2023

Cook Islands Domestic Shipping Roadmap



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Contents

Contents	2
Executive summary	3
Objective	4
Background	4
Domestic shipping is important for sustaining isolated communities	4
The Cook Islands are geographically dispersed	4
The population in the Pa Enua has been in decline	5
Improving domestic shipping is a national policy priority	5
The untapped economic potential of the Pa Enua	7
Domestic shipping, economic growth, and sustainable communities in the Pa Enua	8
Problem definition	8
Uneconomic domestic shipping leads to unsatisfactory and costly services	8
Inadequate services lead to poor outcomes for the Pa Enua	9
An overview of domestic shipping in the Cook Islands	9
The current shipping situation remains short of expectations	10
Options and recommendations	12
Government should acquire suitable vessels.	12
Vessel specifications	13
A new build vs a used vessel	14
Service requirements	14
Operational models	15
Cost of service	16
Meeting the needs of the Pa Enua	17
Overall evaluation	18

Executive summary

Providing shipping services to small populations over large distances is at the core of the issues that afflict domestic shipping in the Cook Islands. Large distances mean the cost of providing services are high, while small populations result in low demand making it difficult for an operator to break even, let alone make a profit. This operating environment, coupled with high capital costs makes providing shipping services unattractive, resulting in an uncompetitive market with only a small number of operators. This has led to high prices and inadequate levels of service.

The lack of regular, reliable, safe, and affordable shipping services restricts the ability to provide essential life sustaining resources to the people and communities of the outer islands (Pa Enua). This also provides a barrier to economic growth.

Ensuring the Pa Enua has access to effective and efficient shipping services is a national priority for Government. This has led to interventions to improve services, primarily through the provision of subsidies, however this approach has had limited success. Government subsidies, combined with a shipping coordinator, have led to an increase in the frequency of domestic shipping services but have only had a marginal impact on service reliability and affordability, and a negligible impact on safety and compliance.

It is now time for Government to consider options for acquiring a vessel to ensure that a suitable, safe, and compliant certified vessel will be servicing the Pa Enua. The most suitable option would be for Government to obtain two vessels, less than 10 years old, configured to compliment each other and their proposed routes.

Operating these vessels through a public private partnership will likely result in the lowest operating costs, however a government run service will provide greater control over schedules and pricing and is the most likely to provide the shipping services needed to sustain the outer islands and promote economic growth. With Government's previous efforts to improve services having had only a limited impact by partnering with the private sector, it is time for Government to take on an operational role.

Implementing this approach over the short to medium term (1-5 years) will allow Government to immediately impact the service delivery to the Pa Enua. During this time valuable information can be obtained about inter-island shipping delivery. This information can be used to inform future decisions on vessels and operational models to ensure the long-term sustainability of the shipping services the Pa Enua needs to sustain themselves and thrive.

Objective

The objective of this Road Map is to provide an independent assessment of the current state of domestic shipping in the Cook Islands and short to medium term recommendations for improving the level of domestic shipping services.

Over the last 20 years a number of reports have assessed the shipping needs of the Cook Islands, identified issues, and proposed options for improvement. Government has implemented some recommendations, mostly relating to the provision of subsidies, and while these have had some success, they have not resulted in the level of service required to sustain and revitalise outer island communities.

This Road map draws on the findings of previous reports but considers more recently available information about the domestic shipping landscape in the Cook Islands, including the outcome of recent government initiatives.

Background

Domestic shipping is important for sustaining isolated communities

Domestic shipping plays a crucial role in the economic development and resilience of Pacific Island countries, which are challenged by vast ocean distances and isolation. To support sustainable communities, reduce barriers to economic growth and enhance population retention, it is necessary to provide reliable, efficient, safe, and affordable shipping services. Cargo shipping provides access to markets and essential goods, that are needed to sustain isolated communities.

