

Technical Assistance Cluster for Sustainable Infrastructure Assistance Program Subproject

Project Number: 46380-015
Cluster Capacity Development Technical Assistance - Subproject (C-CDTA)
May 2016

Republic of Indonesia: Improving Multimodal Connectivity to Support Integrated Land and Sea Tollway

Subproject No.7

(Financed by the Government of Australia)

CURRENCY EQUIVALENTS

(as of 18 May 2016)

Currency unit	–	rupiah (Rp)
Rp1.00	=	\$0.00008
\$1.00	=	Rp13,318

ABBREVIATIONS

ADB	–	Asian Development Bank
BAPPENAS	–	National Development Planning Ministry (Badan Perencanaan Pembangunan Nasional)
CMMA	–	Coordinating Ministry of Maritime Affairs
CMEA	–	Coordinating Ministry of Economic Affairs
GDP	–	Gross Domestic Products
MOT	–	Ministry of Transport
PELINDO	–	Pelabuhan Indonesia
SOE	–	State Owned Enterprises
RPJMN	–	Midterm National Development Plan
WB	–	World Bank

TECHNICAL ASSISTANCE CLASSIFICATION

Type	–	Cluster capacity development technical assistance subproject (C-CDTA)
Targeting classification	–	General Intervention
Sector (subsector)	–	Transport, Transport Policies and Institutional Development
Strategic Agenda and Drivers of Change	–	Inclusive Economic Growth, Access to Economic Opportunities; Environmentally Sustainable Growth, Urban Environmental Improvement. PSD, Public Sector Goods Essential for Private Sector Development; GCD, Institutional Development; NGE;
Partnership	–	Official Cofinancing

NOTE

- (i) In this report, "\$" refers to US dollars.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

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I. INTRODUCTION

The Government of Indonesia through its National Development Planning Ministry (BAPPENAS) has requested that the Asian Development Bank (ADB) provide a technical assistance to enhance government capacity to plan and implement the necessary multimodal transport improvements in support of the Sea Tollway.¹ The TA is a subproject under the cluster technical assistance on Sustainable Infrastructure Assistance Program (SIAP).² The SIAP's steering committee endorsed the TA on 21 April 2016.³ The subproject's design and monitoring framework is in Appendix 1.

2. As of 31 March 2016, six subprojects have been approved worth a total amount of \$9.6 million, of which \$7.3 million has been committed and \$4.1 has been disbursed. ADB has received total of AU\$15 million or 75% of the total financing of the Government of Australia for the SIAP. The available balance for approval of new subprojects is \$3 million.⁴

II. ISSUES

3. Indonesia's economic growth averaged 5.8% over the last decade. However, GDP growth rate has decelerated gradually since peaking at 6.5% in 2011 to 5.1% in 2014, its slowest since 2006. Forecasts for 2015 and 2016 respectively indicate growth rates at 4.8% and 5.2%.⁵ High logistic costs caused by inadequate domestic connectivity and underinvestment in transport infrastructure have been identified as one of the main constraints for economic growth. Hence, to reduce logistic costs by implementing the Sea Tollway which is to improve maritime connectivity and its integration with other transport modes is a strategic focus in the Midterm National Development Plan (RPJMN) 2015–2019. The Sea Tollway has since been promulgated as official government policy.

4. The Sea Tollway concept targets development and operation of low unit cost, high capacity container shipping services operating between West and East Indonesia linking five hub ports; Belawan/Kuala Tanjung, Jakarta, Surabaya, Makassar and Bitung or Sorong, supported by 19 feeder ports.⁶ The main driving force behind the Sea Tollway is the inadequate connectivity, including inadequate ports, shipping and hinterland connections especially in East Indonesia, forcing excessively high logistic costs.

