



Sea & Air Access Consultancy

Draft Updated Strategy



AQUILA AVIATION LTD

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Sea & Air Access – Updated Strategy

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1.0 Executive summary

This section will be drafted in more detail as part of the final document.

1.1 Principal conclusions

The principal conclusions reached from the analysis are:

1. The existing capacity – sea and air – is adequate, from a narrow commercial perspective, to meet demand for the foreseeable future
2. A replacement contract for the Jaden Sun is an early imperative; tendering for a multi-year contract is expected to provide better options for vessel choice, leading to lower costs
3. The lower costs of the sea contract will allow a re-allocation of the financial support which will, in turn permit the underwriting of a longer term solution to air access, based on a larger, more modern aircraft, within the constraints of operations at Montserrat Airport (MNI)
4. Marketing and connectivity enhancements will improve access to the island, generating greater income for tourism providers on the island and a more comprehensive network for access to the wider region and long-haul points of origin in Europe and North America

1.2 Recommendations summary

The tables below duplicate the recommendations contained in the individual sections. The numbering indicates the relevant section.

Recommendations on Montserrat positioning

Number	Recommendation
3.1	The ferry reservation system to show the schedule, and allow bookings to be made, on at least a rolling six month basis
3.2	Consider removing the ferry reservation origin and destination points other than Montserrat and Antigua until an extended schedule is established
3.3	Explore options on through-checking of baggage at Antigua (ANU), through code share agreements with British Airways, Virgin Atlantic and the US and Canadian carriers
3.4	Work with Antigua Airport to permit airside transfer of passengers rather than having to clear Immigration, Customs and go through Security processes
3.5	Confirm the status of SVG Air and BMN Air to ensure the financial support is being provided to the correct company and that appropriate designation, under the bilateral agreements between Antigua and Montserrat, is in place, to allow the issue of a Foreign Operator Permit



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3.6	Engage with SVG Air regarding improvements to their reservation system to permit immediate confirmation of a booking
3.7	Enhance the booking processes for accommodation on Montserrat

Recommendations on data gathering and analysis

Number	Recommendation
4.1	<p>A combined database should be created to link the various sources of information – Statistics, Tourism, Access Office – to allow true segmentation analyses to be conducted.</p> <p>This will allow better understanding of demand characteristics which will, in turn, inform better decision making.</p>
4.2	<p>Surveys of passengers – both sea and air – should be undertaken on a continuing basis to identify preferences for key variables – schedule frequency; day-of-the-week; same-day options; willingness to utilise both transport modes.</p> <p>Where possible, these surveys should be requested of every passenger, with suitable collection points in the terminals and on board the ferry.</p>
4.3	Consider reducing the frequency of the double daily services from twice per week to once per week during the period from April through October.

Recommendations on connectivity

Number	Recommendation
6.1	Identify ferry databases and add the Montserrat to Antigua service
6.2	Engage with Caribsky – through LIAT or Winair - to identify how Montserrat could be added to the network, and under what conditions



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Recommendations on strategy

Number	Recommendation
8.1	Establish a procurement committee to draft requests for proposal for ferry services with all potential options identified
8.2	Engage with flyMontserrat and SVG Air regarding their willingness to acquire and operate Twin Otter aircraft
8.3	Initiate discussions with Winair and Air Antilles regarding adding Montserrat into their scheduled networks from St Maarten and Guadeloupe respectively
8.4	Approve the approach and timeframes identified in Section 9 below
8.5	Contract with the preferred bidder for each mode of travel

Recommendations on process

Number	Recommendation
9.1	An early decision on the strategy for the ferry replacement is vital, given the imminent expiry of the contract for the Jaden Sun
9.2	Extension options may be required to be explored with the owner/operator in the near future to ensure continuation of service after the 30 th of September. It is not clear that the contract provides for automatic extension should the Government request this
9.3	Establish a formal Procurement Board to develop requests for proposal and an evaluation methodology that is suitable for long term contracts
9.4	Confirm the availability of long-term funding from DFID to permit the Government to enter into appropriate contracts



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2.0 Introduction

This report represents an updated strategy for the provision of sea and air access for Montserrat, in accordance with the Request for Proposal supplied by the Government of Montserrat in November 2018, and amended in early December 2018.