The Cook Islands are geographically dispersed

The Cook Islands comprises fifteen islands spread over 2.2 million square kilometres. The fifteen islands are divided geographically into a Northern



and Southern group of islands. The islands are a geographically mix of sand cays, low-lying coral atolls, raised coral islands and small volcanic islands. The country's total land mass is 236.7 km.

The Northern group of islands consist of Palmerston, Suwarrow (uninhabited), Nassau, Pukapuka, Rakahanga, Manihiki and Penrhyn. The Northern Pa Enua are relatively isolated from the

Southern Pa Enua. The Southern group consists of Aitutaki, Manuae (uninhabited), Palmerston, Takutea, Atiu, Mitiaro, Mauke, Mangaia, and Rarotonga.

The population in the Pa Enua has been in decline

Te Kaveinga Tupu'anga iti Tangata - Cook Islands population policy 2022-2032, has provided the latest insights into demographic shifts in the Cook Islands noting: In general, the Pa Enua have had a decaying population since 1971 while Rarotonga has been gaining since 2001. As a result, the geographical distribution of the Cook Islands population has changed. Rarotonga's population has grown from 50 percent of the Cook Islands total in the early 1960s to 72 percent by 2021. As recently as 1981, the population of the Pa Enua made up 45 percent of the total; by 2021 this proportion had dropped to 28 percent.

By 2021, the Southern Pa Enua had lost 58 percent of its 1971 population. Mangaia had the largest decrease (77 percent) followed by Atiu (74 percent) and Aitutaki (37 percent). These three islands contributed over 80 percent to the drop in population up to 2021. Overall, the population of the Southern Pa Enua declined by 60 percent over the period 1971–2021.

The population of the Northern Pa Enua, declined by 55 percent between 1971 and 2021. Penrhyn and Pukapuka contributed most to the decline in the Northern Pa Enua with Penrhyn losing 64 percent of its population and Pukapuka 40 percent between 1971 and 2021.

As of 2021, several islands have resident populations below or just above 200 people. These include Mitiaro (152), Palmerston (25), Manihiki (203), Rakahanga (81) and Penrhyn (230). Reversing population decline in the Pa Enua is a major challenge to both the Government and the communities themselves.

The strong economic performance of the Cook Islands is driven mainly by Rarotonga. The large distances between Rarotonga and the Pa Enua, and the lack of regular, high quality and affordable transport services, including shipping, along with limited labour, water and entrepreneurship, has limited the economic opportunities and benefits for the Pa Enua (except for Aitutaki). In 2015, the median income in the Pa Enua was estimated at \$8,050.

Improving domestic shipping is a national policy priority

Due to the dispersed nature of the islands that make up the Cook Islands, transport links between the islands are always going to be of national significance. The Cook Islands possess several strategic documents that highlight the importance of domestic shipping to the nation's progress and overall welfare.

Te Ara Akapapa'anga Nui National Sustainable Development Agenda (NSDA) 2020+ 2021–2121: The Cook Islands National Development priorities are guided by the National Sustainable Development Agenda 2020+ (NSDA 2020+) which takes an extended outlook over 100 years, steering the Cook Islands towards a vision of wellbeing. This document sets out 15 pledges or Ta Tatou Aka'atinga which includes:

Pledge 9: To Tatou Akamana'anga – Our empowerment: We will create sustainable and safe communities where jobs, housing, comprehensive services, sustainable transport systems, the use of information and communication technology, and green/blue areas support economic, social and cultural wellbeing, as well as the wellbeing of the environment.

Te Ara Akapapa'anga Nui NSDA 2020+ Te Kaveinga iti – 5 years: This document sets short term targets on wellbeing to help achieve the longer-term goals set out in the NSDA 2020+ and includes indicators to measure progress over a 5 year time period.

Goal 3. Economy, Employment, Trade and Enterprise

Minimizing the barriers to doing business.

<u>Indicator 3.7 Cost of doing business and trade</u>: To reduce the cost of doing business in the Pa Enua, renewable and sustainable resources for sea transportation must be considered as a cost reduction strategy. This means changing our vessels to be greener and more energy efficient, which is environmentally and economically friendlier.

