identification and costing of key infrastructure projects and related port development initiatives;
- (iv) prepare reports and presentations for ADB and relevant government departments and disseminate the findings among key stakeholders; and
- (v) undertake other related tasks as may be required by ADB project officers.

**5. Minimum qualifications.** The expert should have at least 15 years of related work experience with master's degree in engineering or other related disciplines. Related work experience in the SASEC countries is an advantage.

**6. Transport specialist (international, 4 person-months).** A transport specialist will be engaged to provide technical support in the preparation of the study, with the focus being on the development of linkages to a robust surface-based transport network necessary to support the development of ports, reduce dwell times, and promote maritime cooperation in SASEC. The transport specialist will:

- (i) review the existing transport infrastructure situation taking into consideration the existing, on-going, and proposed developments, with particular focus on the connectivity between the key maritime gateways and their immediate hinterlands;
- (ii) analyze existing scenarios and issues pertaining to the transport networks, identifying major bottlenecks and demand-supply gaps based on expected industrial and population development;
- (iii) analyze current issues in the transportation of export goods from the key production centers to the SASEC maritime gateways and from the ports to concentrations of import demand;
- (iv) identify key 'last mile' constraints at the major SASEC ports, highlighting potential infrastructure strategies and projects designed to eliminate these bottlenecks;
- (v) evolve suitable strategies and corresponding phasing plans for the development of robust transportation infrastructure necessary to support the maritime gateways as critical nodes in SASEC's transportation network;
- (vi) incorporate environment-friendly measures in the infrastructure development strategy;

- (vii) prepare reports and presentations for ADB and relevant government departments and disseminate the key findings among stakeholders; and
- (viii) perform other tasks related to the project as requested by the relevant ADB staff.

7. **Minimum qualifications.** The expert should have at least 10 years of related work experience with master's degree in engineering or other related disciplines. Related work experience in the SASEC countries is an advantage.

8. **Trade logistics specialist (international, 4 person-months).** A trade logistics specialist will be engaged to provide technical support in the preparation of the study, with the focus on the development of external logistics facilities necessary to support port operations and the maritime sector in SASEC. The trade logistics specialist will:

- (i) prepare an overview assessment of SASEC's external trade logistics infrastructure and services and related regulatory framework taking into consideration the existing, on-going and proposed developments;
- (ii) assess the existing and future demand for off-dock container freight stations, empties depots and inland container depots required to improve trade logistics and reduce container dwell times within the port;
- (iii) analyze current external bottlenecks in trade logistics infrastructure (container freight stations/inland container depots), as well as operational and regulatory issues in the movement of goods between the ports and these external facilities;
- (iv) prepare strategies for the development and necessary upgrading of external logistics infrastructure and distribution systems, identifying priority projects designed to minimize container dwell times within the ports;
- (v) recommend any regulatory reforms needed for logistics facilitation that would enable faster and cheaper vehicle and cargo movement and devise a plan for their implementation;
- (vi) prepare reports and presentations for ADB and relevant government departments and disseminate findings among key stakeholders; and
- (vii) undertake other related tasks as may be required by ADB project officers.

9. **Minimum qualifications.** The expert should have at least 10 years of related work experience with master's degree in engineering or other related disciplines.

10. **Port logistics specialist (international, 4 person-months).** A port logistics specialist will be engaged to provide technical support in the preparation of the study, with the focus on the development of efficient port logistics infrastructure and services designed to reduce container dwell times and promote maritime cooperation in SASEC. The port logistics specialist will:

- (i) analyze the port logistics of container operations at key SASEC gateway ports, particularly in terms of the availability, cost and reliability of port logistics facilities and services and assess the average container dwell times;
- (ii) identify current operational and institutional constraints in port container logistics in selected SASEC ports, terms of both facilities and services and determine the potential scopes of intervention;
- (iii) assess the present use of information technology applications in port logistics and where necessary, recommend enhancing e-logistics systems;
- (iv) recommend strategies to enhance value chain logistics within the port through improvements in efficient port logistics and the development of environment-friendly measures;

- (v) evaluate the competence level of port logistics human resources and formulate appropriate capacity development strategies;
- (vi) prepare reports and presentations for ADB and various government levels and disseminate findings among key stakeholders; and
- (vii) undertake other related tasks as may be required by ADB project officers.

11. **Minimum qualifications.** The expert should have at least 10 years of related work experience with master's degree in engineering or other related disciplines.

### **C. Consultants to be Recruited as Individuals**

#### **1. Study on Maritime Legal and Regulatory Framework**

12. **Legal and regulatory reform specialists (maritime) (2 persons, international and national, 3 person-months each).** As part of the analytical work on advancing maritime cooperation in the SASEC region, legal and regulatory reform specialists (maritime) will be engaged for the development of a sound legal and regulatory framework that promotes maritime cooperation in the SASEC region. This will be achieved by identifying any legal and regulatory barriers adversely impacting on the SASEC maritime sector and then proposing remedial legal and regulatory strategies designed to enhance intra-SASEC trade and port development. The consultants will perform the following tasks:

- (i) review and assess the existing legal and regulatory framework, including relevant existing and planned rules, regulations, and guidelines, impacting on trade and maritime connectivity among SASEC member states and the port sector;
- (ii) determine any existing and potential national legal barriers to maritime cooperation and port-related activities in the subregion;
- (iii) identify suitable measures and policy initiatives designed to enhance trade through the SASEC maritime gateways and create an enabling environment for maritime cooperation and the promotion of investments into the region's port sector. The proposed legal and regulatory changes will be integrated into the regional transport and logistics strategies that will also be an output of this TA;
- (iv) prepare a strategy paper on recommended reforms and implementation of those reforms in the legal, regulatory and institutional framework. This is expected to cover specific aspects related to the maritime sector, including coastal shipping arrangements, cabotage, reservations of cargo for own flagged vessels, access to national waterways, competition controls, terminal ownership/concessions etc., as these areas can directly impact on the nature of shipping connectivity between SASEC countries;
- (v) engage key stakeholders through the design and implementation of suitable regulatory reform forums and workshops;
- (vi) prepare reports and presentations for ADB and relevant government departments and disseminate key findings among stakeholders; and
- (vii) undertake other related tasks as may be required by ADB project officers.