5. The Sea Tollway concept, outlined some 4 years ago, has been studied at a conceptual network level by the World Bank (WB) and by Pelabuhan Indonesia II (Pelindo II). However, these studies have also not specified how the concept can and should be implemented. To implement the Sea Tollway concept, the government needs to introduce a strategic Sea Tollway network

¹ Sea Tollway is an initiative prioritized by President Joko Widodo, and included in the Midterm National Development Plan (RPJMN) 2015-2019. It directly refers to the government's 'Tol Laut' concept which is the development of a high capacity container shipping service between West and East Indonesia linking 5 hub ports and supported by 19 feeder ports. RPJMN lists the 24 strategic sea ports including the 5 hub ports: Belawan/Kuala Tanjung, Tanjung Priok/Kali Baru, Tanjung Perak, Makassar, and Bitung; and the 19 feeder ports: Malahayati, Batu Ampar Batam, Teluk Bayur, Jambi, Palembang, Panjang, Tanjung Emas Semarang, Pontianak, Sampit, Banjarmasin, Kariangau Balikpapan, Palaran Samarinda, Pantoloan, Kendari, Tenau Kupang, Ternate, Ambon, Sorong, and Jayapura.

² ADB. 2013. *Cluster Technical Assistance to the Republic of Indonesia: Sustainable Infrastructure Assistance Program. Manila.* (C-TA0013-INO). This technical assistance cluster, amounting AU\$20 million is financed by the Government of Australia, through the Department of Foreign Affairs and Trade, and administered by ADB.

³ The TA was first published in the Business Opportunities section in ADB website on 10 May 2016.

⁴ Subprojects 7, 8 and 9 are being submitted during the week of 9-13 May 2016.

⁵ ADB. 2016. *Asian Development Outlook Update.* Manila.

⁶ High capacity container shipping service refer to vessel size of up to 6,000 TEU capacity.

within a continually evolving maritime environment and consider the detailed implications of its introduction.

6. The TA is designed to address the need to enhance the capacity of the government to implement the Sea Tollway concept. Specifically, the TA will: (i) complete port and network analysis of cargo movements along the Sea Tollway corridor; (ii) improve policy framework to support implementation of Sea Tollway; and (iii) develop an implementation plan and an investment project pipeline for the Sea Tollway.

7. ADB has been supporting strengthening of domestic transport connectivity in Indonesia. The current ADB support has already made some important draft conclusions and recommendation related to Sea Tollway shipping and the proposed TA would build upon that analysis.⁷ The WB is the only other major development agency currently involved in sector planning support. It is supporting logistics reform especially in major ports. This TA has been discussed with the WB and other development agencies during the scoping exercise between November 2015 and January 2016 and at the BAPPENAS stakeholder meeting on 7 January 2016 to ensure that the TA will complement, but not overlap with other agency maritime sector initiatives.⁸

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

8. The impact of the TA will be improved implementation of Sea Tollway and hinterland multimodal connectivity policy. The outcome will be enhanced organizational capacity for implementing Sea Tollway.

B. Methodology and Key Activities

9. The following key activities will be covered by the TA to achieve the planned three outputs.

10. **Output 1:** Network analysis for Sea Tollway corridor prepared. This output will produce an updated strategic port and network analysis for the next 10 and 20 year periods. It will include the economic, financial and operational evaluation of various Sea Tollway related scenarios including (i) hub ports and feeders, (ii) direct port to port services, and (iii) multi-port calls including regional shipping service loops. The output will also provide hinterland multimodal transport plans in support of the port and shipping networks.

11. The analysis will assist the government to develop and support lower cost transport services to Eastern Indonesia. Previous studies show that the overall benefits of the Sea Tollway are positive. However, government recognizes it must support the lower trafficked sectors outside Java where lower load factors generate insufficient revenue for commercial shippers to operate new services along the Sea Tollway. This output will analyze how to support regional socio-economic development through the Sea Tollway development with a timeline of interventions in the maritime sector to support development.

⁷ ADB is currently providing a technical assistance: ADB. 2012. *Inclusive Growth through Improved Connectivity Program*. Manila (TA 8215-INO).

⁸ DFAT, Government of Australia has supported the maritime sector including through its Indii program which prepared the National Ports Master Plan and more recently a PPP framework for financing Makassar port. Discussions also took place with the Embassy of the Netherlands who, with the Port of Rotterdam, are supporting the planning of port infrastructure at Kuala Tanjung.

12. This output will (i) update and refine port and shipping network model; (ii) assess and recommend a system for commercial, non-commercial and feeder container services operating along the Sea Tollway that addresses the economic disparity between West and East Indonesia; and (iii) develop hinterland multimodal transport plans taking into account the proposed port and shipping networks, existing infrastructure and forecast economic activities. This output will analyze changes required in the ports to accommodate the Sea Tollway concept, and to shipping services, sea routes and hinterland transport connection improvements, that will be required to implement the Sea Tollway concept.