Goal 6. Connecting our Nation through Infrastructure, Transport and ICT Promote regular and reliable transport.

<u>Indicator 6.3 Transport connectivity index:</u> This indicator assesses the frequency and affordability of domestic air and shipping services against benchmarked standards. We aspire to improve transport services between our islands to ensure that all people in the Cook Islands have adequate and reliable transport via shipping and air links. These links are crucial to enhance the economic viability of the Pa Enua and connect our Cook Islands community.

Te Kaveinga Tupu'anga iti Tangata - Cook Islands population policy 2022-2032: The Cook Islands recently completed its first population policy which is a key priority of the National Sustainable Development Agenda 2020+ and the Economic Development Strategy 2030. Te Kaveinga Tupu'anga iti Tangata provides an official picture of the population situation and makes transparent the rationale for Government action to address population issues. The policy has a 10-year timeframe covering the period 2022–2032.

Policy goal 2: Halting and reversing the decline in population in the Pa Enua

This goal identifies the role of transportation for maintaining a stable population in the Pa Enua, noting the risk that: population decline in the Pa Enua will become a "vicious cycle", making population recovery difficult. The argument is that population decline increases the cost of transportation (due to less demand) and reduces the production of exportable goods (due to reduced supplies of labour), which again increases the per unit costs of transportation.

Supporting objectives for policy goal 2

Objective 2.9 Improved transport infrastructure (ports and airports) to increase access and reduce travel costs between Rarotonga and the Pa Enua (EDS 1.7–1.9)

Objective 2.16 Reduced essential or basic food prices in Pa Enua (excludes products of low nutritional value) (EDS 1.6)

Objective 2.17 Lower passenger fares and freight costs to Pa Enua by means of "discount" scheme (EDS 1.10)

Cook Islands Economic Development Strategy 2030: The Economic Development Strategy addresses cross-cutting economic issues, challenges and opportunities to achieve a vision of the economy in 10 years' time that will carry the Cook Islands into the future.

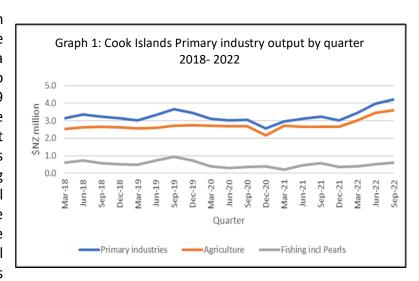
Objective 1: Improving equity and access for all. A more equitable Pa Enua can be achieved through reducing the cost of living and improving shipping and air services.

<u>Action 1.7</u> seeks to ensure the sustainable, safe, reliable and affordable provision of inter-island shipping.

The untapped economic potential of the Pa Enua

The Pa Enua possesses untapped economic potential, an example of this is agriculture production. Agriculture in the Cook Islands is based on small holdings type systems and was the number one industry fifteen to twenty years ago. Domestic agricultural production had been increasing in some areas (such as Aitutaki, Mangaia and Mauke who are consistently supplying vegetables and herbs to Prime Foods and Wigmore's Superstore on Rarotonga).

However, production from subsistence commercial and growers on Rarotonga and the Pa Enua decreased from 2020 to 2021. This is a result of COVID-19 when Cook Islands borders were closed, and our tourism market diminished drastically. Farmers scaled back their planting programmes to ensure produce was sold and to reduce waste. With the reopening of the borders in 2022, agricultural production increased as tourists returned (see graph 1).

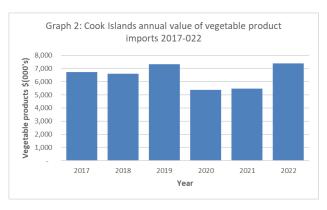


The increase in demand for agriculture products is, however, mainly being met through imports that jumped from \$5.48 million in 2021 to \$7.4 million in 2022, a 35% increase (see graph 2). National planners have seen the opportunity here to grow the agricultural sector. The NSDA 2020+ Te Kaveinga iti, under Goal 10, aims to increase import substitution by increasing the percentage of food grown locally. However, this goal also notes the diminishing amount of arable land available in Rarotonga noting 'the rise in tourism and consumerism has coincided with the decline of agriculture as an industry. One consequence of this, especially on Rarotonga, is that

land once used for agricultural production has been converted to residential or commercial (usually tourist) use'.

