



Participants only

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Strengthening Inter-island Shipping in Pacific Island Countries and Territories

Background Paper¹

¹ This paper was prepared by Mr. John R. Moon, Consultant. The views expressed in the present document are those of the author and do not necessarily reflect the views of the United Nations Secretariat, the Secretariat of the Pacific Community (SPC), the Pacific Island Forum Secretariat (PIFS) or the International Maritime Organization (IMO)

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Background Paper

Summary

The Economic and Social Commission for Asia and the Pacific (ESCAP) at its 68th session (attended by, amongst others, twelve Pacific Island members) endorsed the Regional Action Programme for Transport Development in Asia and the Pacific, Phase II (2012-2016). One of the ten substantive areas of action for the programme is Inter-island shipping.

At a follow-up Seminar on the “Development of an Integrated Transport and Logistics system in ASEAN Countries and the Pacific Subregion”, the ESCAP secretariat, SPC, PIFS, and subsequently IMO agreed to work together to convene a High-level Meeting on strengthening Inter-island shipping and logistics in the Pacific Island countries in Suva, 23-25 July 2013.

In formulating the agenda for the Meeting, the four organizations took into account the mandates given to them by their member states, specifically taking into account the concerns of Pacific Island countries and territories. The Annex to this paper provides a brief outline of the mandates and work of ESCAP, IMO, SPC and PIFS.

The provisional agenda for the Meeting includes five substantive items namely (a) The production-transport nexus: domestic shipping services; (b) Improving regional shipping services in the Pacific; (c) Maritime infrastructure development; (d) Sustainable maritime transport; and (e) Information and data requirements for informed decision making and policy formulation.

This background paper elaborates upon these agenda items with a view to encouraging further exchange of information between delegations as well as facilitating discussions at the Meeting.

The paper also submits a number of issues for consideration the Meeting.

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Introduction

1. Small Island Developing States (SIDS) have high levels of vulnerability which arise from a number of intrinsic characteristics including small size, remoteness, exposure to external (demand and supply-side) shocks, narrow resource base and exposure to global environmental challenges.

Box 1. Expands further on the characteristics.

Box 1. Characteristics of Small Island Developing States

The high levels of vulnerability of the natural, economic and social systems of small island developing States arise from the following intrinsic characteristics²:

- (a) Small size. Small population size is in itself a limit. Higher income levels can increase overall economic size to only a limited extent, leaving few opportunities to create economies of scale. Small size typically leads to disproportionately expensive public administration and infrastructure. A small population typically has a narrow skills base, exacerbated by high rates of outmigration;
- (b) Remoteness. Many small island developing States are geographically remote from major markets; in addition, low transport and communications volumes typically mean high freight and communications costs;
- (c) Vulnerability to external (demand and supply-side) shocks. On average, small island developing States are relatively more exposed to natural disasters than most other developing countries. Due to the small size of their economies, they are highly dependent on trade but lack the factors that determine competitiveness. Similarly, international macroeconomic shocks tend to have higher relative impacts on their small economies. The combination of small size and remoteness leads to high production and trade costs, high levels of economic specialization and exposure to commodity price volatility;
- (d) Narrow resource base. Small island developing States can rely on few natural resources to fuel their sustainable development. Energy, water, mineral and agricultural resources are relatively limited, and resource extraction tends quickly to meet the carrying capacities of the small islands;
- (e) Exposure to global environmental challenges. Small island developing States face unique threats related to global environmental issues, including climate change (sea-level rise, destruction of coral reefs critical to food security and ecosystem adaptation), tourism, loss of biodiversity, waste pollution, scarcity of freshwater and acidification of the oceans. It should also be noted that the vulnerability of small island developing States follows the logic of critical thresholds and tipping points.

² Five-year review of the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, General Assembly, A/65/115.

2. A number of these characteristics have a direct impact on the provision of efficient, frequent, reliable, affordable, safe and environmentally sound shipping services which have relatively short transit times and appropriate capacity.
3. On the demand side, some segments of inter-island shipping can be characterized by low and often irregular traffic volumes, long voyage distances³, imbalanced cargo flows and low unit values of exports. On the supply side, there are considerations of ship economics (ship size in relation to volume of cargo, required service frequency, route length, ship speed, physical constraints to ship size at ports and time in ports) and indivisibilities in associated seaport infrastructure, superstructure and equipment. The consequences of these demand and supply considerations are high transport costs and low profits or chronic losses on shipping operations.
4. These constraints and challenges lead to a “vicious downward spiral” of events. The inability of ship operators to make adequate profits leads, in turn, to a further deterioration in shipping services, entailing difficulties in securing finance, low levels of investment, inadequate maintenance, ageing fleets, inability to attract seafarers and qualified shipping company management staff, low productivity, poor service quality (frequency and reliability) or unavailability of services, and compromised safety standards.
5. These difficulties can be further compounded by constraints in the ship repair industry, including: lack of adequate repair facilities, particularly in remote locations; difficulties in obtaining spare parts, especially for aged equipment and machinery; high costs of repairs and low standards of workmanship in ship repairs.
6. In addition, there are various institutional, organizational and cultural constraints that impact on the sector, including: maritime legislation failing to meet international standards; the legislative environment not being conducive to enforcement of ship mortgages or maritime liens; ships being uninsured or uninsurable; limited enforcement of safety standards; inadequately trained seafarers; lack of transparency in the operation of government-owned fleets and in awarding and monitoring of route licenses and contracts for subsidized shipping services.
7. Further, the shipping industry in particular and the transport industry in general is the source of a number of threats to SIDS due to its heavy dependence on petroleum oils as well as its emissions including air and water pollution.

³ “Many domestic inter-island voyages would represent a major international voyage in other parts of the world and some inter-island voyages in the Pacific region are longer and potentially more hazardous than many intercontinental voyages.” Williams, I. and Hoppe, H., Safety Regulations for Non-Conventional Vessels: the IMO Approach; available from http://www.imo.org/includes/blastData.asp/doc_id=1149/Safety.pdf, (downloaded 27 July 2010).

8. The above considerations illustrate the complex and intertwined relationships between size, distance, remoteness and resources base as well as the vulnerability of small island developing states to economic, natural and environment shocks. They also illustrate the challenges that these characteristics present in the provision of ships, shipping services, port infrastructure, ship repair facilities, navigational aids, navigational charts and protection for the marine environment.

9. The following chapters consider a range of domestic and international shipping issues facing countries and territories of the Pacific. Chapter I focuses on domestic shipping services by looking firstly at the high levels of dependency between production and transport; and secondly at “public service obligation” to provide services on routes that are socially desirable but not commercially viable.

10. Chapter II focuses on international services to, from and within the Pacific. The first issue considered is the role of regional shipping commissions in amongst others, providing adequate, reliable, frequent and affordable shipping services to all member states. Secondly, it considers the route structures provided by ship operators to service the region’s international trade. Thirdly it asks the question whether any more hub ports could be developed to improve shipping service to countries of the region.

11. Chapter III considers a number of issues related to maritime infrastructure development including the development and financing of port infrastructure, navigational aids and hydrographical issues. The sections on port infrastructure financing consider both ports serving domestic shipping and ports serving international shipping while the sections on navigational aids and hydrographical issues consider domestic and international shipping together (although some day marks are mainly provided for domestic shipping).

12. Chapter IV considers a number of aspects of sustainable maritime transport including facilitation of transport and trade, ship financing, energy and environmental aspects, and regional capacity and compliance.

13. Chapter V consolidates the issues for consideration of the Meeting.

I. Production-Transport Nexus: Domestic shipping services

14. Domestic inter-island shipping services in many countries of the region (especially to outer islands) are infrequent and unreliable. This has a negative impact on the production and income generation possibilities of islands, as regular access to markets is crucial to these possibilities.

Consequently, these islands are faced with a circular problem where the lack of adequate shipping services limits the ability of islanders to generate the income necessary to pay for the same shipping services. In a number of countries, shipping services are provided through subsidies, franchising or licensing. In most cases however, it is unlikely that sufficient development would occur on the islands without effective extension services being provided. In other words, it is unlikely that the shipping services could become fully sustainable or at least make a significant contribution to covering costs of the services.

15. The following sections consider firstly the forwards and backwards linkages between production and transport services (the production-transport nexus) and secondly the interim solution of providing of transport services as public sector obligations.

A. Production-transport nexus

16. The linkage or connection between production and transport (production-transport nexus) is illustrated by the former inter-island copra trade in Fiji (see Box 2). In the past, “copra planters would fill up the ships with copra on the way to the sheds in Suva, sell their copra and fill the ships on their way back with supplies they bought from Suva”. However, “when copra processors were set up outside Suva, ... the boats that we used to travel in frequently to the most remote island locations started to stop sailing and finally they were sold.” In other words, and somewhat obviously, there needs to be movement of goods and/or passengers, for shipping services to be provided.

17. Equally well, the provision of shipping services does not necessarily imply the movement of goods and passengers (especially if extension services are not available to develop production opportunities which in turn increase incomes). As stated by Captain Salu, “when villagers earn steady and good income, ... ship owners would be in a better position to bargain for an adjustment in freight rates and passage fare”. In other words, when the villagers have an ability to pay for shipping services (through livelihood production activities) then it becomes feasible for shipowners to provide services.

18. Clearly, the provision of inter-island shipping service is a necessary but not sufficient condition for economic and social development of the islands. There is also a need for extension services to support increased production and incomes necessary to pay for the shipping services.

Box 2. Illustration of the Production-Transport Nexus

Bring back mills to Suva⁴

“THE answer to the shipping problems in the outer islands and addressing the urban drift would be to bring back copra processing mills to Suva.

Former Government Shipping Fleet Superintendent Captain Jone Kamikamica said when he was young his father could afford to put him through an education in London, through lucrative copra sales.

‘Then copra planters would fill up the ships with copra on the way to the sheds in Suva, sell their copra and fill the ships on their way back with supplies they bought from Suva,’ he said.

Captain Kamikamica said back then Island Industries operated at Walu Bay in partnership with Bank Line, who exported coconut oil to the United Kingdom.

He said these operations closed when copra processors were set up outside Suva.

‘At the same time the boats that we used to travel in frequently to the most remote island locations started to stop sailing and finally they were sold,’ he said.’

Copra crucial to contain ship ills⁵

“FORMER director of Maritime Safety Captain Waisale Salu believes the solution to Fiji's inter-island shipping is not in the State-subsidised franchise scheme or the proposed sea route licensing.

Mr Salu, who has retired after 40 years of service, said the solution was to revive the copra industry.

Mr Salu said it would in turn bring life to the economy in the smaller islands and benefit villagers and ship operators alike.

He said ship owners would be in a better position to bargain for an adjustment in freight rates and passage fare when villagers earn steady and good income.

Mr Salu said this was possible through the revival of the copra industry.

He said that during his cadetship on the Ratanui and Uluilakeba in the early 1960s, copra was the main source of income for the islanders”.

19. The revival of the copra industry (or coconut products industries in general) is an example of a commodity that may be investigated to strengthen the production-transport nexus (in fact it was

⁴ Fiji Times Online, “Bring back mills to Suva”, Thursday, June 19, 2008, <<http://www.fijitimes.com/story.aspx?ref=archive&id=92564>>

⁵ Fiji Times Online, Saturday, “Copra crucial to contain ship ills”, June 14, 2008, <<http://www.fijitimes.com/story.aspx?id=92133>>

recently reported that the Copra Millers of Fiji Limited (CMFL) and government have put in place strategies to sustain copra production in the country⁶). There are other initiatives that focus on sustainable livelihoods, for example, the UNDP GEF funded development projects supporting the 20-year Ono-i-Lau Development Plan and the 20-year Cikobia Development Plan. In many cases, other livelihood production opportunities exist for islanders in for example, fishing and other seafood, seaweed cultivation, pearl shell harvesting and manufacture of coconut products. All of these commodities can enter domestic or international trade if adequate shipping services are available.

20. Given the high levels of dependency between production and transport, either (production or transport) can be used as an entry point to initiating an economic and social development process. However, what is clear from the discussion is that if a plan to support the provision of inter-island transport services is used as the entry point, then there should also be a component of the plan that provides appropriate extension services. Similarly, if an island or provincial development plan is used as an entry point then the provision of inter-island transport services should be an integral part of that development plan.

21. Delegations may wish to share their experiences in promoting development through the provision of inter-island shipping services and/or provincial or island development plans, highlighting the production – transport nexus.

B. Public service obligations in support of the economic development of outer islands (subsidies, franchising and licensing)

22. Theme four of the Transport Services Implementation Plan (TSIP) of the SPC Framework for Action on Transport Services (FATS) 2011-2020 includes, as national responsibilities, activities on a “Maintenance fund for promotion of sustainable subsidies” and to “Examine franchise or subsidy schemes for uneconomical routes”. In this respect, a number of Pacific Island Countries and Territories provide some form of support to the provision of shipping services including the Fiji Shipping Franchise Scheme, the Domestic Maritime Support Project in Solomon Islands, the Inter-island Shipping Support Project in Vanuatu, and shipping service to Tonga's most remote islands, the Niuas.

23. Each of these schemes attempt to address the issue of provision of shipping services where operators, for commercial reasons, would not provide the services or not provide services of a desirable level in terms of quality, efficiency, frequency, reliability and geographical coverage.

⁶ Fiji Times Online, Monday, “Strategies in place to revive industry”, May 06, 2013, <
<http://www.fijitimes.com/story.aspx?id=233125> >

24. The franchising of domestic shipping routes involves the contracting of private operators by governments to deliver services of a predetermined quality to specified populations. Such schemes have been implemented in Pacific Island countries with varying degrees of success. The range of problems encountered have included:

- Shortage of private sector operators willing to bid for and operate the services;
- Unsuitability of vessels deployed to deliver franchised services;
- Requirements by financing agencies that vessels are insured, which conflicts with local cultural practice of not insuring vessels (or of vessels being uninsurable);
- Erratic performance of obligations by contracted service providers;
- Unwillingness or inability of governments to enforce sanctions for non-performance;
- Unwillingness of governments to commit the funds required to make subsidy payments for the full period of the franchise contract;
- Communities not meeting the original criteria for inclusion in the scheme applying pressure on governments for later inclusion; and
- Lack of implementation of contract bidding requirements by the responsible governments.