13. The analysis will update base year and projected year cargo /container volumes, port and berth capacity requirements at hub ports, shipping service capacity, frequencies and other relevant information, both domestic and international. Alternatives will be assessed according to system costs, financial implications and operational and regulatory factors related to current and proposed shipping line services. The implications for any government financial and other support as a means to reduce transport costs for Eastern Indonesia under any of the scenarios will be a fundamental part of the output. The socio economic macro benefits of the proposed networks will also be assessed using an analysis which will show the national and provincial benefits of implementing the Sea Tollway in terms of GDP and reduced transport costs.

14. **Output 2: Policy framework to support implementation of Sea Tollway improved.** This output will recommend policy and/or regulation revisions to support implementation of Sea Tollway.

15. Policy enhancements to accommodate the development planning recommendations for the proposed network produced under Output 1 will be identified. In addition, this output will review all existing policies and regulations implementing the Sea Tollway noting any policy, regulation, planning and coordination weaknesses or deficiencies that would constrain the implementation of the Sea Tollway concept. Weaknesses and deficiencies will be identified and addressed through proposed policy updates and/ or enhancements.

16. The output will provide guidance on the overall package of measures required to update and improve Sea Tollway policies, regulations and coordination, including (i) existing policy and regulation revisions as required for the proposed port development and port logistics; (ii) policy and regulation revisions to accommodate the new/ revised shipping networks and routes; (iii) policy and regulation for port hinterland development and hinterland multimodal transport connections; (iv) specification of coordination requirements for key stakeholders; (v) development of policy framework, project priorities and feasible financing mechanisms for funding the implementation of Sea Tollway and hinterland multimodal transport connections (infrastructure, equipment and ships etc.); and (vi) a monitoring system to include key performance indicators (KPI) such as productivity, tariffs, traffic and other factors as identified.

17. **Output 3: Implementation plan and investment project pipeline developed.** This output will provide an implementation plan for the Sea Tollway covering the short- and medium-term. This output will incorporate findings from Output 1 and Output 2. The implementation plan will include measures needed to be taken by the government to improve maritime connectivity, reduce transport costs and cater for increased cargo traffic in Indonesia. In addition, the output will develop a pipeline of investment projects with a proposed financing plan to support the implementation of the Sea Tollway.

18. The short- and medium-term implementation plans will include detailed recommendations related to the Sea Tollway for (i) shipping network priority service routes (commercial and non-commercial), (ii) port development (infrastructure, equipment and operations), (iii) hinterland connections (road, rail, other links) and facilities, and (iv) priority feeder links into the Sea Tollway. The implementation plan proposals developed by the TA will focus on the short and medium term but with a view to the longer-term vision of the Sea Tollway concept that is a strategic container route with large and low unit cost container vessels operating between West and East Indonesia.

19. The TA will generate a long list of potential projects (the “pipeline”) in collaboration with stakeholders. The pipeline will be ranked according to agreed criteria that could include but not necessarily be limited to: (i) priority, (ii) project readiness, (iii) feasibility, (iv) the absence of major constraints, and (v) listed/not listed for immediate implementation.

20. The TA consultants will present the pipeline for discussion at the TA mid-term review. Guidance from the government, ADB and relevant stakeholders will be provided to the consultants for the selection of those higher ranked projects with the most potential for preliminary appraisal. By the end of the TA implementation, a revised pipeline comprising a number of projects will be proposed for subsequent pre- or full feasibility with a view to project preparation beyond the term of the TA.

21. Guidance related to investment project planning and financing will be provided to the government and relevant agencies and organizations that are responsible for project implementation to support investment project financing. This output will therefore also identify and appraise the various possible funding modalities for the selected projects including public and private sources as well as public private partnerships.

C. Cost and Financing

22. The TA is estimated to cost \$1,300,000 of which \$1,250,000 will be financed from SIAP on a grant basis by the Government of Australia and administered by ADB. The government will provide counterpart support in the form of counterpart staff, and provision of meeting space for seminars and workshops. The value of government contribution is estimated to account for 3.85% of the total TA cost. The detailed cost estimates and financing plan are shown in Appendix 2.