The Pa Enua can play a major role in overcoming this constraint, as the strategy also noted the potential to 'utilise the arable land available in the southern Cook Islands to increase the percentage of food produced locally boosting economic growth locally and nationally, improving import substitution that also increases our resilience'.

An affordable and reliable domestic shipping service will provide the market access needed to unlock this potential.



Domestic shipping, economic growth, and sustainable communities in the Pa Enua

The strategic documents noted above illustrate how improving domestic shipping services can contribute to unlocking economic prospects in the Pa Enua through improved connectivity to markets in Rarotonga. Additionally, the implementation of a sustainable transportation system can enhance the security and durability of Pa Enua communities through better service dependability and lowered costs of living. Collectively, these outcomes have the potential to mitigate the population decline seen in the Pa Enua, and potentially facilitate its reversal.

Problem definition

Uneconomic domestic shipping leads to unsatisfactory and costly services

The cost of providing shipping services to small populations over large distances is at the core of the issues that afflict domestic shipping in the Cook Islands. Large distances mean the cost of providing services are high, while small populations result in low demand making it difficult for an operator to break even or make a profit.

This operating environment coupled with high capital costs makes providing shipping services unattractive. This in-turn, leads to only a small number of operators and an uncompetitive market which can lead to high prices and poor levels of service. This is the case in the Cook Islands, where a small number of shipping operators, facing significant challenges to operate profitably, have sought to reduce costs and increase revenue through:

- The use of older repurposed vessels that are cost effective but less suited to domestic shipping.
- foregoing necessary ship maintenance, leading to safety and compliance issues.
- irregular services, with voyages being delayed until filled with a commercially viable cargo.

charging high prices to recoup the costs of unprofitable services.

Inadequate services lead to poor outcomes for the Pa Enua

The root of many domestic shipping issues in the Cook Islands is insufficient operational cash flow. This leads to an aging fleet that is poorly maintained which is the main reason for disruptions to the domestic shipping infrastructure, issues with compliance and passenger safety. The lack of regular, frequent, safe, and affordable shipping services can restrict the ability to provide essential life sustaining resources to the people and communities of the Pa Enua and reduces opportunities for economic growth.

There are also questions around the suitability of the ships currently being operated by the commercial shipping companies. This includes the suitability of their design for the distances, conditions and transport requirements for the Cook Islands. Moreover, dangerous goods are often carried on voyages with passengers, raising safety concerns.

Previous analysis noted that outer island social and economic development is being adversely affected by poor shipping services and that market-based solutions to domestic shipping have resulted in inadequate shipping services that are unsustainable in the longer term, particularly for the Northern Group.

An overview of domestic shipping in the Cook Islands

In previous years, the private firm Silk and Boyd Shipping Service managed domestic shipping operations with the support of a Government subsidy. However, during the mid-1980s, the Government subsidy was terminated, even though most outer island routes were financially challenging. These routes lacked consistent demand to adequately cover both capital and operational expenses, ultimately leading to the cessation of the sole shipping service available at that time.

Until 2016, shipping services were mainly offered by the private enterprise Taio Shipping. The service quality was widely criticized for being substandard, marked by irregular and infrequent voyages. Over a span of three decades, six of the company's vessels suffered grounding incidents leading to their loss. Tragically, there was also a recent incident where a young child fell overboard.

In 2018, the Government initiated a trial shipping subsidy targeted at the Northern Group Islands of Pukapuka, Nassau, Manihiki, Rakahanga, Penrhyn, and Palmerston. This trial spanned 8 months and aimed to enhance the consistency and frequency of voyages.