25. Taking into account these experiences, a franchise shipping scheme was introduced in the Solomon Islands towards the end of 2010. The scheme, co-financed by the European Union, the Asian Development Bank, and the Solomon Islands Government, aims to reduce barriers to market access and promote the growth of rural production for remote island communities without reliable maritime services.

26. Initially, five routes were franchised. These were selected based upon a multi-criteria analysis which included: distance from the capital city; confirmation by stakeholders that the route was not financially viable but socially and economically desirable; previous identification as a route requiring assistance; not well served by commercial services; and possessing a history of subsidized calls.

27. On the routes, operators are required to provide a specified number of voyages during the contract period. The route also includes calls at nominated destinations although; the order of rotation is not specified. Vessels in the size range of 220 to 300 gross tons are considered acceptable in terms of safety, comfort and carrying capacity. Proposed call frequencies were between one and two voyages per month.

28. As part of the service monitoring system, vessels are required, within a set period after the completion of a voyage, to submit details of the voyage, including passenger lists and fare revenue collected; freight and tariffs collected; logbook entries showing vessel positions, arrival and departure times; and fuel use. A record is required of each call at a specified location, counter signed by an authorized signatory, usually a nominated individual such as teacher, post master, health worker or local government official.

29. Most of the administration of the scheme including procurement, safety certification, evaluation of tenders, implementation, monitoring and review of contracts lies with government agencies. However, day-to-day management was to be contracted out to a professional management or accounting firm. Functions would include monitoring and reconciliation of voyage records, passenger lists, cargo manifests, substantiation of required calls, and monitoring adherence with contract conditions and performance specifications.

30. Delegations may wish to share their experiences in implementing public service obligations (subsidies, franchising and licensing) in the provision of inter-island shipping services including the problems faced in implementing schemes and means of addressing the problems.

II. Improving regional shipping services to, from and within the Pacific

A. The role of regional shipping commissions in improving service delivery in the Pacific

31. The profit maximizing behaviour of private sector ship operators encourages them to service ports with relatively high traffic volumes, adequate and efficient infrastructure and commodities which are able to bear remunerative freight rates. As a result, ports with low traffic volumes and poor port facilities as well as commodities with low unit values are often served infrequently and unreliably if at all.

32. Island states and territories have however formed regional shipping commissions that are looking towards (a) access to international markets for the promotion of national trade and commerce; (b) adequate and reliable frequency to guarantee sufficient supply and inventory; (c) favourable route structures to serve all member states ports; (d) affordable service rates in line with the local economies; and (e) protection to approved service providers from external interference in exchange for the agreed service.

33. For international shipping, the main policy has been regulation of entry. This is practiced at both the national level where ships providing services to some countries in the Pacific are required to be licensed (for example, Cook Islands, Nauru and Niue) and by groupings of countries. One example of the latter practice is the Micronesian Shipping Commission (MSC) of the Marshall Islands, the Federated States of Micronesia and Palau (Saipan and Guam being non-voting members).

34. The objective of MSC is to encourage and promote an economical, reliable, safe and coordinated system that meets the demand for international commercial shipping throughout the three Micronesian island nations. Policy is implemented through an “Entry Assurance System” whereby an “Entry Assurance Certificate” (EAC) is required for all commercial carriers servicing the member countries. The scheme is largely financed through an annual fee for each EAC issued.

35. The criteria for granting EACs include that: (a) routes satisfy basic trade requirements; (b) tariffs charged should be reasonable for the service proposed; (c) the carrier must demonstrate capability to provide a reliable and stable service in terms of frequency, regularity and on transit time performance; (d) the service must be flexible to accommodate both specialized and conventional cargo; (e) the capitalization or investment of the operator must be sufficient to adequately sustain the proposed service; and (f) employment is provided to citizens of the three countries (including internships with the operators).

36. Reaction to the Commission has been mixed. The Secretariat of the Pacific Community (SPC) has noted that: “In carefully studying shipping patterns in the region, RMP (former Regional Maritime Programme) realizes the very close collaboration amongst shipping companies render little or no competition to the PICTs resulting in a near cartel environment. Their services are selective being regular to profitable ports and erratic to others. To address this arrangement, a shipping commission along the lines of the Micronesian Shipping Commission model is planned for the central and eastern Pacific region. An important feature of these shipping commissions is the promotion of sufficient or controlled competition so that monopoly is removed but the restricted number of carriers for operations to remain commercially viable maintained.”⁷

37. Two Pacific Island studies have however questioned the need for such arrangements:^{8,9}

⁷ Secretariat of the Pacific Community, Regional Maritime Programme; available from http://www.spc.int/maritime/index.php?option=com_content&task=view&id=204&Itemid=1, (downloaded 27 July 2010).

⁸ Australian Agency for International Development (AusAID), Pacific Regional Transport Study. Country Reports, Canberra: AusAID/Government of Australia, 2004.

⁹ Asian Development Bank, Oceanic Voyages, Aviation and Shipping in the Pacific, 2007.

38. The concept has received support in the Central Pacific. In their Communique of the Third Smaller Island States (SIS) Meeting of Ministers of Maritime Transport, held at Nuku'alofa, Tonga, on 13 May 2009, the Ministers agreed: "... That the Central Pacific Shipping Commission Committee, comprising of members from Kiribati, Marshall Islands, Nauru and Tuvalu, and other interested states and territories such as FSM, Palau and Wallis & Futuna, expedite setting up a Central Pacific Shipping Commission (CPSC), involving our countries, similar to the Micronesian Shipping Commission (MSC) model. To facilitate the work, SPC and PIFS will work with the Committee to prepare a draft framework for the establishment of CPSC and report progress to the next SIS Transport Ministers meeting."¹⁰

39. The Central Pacific Shipping Commission (CPSC) was officially launched on 4 August 2010.

40. The 2012 report of the SPC Economic Development Division¹¹ noted that "... there has been recent interest by established shipping companies to extend their network to service the central Pacific region, including by Micronesian Shipping Commission licence holders, who have shown interest in providing connections with the north. This is seen as a positive development in that the goal of CPSC is being achieved. It presents a new option to CPSC to become a monitoring rather than a regulating body. Discussions with the interested shipping companies favour the former role as it allows the market forces to determine the service and gives CPSC an oversight role to ensure that the outcomes are favourable to members. The exact shape that this will take will have to be determined by CPSC officials and commissioners in their next meeting."

41. Delegations may wish to share their experiences in developing and implementing policies that regulate entry into the region's international shipping.

B. Existing models of shipping service provision for the Pacific

1. Introduction

42. The 2007 ADB study "Oceanic Voyages: Shipping in the Pacific Region" noted that "There are signs of an increasing tendency for direct services to be replaced by "hubbing" over selected local transshipment centres. The most important hubs at present are Auckland (for the South Pacific) and Guam (for Micronesia)."

¹⁰ <http://www.spc.int/maritime/images/Reports/Comunique/SIS%20ministerial%20communique%202009.pdf> (downloaded 27 July 2010).

¹¹ SPC, Director-General's report series - 2012 work programme highlights and 2013 work programme, Agenda Item 2.2.2: Economic Development Division, 42nd Meeting of the Committee of Representatives of Governments and Administrations, Noumea, New Caledonia, 12-16 November 2012.

43. In the intervening six years, there have been a number of significant changes in the shipping services provided to the region with a number of services being withdrawn, shipowners going into liquidation and being acquired by other companies and new alliances between ship operators being formed. These changes have led to the emergence of new route structures, for example, the continuation and consolidation of the link between north and south Pacific services with the acquisition of Reef Shipping by Matson Line and the provision of “comprehensive coverage of ports across the northern and eastern Pacific” and “dedicated liner shipping trades to markets including the Cook Islands and French Polynesia” following the formation of the Greater Pacific Shipping (GPS) partnership of Pacific Direct Line (PDL), Sofrana Unilines and Swire Shipping. As noted in the abovementioned report of EDD¹², these have been seen as a positive development.

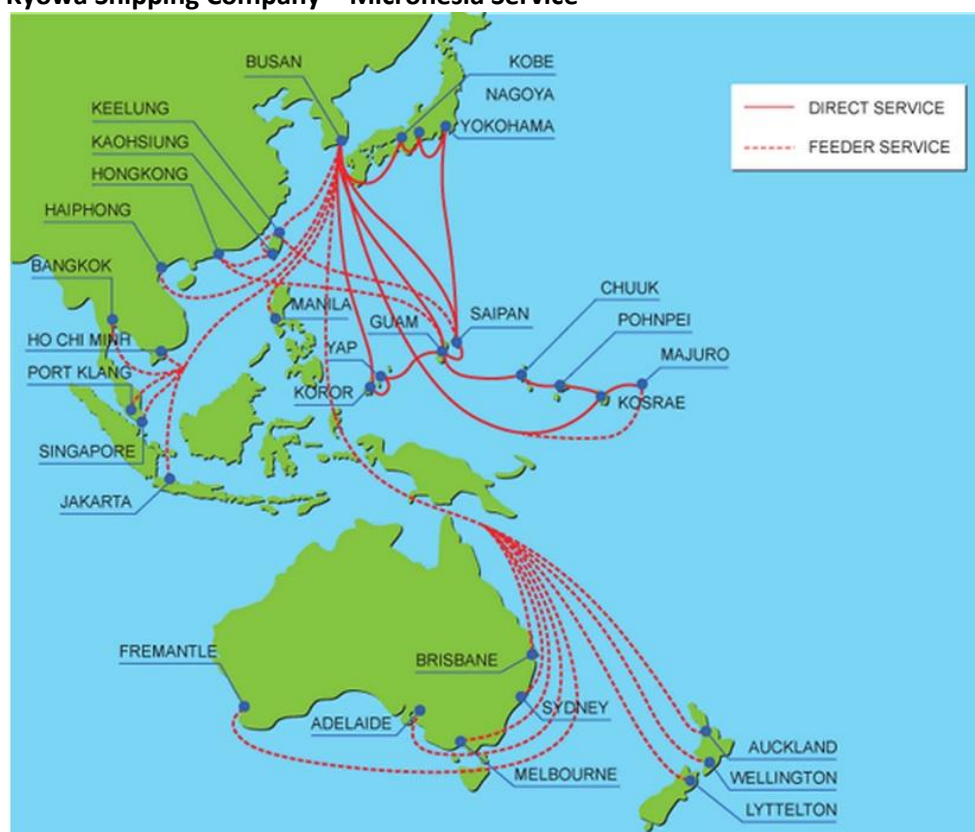
44. The following figures and text illustrate some of the representative routes servicing the north and south Pacific.

¹² Ibid.

2. Kyowa Shipping Company – Micronesia Service

45. Services from East Asia¹³ to the Northern Pacific include the Micronesia Service (see Figure 1.) which is provided by Kyowa Shipping Co., Ltd. in cooperation with FSM Line Ltd. and Western Pacific Shipping Co (see also a more recent agreement with Matson below). Three ships with around 400 TEUs capacity are used in the service. A feature of the model used for this service is that cargoes from Australia, New Zealand and Southeast Asia are indicated as being carried to Busan, Republic of Korea where they are transhipped for onward carriage to Micronesia. By way of comparison, the distance from Sydney, Australia to Majuro, Marshall Islands is around 5,000 kilometers: whereas the distance Sydney-Busan-Majuro is around 13,300 kilometers (or more than two-and-a-half times the distance). Clearly, there are considerations beyond distance that motivate the offering of the service including the traffic volumes between individual countries in Australia, New Zealand and Southeast Asia on the one hand and individual countries in Micronesia on the other.

Figure 1. Kyowa Shipping Company – Micronesia Service



Ports Served: Busan, Kobe, Nagoya, Yokohama, Saipan, Guam, Palau(Koror), Federated States of Micronesia(Yap, Chuuk, Pohnpei, Kosrae), Marshall Islands(Majuro, Kwajalein, Ebeye)

Source: <<http://www.msa-guam.com/liner-services/kyowa/routing-map>>

¹³ China; Hong Kong, China; DPRK; Japan; Macao, China; Mongolia; Taiwan, China; ROK; and the Russian Federation in Asia.

3. Bali Hai Service

46. The most comprehensive service from East Asia to the North and South Pacific is the Bali Hai Service (see Figure 2.). This service has four partners Kyowa Shipping Co., Ltd.; China Navigation Co., Ltd.; Mitsui O.S.K. Lines, Ltd.; and Nippon Yusen Kabushiki Kaisha. It utilizes four ships of around 900 TEUs capacity. The service is again used for feederling with, for example, the Europe Pacific Express service of one of the partners (Swire Shipping – a subsidiary of China Navigation) transshipping over Busan to ports in both the North and South Pacific on Loop 2 (See also Figure 4.).

Figure 2. Bali Hai Service



Port Rotation, Loop 1: Kaohsiung - Busan - Kobe - Nagoya - Yokohama - Majuro - Tarawa - Noumea - Lautoka - Suva - Apia - Pago Pago - Papeete - Nuku'alofa - Noumea - Santo - Honiara - Noro

Port Rotation, Loop 2: Kaohsiung - Tokuyama - Busan - Kobe - Nagoya - Yokohama - Honiara - Santo - Port Vila - Noumea - Lautoka - Suva - Apia - Pago Pago - Papeete - Noumea

Source: < <http://www.greaterbali Hai.com/map/map.html> >

4. Matson South Pacific routes with connections to Micronesian Services

47. Matson Line has traditionally provided shipping services between the West Coast of the United States and Hawaii (since 1882) and between Long Beach, United States and China (China – Long Beach Express). The China – Long Beach Express calls in Guam on its westbound leg and tranships cargo for the Federated States of Micronesia, Marshall Islands, Palau and Saipan, Northern Mariana Islands.