13. **Minimum qualifications.** The expert should have at least 10 years of related work experience with master's degree in public administration, economics or other related disciplines.

## 2. Study on Port Community Systems

14. **Port information and communication technology specialists (2 persons, international and national, 3 person-month each).** As part of the analytical work on advancing maritime cooperation in the SASEC region, port information and communication technology specialists will be engaged to prepare a comprehensive study on the development of neutral and open electronic platforms, such as the port community system (PCS), that allow intelligent and secure information exchange among the various stakeholders in the port area, thereby improving the competitive position of SASEC's maritime communities. The consultants will perform the following tasks:

- (i) review the existing data sharing processes, including any existing PCS mechanisms in selected SASEC ports, and formulate a needs assessment for the implementation of a port community system;
- (ii) determine the scope of data sharing requirements of selected SASEC ports and identify the objectives to be achieved by implementing the system;
- (iii) based on international best practices and the circumstances unique to SASEC ports, advise on benchmarking of PCS and assess the requirements in terms of personnel skills, facilities or infrastructure, organizational processes/protocols and the structures necessary for PCS implementation;
- (iv) formulate a work plan for PCS implementation in selected SASEC ports. This shall include the necessary steps to be followed for the successful implementation of the system, including technology architecture and processes to be developed, training and capacity building needs, and legislative amendments, if any;
- (v) recommend migration strategy to ensure that the management and implementation of individual sub-systems will be coordinated within the high-level master plan;
- (vi) provide a governance framework for monitoring the implementation, deployment and operation of PCS to ensure conformance with defined and desired specifications, policies and recommendations;
- (vii) provide estimates for resources needed for implementing, deploying, and continuous operating of the PCS;
- (viii) prepare reports and presentations for ADB and relevant government departments and disseminate the findings among key stakeholders; and
- (ix) undertake other related tasks as may be required by ADB project officers.

15. **Minimum qualifications.** The expert should have at least 10 years of related work experience with master's degree in a relevant discipline.

## 3. Study on Cruise Tourism Demands in South Asia Subregional Economic Cooperation Ports

16. **Cruise tourism specialist (international, 3 person-months).** As part of the analytical work on advancing maritime cooperation in the SASEC region, a cruise tourism specialist will be engaged to prepare a study on the potential of cruise tourism in SASEC, with the main focus being on the role and impact on ports of such tourism. The specialist will:

- (i) analyze the structure of existing cruise tourism at selected SASEC ports;
- (ii) assess the potential for cruise tourism in the region, particularly in terms of present and future demand;
- (iii) indicate the type, size and regularity of cruise vessels expected to call at SASEC ports;

- (iv) identify current gaps in tourism-related port facilities and determine potential scopes of intervention;
- (v) assess the existing regulatory framework relating to cruise tourism and determine appropriate policy interventions that would attract cruise operators to SASEC ports;
- (vi) incorporate greening efforts to promoting cruise tourism and identify issues that need to be addressed to achieve the sustainability of the cruise tourism sector;
- (vii) prepare reports and presentations for ADB and various government levels and disseminate findings among key stakeholders; and
- (viii) undertake other related tasks as may be required by ADB project officers.

17. **Minimum qualifications.** The expert should have at least 10 years of related work experience with master's degree in a relevant discipline.

#### 4. Study on Greening Technologies for Ports

18. **Environmental specialists (ports) (2 persons, international and national, 3 person-months each).** As part of the analytical work on advancing maritime cooperation in the SASEC region, an environmental specialist with specific experience in the port sector will be engaged to prepare a study on the greening of SASEC ports, while ensuring sustainable operations that will complement maritime cooperation in the region. The environmental specialist (ports) will:

- (i) analyze existing world port 'greening' strategies to identify international best practices;
- (ii) review and analyze the sector's present environmental policies and regulations, as well as current greening efforts in SASEC maritime sector, focusing on the ports and related logistical activities;
- (iii) develop a roadmap for cleaner ports and the integration of low-carbon and climate-resilient development components in SASEC maritime cooperation initiatives;
- (iv) identify tools and approaches to greening of ports, including integrating climate change adaptation and mitigation measures in the planning and implementation of port and logistics projects, underpinned by institutional capacity development;
- (v) program institutional capacity development and training with respect to port greening strategies and climate change adaptation measures;
- (vi) identify initiatives to step up efforts to raise stakeholders' awareness of environmental and climate change issues and their impact on the maritime sector;
- (vii) prepare a comprehensive strategy on relevant environmental and climate change adaptation and mitigation for the SASEC maritime sector;
- (viii) provide inputs on the requirements of ADB's Safeguard Policy Statement 2009 in the selection of maritime projects to be included in ADB's country operations business plan;
- (ix) prepare a handbook on best practices on greening of port operations for distribution to relevant stakeholders;
- (x) assist any SASEC port in attaining green port certification;
- (xi) prepare reports and presentations for ADB and relevant port and government departments and disseminate the findings among key stakeholders; and
- (xii) perform other tasks related to the project as requested by the relevant ADB staff.

19. **Minimum qualifications.** The expert should have at least 10 years of related work experience with master's degree in a relevant discipline.