The project required a review of previous and/or complementary studies including:

- The Montserrat Tourism Master Plan 2015 – 2025
- The Montserrat Sustainable Development Plan 2008 – 2020
- The Physical Development Plan for North Montserrat 2012 – 2022
- National Tourism Policy 2016
- Economic Growth Strategy and Delivery Plan for Montserrat 2018
- Investment Prospectus Development and Investor Identification Study for Montserrat (“Noakes Report”) 2013
- Review of Strategy for Sea and Air Access (“Coffey Report”) 2017

2.1 Coffey report recommendations

The Terms of Reference for the consultancy project required that it “factors in previous work, such as the Coffey Report”.

The Coffey Report made a number of recommendations, mostly of an institutional nature (relevant examples shown below). However, this report has been prepared on the basis that the Government is seeking specific recommendations that have “a degree of proportionality and simplicity should be applied to all documents, as the complexity of previous studies has led to slow implementation, to date”.

The study addresses the short-medium term (2 – 5 years) strategic imperatives, driven by the need to replace or extend the current contract for the Jaden Sun, due to expire on the 30th of September 2019.

2.1.1 Coffey Report recommendations summary

Immediate focused Little Bay Port breakwater desk review study, leading to large-scale investment in an appropriate (Scalable) Phase 1 breakwater

Monitor and fine-tune service contracts in IAP period, ensuring maximisation of effectiveness of UK aid money

Conduct Study of optimum ferry vessel type and size for the lifeline sea crossing considering sea-state conditions throughout the year

Once ferry service is operational, conduct time and motion studies for the average month and for the peak month to determine scope for improvements.



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Conduct analysis of customer complaints

Monitor developments and track need for further facility improvement at Antigua

There is a need for improvement in the marketing effort to increase the number of tourists/visitors, need for collaboration between the Airport and the MTB to attract flights and passengers from neighbouring islands, a need to explore possibilities for the development of new gateways in St. Kitts and Guadeloupe as well as for improvements in the marketing effort to increase the number of tourists/visitors.

The tourism development office should start to determine through surveys the WTP/ATP of each category of traveller.

All policy and planning for connectivity infrastructure be handled independently from the Access Coordinator role. In the short-term this task would likely require external expert or DFID support tapping into their internal technical expertise

A temporary PIU structure is deemed appropriate for the on-going ferry and air transport connectivity service procurement and contracting processes. A PIU would most likely have significant project management and procurement skills embedded within it. The PIU could, in the short-term, manage the Connectivity Strategy ferry and air transport service procurements, including performance indicators for each, with rewards for over-achievement and penalties for under-achievement. Technical members of the PIU would be able to provide On-The-Job Training (OJT) to their Montserratian counterparts

These recommendations have been assessed in developing this Updated Strategy for Sea and Air Access.



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3.0 Situational analysis

This section provides a brief overview of access to Montserrat. More detail has been provided in previous reports, and so is not duplicated here.

The situational analysis that flows from this review has been used, in part, to inform the strategic choices outlined later in the document.

3.1 Current operations

Current access to Montserrat – whether ‘lifeline’ services or as part of a tourism product – is limited to connections to Antigua, some 36 nautical miles away. The services comprise:

- 7 return trips per week on a 200+ capacity passenger ferry – currently the Jaden Sun. These trips consist of services on five days per week: Sunday, Tuesday, Thursday, Friday and Saturday, with two additional trips on each of Tuesday and Friday
- A typical airline schedule of:
 - 4 return flights per day operated by flyMontserrat
 - 2 return flights per day operated by SVG Air
- The airline schedules largely compete with each other on time and price, and are operated by BN2 Islander aircraft with a maximum seating capacity of 9

Both sea and air access receive financial support from the Government of Montserrat (GOM), as part of grant-in-aid funding from the UK Department for International Development (DFID). The financial support currently comprises:

- i. XCD 5.4 million (US\$ 2.0 million) for the ferry service
- ii. XCD 432,000 (US\$ 160,000) for the air service, split equally between flyMontserrat and SVG Air

The airline financial support is the equivalent of underwriting the tickets for approximately 350 return passengers per airline per year (less than one per day), net of taxes.

The Government of Montserrat holds an equity position in flyMontserrat. This may influence some of the strategic options discussed below.

3.2 Regional positioning

Montserrat has a relatively low population base, which acts as a constraint on meeting access requirements at a reasonable cost.