48. In November 2012, Matson and Kyowa (see above) signed a Space Charter Agreement relating to transshipment at Guam to Micronesia, Marshall Islands and Palau.

49. On 7 January 2013, Matson also commenced operations of the primary assets formerly owned by Reef Shipping which went into receivership on 26 November 2012. Reef Shipping was reportedly formed 1967 "from a small office on a South Auckland wharf" when it offered a shipping service between New Zealand and Fiji¹⁴.

50. Prior to their demise, Reef Shipping had introduced a number of innovations into the route structures of their services. In early 2010, they were granted of an Entry Assurance Certificate License (EAC) from the Micronesian Shipping Commission to carry cargo into the Marshall Islands, Federated States of Micronesia and Palau, thereby providing increased connectivity between the North and South Pacific. The port rotation serving this connecting route evolved to include Suva, Lautoka, Wallis, Futuna, Funafuti, Tarawa, Majuro, Nauru and Honiara which included the Smaller Island States of the Central Pacific Shipping Commission (Kiribati, Marshall Islands, Tuvalu and Nauru).

51. Figure 3. shows that Matson has retained the route structure of Reef Shipping and is currently providing two circuits that are largely self standing (New Zealand-Cook Islands-Niue and Brisbane-Nauru-Solomon Islands) and three other circuits that are connected through transshipment at Fiji and Marshall Islands (New Zealand-Fiji-Samoas-Tonga-New Zealand, Central Pacific and Micronesia).

¹⁴ <http://www.stuff.co.nz/business/industries/8124846/Reef-Shipping-taken-over-by-US-company>

Figure 3. Matson South Pacific routes with connections to Micronesian Services



Port rotation:

—	IMUA	Australia-Solomons-Nauru	21 days
		BNE-HIR-NOR-NAU	
—	MANA	North & West of Fiji	28 days
		SUV - LTK - WLS - FUT - TAR - MAJ - NAU - HIR - SAN - VLI - SUV	
—	OLOMANA	Cook Islands	21 days
		AKL - RAR - AIT - NIU - AKL	
—	LILOA	Fiji, Samoas, Tonga	21 days
		TRG - AKL - LTK - SUV - APW - PPG - VAV - NUK - TRG	
—	MATSON CCA	Guam/Micronesia	14 days
		MAJ - KSI - PNI - TTK - GUM	

AIT - Aitutaki, Cook Islands
 AKL - Auckland, New Zealand
 APW - Apia, Samoa
 BNE - Brisbane, Australia
 FUN - Funafuti, Tuvalu
 FUT - Futuna Islands
 GUM - Guam
 HIR - Honiara, Solomon Islands
 KSI - Kosrae, FSM (locode = KSA)
 LTK - Lautoka, Fiji
 MAJ - Majuro, Marshall Islands
 NIU - Niue
 NOR - Noro, Solomon Islands

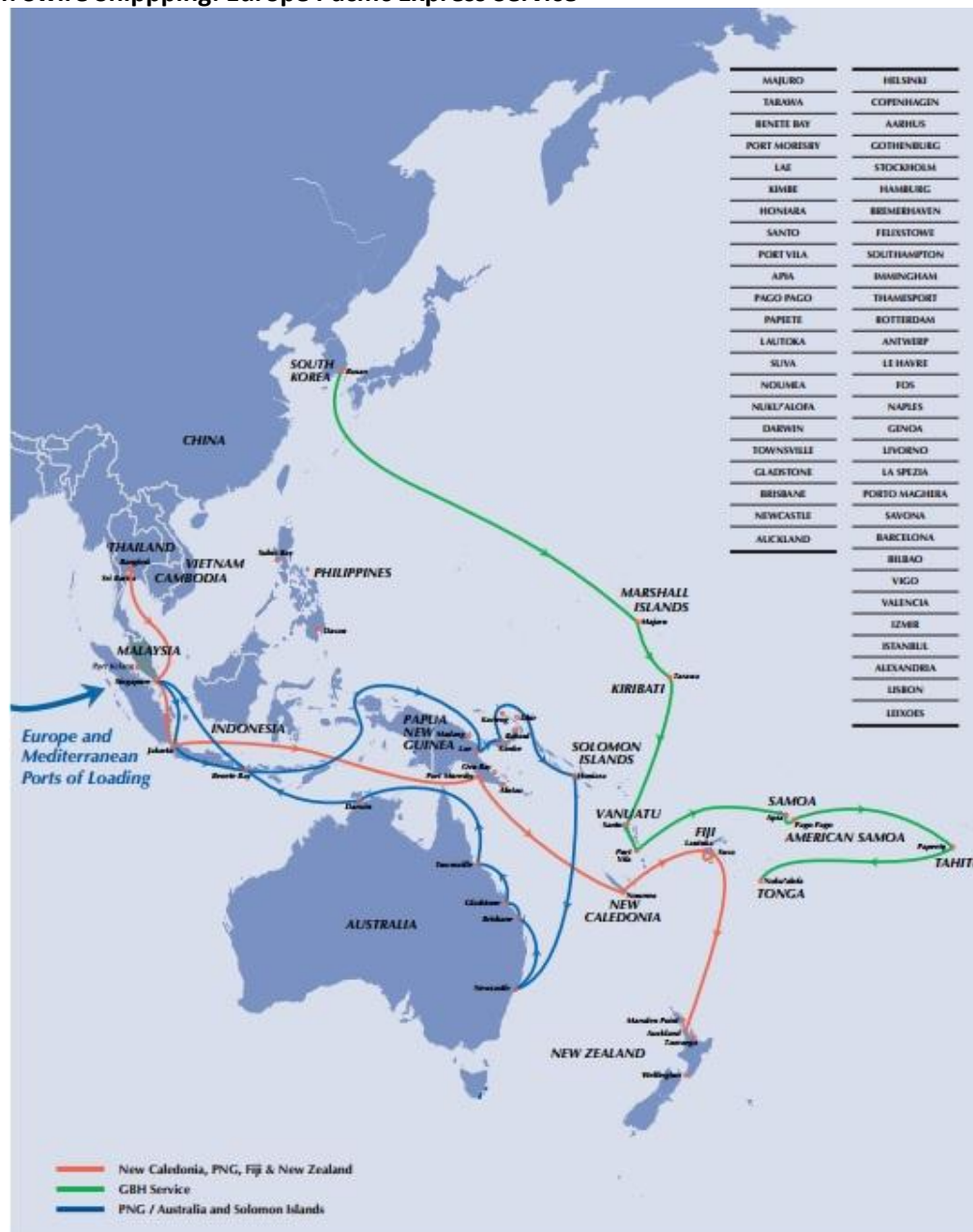
NAU - Nauru
 NUK - Nuku'Alofa, Tonga
 PNI - Pohnpei, FSM
 PPG - Pago Pago, American Samoa
 RAR - Rarotonga, Cook Islands
 SAN - Santo, Vanuatu
 SUV - Suva
 TAR - Tarawa, Kiribati
 TTK - Chuuk (ex Truk), FSM
 TRG - Tauranga, New Zealand
 VAV - Vavau, Tonga
 VLI - Port Vila, Vanuatu
 WLS - Wallis Islands

<http://www.matson.co.nz/site/reefshipping/files/Matson%20Route%20Maps/Matson%20South%20Pacific%20Route%20Map%20010413.pdf>>

5. Selected Swire Shipping Services

52. Swire Shipping utilizes a number of services to cover-off Pacific Islands including: the Loop 2 port rotation of the Bali Hai service (see above), their South East Asia Service (South-east Asia, PNG, Solomon Islands and Australia) and their East South East Asia Service (South-east Asia, PNG, New Caledonia, Fiji and New Zealand). Figure 4. shows these routes and the ways in which the European trade is serviced. In addition, cargoes for some of the ports shown on the Bali Hai route (Tonga, Vanuatu, Samoa and American Samoa) are sometimes transhipped at Singapore then again at Suva (see Table 1).

Figure 4. Swire Shipping: Europe Pacific Express Service



Source:

http://www.swireshipping.com/index.php?option=com_content&view=article&id=47&Itemid=43

Table 1. Swire Shipping: Transhipment on Continent / Pacific Islands & Oceania Services

Country	Port	Serv	Tranship	Freq	Country	Port	Serv	Tranship	Freq
Australia	Darwin	SEA	Singapore	M	PNG	Lae	SEA	Singapore	F
Australia	Townsville	SEA	Singapore	M	PNG	Madang	SEA	Singapore	M
Fiji	Lautoka	EPE	Singapore	W	PNG	Oro Bay	SEA	Singapore	M
Fiji	Suva	EPE	Singapore	W	PNG	Port Moresby	SEA	Singapore	F
Kiribati	Tarawa	EPE	Busan	M	PNG	Rabaul	SEA	Singapore	F
Marshall Is.	Majuro	EPE	Busan	M	PNG	Wewak	SEA	Singapore	R
FSM	Chuuk	EPE	Busan	M	Solomon Is.	Honiara	SEA	Singapore	M
FSM	Kosrae	EPE	Busan	M	Tahiti	Papeete	EPE	Busan	W
FSM	Phonpei	EPE	Busan	M	Tonga	Nukualofa	EPE	Singapore	R
New Caledonia	Noumea	EPE	Singapore	W	Vanuatu	Port Vila	EPE	Singapore	W
PNG	Alotau	SEA	Singapore	M	Vanuatu	Santo	EPE	Singapore	W
PNG	Kavieng	SEA	Singapore	M	Samoa	Apia	EPE	Singapore	M
PNG	Kimbe	SEA	Singapore	M	American Samoa	Pago Pago	EPE	Singapore	M
EPE SERVICE - (Europe Pacific Express service)									
SEA SERVICE – (South East Asia service)									
Key: Serv=Service; Tranship=Transhipment Port; Freq=Frequency (M=Monthly; W=Weekly; R=Regular)									
Source: < http://www.boeckmans.be/be/Liner_ST_Pacific.htm >									

6. Pacific Direct Line

53. Pacific Direct Line (PDL) and their partners, Sofrana Unilines (Sofrana), Pacific Forum Line (PFL), Neptune Pacific Line and Swire Shipping provide services between Australia, New Zealand and Pacific Islands up to Marshall Islands (Majuro) in the north and French Polynesia (Papeete) in the east. These companies presumably have space charter agreements between each other as in a number of cases three or four of them claim the same ship as part of "Our Fleet" (see, for example, the Capitaine Tasman, Forum Fiji, Southern Fleur, Southern Moana (which is replacing Southern Fleur), Southern Lily 2 and Southern Lily 3 (which is replacing Southern Lily 2) in Table 2.).

Table 2. "Own Fleet" of PDL, Sofrana, Pacific Neptune Line and PFL					
Vessel	PDL "Our Ships"	Sofrana "Our Fleet"	PFL "Our Modern Fleet"	Neptune Pacific Line "Our Fleet"	Swire Shipping
BC San Francisco	x				
Capitaine Cook				x	
Capitaine Tasman	x	x	x	x	(x)
Captaine Wallis				x	
Danny Rose	x			x	(x)
Forum Fiji	x	x	x		(x)
Komaiwai II	(x)				
MCP Villach		x			
Scarlett Lucy				x	
Sofrana Tourville		x			
Sofrana Surville	(x)	x			
Southern Cross	x		x		
(Southern Fleur)	x	x	x	(x)	
Southern Moana (replacing Southern Fleur)	x	x	x	(x)	
(Southern Lily 2)	x	x	x		
Southern Lily 3 (replacing Southern Lily 2)	x	x	x	(x)	
Southern Pearl	x	x			(x)
Southern Tiare	x				
Tiare Moana	x		x		
Note: x=indicated as being "own ship"; (x)=included in company's schedule only (not as being "own ship")					
Sources: http://www.pdl123.com/about_us/ships/index.php http://www.neptunepacific.com/fleet.php http://www.pacificforumline.com/our-products-and-services/vessels/ http://www.sofrana.co.nz/fleet http://www.swireshipping.com/images/stories/scheldues/Australia%20to%20Pacific%20Islands.pdf					

54. Figure 5. shows 10 routes of PDL including: (a) New Zealand to Tonga – Samoa; (b) Australia to Noumea; (c) New Zealand to Noumea - Vanuatu - Fiji - Wallis – Futuna; (d) New Zealand to Noumea; (e) Australia to Vanuatu - Wallis – Futuna; (f) New Zealand to Norfolk Island; (g) Australia to Fiji - Samoa – Tonga; (h) New Zealand to Fiji; (i) New Zealand to Tahiti; and (j) Australia to Tahiti.

55. In addition, in April 2011, PDL introduced a Fiji to Majuro Direct service. In June 2013, the port rotation of this service was: Suva-Wallis-Futuna-Funafuti-Tarawa-Majuro. This again increased the connectivity of three of the four Smaller Island States of the Central Pacific Shipping Commission (Kiribati, Marshall Islands and Tuvalu).

Figure 5. Pacific Direct Line, Combined Route Map (10 Routes)



Source: < <http://www.pdl123.com/services/schedules/maps/index.php> >

7. CMA CGM Panama Direct Line

56. From the direction of the Americas there are a number of services that call at Pacific Island Ports. The Panama Direct Line of CMA CGM (Rotterdam to Melbourne via the Panama Canal) calls at Papeete, Lautoka and Noumea (see Figure6.)

Figure 6. CMA CGM Panama Direct Line



Source: <<http://www.cma-cgm.com/eBusiness/Schedules/LineServices/ServiceSheet.aspx?ServiceCode=RTWPAN>>

8. Hamburg Sud North America West Coast - Pacific Islands Service

57. Hamburg Sud also makes calls to Papeete and Suva in some of their Pacific services as well as providing a fortnightly service Los Angeles-Oakland-Papeete-Apia-Pago Pago (see Figure 7.).