D. Implementation Arrangements

23. BAPPENAS will be the executing agency. The executing agency will have day-to-day interaction with the TA consultants. BAPPENAS will establish and chair the TA steering committee. The steering committee will convene as needed, and be regularly consulted on implementation of TA activities. BAPPENAS will invite representatives of Ministry of Transport (MOT), Coordinating Ministry of Maritime Affairs (CMMA) and Coordinating Ministry of Economic Affairs (CMEA), as well as relevant state-owned enterprises (SOEs) to participate in the steering group to help guide the TA after a TOR for the steering committee is agreed. BAPPENAS will ensure that key stakeholders participate in stakeholder consultations. These stakeholders include relevant state enterprises, transport operator associations, and industry associations. BAPPENAS, CMMA, CMEA, and MOT will ensure that government counterpart staff participate in capacity building and other TA activities as appropriate. The proceeds of the TA will be disbursed in accordance with ADB’s Technical Assistance Disbursement Handbook (2010, as amended from time to time). The equipment to be purchased under the TA as mentioned in Appendix 2 will be procured in accordance with ADB’s Procurement Guidelines.

24. Implementation schedule. Consulting services will include 21 person months of international consultants and 35 person months of national consultants. The consultants will be engaged through a firm, in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). ADB will use the quality- and cost-based selection (ratio 90:10 to emphasize quality and technical aspects rather than cost) to select the consulting firm. Appendix 3 provides the outline terms of reference for consultants. The TA will be implemented over 18 months starting on 1 July 2016 with completion expected on 31 December 2017.

DESIGN AND MONITORING FRAMEWORK

Impact of the CDTA is Aligned with			
Implementation of Sea Tollway and multimodal connectivity policy improved (National Medium-term Development Plan 2015 – 2019) ^a			
Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Organizational capacity for implementing Sea Tollway enhanced	By 2018 a. Policy for implementing Sea Tollway institutionalized in BAPPENAS (baseline: NA) b. Publication of knowledge products on Sea Tollway Implementation for stakeholders (baseline: NA)	a–b. TA completion report	Diminishing government support for Sea Tollway implementation because priorities change
Outputs	By 2017		
1. Network analysis for the Sea Tollway corridor prepared	1a. Port and shipping network analytical model refined and updated (baseline: NA) 1b. Hinterland multimodal transport connection plans drafted (baseline: NA) 1c. Report on network analysis completed (baseline: NA)	1a–c. TA review and consultant report	Inability of stakeholders to participate because of various constraints
2. Policy framework to support implementation of Sea Tollway improved	2. Recommended policy enhancement for implementation Sea Tollway prepared (baseline: NA)	2. TA review and consultant report	
3. Implementation plan and investment project pipeline developed	3a. Implementation plan for Sea Tollway developed (baseline: NA) 3b. Investment project pipeline developed (baseline: NA)	3a–b. TA review and consultant report	
Key Activities with Milestones			
<p>Output 1: Network analysis for the Sea Tollway corridor prepared</p> <p>1.1 Carry out consultation, reports review and data collection (October 2016)</p> <p>1.2 Refine and update network model (December 2016)</p> <p>1.3 Develop and evaluate network scenarios (January 2017)</p> <p>1.4 Analyze and establish Sea Tollway network (February 2017)</p> <p>1.5 Develop hinterland multimodal transport connection plans (March 2017)</p> <p>1.6 Conduct workshop on network analysis and multimodal transport plans (April 2017)</p> <p>Output 2: Policy framework to support implementation of Sea Tollway improved</p>			

<p>2.1 Identify weaknesses and deficiencies in policies (December 2016)</p> <p>2.2 Propose enhanced policies to support implementation of Sea Tollway (March 2017)</p> <p>2.3 Carry out consultations with stakeholders on proposed improved policies (April 2017)</p> <p>2.4 Finalize and recommend policy framework (July 2017)</p> <p>Output 3: Implementation plan and investment project pipeline developed</p> <p>3.1 Analyze findings of outputs 1 and 2 (April 2017)</p> <p>3.2 Develop implementation plan (May 2017)</p> <p>3.3 Produce long list of potential investment projects (June 2017)</p> <p>3.4 Carry out project appraisal and evaluation (July 2017)</p> <p>3.5 Develop investment project pipeline (August 2017)</p>
<p>Inputs</p> <p>Government of Australia^b: \$1,250,000.00</p> <p>Note: The government will provide counterpart support in the form of counterpart staff, provision of meeting space for seminars and workshops, and other in-kind contributions.</p>
<p>Assumptions for Partner Financing</p> <p>N/A</p>

BAPPENAS = Ministry of National Development and Planning, CMMA = Coordinating Ministry of Maritime Affairs, MOT = Ministry of Transport.