The results were deemed satisfactory in terms of increased frequency and cost-effectiveness, but the improvement in timeliness was less notable. Regrettably, all voyages fell short of departing within the stipulated timeframes, attributed to factors like cargo volume, adverse weather conditions, or competing obligations.

With the aim of further enhancing domestic shipping services, the Government acted in 2018 by creating a specialised Shipping Coordinator position under the Ministry of Finance and Economic Management (MFEM).

Since March 2020, the Shipping Coordinator has been actively gathering shipping and trade information, and establishing connections with pivotal stakeholders including Island

Governments, outer island communities, domestic shipping firms, international shipping entities, wholesalers, and retailers.

This collaborative effort resulted in increased movement of goods, improved frequency and regularity of voyages, and a growing sense of confidence within the shipping system. Government subsidies continued through 2021 and 2022 to the tune of \$1million per year, split between the Southern route (\$200,000) and the more costly and uneconomic Northern route (\$800,000). During this period some improvements were seen (see table 1).

Table 1: Improvements in shipping since coordination began in 2020.				
Cargo movement	\$value average			
3 months	\$130K per voyage North			
12 months	\$185K per voyage North.			
3 years	\$197K per voyage North			
Cost of damaged goods	\$value average			
3 months	\$2,395 per voyage North			
12 months	\$1,450 per voyage North			
3 years	\$ 350 per voyage North.			
Building material loads	\$value average			
3 months	\$7,700 per voyage			
12 months	\$18,950 per voyage			
3 years	\$29,900 per voyage			

Although the Government's shipping

subsidy and the efforts of the Shipping Coordinator yielded some positive results, challenges remained in delivering the affordable, regular, and frequent shipping services essential to promote economic activity and uphold the standard of living within outer island communities.

The current shipping situation remains short of expectations

Currently, only two vessels service the Pa Enua on a regular basis¹. One of these ships, (MV Lady Moana – Taio Shipping) is at the end of its asset life cycle and is frequently in need of substantial repairs. The second ship is a 46-meter landing craft (Taunga Nui – Cook Islands General Transport) used primarily to transport materials and equipment for major projects and general cargo. However, the vessel is designed for coastal passage (within 300nm of coast line) which is

1. —

2.

¹ The MV Anuanua Moana, an exploration vessel currently based in Rarotonga, has delivered a small quantity of goods and passengers to the Pa Enua on special request.

unsuitable for much of the interisland trade. Subsidies are also required for this vessel due to the high operating costs of the barge because of the inefficiency of its hull shape.

The current operators provide services to the Southern Group Islands at intervals of approximately four to six weeks and to the more distant Northern Group Islands every twelve weeks. These services are supported by a Government subsidy that reduces operating costs by 40% forty percent. However, regular services are often interrupted by safety compliance issues or equipment breakdown. These frequencies fall short of Government's service expectations, particularly for the Northern Group where the minimum expected frequency is once every two months, preferably monthly.

Key stakeholders have also identified ongoing issues with the current services. Feedback from consultations undertaken in June 2023 with key suppliers to the Pa Enua, Prime foods and CITC, noticing the need for the following improvements to services:

 A set schedule is required with some degree of predictability to allow for planning. (when a schedule was in place and adhered to, it worked well)

- Freight space needs to be dictated in advance, and honoured.
- Crating system needs to be initiated.
- Chiller is needed for fruit, vegetables, and dairy etc.
- More frequent services are required to reduce stock required for transport, storage, and expiry issues.
- Lower rates should be charged for services to bring goods from the outer islands to Rarotonga for retail sale.
- A newer dedicated cargo/passenger ship is needed to encourage growth.

Feedback from the Palmerston Island administration also raised concerns regarding scheduling, noting that shipping schedules and departure notices being given only one week in advance does not allow sufficient time to for people to put orders in with suppliers in Rarotonga and for them to process the orders and deliver before departure.