Figure 7. Hamburg Sud North America West Coast - Pacific Islands Service



Source: Hamburg Sud, Products and Service Guide, May 2013

58. The above discussion has illustrated the extent of coverage of international shipping services in the Pacific and, as noted by SPC, there have been a number of “positive developments”. Further analysis is however required to ascertain the coverage, frequency and reliability of services provided.

59. In this respect, delegations may wish to apprise the Meeting of issues related to the coverage, frequency and reliability of shipping services provided to their country.

C. Potential for further hub port development and perspectives on potential hub-and-spoke networks

60. The above discussion has also illustrated that a number of ports in the Pacific have, to varying degrees, been providing transshipment services. Examples of which include Guam (transshipment hub for Micronesia), Majuro, Marshall Islands (transshipment between North and South Pacific), Lae, PNG (transshipment to other ports in PNG), Suva, Fiji (transshipment to American Samoa, Samoa, Tonga, Kiribati, Marshall Islands and Wallis and Futuna), Noumea, New Caledonia (transshipment to Fiji and Papeete, French Polynesia) and Papeete, French Polynesia (transshipment to Apia, Samoa and Pago Pago, American Samoa). Other ports in, for example, PNG and the Solomon Islands have also been suggested as potential hub ports.

61. In identifying hub ports for transshipment, shipping companies will take into account relevant factors from amongst the following: (a) location (proximity to major world shipping routes); (b) quick turnaround time; (c) quality services with efficiencies and productivity; (d) reasonable costs; (e) ability to accommodate larger ships – deep water, advanced equipment; (f) excellent networks covering neighbouring feeder ports; (g) existence of logistic cluster supporting value-added logistics activities; (h) no red tapes and no burdensome paper works; (i) advanced information technology; (j) intermodal infrastructures- access to rail, air and road distribution networks; and (k) local markets producing freight volume.¹⁵

62. Countries and ports with aspirations to becoming hub ports need to take these factors into account. Equally well, it needs to be noted that the provision of transshipment facilities does not guarantee that ship-operators will avail themselves of the facilities.

¹⁵ ESCAP, Free Trade Zone and Port Hinterland Development, Sales No. E.05.II.F.22, ISBN: 92-1-120434-8, ST/ESCAP/2377, 2005.

63. One initiative of a number of Smaller Island States (SIS)¹⁶ commenced in May 2009 when the Kiribati Shipping Services Limited (KSSL) signed an agreement with the governments of Nauru, Tuvalu, Kiribati and Wallis and Futuna to provide regular feeder shipping services to those countries.

64. SPC was monitoring the service provided by Kiribati Shipping Service Limited¹⁷ and in 2011 noted significant success in the provision of affordable and regular services to Tuvalu, Nauru and Kiribati, using Suva as a transshipment point. Research showed that as a short-term measure the service was effective. However, in the medium term (after 18 months of operation), the service was struggling due in part to reliability and scheduling issues. However, the company had advised that the issues had been addressed with the purchase of another vessel. MV Moanaraoi was used under the SIS Agreement between Fiji, Kiribati, Nauru, Wallis & Futuna, and Tuvalu until November 2011 when she was no longer fit/safe to run this service¹⁸. Table 3. shows an earlier sailing schedule for the KSSL Vessel MV Moanaraoi.

Table 3. Earlier sailing schedule for KSSL vessel MV Moanaraoi

	KSSL		VESSEL	VOY	TARAWA	FUNAFUTI	SUVA	FUNAFUTI	NAURU	TARAWA
	KIRIBATI SHIPPING SERVICE LIMITED		MOANA RAOI	41	DEPART	ARRIVE	ARRIVE	DEPART	ARRIVE	ARRIVE
			MOANA RAOI	42	Sailed	Sailed	In Port	26-Jan	30-Jan	5-Feb
	SUVA/FUNAFUTI/NAURU/TARAWA/MAJUO		MOANA RAOI	43	9-Feb	13-Feb	17-Feb	23-Feb	27-Feb	7-Mar
	DIRECT SERVICE		MOANA RAOI	44	9-Mar	13-Mar	17-Mar	23-Mar	27-Mar	2-Apr
			MOANA RAOI	44	6-Apr	10-Apr	14-Apr	20-Apr	24-Apr	30-Apr
										2-May
Weigh Bridge Certificate to be provided for All Export Containers										
		SUVA	Apenisa	Roselyn	LAUTOKA		Zureen			
		Phone: (679) 3312 633	Mobile: (679) 9999 811	9907 858			Phone: (679) 6664090	(679) 9907 434		
		Fax: (679) 3236 336	shipssales@wgfiji.com.fj	roselynp@wgfiji.com.fj			Fax: (679) 6665844	zureen@wgfiji.com.fj		

Port rotation: Suva, Fiji – Funafuti, Tuvalu – Nauru – Tarawa, Kiribati - Funafuti, Tuvalu - Suva, Fiji.
Round trip 28 days.

65. It is also understood that communication is ongoing with the Samoa Shipping Corporation Limited (SSCL) concerning the possibility of a similar service to the eastern Pacific Islands and a suitable vessel for the service.

66. Delegations may wish to apprise the Meeting of proposals that they may have to develop hub ports or inter-island shipping services based upon hub ports. They may also wish to propose potential shipping services based upon hub ports.

¹⁶ The Smaller Island States (SIS) include Cook Islands, Kiribati, Marshall Islands, Nauru, Niue and Tuvalu.

¹⁷ SPC, Annual Report 2011, Part 1,

¹⁸ IMO-SPC, Kiribati Country Report, Pacific Forum on Domestic Ferry Safety, Suva, 30 October to 02 November 2012.

III. Maritime infrastructure development

A. Development of port infrastructure

1. Ports serving international shipping

67. The study on “Ports located in small islands” prepared by the PIANC-IAPH Joint Working group¹⁹ noted that many of the main ports serving deep sea shipping appeared to focus on the operation of existing facilities that were built in the 1960’s and 1970’s rather than their development. Developments had however been undertaken using grants provided by donor countries sometimes in the wake of a major disaster.

68. Similarly, the 2004 Pacific Regional Transport Study²⁰ noted that “Many of the port facilities visited by the Technical Team were built in the 1950s or 1960s, prior to containerisation and such ports pose serious operational problems. Cargo sheds designed to shelter breakbulk cargo from extreme weather conditions now pose obstacles to the efficient movement of containers between ships and stacking areas. Wharf surfaces are typically potholed, making it difficult to operate forklift trucks, thus raising the cost of stevedoring operations. Some wharves, unable to take the weight of a forklift plus heavy container, require double handling of containers. After being unloaded by ship’s equipment, containers are initially placed on flat bed trucks, driven to the wharf stacking area, unloaded and positioned in their appropriate slot in the stack by forklift. A lack of maintenance was noticeable in many ports.”

69. Box 3. provides an example of the development of King’s Wharf, Suva over the past 100 years through various stages of disasters and technological change.

¹⁹ Permanent International Association of Navigation Congresses (PIANC), Ports located in small islands, January 2008.

²⁰ Australian Agency for International Development (AusAID), Pacific Regional Transport Study, 2004, Canberra, AusAID/Government of Australia, p 37.

Box 3. King's Wharf, Suva

- 1912 construction of a wooden structure began.
- 1953 wharf damaged by tidal wave following earthquake. Temporary repairs enabled the wharf to provide berthing facilities for large ocean going vessels for some 8-9 years.
- May 1961 - June 1963 new wharf constructed.
- 1979 ADB loan to rehabilitate and develop Suva Port to handle containers.
- February 2004 - December 2005 (a) restoration of King's Wharf to extend its life to 2020, (b) upgrade of King's Wharf to minimum seismic standards, (c) strengthening of the King's Wharf deck and reorientation of the container yard to improve the efficiency of cargo handling, and (d) ship-to-shore sewage to improve water quality control at Suva Port.

70. There have been some completed and ongoing port improvement projects in the region; there is however a need for further information on the condition of ports as well as productivity indicators so that performance can be assessed against benchmarks.

2. Ports serving domestic shipping

71. The PIANC-IAPH Study also noted that while the main ports had limited infrastructure: there was even less infrastructure in the secondary ports.

72. The rationale provided for the ADB "Outer Island Transport Infrastructure Project" in the Marshall Islands highlights the plight of secondary ports (landing places).²¹ "Transport operations are at present complicated by poor infrastructure and facilities in the outer islands. In particular, the sea approaches and landings on coral atolls are often constrained by narrow reef passages, navigational obstructions, and shallow reef flats, making landing difficult. Weather, sea, and light conditions restrict the time available for anchoring and lightering goods and passengers ashore, subject passengers to greater risk and discomfort, and frequently cause damage to cargo. Navigational aids are almost entirely absent, and there are few ship docks or small boat jetties. Where beach landings are required, channels need to be cleared to allow small boats to reach the shore. On land, warehousing for storing goods and local produce for export is needed at a central location to improve the efficiency of shipping operations". (In addition, where the landing facilities consist of jetties or pontoons connected to the island by a trestle, these structures are easily damaged by storm/hurricane waves).

73. "Together, these constraints lead to infrequent and unreliable shipping schedules, increased safety risks to passengers and cargo, and added costs for outer island transport. These conditions, in

²¹ ADB, Republic of the Marshall Islands: Outer Island Transport Infrastructure Project, Validation Report, December 2009.

turn, limit opportunity for social interaction; access to education, health, and business development services; and the ability of public agencies to deliver programs and develop social infrastructure in the outer islands. They also increase the prices of essential goods and discourage production and marketing of such local products as copra, fruits and vegetables, fish, and handicrafts.”

74. In the Solomon Islands, Mizusawa et al²² also note that “... the maritime infrastructure inventory consists of international ports at Honiara and Noro; approximately 86 small wharves and jetties, and 26 anchorages”.

75. “Most wharves and jetties are in poor condition as they are old and not maintained periodically. The current maintenance approach is reactive, with Ministry of Infrastructure Development (MID) responding when a complaint is made at the provincial government level. Maintenance costs under this approach are high. In addition, expected economic benefits generated by wharves and jetties have not been sufficient to cover the true cost of capital, and accumulated losses stand at about \$1.5 million because of inadequate funding for operation and maintenance. Due to deferred maintenance caused by lack of MID resources, such as funds and personnel, deteriorated wharves and jetties hinder service provision and pose a safety risk and reduction of accessibility and productivity of users. MID requires appropriate operation of the assets and records of asset use and condition over time in order to justify their maintenance and rehabilitation and to sustain their asset operation.”

76. The illustrative examples of the PIANC-IAPH Study, the Marshall islands and the Solomon Islands suggest that for marine infrastructure (including wharves) there is a need for, amongst others, an adequate inventory and survey, rehabilitation and development, development of asset management plans (maintenance schedules) and allocation of adequate resources if this infrastructure is to play its role in social and economic development.

77. The examples also illustrate the interdependencies between shipping services (discussed in the introduction to this paper and Chapter 1.) and maritime infrastructure. Clearly, any attempt to address the issues requires an integrated approach to shipping services and maritime infrastructure.

78. Delegations may wish to apprise the Meeting of the existing and planned facilities at their ports serving international shipping and at their ports serving domestic shipping. They may also wish to apprise the Meeting of measures that they are taking to address the issues discussed in this section.

²² Mizusawa, D., Guild, R., Adhar, R. R. and Ling, D. “Strengthening Maritime Transport Sector in Solomon Islands”, Paper submitted to 91st Transport Research Board Annual Meeting, 2012 <<http://docs.trb.org/prp/12-3585.pdf>>

B. Financing port infrastructure

1. Introduction

79. One of the major challenges facing countries in the area of port infrastructure and facilities is that of finance for not only development but also rehabilitation and maintenance.

80. The principal sources of funds for capital expenditures on infrastructure include public sector budget (current revenues or public borrowing), official development assistance (ODA - including concessionary loans and grants), the private sector and combinations of these sources.

2. Ports serving domestic shipping

81. In many cases, only limited funding has been made available from public sector budgets for development, rehabilitation and maintenance of maritime infrastructure. In Solomon Islands, for example, a "... program of wharf construction and navigational aid provision has been ongoing since 2005, with assistance from development partners. To date fourteen new wharves have been constructed and a further nine are being rehabilitated during 2010, including the major wharf at Auki. The forward program will include a further nine wharves in 2011, with up to twenty more being constructed or rehabilitated between 2012 and 2015. However, further programs of wharf construction and repair are needed and will be carried out with external funding to the extent possible, unless and until the Government is in a position to do so with domestic resources alone".²³

82. In addressing the issue of inadequate allocation of funds from public sector budgets, Solomon Islands has introduced an extension of the Road Funds concept to the whole of the transport sector and established a National Transport Fund (see Box 4.).

²³ Solomon Islands Government, National Transport Plan, 2011-2030, Final, October 2010.

Box 4. Solomon Islands - National Transport Fund

A major impediment to the maintenance and development of the transport system [in the Solomon Islands] has been funding. The allocation of funds has been inadequate and often inappropriately deployed. The Government's strategy to improve the situation has been to establish the National Transport Fund (NTF).

The Fund will provide ring-fenced funding for transport infrastructure maintenance and development and is managed by a Board comprised of representatives of relevant government agencies and development partners.

The NTF is responsible for providing financial support to the whole of the transport sector, including road, maritime and air transport. This includes support for shipping services, maintenance and provision of roads, wharves and airfields, and the provision and maintenance of maritime navigational aids.

The NTF Board is responsible to Parliament for delivering the National Transport Plan and will produce an annual report setting out progress. The NTF Board will put in place comprehensive planning, programming, budgeting and disbursement procedures for the fund, in line with Solomon Islands Government (SIG) Financial Instructions and other guidelines. These will ensure that NTF funds are spent in a transparent, fair and consistent fashion.