^a Government of Indonesia Republic, Rencana Pembangunan Jangka Menengah Nasional (RPJMN) (National Medium-term Development Plan) 2015-2019. Jakarta

^b Administered by ADB

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN

Item	Amount
Government of Australia^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (21 person-months)	541.7
ii. National consultants (35 person-months)	232.3
b. International and local travel	77.0
c. Reports and communications	30.0
2. Equipment ^b	10.0
3. Workshops, training, seminars, and conferences	40.0
4. Land Transport and Vehicle Hire ^c	6.0
5. Surveys	100.0
6. Miscellaneous administration and support costs ^d	132.5
7. Representative for contract negotiation	5.0
8. Contingencies	75.5
Total	1,250.0

^a Financed by SIAP on a grant basis by Government of Australia administered by ADB.

^b Equipment to be purchased and handed over to the executing agency and/or implementing agency upon completion of TA

Type	Quantity	Cost
Computer (desktop/ laptop)	3	\$3,000.0
Printer and copy machine	1	\$3,000.0
Software and related technical support	TBD	\$4,000.0

^c Leased vehicles for field investigations, data collections, interview with affected persons and project meetings.

^d Office rental, operations, support and general administration

Source: ADB estimates.

Note: The technical assistance (TA) is estimated to cost \$1,300,000, of which contributions from the Government of Australia are presented in the table above. The government will provide counterpart support in the form of counterpart staff, and provision of meeting space for seminars and workshops, and other in-kind contributions. The value of government contribution is estimated to account for 3.85% of the total TA cost.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Objective of the assignment

1. The Asian Development Bank (ADB) is seeking a consulting firm to undertake a Technical Assistance (TA) assignment which aims to strengthen government's capacity to develop detailed and timetabled implementation plans and policy actions to deliver maritime and multimodal transport connectivity infrastructure projects. The expansion of maritime transport services will reduce logistic costs through improved connectivity and transport efficiency. In this context, a strategic priority of Indonesia's Medium-term Development Plan (RPJMN) 2015-2019 is the development of a Sea Tollway - a concept to use maritime transport as a backbone, together with intermodal transportation, to create a well-integrated point-to-point, multimodal connectivity network to improve transportation efficiency and to support supply chains.

B. Consulting service requirement

2. The firm shall demonstrate extensive experience in transport sector multimodal planning and modelling with emphasis on the maritime sector in Indonesia. Experience in providing multi sector specialists and teams is essential. The outline terms of reference for the consultants are described in paragraphs 3 to 14. Further elaboration of other required tasks and required qualifications for the consultants will be defined in the detailed terms of reference. Table 1 provides a summary of consulting service requirement. Table 2 sets out the expected outputs from the consulting assignment.

Table 1: Summary of Consulting Services Requirement

Positions (International)	Person-month	Positions (National)	Person-month
Team Leader (Multimodal Transport Economist)	9.0	Deputy Team Leader (Transport Economist)	9.0
Transport Development Specialist	3.0	Ports and Shipping Transport Consultant	3.0
Logistic, Freight Transport & Shipping Specialist	3.0	Transport Planning/Modelling Analyst	5.0
Policy & Institutional Development Specialist	3.0	Project Financial Analyst	3.0
Project Financial Specialist	3.0	Policy & Institutional Development Analyst	3.0
		Officer Administrator	12.0
Total	21.0		35.0