In addition, the limited accommodation influences the development of a large scale tourism sector. Montserrat’s tourism strategy, based on low volume, high value visitors, also has an impact on providing high frequency, large volume access to the island.



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3.3 Comparator islands

Other island nations in the eastern Caribbean enjoy access through a variety of transport modes, some of which provide significantly higher levels of connectivity to primary markets.

Some specific examples include:

- St Maarten: direct connections to North America and Europe; Connecting services with Winair to 12 destinations; Code-share agreements with Air France-KLM and a number of US and Canadian airlines that permit airside transfers of passengers and baggage at St Maarten without the need to clear Immigration and Customs
- Guadeloupe: direct connections to Europe (Paris) and North America; based airline – Air Antilles – that provides code share connections to seven regional destinations (non-stop) and a further two via Martinique
- Antigua: linking into the LIAT regional network, and served by multiple airlines from Europe and North America

Some challenges for access to Montserrat are:

- i. A lack of code-share agreements with the major international carriers by flyMontserrat and SVG Air. This has a number of effects, including:
 - a. Complexity of connections over Antigua, due to the need to clear Immigration and Customs in ANU before checking in for the flight to Montserrat. Slight delays on the flights from any of the prime points of origin risks missing the connection
 - b. No 'through' fares available. The code-shares over St Maarten, however, do not appear to offer a discount on the connecting service. A check on the costs of flights from Amsterdam to St Maarten and from Amsterdam to St Barth, via St Maarten, would indicate that the Special Pro-rate Agreement (SPA) between KLM and Winair allows each airline to charge the individual sector price
 - c. A missed opportunity to add Montserrat to the global network offered by the major international carriers
- ii. Whether or not the international airlines would be willing to code-share with operators of single-pilot, piston-engined aircraft. Discussions with potential partners would appear to be of value as part of a wider review of strategy
- iii. None of the airlines that are creating the Caribsky marketing initiative includes Montserrat in their network. This requires greater effort and cost, by the Government of Montserrat, to overcome the enhanced links, common ticketing policy and marketing strengths anticipated
- iv. Neither of the two airlines operating to Montserrat are candidates for inclusion in the Caribsky project

These issues are discussed in more detail in the section on connectivity options.



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3.4 Comments

The following comments reflect issues identified from the perspective of a foreign visitor.

1. Up until mid-March, the ferry booking system only allowed reservations until the end of April. However, that has now been amended
2. The ferry reservation system offers multiple origin and destination ports, despite the sole route being between Montserrat and Antigua. The 'default' origin point is neither port, risking passengers seeing the information that no service exists
3. There is a lack of clarity as to which company operates the flights for SVG Air. The website states that scheduled services between Antigua, Barbuda and Montserrat are operated by a sister company – BMN Air (Barbuda, Montserrat and Nevis). That company's website refers to ABM Air – presumably Antigua, Barbuda and Montserrat
4. SVG Air's reservation system does not appear to allow on-line booking with instant confirmation, requiring e-mail confirmation of a passenger request. Passengers expect near instant confirmation of reservations, whether for flights, hotels or car hire; this system must act as a deterrent to booking with SVG Air

3.5 Recommendations

The following table lists the recommendations with respect to positioning Montserrat.

Number	Recommendation
3.1	The ferry reservation system to show the schedule, and allow bookings to be made, on at least a rolling six month basis
3.2	Consider removing the ferry reservation origin and destination points other than Montserrat and Antigua until an extended schedule is established
3.3	Explore options on through-checking of baggage at Antigua (ANU), through code share agreements with British Airways, Virgin Atlantic and the US and Canadian carriers
3.4	Work with Antigua Airport to permit airside transfer of passengers rather than having to clear Immigration, Customs and go through Security processes
3.5	Confirm the status of SVG Air and BMN Air to ensure the financial support is being provided to the correct company and that appropriate designation, under the bilateral agreements between Antigua and Montserrat, is in place, to allow the issue of a Foreign Operator Permit
3.6	Engage with SVG Air regarding improvements to their reservation system to permit immediate confirmation of a booking
3.7	Enhance the booking processes for accommodation on Montserrat



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4.0 Historical data

Historical data were obtained from a number of courses in Montserrat. The challenge was, at time of the current draft document, complete sets of data that would allow detailed analysis were not available (see table below). In particular, recent data were awaited following re-creation of the databases previously lost.