Source: Solomon Islands Government, National Transport Plan, 2011-2030, Final, October 2010

83. In considering the financing of domestic maritime infrastructure a number of questions arise and need to be addressed including:

- Who should be responsible for development, rehabilitation and maintenance of the infrastructure – central, provincial or local government?²⁴
- What is the revenue base of, in particular, provincial or local government?
- Is the provincial or local government authorized to raise revenue for the purpose of development, rehabilitation and maintenance of the infrastructure?
- Should users be charged for use of the maritime infrastructure facility?

²⁴ In the Solomon Islands, provincial wharves and navigation channels for a long time suffered from a lack of maintenance, leaving many in poor condition or no longer usable. A lack of clear definition of the respective roles of the national and provincial governments contributed to this situation until the Maritime Safety Administration Act 2009 clarified responsibilities. The Operations and Maintenance Division now has responsibility for the provision and maintenance of marine infrastructure.

- If users are charged, what costs should the charges cover, full costs including capital costs or operating and maintenance costs only?²⁵
- If the shipping service that calls at the wharf is subsidized through a Public Sector Obligation then should users be charged for use of the maritime infrastructure facility? (The cost to vessel operators of port user charges would increase, which would require an increased subsidy payment. However, it needs to be borne in mind that a number of benefits accrue from maritime infrastructure improvements including reduced ship turnaround time, reduced loss and damage to cargo and improved passenger comfort and safety. Consequently, the full amount of a user charge on a vessel need not be passed onto goods and passengers).

3. Ports serving international shipping

84. In addition to financing domestic maritime infrastructure other ODA projects for international ports have included the Asian Development Bank's Avatiu Port Development Project (officially opened 15 April 2013) and the signing of an agreement by Japan International Cooperation Agency (JICA)²⁶ for the Port Vila Lapetasi International Multi-Purpose Wharf Development Project in Vanuatu. (The terms and amounts of the loan are shown in Table 4.).

Table 4. Port Vila Lapetasi International Multi-Purpose Wharf Development Project, terms and amounts of loan						
Project title	Amount (million yen)	Annual interest rate (%)		Repayment (years)	Grace Period (years)	Procurement
		Project	Consulting services			
The Port Vila Lapetasi International Multi-Purpose Wharf Development Project	4,945	0.55	0.01	40	10	General Untied

85. Private sector financing of port development is largely confined to minerals companies, for example, the Prony Bay Port, New Caledonia, of the Goro nickel and cobalt project of Vale Nouvelle-Calédonie and the Lihir port facilities of the goldmine of Newcrest Mining Limited on Niolam Island, New Ireland Province, PNG. (In fact, the import of equipment and provisions and the exports of minerals have increased the demand for shipping services).

²⁵ The Solomon Islands Shipping and Marine Sector Study, February 1999 concluded that few wharves could be justified on economic viability criteria alone. As a result, they had developed a prioritisation methodology (see Annex A of the National Transport Plan) to identify priorities for wharf construction and rehabilitation projects.

²⁶ <http://www.jica.go.jp/english/news/press/2012/120613.html>

86. Public-private partnerships (PPPs) are also being used in countries of the Pacific. In the Federated States of Micronesia, the Pohnpei Port Authority²⁷ for example, "... operates its assets in a manner that can be defined as a Landlord Port model, wherein the infrastructure is leased to private operating companies and/or to industries such as fuel tank terminals and industrial processing plants. The lease to be paid to the Port Authority is usually a fixed sum per square meter per year, typically indexed to some measure of inflation. The level of the lease amount is related to the initial preparation and construction costs (e.g., land reclamation and quay wall construction). The private port operators (lessees) provide and maintain their own superstructure including buildings (e.g., offices, sheds, warehouses, Container Freight Stations, workshops). They also purchase and install their own equipment on the terminal grounds (e.g., quay cranes, forklift trucks, conveyor belts) as required by their scope of operations and customers. In Landlord Ports dock labor is employed by the private stevedore / terminal operators and the lease agreement operates for an extended period of usually between 10-25 years dependent upon the scope and size of operations and the investment required. As the Authority has a vested interest in the performance of stevedoring operations the agreement usually includes terminal and stevedoring performance rates which are benchmarked and tested regularly to ensure the port's customers are being serviced adequately. The combined land lease and stevedoring operating rights are then considered as a form of concession agreement rather than a land lease".

87. More recently in Fiji, Aitken Spence PLC from Sri Lanka acquire a majority stake in Ports Terminal Ltd., a subsidiary of Fiji Ports Corporation Limited and entered into an agreement with Fiji Ports Corporation Limited, to manage the cargo handling activities in the Ports of Suva and Lautoka for a concession period of 15 years.

88. Internationally, there is a trend towards engaging terminal operating companies on a concession basis to, amongst others, improve port efficiency.

4. Organizations providing technical assistance and ODA

89. There are a number of regional initiatives designed to provide technical assistance to Pacific Island Countries and Territories including the Pacific Infrastructure Advisory Centre -PIAC (see Box 5.) and members of the Council of Regional Organisations of the Pacific (CROP).²⁸

²⁷ Pacific Region Infrastructure Facility (PRIF), Federated States of Micronesia (FSM), Pohnpei Port Scoping Study October 2010

²⁸ The members of CROP include: Pacific Islands Forum Secretariat (PIFS); Pacific Islands Forum Fisheries Agency (PIFFA); Pacific Islands Development Programme (PIDP); Secretariat for the Pacific Community (SPC); Secretariat of the Pacific Regional Environment Programme (SPREP); South Pacific Tourism Organisation (SPTO); University of the South Pacific (USP); Pacific Power Association (PPA); and Pacific Aviation Safety Office (PASO)

90. In addition a number of organizations are providing ODA including: Asian Development Bank (ADB), the World Bank (WB), International Finance Corporation (IFC), the European Investment Bank (EIB), the Australian Agency for International Development (AusAID), the European Commission (EC), Agence Française de Développement (AFD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Japan International Cooperation Agency (JICA), the New Zealand Government via the NZ Aid Programme (NZMFAT).

Box 5. The work of PIAC and PRIF

The Pacific Infrastructure Advisory Centre (PIAC) provides technical assistance for advisory and project preparatory support to partner countries. This practical support comes in the form of: analytical studies and research, policy advice, preparation of technical assistance (TA) and investment proposals, asset and utility management, capacity building and institutional strengthening support, and coordination and harmonisation of external assistance provided by PRIF²⁹ partners and regional organisations.

TA projects completed by PIAC include: Pohnpei Port Scoping Study; Tonga National Infrastructure Investment Plan; Samoa National Infrastructure Plan; Institutional Assessment of Road Construction and Maintenance Services, Tonga; Nauru Economic Infrastructure Strategy and Investment Plan; Tuvalu Infrastructure Strategy and Investment Plan; Scoping Study for Nauru Port Development; and Honiara Port Scoping Study, Solomon Islands.

91. Delegations may wish to apprise the Meeting on their existing and planned sources of funds (including private sector participation – PPPs) for financing ports serving international shipping and ports serving domestic shipping.

92. They may also wish to apprise the Meeting of the extent to which user charges are employed to cover capital and/or operating costs of wharves and ports.

²⁹ The Pacific Region Infrastructure Facility (PRIF) is a multi-partner investment coordination and technical facility. It was initiated in 2008 by the Asian Development Bank (ADB), the Australian Agency for International Development (AusAID), the New Zealand Government via the NZ Aid Programme (NZMFAT), and the World Bank Group (WBG), including the International Finance Corporation (IFC). The European Commission (EC) and the European Investment Bank (EIB) became members in 2010.

C. Navigational aids

93. In many places in the Pacific, aids to navigation are often limited or lacking effective 24/7 all-weather operations. The Sailing Directions for the Pacific³⁰ indicate, for example, that “Beacons around the coasts of <country name> are frequently destroyed or damaged by heavy weather. When this occurs, it may be some time before the aids are repaired or replaced. Also, it may not be possible to rebuild the aid in its exact charted position. Mariners are advised to use caution”.

94. A number of projects with a navigational aids component have been funded by ADB or the World Bank in the Pacific including PNG, Solomon Islands and Tonga.

95. In PNG, ADB funded a Rehabilitation of the Maritime Navigation Aids System Project which was signed in 2000. The Project Validation Report³¹ noted that at the time of the project appraisal, “about half of the population was living in the coastal provinces, most of them in conditions of extreme isolation, deprived of basic social services and economic opportunities. The delivery of traded goods, education, and health services all depended heavily on water transport. Integration of the coastal communities with the national economy required a major improvement in the frequency, reliability, and safety of coastal maritime transport by commercial vessels and smaller private craft. A major constraint to this development was the poor and deteriorating level of navigational services provided by the public sector in all coastal areas. Many of PNG's navigational aids had deteriorated from lack of maintenance, weather, volcanic damage, and vandalism. As a result, 70 out of 166 navigational aids were not operational at the time of project appraisal. Most of these were located on critical shipping routes”.

96. Amongst the impacts, the project was expected to:

- provide improved transportation services at a lower cost and lower risk;
- improve access to markets in adjacent communities and on other islands;
- improve distribution of goods;
- improve access to social services, especially health and education; and
- generate income opportunities in remote and impoverished coastal rural areas.

³⁰ Pub. 126, Sailing Directions (Enroute) for Pacific Islands, Ninth Edition, 2010 (corrected to October 2012) published by the US National Geospatial Intelligence Agency (NGA).

³¹ <http://www.adb.org/sites/default/files/in126-11.pdf>

97. In 2012, it was reported that “The operational status of the nav aids provided by the previous project is generally good.”³²

98. In 2003, the National Maritime Safety Authority Act was promulgated establishing the National Maritime Safety Authority (NMSA) as the agency responsible for the maintenance and operation of navigational aids. One of the innovations introduced by NMSA was to establish community lighthouse committees (CLCs) at all navigational aid sites to monitor lights, provide security, and conduct basic maintenance.

99. In 2011, funds were also allocated for rehabilitation and construction of 63 day markers along the coastal waters of Central, Milne Bay, Oro, Morobe, Madang East and West New Britain. Another 99 navigational aids will be replaced and 33 new aids installed under the recently signed ADB Maritime and Waterways Safety Project.

100. In the Solomon Islands, the Maritime Safety Administration Act 2009, amongst others, established the Solomon Islands Maritime Safety Administration (SIMSA), one of whose functions is the regulation and operation of navigational aids.

101. The World Bank’s Tonga Transport Sector Consolidation Project³³ included an element on replacement and/or upgrading of navigation lights and terminal lighting required for safe operation of all inter-island shipping. In justifying the project, it was noted that “most existing navigation lights on inter-island routes are currently non-functional and on some outer islands with difficult access and large swells (Niufo’ou and Niuatoputapu) adequate navigational indicators are not currently in place. In many locations, reef hazards are not identified adequately on maritime charts”.

102. Benefits of the project were noted as being:

- Improved safety of maritime navigation and berthing
- Compliance with basic IMO guidelines for safe navigation
- Improved reliability of access to outer islands
- Reduced ship hull damage during adverse weather
- Improved safety and efficiency of handling for all cargo
- Improved security and handling of hazardous cargos
- Improved handling of refrigerated cargo

³² ADB, Proposed Loan, PNG - Maritime and Waterways Safety Project, Report and Recommendation of the President to the Board of Directors, Project Number: 44375, November 2012

³³ http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2008/06/19/000333038_20080619234748/Rendered/PDF/428890PAD0P0961ly10IDA1R20081020811.pdf

- Less spoilage of perishable goods
- Better segregation of passenger and freight access
- Readiness for arrival of new and larger ferry

103. Delegations may wish to apprise the Meeting on the challenges that they are facing in the provision of navigational aids as well as the ways that they are addressing the challenges in their existing and planned provision of navigational aids.

D. Regional hydrographical issues

104. The accuracy of charts in many areas of the Pacific is poor. The Sailing Directions for the Pacific³⁴ again noting, for example, that a particular feature "lies x miles [from] its charted position", that "Island shapes may not be accurate and not all are charted" or "the depths listed for the passes and lagoons of this atoll are derived from old sketch surveys. The passes should be entered only at slack water, under favourable light conditions, and with local knowledge".

105. Further, in one of its national reports, the Cook Islands, for example, stated that "the current state of nautical charting and the lack of coherent Maritime Safety Information (MSI) services may have a significant adverse impact on the Cook Islands economy as well as putting the safety of life at sea and protection of the marine environment at risk".³⁵

106. At the Second Meeting of the SOPAC Division, Noumea, New Caledonia, 3-5 November 2012, the Division's report on Emerging Issues and Opportunities noted that "The SOLAS convention requires all coastal States to ensure that hydrographic surveys are carried out and that nautical charts are published and kept up to date. Most nautical charts available for PICTs have not been updated since the Second World War, and some contain information dating back to the 19th century. Insufficient and outdated hydrographic information is a limiting factor in the development and safe use of the port, harbours, and coastal areas in PICTs".

107. It noted further that "SOPAC currently operates and maintains marine survey equipment worth approximately A\$1M, and routinely conducts several surveys per year for environmental or geosciences applications in member countries. SOPAC staff are not trained hydrographic surveyors, and the collected bathymetric data are not necessarily adequate for charting purposes."

³⁴ Ibid.

³⁵ Cook Islands National Report, 11 th South Western Pacific Hydrographic Commission Meeting Brisbane, Australia, 15 th -16 th February 2012.

108. A range of activities are currently planned in order to strengthen the capacity of SPC to meet internationally recognised hydrographical standards including five months training of an SPC staff member.

109. The International Hydrographic Organization (IHO) is an intergovernmental consultative and technical organization, established in 1921, with the object of coordinating the activities of national hydrographic offices; working towards the greatest possible uniformity in nautical charts and documents; adopting reliable and efficient methods of carrying out and exploiting hydrographic surveys; and developing of science in the field of hydrography and the techniques employed in descriptive oceanography.