Table 2: Summary of Major Outputs and Timeline

Major Activities	Major Outputs	Expected Completion Date
<u>TA Inception</u>		
Initial consultations with stakeholders, report review and work plan preparation	Inception report	October 2016
<u>Output 1: Network analysis for the Sea Tollway corridor prepared</u>		
Data collection, model refinement, network modelling & analysis	Report on model refinement and update, and network analysis	February 2017
Hinterland multi-modal transport connection plans development	Hinterland multi-modal transport connection plans	March 2017
<u>Output 2: Policy framework to support implementation of Sea Tollway improved</u>		
Recommended policy enhancement	Report on review of existing policies and recommended policy revision	April 2017
<u>Output 3: Implementation plan and investment project pipeline developed</u>		
Sea Tollway implementation plan development	Short & medium term Sea Tollway implementation plan	May 2017
Investment project pipeline development and appraisal	Report on investment project development and appraisal	August 2017
<u>Overall TA output</u>		
Detailed descriptions of all TA outputs	Draft final TA consultant report	October 2017
Incorporate comments on draft final TA consultant report	Final TA consultant report	December 2017

Source: ADB staff estimates.

3. **Team Leader/Multimodal Transport Economist** (International, 9 person-months).

The international specialist will have extensive experience in transport planning, logistics, transport costing, policy analysis, and knowledge of maritime strategic highway between North Sumatra and Eastern Indonesia. The specialist will have experience working in the Indonesian transport sector or comparable experience in other areas with similar characteristics. As a team leader, the specialist should have demonstrated experience in running multidisciplinary teams and developing case studies based on surveys and primary data collection. Ability to speak Bahasa Indonesia will be an advantage.

4. The Team Leader will lead and manage the team. The Team Leader will have overall responsibility for the assignment including all required reports and outputs prepared by the team. The specific activities to be carried out by the team leader, with the relevant specialist(s) where appropriate are as follows:

- (i) Be responsible for coordination and consultation with BAPPENAS, MOT and ADB, and other agencies as required.
- (ii) Plan and manage the detailed consulting work program.
- (iii) Prepare the required outputs; specifically the Development Plan and the Implementation Plan to develop the maritime sector/Sea Tollway related to the analyses, conclusions and recommendations proposed in the above activities.
- (iv) Identify a long list of investment projects that have potential for further study.
- (v) Manage the interactive workshop with stakeholders to develop findings, proposed policies, and investment options.

- (vi) Manage and administer procurement of workshops, training, seminars, equipment, and surveys required under the TA.
- (vii) Develop and support delivery of the capacity building programs requested by the relevant government agencies.
- (viii) Manage the preparation and production of all reports.

5. **Transport Development Specialist** (international, 3 person-months). The specialist will be responsible for ensuring the appropriate macro-economic development base for the assignment including RPJMN and other economic planning bases for the future development of the economy of Indonesia are input at relevant stages of the study including transport analyses. The Consultant will be responsible for the draft hinterland multimodal transport development plan including recommendations on improvements to infrastructure, equipment and soft issues like regulations, institutional capacity, and coordination. The recommendations will support the overall Sea Tollway implementation plan under the TA.

6. **Logistics, Freight Transport and Shipping Specialist** (international, 3 person-months). The consultant will prepare the transport analysis of cargo movement within the Sea Tollway corridor analysis, with the national consultant, either through a model or through spreadsheet analysis as a basis for developing port, shipping and hinterland recommendations under this TA. The analysis should be in economic and financial cost terms to provide resource cost evaluations and financially based analyses respectively. He/ she will analyze the shipping sector and prepare recommendations to restructure public sector operations, support private sector operations, reform public policy and collect and review all available data and existing studies on domestic shipping, identify needs for further analysis and data collection and update data as required. Prepare quantitative and qualitative databases that document the data as completely as possible.

7. **Policy and Institutional Development Specialist** (international 3 person-months). The specialist will contribute to the Team's analysis of maritime sector and implementation of Sea Tollway issues and review and assess the policy, regulatory and institutional coordination constraints. He/ she will undertake analysis of existing and new requirements of national government, sector and local level policy, regulatory and institutional coordination arrangements and will propose policy and institutional coordination enhancement related to the recommendations of the TA especially related to proposed port and shipping network and hinterland multimodal transport plan development to support Sea Tollway implementation. The specialist will provide a comparative analysis of international best practice for port/logistic policies. He/ she will also conduct consultations with stakeholders to finalize recommended policy framework.