The following data sets have been provided by stakeholders on Montserrat.

Data	Period	Comment
Total passenger numbers, differentiated by Sea and Air and by Arrivals and Departures	2011 - 2016	
Tourism data for 2016, with segmentation analysis	2016	Affected by ferry availability which would appear to distort the figures
Sea travel data, by month, summed for arrivals and departures by day	2017 and 2018	
Day tour sea travel, contained within the totals provided	July 2017 – December 2018	
Passenger movement analysis, on a daily basis	January 2017 – July 2018	
Summary data for air and sea travel, differentiated by arrivals and departures	January 2017 – July 2018	There are some differences in the figures from this data set and the air passenger data. The difference is approximately 7% in total – 6% for arriving and 8% for departing passengers
Air passenger data, by month, differentiated by arrivals and departures and by airline	2018	There are some differences in the figures from this data set and the summary air data. The difference is approximately 7% in total – 6% for arriving and 8% for departing passengers

The following data have been indicated as being available in the near future:

1. Tourism data for 2017 and 2018 to be supplied by the end of March 2019

These data, when received, will be analysed during April 2019 as part of the Updated Strategy final report. The data are not expected, at this stage, to have any significant impact on the strategy conclusions reached in this Draft version of the strategy report.



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The impact on capacity and frequency is discussed in the sections on sea and air access below.

The analysis of ferry and aircraft types requires sufficient data on passenger (and cargo) flows in order to identify:

- Optimum size
- Optimum schedule and frequency
- Growth requirements

For Montserrat, however, the current demand characteristics would ordinarily indicate smaller ferries than currently in service and the minimum aircraft size to operate between Montserrat and Antigua. There are, however a number of other factors that must be taken into account, including:

- i. Comfort, safety and timetable reliability for the ferry service i.e. smaller vessels would be weather sensitive
- ii. A limited number of alternative aircraft types within an identified need to offer flights that will attract greater passenger numbers, and act as a future replacement for the existing Britten Norman Islander operations

Each of these is expanded upon in the relevant sections below.