The Penrhyn Island Administration considers that freight and passenger charges are unaffordable at \$400 per m³ and \$1,400 per person; and that a chiller is required to reduce spoilage.

Given that issues regarding domestic shipping remain persistent, despite recent Government interventions, it is timely for Government to consider its options for improving service delivery to the Pa Enua.





Options and recommendations

Outer island social and economic development is being adversely affected by poor shipping services. Market-based solutions to domestic shipping have failed to provide adequate services that are sustainable in the long term, particularly to the Northern Group, meaning that some form of Government intervention is required. This report considers two options for government intervention, namely:

- Operating subsidy: Existing services would be subsidised through an operating franchise, noting that this doesn't of itself result in modern, efficient ships.
- Capital subsidy: the acquisition of a purpose-built vessel.

Government already has experience providing operating subsidies to shipping providers. However, if a vessel is acquired, Government also needs to consider potential ownership/operating scenarios. This report considers three options:

Option A. Contract service provision to private operators operating their own vessel (a subsidised service – where the operator must purchase a vessel that meets set minimum specifications).

Option B. Purchase a Government owned vessel and contract out the operation to a private operator.

Option C. Purchase a Government owned vessel to be operated by government.

Government should acquire suitable vessels.

Due to the inherent challenges of operating a profitable shipping service across large distances to small, isolated communities, some form of government intervention is going to be needed to support an affordable and reasonable level of service. Domestic shipping is an essential service for connecting the outer islands to the economic hub of Rarotonga, but despite Government's efforts, the service does not meet the needs of the community.

To date, the Cook Islands Government has opted to intervene in domestic shipping primarily through the provision of subsidies, however, this approach has had limited success. Subsidies combined with a shipping coordinator have led to an increase in the frequency of domestic shipping services but have only had a marginal impact on service reliability and affordability, and a negligible impact on safety and compliance.

Purchasing a vessel will give the Government greater control over shipping services and will at least ensure that a suitable, compliant, and properly certified vessel will be servicing the Pa Enua. Government, through its choice of operating mode, can also influence the reliability, regularity, affordability, and cost effectiveness of services.

Other Pacific Governments have faced the same domestic shipping issues being experienced in the Cook Islands and have turned to vessel ownership and operation to alleviate them. This includes:

Tonga's **Friendly Islands Shipping Services** was established in 2011, its objective is to operate a reliable shipping service that complies with all regulatory and operational standards as assessed by qualified external experts.

The state-owned **Kiribati National Shipping Line Limited** vision is to provide, a safe, secure and a reliable shipping service that is environmentally-conscious and that will enable socio-economic development and contribute to prosperity of the Kiribati people, especially those islands along routes considered unprofitable and receiving little or no shipping service.

The **Samoa Shipping Corporation** is a government-owned company currently operating seven vessels that aims to provide ferry and marine shipping support services that are safe and reliable.

Vessel specifications

It is important that the right type of vessel is sourced to meet the domestic shipping needs of the Cook Islands. MFEM have already considered the type of vessel suitable for shipping services to the Pa Enua as part of a tender process run for the provision of interim shipping services in early 2020 (subsequently cancelled). The tender identified that a suitable vessel should be fully compliant, properly certified, and meet the specifications set out in table 2 below.

Table 2: Vessel specifications

Specification		Specification	
Construction	Less than 10 years old	Max draft	3.5m
Beam	6 – 7.5m	Length LOA	35-50m Maximum
Gross Tons	499 max	DWT	200 - 450T
Passengers	12 Max	Walk in Freezer	17m3
Crane/lift min	3.5Ton	Hull	Steel

Some of the vessel specifications are based on compliance thresholds. For instance, vessels larger than 500 Gross tons or carrying more than 12 passengers must meet different international requirements, increasing operating and compliance costs. A vessel configured as above is focused on cargo delivery, while retaining some passenger capacity. This specification is particularly sensible if Government chooses to acquire only one vessel initially as it is more of a 'work horse' capable of delivering the goods the Pa Enua needs. If Government chooses to acquire a second vessel, it need not be of the same specification but rather it should complement the first vessel.

