SECTOR ASSESSMENT (SUMMARY): WATER TRANSPORT [NONURBAN]¹

A. Sector Performance, Problems, and Opportunities

1. Timor-Leste’s maritime sector handles 95% of the country’s foreign trade volumes, most of which are imports. Subsidized ferry services provide connections to the Oecusse exclave and to Atauro Island. Dili port is the country’s only international port. Mahata port in the Oecusse exclave and the port on Atauro Island support domestic ferry traffic, and there are some smaller publicly owned piers and ramps used principally by fishermen, as well as a number of privately owned piers. There are no ports on the south coast due to its exposure to rough seas. The poverty incidence in Oecusse is particularly high due to its isolation from the rest of the country, and the heavily subsidized ferry travel to and from Dili provides essential connectivity. Demand for the ferry may decrease considerably if border controls are relaxed, allowing more convenient, lower-cost travel by road, through Indonesian territory.

2. Dili port handled approximately 225,000 freight tons of general cargo, and 51,822 twenty-foot equivalent unit containers in 2014. General cargo volumes grew 12% per year and container traffic rose 9% per year during 2010–2014. In 2014, 42,284 ferry passengers traveled the Dili–Oecusse route and 19,923 passengers traveled the Dili–Atauro route.² A jetty (privately owned by the Indonesian oil company Pertamina) handled 103,916 tons of fuel in 2013.³

3. With Timor-Leste’s heavy dependence on imported goods for general consumption and investment, the efficiency of sea transport and the efficiency of the international port at Dili are vital. Demand for Dili port has risen rapidly since 2007 leading to congestion and higher costs. New port infrastructure is needed to avoid increased costs of food, fuel, and goods, which would disproportionately affect the poor.

4. Dili port is struggling to cope with the current volume of cargo and this is likely to worsen as the economy continues to develop. The port cannot be expanded due to the physical constraints of its location. The depth alongside the wharf is 7.5 meters, giving a maximum vessel draft of approximately 6.5 meters, allowing only small container ships to berth alongside. The berths and the approach channel require frequent dredging. Larger visiting ships unload onto lighters that then bring the cargo into Dili port, causing delays and added costs. The 289-meter wharf can berth up to three 90-meter bulk cargo vessels, or two container vessels. The condition of the apron and container stacking areas is poor due to lack of maintenance. Customs services are only provided 8 to 9 hours a day, after which no cargo can enter or leave the port.

5. Timor-Leste ranks 92 out of 189 countries in the ease of trading across borders.⁴ Compliance with import procedures is estimated to require 6 days although the actual time taken may be significantly longer due to congestion (footnote 4). Timor-Leste customs and police require seven documents to import a shipment, which is above the median for the region, and slows the import clearance process. This leads to delays, storage charges, and can cause spoilage. Dili port’s cargo handling capacity is further constrained by the limited technical and managerial capacity of the Port Authority of Timor-Leste (APORTIL), the inability to bring larger container ships alongside the wharf, limited availability of cranes and forklifts, and stevedores that can be uncooperative.

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² Government of Timor-Leste, Port Authority of Timor-Leste (APORTIL).
³ Data provided by Pertamina International Timor SA.
6. The maritime sector is managed and regulated by APORTIL and the National Maritime Transport Authority (DNTM). Both agencies are within the Ministry of Public Works, Transport and Communications. APORTIL is responsible for the development, operations, and maintenance of publicly-owned ports. APORTIL also operates the Oecusse and Atauro ferry services, and the private sector operates all other boats. DNTM is the maritime regulatory body. There is no ship registry and Timor-Leste-owned vessels are small in number. Large foreign-owned vessels carry all the overseas trade. Private companies provide lightering services across the harbor, and contractors provide cargo handling functions inside Dili port.

7. APORTIL has a staff of 47, including seven technical staff, two of whom are mechanical engineers. All operations are based in either Dili, Oecusse, Atauro, or on board the ferry. Other ports receive only occasional visits from APORTIL staff. DNTM has a total staff of 12, including five technical staff, and lacks the capacity to prepare and enforce maritime regulations. With the exception of the United Nations Convention on the Law of the Sea, Timor-Leste has neither adopted conventions nor passed them into law. Additional national maritime laws and regulations have been prepared, but are yet to be approved.