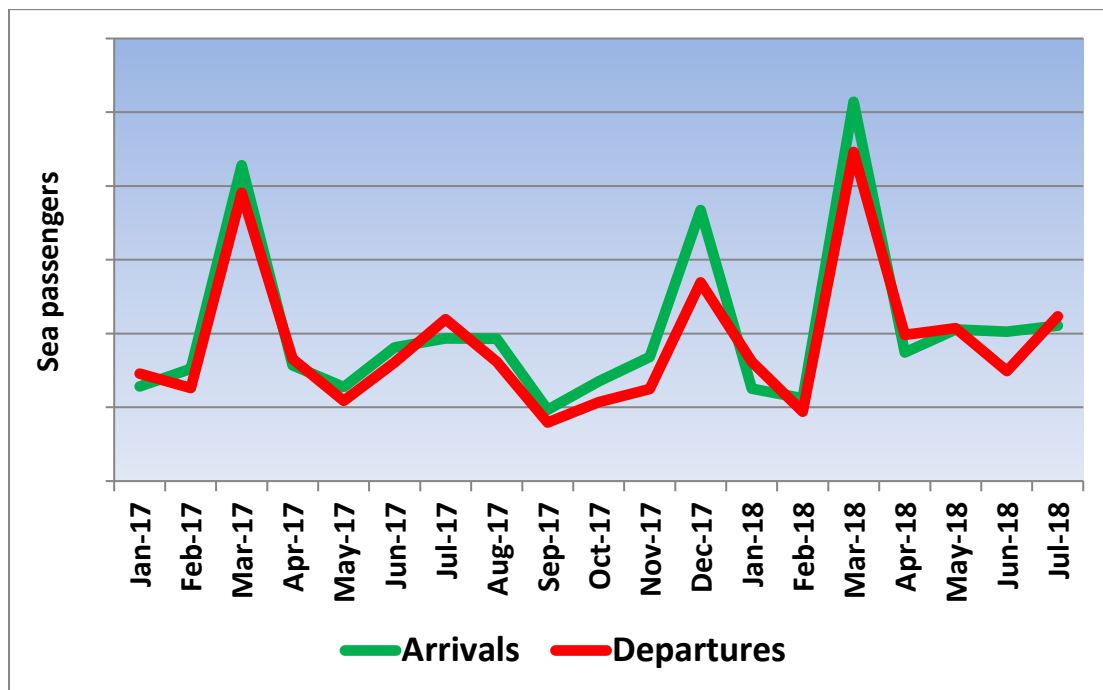


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4.1 Passenger numbers

4.1.1 Sea

Passenger data for the ferry service were analysed using the daily arrival and departure statistics provided, covering the period from January 2017 through July 2018. The availability of these data for the period through December 2018 will be useful to provide comparisons with the figures provided for the period 2010 – 2016.

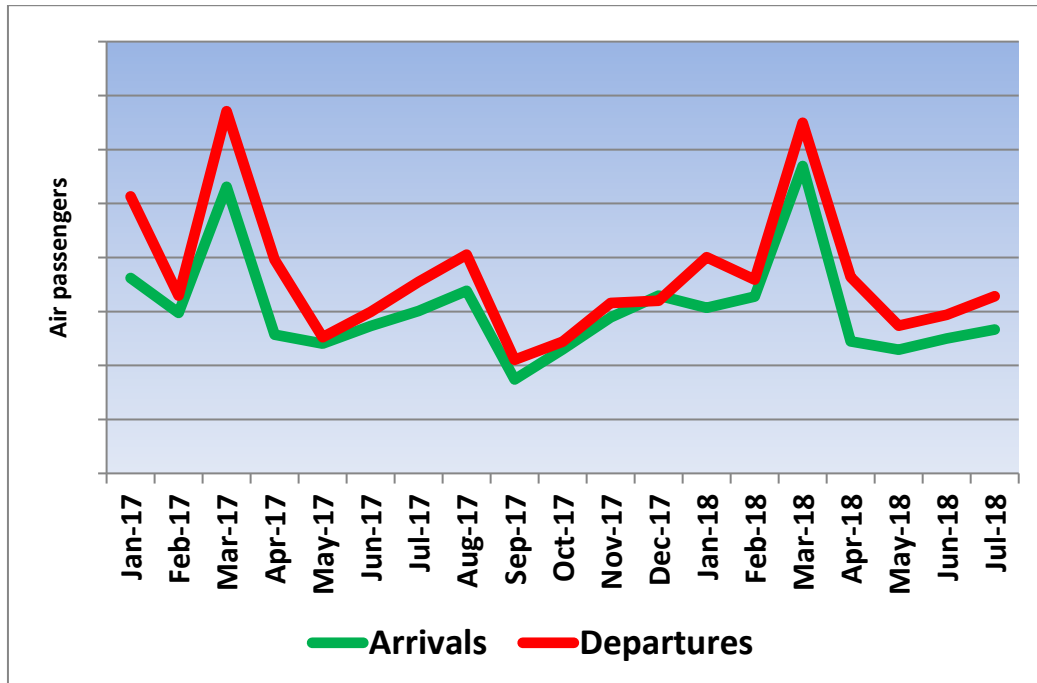




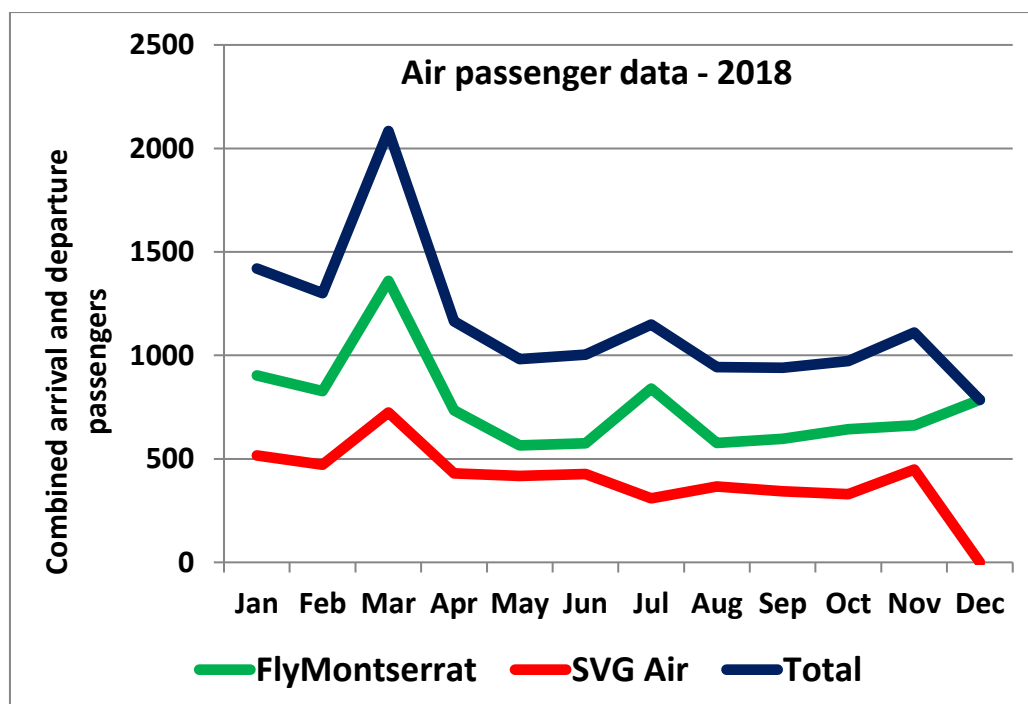
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4.1.2 Air