8. **Project Financial Specialist** (international, 3 person-months). The specialist will undertake an analysis of transport sector funding in Indonesia in the maritime sector. He or she should note any weaknesses and deficiencies in funding infrastructure, shipping, port, and hinterland facilities. The analysis will include institutional, regulatory and capacity constraints and propose the means to overcome each constraint to accelerate funding of sector investments. The specialist will contribute to the process of identifying, selecting and appraising potential projects and for the selected projects in the second phase. The Project Financial Specialist will work in tandem the national financial consultant to structure and appraise in financial terms (according to ADB Guidelines) potential projects emanating from this TA.

9. **Deputy Team Leader/ Transport Economist** (national, 9 person-months). The national specialist will have (i) a broad background in maritime transport policy development and logistics analysis in Indonesia, (ii) experience across the range of transport modes in Indonesia, and (iii)

participated in maritime transport planning analyses. As deputy team leader, the specialist will take primary responsibility for the following activities:

- (i) Assist and support the team leader conduct a comprehensive review of the background literature (especially in Bahasa Indonesia).
- (ii) Assist the Development Economist prepare the design of, and terms of reference for, the pilot hub port hinterland surveys.
- (iii) Manage the pilot survey teams in selected interviews and meetings and to support the preparation of conclusions and recommendations.
- (iv) Provide strategic support to all team members but with emphasis on capacity and institutional issues.
- (v) Assist the team to assess the implications of the proposed policies and physical investments needed to overcome the identified impediments to an efficient logistical system.
- (vi) Be responsible for the project components that require fluency in the Indonesian language.
- (vii) Support, develop and deliver training and capacity building programs requested by the relevant government agencies.

10. **Ports and Shipping Transport Consultant** (national, 3 person-months). The specialist will analyze the shipping sector and prepare recommendations to restructure public sector operations, support private sector operations, and reform public policy in relation to the Sea Tollway;

- (i) Assess the current operational and financial situation of public and private sector operators of domestic shipping services, including their fleets and other assets, routes and markets etc.
- (ii) Propose and assess the feasibility of existing and alternative mechanisms for the provision of maritime transport services on and related to the Sea Tollway including liberalization of regulations
- (iii) Review domestic commercial financing practices and determine barriers to expanded credit to the shipping sector. Prepare recommendations at the policy level that could enhance credit availability.
- (iv) Assess the new PELNI shipping operations related to the Sea Tollway as to their effectiveness and if they complement the private sector market or compete, fairly or otherwise, with existing private sector services.

11. **Transport Planning/Modelling Analyst** (national, 5 person-months). The consultant will work with international Logistic, Freight Transport and Shipping Specialist and international Transport Development Specialist to develop the network connectivity analysis either through a model or through spreadsheet analysis as a basis for developing port, shipping and hinterland recommendations under this TA. The analysis will be in economic and financial cost terms to provide resource cost evaluations and financially based analyses respectively.

12. **Project Financial Analyst** (national, 3 person-months). The consultant will work with international Financial Specialist to undertake an analysis of transport sector funding in Indonesia with special emphasis on the maritime sector. He or she should note the weaknesses and deficiencies in funding infrastructure, shipping, port and hinterland facilities. The analysis will include institutional, regulatory and capacity constraints and propose the means to overcome them to accelerate funding of sector investments. The specialist will also contribute to the process of identifying, selecting and appraising potential projects and for the selected projects in the second phase, work with the national financial consultant to structure and appraise in financial terms (and according to ADB Guidelines) potential projects emanating from this TA.

13. **Policy and Institutional Development Analyst** (national, 3 person-months). The analyst will support the international Policy and Institutional Development Specialist to assess the policy, regulatory and institutional coordination constraints related to implementation of Sea Tollway. He/ she will provide support to analysis of existing and new requirements of national government, sector and local level policy, regulatory and institutional coordination arrangements and policy and recommendation on institutional coordination enhancement related to proposed port and shipping network and hinterland multimodal transport plan development to support Sea Tollway implementation. The analyst will also support consultations with stakeholders to finalize recommended policy framework.

14. **Office Administrator** (national, 12 person-months). The office administrator will be responsible for coordinating with ADB, government agencies, stake holders, and the consulting team for logistic arrangements supporting consultations, workshops and meetings. In addition, he/ she will undertake all of the routine administrative tasks required to support the TA implementation.