110. The IHO has encouraged the establishment of Regional Hydrographic Commissions (RHCs) to coordinate hydrographic activity and cooperation at the regional level, the South-West Pacific Hydrographic Commission (SWPHC) being the body that covers most of the Pacific Islands. Members include Australia, Fiji, France, New Zealand, Papua New Guinea, Tonga, UK and USA; while Associate Members include Cook Islands, Kiribati, Niue, Palau, Solomon Islands and Vanuatu. SWPHC meets annually, the next Conference (twelfth) being scheduled for Port Vila, Vanuatu, 12-14 November 2013.

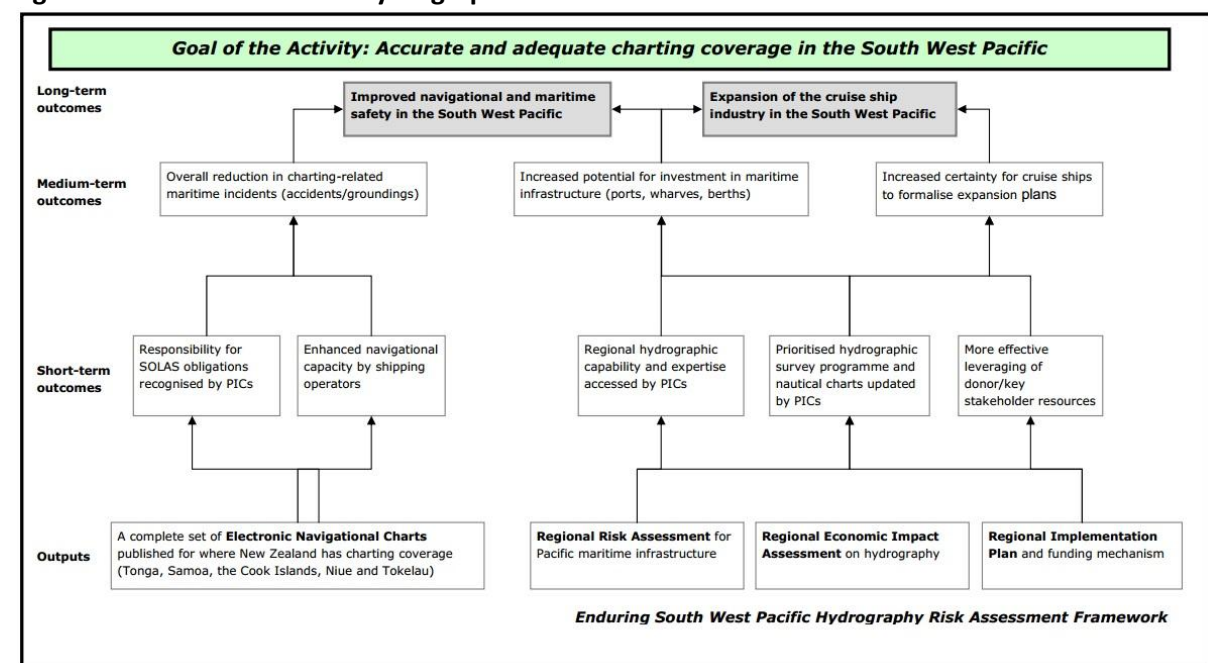
111. In order to improve the Region's capacity to conduct hydrographical surveying a Memorandum of Understanding (MoU) between the IHO and SPC was signed in April 2011. Under the MOU, future hydrographical survey activities carried out by SPC will be coordinated with the regional hydrographical charting authorities, the SWPHC, and member countries.

112. Land Information New Zealand (LINZ) and the Ministry of Foreign Affairs & Trade are also working on a South West Pacific Regional Hydrography Programme³⁶, a risk assessment of the adequacy and accuracy of nautical charts, primarily within the New Zealand area of chart coverage and extending to Kiribati, Vanuatu, Solomon Islands and Tuvalu. This two year project commenced in July 2012. The outputs of the Programme include (a) A complete set of Electronic Navigational Charts published for Tonga, Samoa, the Cook Islands, Niue and Tokelau; and (b) An enduring Hydrography Risk Assessment Framework established for South West Pacific maritime infrastructure that comprises: (i) A Regional Risk Assessment; (ii) An Economic Impact Analysis; and (iii) A Regional Risk Assessment Implementation Plan and funding mechanism agreed by donors/key stakeholders. Figure 8 shows the results framework for the project which includes the long-term outcomes of

³⁶ http://iho.int/mtg_docs/com_wg/CBC/CBSC10/CBSC10-15A-LINZ%20Activity%20Design%20Document%20-%20CBSC%20Jun%2012.pdf

improved navigational and maritime safety as well as expansion of the cruise ship industry in the South-west Pacific.

Figure 8. South West Pacific Hydrographical Risk Assessment – results framework



Source: Activity Design Document (ADD): South-West Pacific Regional Hydrography Programme

http://iho.int/mtg_docs/com_wg/CBC/CBSC10/CBSC10-15A-

<LINZ%20Activity%20Design%20Document%20-%20CBSC%20Jun%202012.pdf>

113. Delegations may wish to apprise the Meeting of the challenges that they are facing in providing adequate navigational charts.

IV. Sustainable maritime transport

A. Maritime transport facilitation

114. Members of the International Maritime Organization (IMO) adopted in 1965 the Convention on Facilitation of International Maritime Traffic, the so-called FAL Convention. The convention entered into force on 5 March 1967 and has been amended in 2002, 2005 and 2009. As of 31 December 2010, 115 of the 173 members of the IMO had acceded to the FAL Convention. To date, 5 of the 14 Pacific Island Countries that are members of IMO have acceded to or ratified the Convention (see Table 5). With this convention, members aimed at facilitating maritime transport by simplifying and minimizing the formalities, data requirements and procedures associated with arrival, stay and departure of ships engaged in international voyage. To this end the Convention contains standards and recommended practices. Its main contribution lies with the acceptance of a

set of models for standardized facilitation forms for ships to fulfil certain reporting formalities when they arrive in or depart from a port.

Table 5. Status of accession to Convention on Facilitation of International Maritime Traffic, 1965	
Country	x=Accession, ratification etc
Cook Islands	
Fiji	x
Kiribati	
Marshall Islands	x
Micronesia (Fed. States of)	
Nauru	
Niue	
Palau	
Papua New Guinea	
Samoa	x
Solomon Islands	
Tonga	x
Tuvalu	
Vanuatu	x
http://www.imo.org/About/Conventions/StatusOfConventions/Pages/Default.aspx	

115. In its Annex, the FAL Convention contains "Standards" and "Recommended Practices" on formalities, documentary requirements and procedures which should be applied on arrival, stay and departure to the ship itself, and to its crew, passengers, baggage and cargo.

116. The IMO Standardized Forms (FAL 1-7) Standard 2.1, lists the documents which public authorities can demand of a ship and recommends the maximum amount of information and number of copies which should be required. IMO has developed standardized forms for seven of these documents. They are the:

- IMO General Declaration
- Cargo Declaration
- Ship's Stores Declaration
- Crew's Effects Declaration
- Crew List
- Passenger List
- Dangerous Goods

117. Two other documents are required under the Universal Postal Convention and the International Health Regulations.

118. The general declaration, cargo declaration, crew list and passenger list constitute the maximum information necessary. The ship's stores declaration and crew's effects declaration incorporate the agreed essential minimum information requirements.

119. Delegations may wish to apprise the Meeting of their experiences in implementing the FAL Convention as well as the challenges that they are facing in its implementation.

B. Trade facilitation issues in the Pacific

120. The section on “Trading across Borders” of the World Bank/ IFC Doing Business, 2012 shows that while Pacific Island Countries (with a couple of exceptions) require a similar number of documents to import and export goods as say Australia or New Zealand, they take two to three times as long (20 to 30 days compared with 10 days) to complete the documentation process (see Table 6).

Table 6. World Bank/IFC Doing Business, Trading across Borders, 2012

Country	Trading across borders (rank)	Documents to export (number)	Time to export (days)	Cost to export (US\$ per container)	Documents to import (number)	Time to import (days)	Cost to import (US\$ per container)
New Zealand	27	7	10	855	5	9	825
Australia	30	6	9	1060	5	8	1119
Marshall Islands	66	5	21	945	5	25	970
Tonga	77	7	20	775	6	24	775
Kiribati	85	6	21	1120	7	21	1120
Solomon Islands	86	7	24	1030	5	21	1237
Samoa	96	7	27	820	7	31	848
PNG	99	7	26	664	9	29	722
Micronesia	106	5	30	1295	6	30	1295
Fiji	113	10	22	655	10	23	635
Palau	124	6	29	1070	10	33	1030
Vanuatu	128	7	21	1690	8	20	1690
Note: Cost measures the fees levied on a 20-foot container in U.S. dollars. All the fees associated with completing the procedures to export or import the goods are taken into account. These include costs for documents, administrative fees for customs clearance and inspections, customs broker fees, port-related charges and inland transport costs. The cost does not include customs tariffs and duties or costs related to sea transport. Only official costs are recorded.							

121. Another indicator of the efficiency of a country's trade facilitation measures is the World Bank's Logistics Performance Index. In 2012, Fiji, Solomon Islands and PNG ranked 123rd, 126th and 128th respectively (see Table 7).

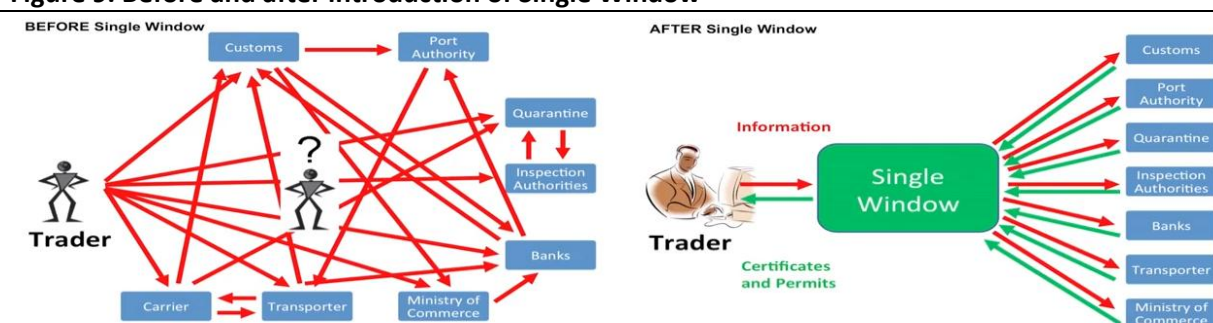
Table 7. World Bank - The Logistics Performance Index and Its Indicators, 2012³⁷

Country	LPI Rank	LPI Score	Customs	Infrastructure	International shipments	Logistics competence	Tracking & tracing	Timeliness
Australia	18	3.73	3.6	3.83	3.4	3.75	3.79	4.05
New Zealand	31	3.42	3.47	3.42	3.27	3.25	3.58	3.55
Fiji	123	2.42	2.07	2.22	2.41	2.18	2.48	3.12
Solomon Islands	126	2.41	2.37	2.03	2.44	2.14	2.39	3.04
Papua New Guinea	128	2.38	1.98	2.2	2.34	2.18	2.51	3.01

122. Inefficient logistics can have a significant impact on export earnings and import costs and consequently, it is an issue that needs to be addressed.

123. One means of addressing the issues and the concomitant costs that they impose is to adopt the Single Window concept. This refers to a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfil all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once (see Figure 9).

Figure 9. Before and after introduction of Single Window



Source: ESCAP < http://www.youtube.com/watch?feature=player_embedded&v=bycfR-dt4bE#!>

³⁷ The Logistics Performance Index overall score reflects perceptions of a country's logistics based on efficiency of customs clearance process, quality of trade- and transport-related infrastructure, ease of arranging competitively priced shipments, quality of logistics services, ability to track and trace consignments, and frequency with which shipments reach the consignee within the scheduled time. The index ranges from 1 to 5, with a higher score representing better performance.

124. The benefits for government and trade of Single Window are shown in Box 6. Cost savings can also be significant with, for example, Kenya Ports Authority estimating savings of around \$100 per full container from reduced trade transaction costs through reductions in delays, inefficiencies, corruption, manual documents/paperwork, cost of capital (JIT Concept), demurrage and improved space utilization and increased capacity utilization at ports.

Box 6. Benefits of Single Window

Benefits for government

- More effective and efficient deployment of resources
- Correct (and often increased) revenue yield
- Improved trader compliance
- Enhanced security
- Increased integrity and transparency

Benefits for trade

- Cutting costs through reducing delays
- Faster clearance and release
- Predictable application and explanation of rules
- More effective and efficient deployment of resources
- Increased transparency

125. Delegations may wish to apprise the Meeting of the challenges they are facing in facilitating trade including the steps that they are taking to introduce Single Window.

C. Environmental aspects of maritime transport

1. MARPOL and management of wastes

126. Under the heading of “Management of Wastes” of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States³⁸, one of the national actions is to “Establish port reception facilities for the collection of waste in accordance with annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78).” In addition, one of the actions at the international level is to “Assist in the implementation of monitoring and pollution prevention programmes and the establishment of port reception facilities for the collection

³⁸ Report of the Global Conference on the Sustainable Development of Small Island Developing States Bridgetown, Barbados, 26 April-6 May 1994 (A/CONF.167/9 United Nations publication Sales No. 94.I.18).

of wastes in accordance with annex V of MARPOL 73/78.”³⁹ (see Box _ International Convention for the Prevention of Pollution from Ships (MARPOL)).