Data on travel by air was provided in detail for the period January 2017 through July 2018, and is summarised in the graph below.



Air passenger data, by carrier, was provided for calendar year 2018, and is summarised below, combining arrival and departure figures. This is to highlight the relationship between the two airlines operating on the route.

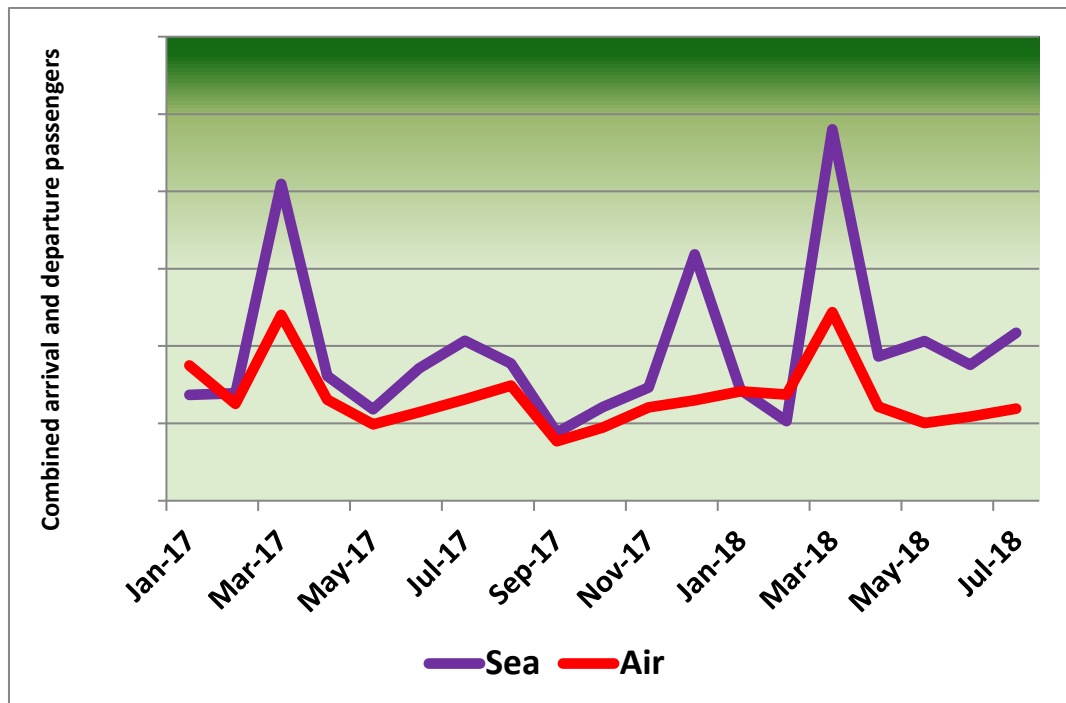




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4.1.3 Sea versus Air

A comparison between sea and air travel was made in order to assess the effectiveness of the financial support offered to the two modes of transport. This is summarised below, for the period from January 2017 through July 2018.