With the threat posed by climate change, it is preferable to acquire a sustainable vessel with low levels of carbon emissions. This is, however, unlikely to be a practicable option at this time but should be considered when Government contemplates the purchase of a future vessel.

A new build vs a used vessel

A new, purpose-built vessel is the ideal choice as it would have a longer lifespan, and lower maintenance, and regulatory costs. However, it will carry a substantially higher capital cost, and because it needs to be designed and built, it will take longer before it is ready to commence operations and impact services to the Pa Enua.

A used vessel, less than 10 years old, of the type described above would be capable of delivering an economic and reliable service for up to 10 years. After this time, it is expected that the vessel will need to be replaced.

Aitutaki: Pop 1941

Southern Service

Approx 6 Days Round Trip

Although used vessels have higher

maintenance costs, they require a substantially lower initial capital outlay which reduces financial risks. They can also be put into operation quickly, and make an impact sooner.

Given the constrained fiscal environment and the need for a timely and pragmatic solution to the domestic shipping issues, used vessels, in good condition, and appropriately certified are the least risky over the short to medium term. Newer, more sustainable vessels should be considered as part of the medium to longer term approach to improving domestic shipping.

Service requirements

An essential consideration for ensuring that shipping services to the Pa Enua meet their needs is determining the level of service that will be provided, i.e. what is desired frequency of voyages, and what routes will they service. The answer to these questions can also inform how many vessels should be acquired.

The Shipping Coordinator has advised that the minimum level of service would be voyages at least once every two months to the Northern Group and twice a month to each of the Southern Group Islands. With a circuit of the Northern Group route taking up to 21 days and the Southern Group approximately 6 days, this would require two vessels.

More frequent services are preferable, especially for the Southern Group where a monthly service of two voyages per Island would represent a slight increase in frequency, albeit with a smaller capacity. The preferred frequency to the Northern Group is monthly but the minimum is two per month depending on capacity. Delivering this higher level of service would require two vessels but could also incur larger operational losses, due primarily to the high operating costs per vessel (see table 3).

Government can reduce its level of risk by acquiring only one vessel to deliver at least minimum service levels to both groups, but this would not deliver the level of services needed.

The final decision on routes and frequencies will still need to be determined as there are a few

possible combinations. For example, minimum levels on both routes, preferred levels on just the Northern route, preferred levels on both routes, or a hybrid mix.

If Government wants to provide the preferred levels of service to both the Northern and Southern groups it should acquire two vessels, one for large volumes able to carry 200 tons, and a more versatile

Table 3: Annual operating profit/loss, 2 vessels, 1 per route					
Item	Northern Voyage	Southern Voyage	Total		
Voyage frequency	12 per year	24 per year	36 per year		
Operating Cost	2 136 000	1 800 000	3 936 000		
Voyage Cost	348 000	240 000	588 000		
Capital Cost	216 000	216 000	432 000		
Total Costs	2 700 000	2 256 000	4 956 000		
Less					
Freight Revenue	1 400 000	2 400 000	3 800 000		
Passenger revenue	220 000	10 000	230 000		
Total revenue	1 620 000	2 410 000	4 030 000		
Profit (Loss)	(1 080 000)	154 000	(926 000)		

vessel that has the capacity to carry 100 tons for smaller shorter runs covering the Southern Group on a more frequent service.

Depending on the response of the private sector, Government should optimise its route selection and frequency to deliver the best service to the Pa Enua, at the least cost.

Given that Government will be charging 'affordable rates' some crowding out of private sector operators can be expected, they may even exit the market altogether. Government's choice of operating model may have some impact on this outcome.

Operational models

When Government acquires its vessels, it will need to decide on an operational model – who will operate the service and on what basis. The preferred model will be the one that is most cost

effective and best meets the needs of the Pa Enua. The two models that will be considered are those that are most common, a Government run operation and a public private partnership.