Box 7. International Convention for the Prevention of Pollution from Ships (MARPOL)

The Convention includes regulations aimed at preventing and minimizing pollution from ships - both accidental pollution and that from routine operations - and currently includes six technical Annexes:

Annex I Regulations for the Prevention of Pollution by Oil (entered into force 2 October 1983). It covers prevention of pollution by oil from operational measures as well as from accidental discharges.

Annex II Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (entered into force 2 October 1983). Details the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk.

Annex III Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force 1 July 1992). Refers to International Maritime Dangerous Goods Code (IMDG Code) and Annex III substances.

Annex IV Prevention of Pollution by Sewage from Ships (entered into force 27 September 2003) Contains requirements to control pollution of the sea by sewage; the discharge of sewage into the sea is prohibited, except when the ship has in operation an approved sewage treatment plant or when the ship is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land; sewage which is not comminuted or disinfected has to be discharged at a distance of more than 12 nautical miles from the nearest land.

Annex V Prevention of Pollution by Garbage from Ships (entered into force 31 December 1988) Deals with different types of garbage and specifies the distances from land and the manner in which they may be disposed of; the most important feature of the Annex is the complete ban imposed on the disposal into the sea of all forms of plastics.

Annex VI Prevention of Air Pollution from Ships (entered into force 19 May 2005) Sets limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances; designated emission control areas set more stringent standards for SO_x, NO_x and particulate matter. (Additional technical and operational energy efficiency measures to reduce the amount of greenhouse gas emissions from ships (expected to enter into force on 1 January 2013)).

³⁹ See Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships (United Nations, Treaty Series, vol. 1340, No. 22484), p. 263.

2. PACPLAN: Pacific islands regional marine spill contingency plan

127. There are a number of agreements, conventions, instruments, policies and other initiatives that require countries to work co-operatively to address marine pollution and protect the marine environment. At the international level these include: the United Nations Convention on Law of the Sea (UNCLOS), the International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC 90) and the Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances 2000 (OPRC HNS) Protocol. At the regional level they include the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (the Noumea Convention 1986) and associated Protocols.

128. The Secretariat of the Pacific Regional Environment Programme (SPREP) in collaboration with Members has developed a revised draft of the Pacific Islands Regional Marine Spill Contingency Plan (PACPLAN). PACPLAN was originally developed in 2000, and underwent extensive review and modernisation in 2012.

129. The PACPLAN is a document that provides the framework for cooperative responses to major marine spills in the Pacific islands region, including broad aims and objectives, underlying spill response philosophies and priorities, roles and responsibilities of relevant organizations, regional and international linkages and mechanisms for accessing regional and international assistance. The revision has been carried out with funding from the International Maritime Organisation (IMO).

130. During the Meeting, a representative from SPREP will apprise participants of the updated PACPLAN: Pacific islands regional marine spill contingency plan, which is to be submitted for endorsement at the 24th SPREP Meeting in September 2013.

131. Delegations may wish to apprise the Meeting of the challenges that they are facing in providing port reception facilitation for the collection of waste from ships.

D. Ship financing

132. At the core of ship financing is the collateral offered by the shipowner. The main sources of collateral being the earnings of the ship, the asset value of the ship and the owner's balance sheet. However, as considered in Chapter I on the Production-Transport Nexus, inter-island shipping can be characterized by low profit levels, ageing fleets, inadequate maintenance, inability to attract seafarers and qualified shipping company management staff, low productivity, poor service quality and compromised safety standards. Each one of these factors has a direct impact on the earnings of the ship or its asset value and consequently a shipowner's ability to secure finance for their ships.

133. An ESCAP study in 1997⁴⁰ noted that “Many domestic shipping operators, particularly small companies operate on very small profit margins thus making it virtually impossible to accumulate sufficient capital to finance new tonnage. Their capacities to borrow sufficient funds from commercial sources at reasonable rates of interest are similarly handicapped. They are therefore forced onto the second hand (or more often third or fourth hand) market; to purchase old ships which are frequently of unsuitable size and type for the trade in which they are to be engaged.

134. Examples of this process are numerous and instances are now occurring of such old and unsuitable vessels, some over 30 years old⁴¹, being passed on from country to country within the region. Domestic shipping services are therefore moving into a downward spiral with ever older ships carrying out progressively more inefficient and sometimes unsafe operations.”

135. In common with the financing of maritime infrastructure, the principal sources of funds for capital expenditures on ships include public sector budget (current revenues or public borrowing), official development assistance (ODA - including concessionary loans and grants), the private sector (including banks) and combinations of these sources.

136. In a number of countries of the Pacific, there are government owned vessels that are used to carry project cargo or service routes that are not commercially viable. For example, the Government Shipping Services in Fiji has 14 vessels (of which 6 were reported as operational in 2009).⁴² In 2011, it also purchased the MV Rogovoka II (a second hand navigational tender vessel) from Malaysia for a reported FJD 1 million. This amount was from the Government budget.

137. In other cases, vessels have been acquired through ODA, especially from JICA. Vessels include the three Samoan ferries MV Lady Naomi, MV Lady Samoa II and MV Lady Samoa III and the Tongan ferry MV 'Otuanga'ofa. JICA has also undertaken a design study for a 525 DWT cargo passenger vessel and a 300 DWT landing craft vessel for Marshall Islands.

138. An example of bank finance is featured in the 2007 Annual Report of the Fiji Development Bank which showcased the success story of its financing of the Bligh Water Shipping's MV Suilven.

⁴⁰ ESCAP, Study on Shipping and Port Capacities in the Island Developing Countries, Report of the Study on Policy Options for Replacing Ageing Ships in the Pacific Island Fleets, ST/ESCAP/1835, 1997.

⁴¹ Note that the policy of the UK Government with respect to ferries in Scotland is :“Our policy will be to replace vessels once they reach the end of their working lives. This is around 30 years”, Scottish Ferry Services: Ferries Plan (2013-2022), Chapter 2: How should ferries be funded and procured?
<http://www.transportscotland.gov.uk/strategy-and-research/publications-and-consultations/j254579-03.htm>

⁴² The Fiji Times ONLINE, Ships have big bill - Six of 14 operational, Thursday, September 2009 <
<http://www.fijitimes.com/story.aspx?id=129618> >

139. Other shipowners, have had to rely on their balance sheets. For example, Mr Leo Smith owner of Consort Shipping was reported as saying that "Some ship owners who have provided ... essential services in the past 20-50 years, have been only being able to float because lending institutions have accepted mortgage on real estate, which current operators inherited from their parents. In my case the property I inherited from my father when he died 35 years ago is still mortgaged to the financial institution that is still willing to finance our company."⁴³

140. Delegations may wish to apprise the Meeting of the challenges that they are facing in ship finance as well as the means by which they are addressing the challenges.

E. Meeting the shipping industry's fuel demand

141. In 2012, the Pacific spent in excess of USD 1.3 billion importing fuels, and has the highest petroleum fuel dependency of any sub-region in the world. On average, Pacific Island countries spend ten per cent of their Gross Domestic Product (GDP) on petroleum fuel imports, a large proportion of which is consumed by the transport sector. This heavy reliance on fuel imports exposes the islands to a high degree of price volatility and takes away resources from important development priorities.

142. There are a number of initiatives designed to address these issues including ESCAP's APEF2013 and SIDS DOCK.

143. The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), at its 67th session held in May 2011 in Bangkok, adopted the resolution entitled "Promoting regional cooperation for enhanced energy security and the sustainable use of energy in Asia and the Pacific." The key element of the resolution was the convening in 2013 of the Asian and Pacific Energy Forum (APEF 2013) at the level of energy ministers of ESCAP member States.

144. As part of the preparations for APEF 2013 a Subregional Consultation Meeting for the Pacific was held 8-9 October 2012 at Nadi, Fiji.

145. SIDS DOCK is another initiative among member countries of the Alliance of Small Island States (AOSIS) to provide the Small Island Developing States (SIDS) with a collective institutional mechanism to assist them transform their national energy sectors into a catalyst for sustainable

⁴³ The Fiji Times ONLINE, Shippers 'struggling', Monday, November 05, 2007 < <http://www.fijitimes.com/story.aspx?id=73683> >

economic development and help generate financial resources to address adaptation to climate change.⁴⁴

146. SIDS DOCK's goal is to facilitate the restructuring of the small islands' energy mix by increasing energy efficiency by 25 per cent (2005 baseline), by generating a minimum of 50 per cent of electric power from renewable sources and a 20-30 per cent decrease in conventional transportation fuel use by 2033.

147. Delegations may wish to apprise the Meeting of the means that they are using to address the Pacific's energy challenges.

F. Regional capacity and compliance

148. Over the last four years, there have been three ferry incidents that resulted in fatalities (Uean Te Raoi II (off the island of Maiana, Kiribati), Princess Ashika (off Tonga) and Rabaul Queen (off Papua New Guinea)). These accidents prompted the convening of a regional seminar on operational safety of domestic ferries and non- convention vessels co-hosted by SPC and IMO in Suva, Fiji from 7-11 December 2009, and a Pacific Forum on Domestic Ferry Safety again co-hosted by SPC and IMO in Suva, Fiji, from 30 October to 2 November 2012. The outcome of the 2012 Forum was a twelve point Action Plan which amongst others "Encourage the implementation and enforcement of applicable provisions of conventions/regulations, including adopting the Pacific Islands Maritime Laws (PIMLaws – SPC model legislation and regulations), into national legislation as appropriate with a view to ensure harmonisation of maritime legislation within the region."

149. This session will consider the Pacific Island Maritime Laws (which superseded the South Pacific Maritime Code⁴⁵) as well as regional capacity to implement and enforce the relevant conventions and regulations.

150. Delegations may wish to apprise the Meeting of the challenges that they are facing in introducing applicable provisions into national legislation.

⁴⁴ It is called SIDS DOCK because it is designed as a "DOCKing station," to connect the energy sector in SIDS with the global market for finance, sustainable energy technologies and with the European Union (EU) and the United States (US) carbon markets, and able to trade the avoided carbon emissions in those markets. Estimates place the potential value of the US and EU markets between USD 100 to 400 billion annually. < <http://sidsdock.org/> >

⁴⁵ South Pacific Maritime Code, South Pacific Bureau for Economic Co-operation (now Secretariat of the Pacific Community), Suva, Fiji, 1986.

V. Issues for consideration

A. Introduction

151. While this paper has considered individual maritime issues such as traffic volumes, shipping services, ports, navigational aids and charts, safety, environmental impacts, fuel and financing, the discussion has thrown-up strong interrelationships between the issues.

152. In other words, all of these issues need to be considered as being elements of larger maritime systems, requiring a programmatic approach so that they can be addressed comprehensively.

B. Programmes for domestic and international maritime transport systems

153. While there are some commonalities between the domestic maritime transport systems and the international transport system serving Pacific Island Countries and Territories, one programme for domestic shipping, one programme for international shipping and a third programme for cross-cutting issues would appear to be appropriate.

154. Components of the domestic shipping programme would include:

- Integrating supply chain (including maritime transport) considerations into provincial, island and industrial development plans (alternatively integrating livelihood production activities into domestic maritime transport development plans);
- Inventory of ships and shipping services (***)⁴⁶;
- Monitoring of the adequacy of domestic shipping services (***)⁴⁷;
- Public Service Obligations (PSOs) (where operators, for commercial reasons, would not provide services or services of an adequate quality);
- Ship finance;
- Inventory of domestic marine infrastructure (***)
- Development, rehabilitation and maintenance of domestic maritime infrastructure including ports, approach channels and navigational aids (primarily provided for domestic shipping);

⁴⁶ The three asterisks (***) indicate elements with obvious information and data requirements.

⁴⁷ Measures of service adequacy include: offering appropriate capacity (relative to passenger and freight demand), efficient, frequent (voyages per unit time – per day, week, month, year as appropriate), reliable (regular – small variations in times between successive arrivals of boats, and punctual – little variation from scheduled arrival and departure times) affordable (which may depend on the income-generation potential), safe, and environmentally sound and compliant inter-island shipping services with relatively short transit times (reflecting more direct rather than circuitous route structures).

- Financing development, rehabilitation and maintenance of domestic maritime infrastructure;
- Navigational aids;
- Navigational charts;
- Fuel and fuel efficiency;
- Domestic shipping (including ferry) safety;

155. Components of the international shipping programme would include:

- Monitoring of the adequacy of international shipping services (especially for Smaller Island States (SIS)) (***);
- Identifying prospective shipping service structures, including the conditions necessary for the services to be viable (especially for Smaller Island States (SIS));
- Developing policies that ensure adequate international shipping services (which may or may not include regulation of entry into international trade);
- Benchmarking, monitoring and improving port performance (***);
- Benchmarking, monitoring and improving trade and transport efficiency (***);

156. Cross-cutting issues programme would include (elements that are common to both domestic and international shipping that are not included in either of the individual programmes):

- Navigational aids (not included in the domestic shipping programme);
- Navigational charts (hydrographical services) (not included in the domestic shipping programme);
- Search and rescue;
- Response to oil and chemical spills;

157. In some of the above programme areas and in some countries, significant progress has been made in addressing the issues outlined in this paper. Development partners including international financial institutions, agencies and bilateral donors have also made, and continue to make, significant contributions towards this progress.

158. Examples at the national level include, the Maritime Safety Authority of Fiji (MSAF formerly Fiji Islands Maritime Safety Administration – FIMSA), Papua New Guinea National Maritime Safety Authority (NMSA) and Solomon Islands Maritime Safety Administration (SIMSA); the Maritime and Waterways Safety Project in PNG, the Domestic Maritime Support (Sector) Project in the Solomon Islands and the Tonga Transport Sector Consolidation; project support by various international and bilateral agencies, including the technical assistance of PIAC and funding support of PRIF.