8. Only one part-time staff member is responsible for preparing the APORTIL and DNTM 5-year plans and annual plans identifying projects, studies, and institutional and legal changes. The annual plans identify strategic directions and form the basis of budget requests, but do not provide necessary cost information. Planning is based on projects identified in Timor-Leste’s Strategic Development Plan, 2011–2030 (SDP); APORTIL’s assumed responsibilities for operating the Berlin Nakroma ferry; and APORTIL’s requirements for institutional development. Planning is not based on demand studies to identify and prioritize projects. Limited human resources capacity within APORTIL constrains project preparation and implementation. There are no design or supervision engineers in APORTIL’s staff, and implementation is inefficient. Maintenance and capital spending are below their budget allocation.

9. APORTIL is a designated autonomous agency with its own property, revenue, and responsibility for operating on a cost-recovery basis. However, it has not completed the necessary institutional arrangements to actually retain funds, which include the establishment of procedures for independent auditing and establishment of a management board. APORTIL remits its revenue to the Ministry of Finance and uses government budget allocations to fund its operations. APORTIL operates the Oecusse ferry at a large loss, and subsidies are required to cover 85% of operating costs. APORTIL’s charter makes no provision for operating vessels.

10. There is a lack of clarity about the roles and responsibilities of both APORTIL and DNTM. The two organizations share the same staff member, and there is a conflict of interests between the two roles. Some port project proposals are initiated by other agencies. For example, there is a proposal to develop an international port in Oecusse to serve the exclaves’ special economic

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6 National regulations drafted and awaiting Parliament’s approval also include those concerning ship registration; ship tonnage measurements; the technical inspection of ships, small cargo vessels (i.e., those under 500 gross tonnage), fishing vessels, and small craft; seafarers training, examination, and licensing; authorization of recognized organizations; ship formalities; the transport and handling of dangerous goods; maritime protection; maritime accident investigation; domestic passenger vessels; and waste management concerning ships and ports areas.
zone and a port in Manatuto to service the fishing industry. Responsibility for project implementation may also be assigned to other agencies. For example, the proposed Suai port is part of a large petroleum development project that is the responsibility of the Ministry of Petroleum and Mineral Resources.

B. Government’s Sector Strategy

11. The government’s sector strategy is focused on investments in port infrastructure. Two large port projects on the north and south coasts are proposed to meet Timor-Leste’s demand for imported goods and service the petroleum industry in the Timor Sea. Other smaller ports are also proposed to support development of the fisheries, agriculture, and tourism sectors.7

12. The government plans to replace Dili port with a new facility at Tibar Bay, 13 kilometers west of Dili. This project has been developed as a public–private partnership using a concession model in which a private partner will design, build, and operate the new port for 30 years before transferring it to the government. The new port’s concept design provides for greater depth (up to 16 meters) and twice the quay length (630 meters) than Dili port, and it will be able to simultaneously accommodate three of the large sub-Panamax feeder vessels with 1,700 and 2,700 twenty-foot equivalent unit capacity that dominate the regional trade routes and liner patterns today.8 The concept design also anticipates larger vessels: one post-Panamax ship carrying more than 5,000 twenty-foot equivalent units could dock in Tibar, and a second sub-Panamax ship could also be accommodated.9 A first phase of construction is expected to deliver the 630-meter wharf, and subsequent phases will expand equipment and storage areas.

13. The International Finance Corporation has provided transaction advisory support for the Tibar Bay port. The project is expected to cost $300–$400 million, and the government expects to appoint a contractor in the first half of 2016 and commence operations at the new port by 2020. Viability gap financing will be required, and the government has asked development partners, including the Asian Development Bank (ADB), to consider providing such financing. Imported cement represents roughly half of Tibar’s estimated general cargo traffic, but private investments in a separate cement import facility with an associated jetty and a potential investment in local cement production could remove all, or at least a large share, of the cement import traffic. Rice represents another quarter of general cargo imports, and that proportion will likely grow.10 The largest items (by value) imported in containers are motor vehicles, electrical equipment, machinery, textiles, and foodstuffs, all of which can generally expect to increase over time as investment and consumption rises.11

14. The government also plans to develop a port at Suai on the south coast as part of the Tasi Mane project, a multiyear development of three industrial clusters on the south coast which will form the backbone of the Timor-Leste petroleum industry.12 The port is intended to service the offshore oil and gas industry and is part of a broader strategy to develop the south coast.