Option 1, the Government acquires vessels and then charter out its operation to a private party (normally for a fee). Under this arrangement the Government, as the vessel owner, hands it over to a charterer for a specified period, usually several years. The charterer manages the vessel and pays all operating and voyage costs. The owner is not normally active in the operation of the vessel.

Given the practical realities of domestic shipping financials, and this being an acknowledged loss-making service the rate of charter will need to be zero (in effect the Government would provide the operator with a vessel free of charge for the duration of the service contract). This does not guarantee that the service will be profitable; subsidies may still be required.

Option 2, the Government purchases a vessel which it will then operate. This would require Government to establish a dedicated entity to run the service. This entity could be part of an existing Agency/SOE, or more practicably the Shipping Coordinators office given the coordinator's industry knowledge and experience. Under this arrangement Government would assume all the risks of providing the service but would retain full control over all service arrangements such as price, and scheduling.

The design of public intervention will therefore need to aim at mitigating the market failure (maximising allocative efficiency) at the lowest possible cost. Whether or not private sector participation can then serve to lower that cost by improving productive efficiency beyond what can be achieved in traditional public provision—while not unduly compromising allocative efficiency—is the litmus test of whether a PPP is economically sensible or not.

In deciding between the options, Government needs to consider the cost (productive efficiency), and the quality and quantity of services that will be provided (allocative efficiency).

Cost of service

The private sector has the incentive to minimise costs to maximise profits, they also do not have the inherent bureaucracy of the public service, allowing them to be more agile. A report by the PPSDI² on case studies of Pacific private sector franchise shipping services found that they can lead to cost savings, however these savings do not accrue to Government (due to the contracting arrangement).

1. _____

² The Pacific Private Sector Development Initiative is a regional technical assistance facility co-financed by the Asian Development Bank, the Government of Australia, and the Government of New Zealand

2.

The PPSDI report however, noted several issues with the private sector franchise, namely, early termination of contracts for non-performance, difficulties in setting contract terms, challenging tender processes, and unacceptable and unsuccessful tenders. The private sector, in some cases at least, was able to deliver services at less cost than publicly provided services.

Government would also need to be able to effectively monitor and enforce the contract which requires its own set up and leads to compliance costs for both parties.

A private sector operator would likely be the lower cost option, but this is not guaranteed given the small number of potential operators and the tender market possibly being uncompetitive.

A Government run operation would be more focused on service delivery than profit. This means operations are likely to incur higher costs, which would be borne by Government. There would also be an initial cost with setting up an office to operate the service which is estimated to be approximately \$250,000 - \$400,000.

The interaction between investment in productive efficiency (cost-cutting) and service quality (innovation) may weaken the case for private ownership. If the contract concerning service quality is incomplete because it cannot be unambiguously measured and monitored.

Meeting the needs of the Pa Enua

Both options would use the same vessel so there would be no difference in terms of vessel suitability, however it would be expected that Government would have a stronger focus on vessel maintenance, compliance, and safety.

As noted above, a Government run service, without a profit motive, would be more focused on service delivery and cost recovery, and be more accountable and transparent. Therefore, this option, would be aligned to deliver the regular and reliable service the Pa Euna needs.

The domestic shipping market is not competitive and is uneconomic, particularly for Northern Group services. We have seen from the subsidised services already procured by Government that they have not resulted in reliable and regular services as the profit motive has meant voyages often leave based on capacity rather than a schedule. This situation may be able to be improved through better contracting arrangements, but these arrangements can be difficult to establish, negotiate and enforce.

In this respect, a Government run operation is more likely to result in the types of services the Pa Enua wants and needs.

Overall evaluation

A Government operated service would require effort and financing to become established but is most likely to provide the shipping services needed to sustain the outer islands and promote economic growth.

Government has made a concerted effort to improve service delivery to the Pa Enua through collaborating with the private sector, however, it has not produced the desired results. it would now seem prudent for Government to play a bigger role in ensuring the delivery of these services by taking on an operational role.