159. At the regional level they include the former Regional Maritime Programme (RMP) of the Secretariat of the Pacific Community (SPC) which has, since 1987, been providing technical advice and capacity-building services in the areas of maritime law and legislation, maritime policy, maritime training, maritime security, compliance monitoring, strengthening national maritime institutions, upgrading maritime training curricula, information and knowledge dissemination and the development of a regional integrated maritime database. And more recently, the Framework for Action on Transport Services (FATS), the Transport Services Implementation Plan (TSIP) and the Economic Development Division Strategic Plan - 2012-2017 as well as the Forum Principles on Regional Transport Services, the Pacific Plan for Strengthening Regional Cooperation.

160. The purpose of a programmatic approach would not be to replace any of these initiatives and projects. The purpose would be to bring them together so that governments could identify all the issues that need to be addressed and then focus on the comprehensive approach necessary to attract adequate resources for development of the maritime transport system.

161. A document which reflects some of the above considerations is the Solomon Islands National Transport Plan⁴⁸ which under Maritime Transport considers Shipping Services and Maritime Infrastructure. Under Shipping Services, it states that: “To assist in the development of regular, reliable and cost-effective shipping services throughout the country the Government will:

- retain the system of the provision of shipping services by private operators;
- expand the system of franchised shipping services to provide financial assistance to private sector ship owners to operate regular, frequent and safe services to outer islands where commercial services are not commercially viable;
- explore options for improving access to finance for newer, more modern and appropriate vessel purchase by private operators;
- enable the provision of improved ship repair facilities at strategic locations in Solomon Islands;
- seek development partner assistance to provide training in appropriate small business management and planning;
- encourage improvements in the condition of vessels by empowering SIMSA to apply regulations relating to ship seaworthiness more rigorously.”

162. Under the heading of Maritime Infrastructure, “the Government will:

⁴⁸ Solomon Islands Government, National Transport Plan, 2011-2030, Final, October 2010

- provide the necessary annual funding from the consolidated budget for the maintenance of wharves and navigational aids;
- adopt a policy of higher quality construction and rehabilitation works to improve ‘whole of life’ costs of wharves;
- continue with the existing programs of wharf construction and rehabilitation and navigational aid provision;
- utilise development partner funding, where available, for the wharf rehabilitation and construction program until Government funds are available; and
- conduct surveys to provide up to date information on the current and potential wharf and anchorage traffic and confirm the condition of all wharves.”

C. Information and data requirements for informed decision making and policy formulation

163. Theme 6 of the Framework for Action on Transport Services 2011 – 2020 relates to Transport data, information and knowledge. The rationale for the theme being that transport sector planning and development within PICTs and the region generally lacks the benefit of access to current and reliable transport data and information, which forms the basis for effective planning and decision-making in the transport sector.

164. In the above indicative programmes, three asterisks (***) were placed after some of the programme elements. These elements were ones with obvious information and data requirements.

165. In preparation for the Meeting, countries have been requested to prepare background papers in two parts, the first for domestic shipping and the second for international shipping, taking into account:

- Port infrastructure.
- Vessel calls (number, frequency, reliability, fares and freight rates).
- Numbers of passengers, cargo tonnages, commodities handled and TEUs loaded and unloaded.
- Fleet size, age and type.
- Shipping service network.
- Government support and other interventions (franchises, route licensing, subsidies, Commissions and other interventions).
- Challenges and opportunities in the provision of shipping services

166. Clearly, the availability of this type of information would be an important contribution to the programmatic approaches indicated above.

Annex

A. United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

1. The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) is the regional development arm of the United Nations for the Asia-Pacific region. ESCAP is made up of 53 members and 9 associate members and has a geographical scope that stretches from Turkey in the west to the Pacific island nation of Kiribati in the east, and from the Russian Federation in the north to New Zealand in the south.

2. ESCAP has four subregional offices including one for the Pacific located in Suva, Fiji.

3. There are 21 members and associate members (indicated (A)) of ESCAP in the Pacific including: Australia, American Samoa (A), the Cook Islands (A), Fiji, French Polynesia (A), Guam (A), Kiribati, the Marshall Islands, Federated States of Micronesia, Nauru, New Caledonia (A), New Zealand, Niue (A), the Northern Mariana Islands (A), Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

4. ESCAP has seven substantive divisions namely: Macroeconomic Policy and Development; Trade and Investment; Transport; Social Development; Environment and Sustainable Development; Information and Communications Technology and Disaster Risk Reduction; and Statistics.

5. Currently, the activities of the Transport Division are being undertaken within the framework of the Regional Action Programme for Transport Development in Asia and the Pacific, phase II (2012-2016) endorsed at the 68th session of the Commission (attended by, amongst others, twelve Pacific Island Members).

6. The Regional Action Programme contains ten substantive areas of action including: (a) Policy guidance at the ministerial level; (b) Transport infrastructure development; (c) Transport facilitation; (d) Transport logistics; (e) Finance and private sector participation; (f) Sustainable transport development; (g) Road safety; (h) Transport and the Millennium Development Goals; (i) Inter-island shipping; and (j) Connecting subregional transport networks. This Meeting is being convened under the substantive area Inter-island shipping.

7. Recent Transport Division activities in which Pacific Island countries have participated included:

- ESCAP/KMI publication “Maritime Data: Pacific Island Developing Countries”, ST/ESCAP/2577, April 2010;

- KMI/ESCAP Joint Workshop on Port Tariff Setting Model for Pacific Island Countries, 13 July 2011, Bangkok, Thailand;
- The Ministerial Conference on Transport, Bangkok, 12-16 March 2012, where it considered a paper and information note prepared by the secretariat on inter-island shipping (including franchising of domestic shipping services, regional cabotage and regulation of entry into international trade);
- The First, Second and Third Asia-Pacific Ministerial Conference on Public Private Partnerships for Infrastructure Development held in Seoul (2007), Jakarta (2010) and Tehran(2012) respectively and the Seminar on the Development of an Integrated Transport and Logistics System in ASEAN Countries and the Pacific Subregion; and
- Seminar on Development of an Integrated Transport and Logistics system in ASEAN Countries and the Pacific Subregion, Bangkok, 21 to 23 Nov 2012.

B. Secretariat of the Pacific Community (SPC)

8. The Secretariat of the Pacific Community (SPC) is an international organisation that provides technical and policy advice and assistance, training and research services to 22 Pacific Island countries and territories. SPC works in a wide range of sectors with the aim of achieving three development outcomes – sustainable economic development, sustainable natural resource management and development, and sustainable human and social development. SPC's work programme is determined by members, and all of its regional initiatives aim to support members' national policies and plans.

9. In January 2010, the Economic Development Division (EDD) was established at SPC, with a particular focus on sustainable economic development in the energy, information and communication technology (ICT), and transport sectors. Following a review of SPC in 2012, the ICT functions of EDD shifted to the University of the South Pacific, leaving EDD to concentrate on energy and transport (maritime and aviation) sectors only.

10. Assistance offered by SPC's Economic Development Division focuses on soft infrastructure development and aims to create an enabling environment through capacity building/supplementation, institutional strengthening, development and implementation of policies, plans and regulatory frameworks, and regional coordination mechanisms.

11. SPC is the only regional agency dealing with maritime matters in the Pacific region and it is the implementing arm for IMO's Technical Cooperation Division activities in the region. The role of SPC's Transport Programme has expanded considerably, now that shipping and aviation issues, in particular those of smaller island states (SIS), are part of its core focus. In addition to this function,

SPC has a major regional role to play in assisting PICTs to comply with international and regional maritime instruments and ensure that there are systems and structures in place to align national frameworks with these ratified requirements.

12. The SPC Transport Programme focuses on delivering the following core regional services:

- provision of technical, legal and policy advice on transport issues;
- assistance to countries to maintain compliance with international maritime obligations;
- building capacity of PICTs to meet international maritime safety and security requirements and enhance transport services;
- monitoring and evaluation of transport development in the Pacific region;
- provision of transport statistics, information and networking; and
- provision of interagency coordination and secretariat services.

13. The Transport Programme also coordinates the implementation of the Framework for Action on Transport Services in collaboration with PICTs, regional maritime associations and development partners. The framework was endorsed by PICT transport ministers in April 2011 in New Caledonia.

C. Pacific Island Forum Secretariat (PIFS)

14. The Pacific Islands Forum Secretariat is based in Suva, Fiji. The Secretariat's mandate is delivered through the annual Leaders' Communiqués and high level ministerial meeting decisions. The Secretary General of the Forum Secretariat is permanent Chair of the Council of Regional Organisations in the Pacific (CROP). CROP brings together nine main regional organisations in the Pacific region.

15. In terms of Transport, the Forum Secretariat regards efficient coordinated transport as an important component of infrastructure development and economic growth in the Pacific region. Good transport links stimulate the economy, reduce costs for industry, facilitate access to social services, and help to overcome some of the barriers related to the movement of other goods and services, further encouraging growth in the region and improving quality of life.

16. Transport issues have been identified by Pacific Forum Leaders (most recently in the *Waiheke Declaration* of 2011) as a serious challenge for all countries in the region: services are often inadequate and roads, ships, and ports are poorly maintained. Furthermore, there remain gaps in supporting infrastructure (such as energy and ICT), legislation, and regulation, which hinder transport services and economic growth in the region.

17. Acknowledging such issues, the *Pacific Plan* lists “expediting fit-for-purpose solutions in the transport sector” as a key regional-level priority for Pacific countries to jointly work on. The Forum Secretariat is mandated to coordinate the implementation of the Pacific Plan, which is the region’s master strategy for strengthening regional cooperation and integration. The Plan, first adopted in 2005, intends to guide country, regional agency, and development partner actions at a regional level in support of “peace, harmony, security and economic prosperity, so that all [Pacific] people can lead free and worthwhile lives” (*Leaders Vision*, 2004). These regional actions should complement, but not supplant, national activities in areas best addressed at the country-level.

18. Implementation of the Pacific Plan is currently guided by priorities grouped under five themes: fostering economic development, improving livelihoods, addressing climate change, strengthening governance, and enhancing security. These priorities are expected to be updated following the outcome of the Pacific Plan Review 2013, which will provide guidance on improving regional priority setting processes and the implementation of activities at a regional level.

D. International Maritime Organization (IMO)

19. Currently, activities of IMO’s are being undertaken within Resolution A.1037(27) on Strategic Plan for the Organization (for the six-year period 2012 to 2017) of 22 November 2011.

20. As stated in the Strategy, the mission of the International Maritime Organization (IMO), as a United Nations specialized agency, is to promote safe, secure, environmentally sound, efficient and sustainable shipping through cooperation. This will be accomplished by adopting the highest practicable standards of maritime safety and security, efficiency of navigational and prevention and control of pollution from ships, as well as through consideration of the related legal matters and effective implementation of IMO’s instruments, with a view to their universal and uniform application.

21. IMO’s Integrated Technical Co-operation Programme (ITCP) for the Pacific Islands in 2012 2013 continues to focus on human resource and institutional capacity issues by strengthening the region's capacity to respond to changes in the maritime sector and to enable it to provide appropriate, accredited training to seafarers and the facilitation of maritime traffic, shipment and safe handling of dangerous goods and bulk cargoes. Strengthening the legal capacity of the national maritime authorities through the provision of the required technical assistance for the development of national maritime policies, as well as the drafting, updating and bringing into force primary and secondary maritime legislation is also a priority for the region. With regard to the protection of the marine environment, the programme will also focus on the ratification, implementation and

compliance with the MARPOL 73/78⁴⁹, AFS 2001⁵⁰, BWM 2004⁵¹ and OPRC 90⁵² Conventions amongst others, and the revision of the PACPLAN.

22. Addressing the Millennium Development Goals (MDGs) in the region in particular, the special shipping needs of Small Islands Developing States (SIDS) and Least Developed Countries (LDCs) in the Pacific Islands, mainly focus on hydrography and cartography. Furthermore, encouraging a partnership for progress ensures that activities in the region have a high impact within the limited resources available. Through IMO's regional partners, IMO has been able to promote its effectiveness by increasing general awareness of IMO's mandate and the ITCP, the ownership of the IMO technical assistance programmes by developing countries and regions and the synergies between recipients/donors/regional bodies and international organizations.

23. Examples of recent regional activities include:

- December 2011: Regional Forum on Domestic Ferry Safety held in Bali, Indonesia (Regional Forum on Domestic Ferry Safety: Bali Action Plan);
- November 2012: Pacific Forum on Domestic Ferry Safety held in Suva, Fiji, in collaboration with the Secretariat of the Pacific Community (SPC) (Pacific Forum on Domestic Ferry Safety: Suva Action Plan);
- August 2012: workshop on Particularly Sensitive Sea Areas (PSSAs), in collaboration with the Secretariat of the Pacific Regional Environment Programme (SPREP) and Australia's Maritime Safety Authority (AMSA);
- May 2012: workshop to assist Pacific Island member governments to meet their obligations on the safe transportation of dangerous goods and bulk cargoes by sea held in Suva, Fiji, in collaboration with SPC;
- October 2012: Regional training course on hydrographic survey, held in Suva, Fiji, in collaboration with SPC and the International Hydrographic Organization (IHO);
- October 2012: Oil spill training level 3 and coastal site sensitivity mapping training held in Apia, Samoa, in collaboration with SPREP; November 2012: Regional training seminar on the IALA Risk Management Tool Box, held in Sydney, Australia, in collaboration with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and AMSA; and

⁴⁹ International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978

⁵⁰ International Convention on the Control of Harmful Anti-fouling Systems on Ships

⁵¹ International Convention for the Control and Management of Ships' Ballast Water and Sediments

⁵² International Convention on Oil Pollution Preparedness, Response and Co-operation

- June 2013: 5th regional search and rescue workshop, held in Suva, Fiji, in collaboration with SPC.

24. In 2013, the following regional activities will be delivered:

- Regional training course for simulator instructors in accordance with the requirement of the STCW Convention, as amended;
- Regional workshop on MARPOL Annexes V and VI;
- Regional workshop on AFS Convention; and
- Regional training course in basic ENC and ENC production.