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8 A Sub-Panamax vessel has dimensions which are below the maximums that can be accommodated in the Panama canal.
9 A post-Panamax vessel has dimensions which exceed the maximums that can be accommodated in the Panama canal.
12 Footnote 7 pp. 95.
would be a multipurpose port with a large breakwater with a depth of 14 meters to protect it from the high waves. The project cost has been estimated to be $719 million and would be wholly financed by the government.\textsuperscript{13} The high cost raises questions about the economic viability of the project given current uncertainties regarding Timor-Leste’s petroleum reserves.

15. The Strategic Planning Matrix for APORTIL, 2013–2017 includes a program for infrastructure development, legislative reform, and human resource improvements. The 5-year plan does not include the Suai port project, which is seen as the responsibility of the Ministry of Petroleum and Mineral Resources. The plan’s legal framework includes capacity building within DNTM to register, survey, and certify ships, and to improve maritime safety. The human capacity section of the plan includes recruitment, training, and technical cooperation. This plan has an ambitious schedule and no cost estimates, and includes capacity building, and short-term maintenance and rehabilitation in Dili port and the ferries.\textsuperscript{14}

16. The maritime planning process relies heavily on the SDP, but the SDP does not consider costs, feasibility, implementation schedule, or APORTIL and DNTM’s capacity. Planning for projects that are listed in the SDP often fails to address demand, feasibility, or cost recovery. Both the SDP and APORTIL’s Strategic Planning Matrix had scheduled the completion of the Com and Atauro port upgrades by 2015, and Kairabela by 2020, but studies for these ports have not yet begun. The expansion of Oecusse into an international port has not yet reached the concept stage. A second ferry to be owned by the government has been ordered, and a third as yet unplanned ferry is under serious consideration, despite the need for a high subsidy and the possibility of improved land connections through Indonesia. APORTIL’s plans do not consider the maintenance of APORTIL ports outside Dili, except for the maintenance of the ferry.

17. Regulation and enforcement of maritime laws remain weak. While appropriate maritime laws have been drafted, these have not been enacted (footnotes 5 and 6).

C. ADB Sector Experience and Assistance Program

18. There have been no significant port development projects in Timor-Leste since independence in 2002, with the exception of a port facility in Oecusse financed by a grant from the Government of Japan. The current ferry vessel was provided by German development cooperation through Deutche Gesellschaft fur Internationale Zusammenarbeit. The International Finance Corporation has been appointed as transaction advisor for the new international port at Tibar Bay. Prior to 2002, ADB had managed the portion of the Trust Fund for East Timor concerned with infrastructure, which included rehabilitation of the main container yard at Dili, as well as expansion of the wharf westward for small vessels. The Government of Japan has provided technical assistance for management of the existing Dili port as well as an assessment of its operations and capacity.

19. While ADB has limited experience in Timor-Leste’s maritime sector, it has extensive experience with the Ministry of Public Works, Transport and Communications on land transport, and urban water and sanitation. As part of ADB’s strategy to support infrastructure development, participation in the viability gap financing of the new international port will be considered.

\textsuperscript{13} The Timor-Leste Institute for Development Monitoring and Analysis (La’o Hamutuk). 2013. \textit{Suai Supply Base: benefit or boondoggle?} Dili. \url{http://laohamutuk.blogspot.com/2013/05/suai-supply-base-boon-or-boondoggle.html}

Problem Tree for Water Transport

Water transport does not support inclusive growth

Transportation of people and goods by sea is constrained

Inefficient port services

- Limited port capacity
- Dili port unsuitable for large scale operations
- Dili port is confined with no room for expansion
- Shallow (0.5 meters) depth prevents docking of larger vessels

- Inefficient operations and maintenance
- Cumbersome customs procedures
- Inadequate maintenance
- No asset management system

Weak legal and regulatory capacity

- Implementation & regulatory roles not separated
- Absence of appropriate enforcement powers
- Incomplete legal framework for maritime transport

Sector investments may lead to misallocation of public resources

- Weak planning
- Poor capacity to prepare demand estimates
- Top-down plans not adequately reviewed or questioned

- Limited human and financial resources

Limited visibility of domestic sea transport

- Limited demand for domestic shipping services
- High investment in road transport improvements
- Cost of port development on south coast is very high