It is striking that, other than the peak periods around St Patrick's Day and the Christmas period, demand for sea and air transport is not dissimilar in volume. This has a bearing on the appropriate allocation of financial support between the two modes of transport.

4.2 Cargo volumes

Cargo flows, on either the ferry or the aircraft, are tiny in terms of weight or revenue, and unidirectional from Montserrat to Antigua.

This represents a significant opportunity in the event that a more cargo-capable ferry could be introduced, as a replacement for the Jaden Sun.



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4.3 Types of passenger

Segmentation data in the final Updated Strategy Report will be analysed in the following three sub-sections based on updated information will be provided following receipt of 2017 and 2018 data in early April 2019.

No specific conclusions will be reached until more up to date data is available, allowing multi-year analysis of volumes, percentages and trends and confirmation as to how data are collected and categorised.

4.3.1 Montserrat/Antigua local travel

4.3.2 VFR traffic

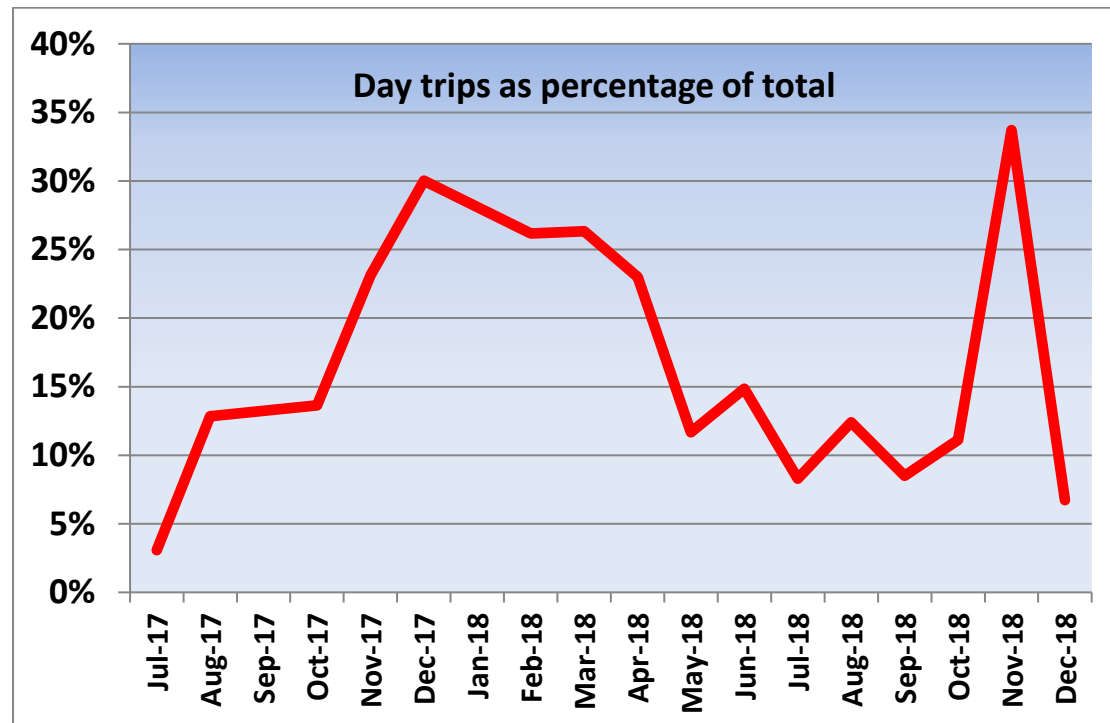
4.3.3 Tourist traffic



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4.3.4 Day-trip volumes

Analysis of the percentage of passengers using the twice daily services on Tuesdays and Fridays was possible for the period July 2017 through December 2018. This analysis is presented, graphically, below.



The analysis above would benefit from a larger data set, but the figures for the same months in each year indicate very similar patterns.

Consideration should be given to reducing the double-daily frequencies from two per week to one for the period April through October, as the additional revenue, especially at the discounted rate for day-trip passengers, is unlikely to cover even the marginal costs of the second daily service.

Retaining one twice daily service a week is expected to have benefits for some of the segments identified in the fare and concessions policy section later in this report.

More analysis may be relevant once the 2017 and 2018 tourism data is provided, but as supporting evidence, the 2016 data show that 93% of all day-trip passengers were in the four month period from January through March, plus December.

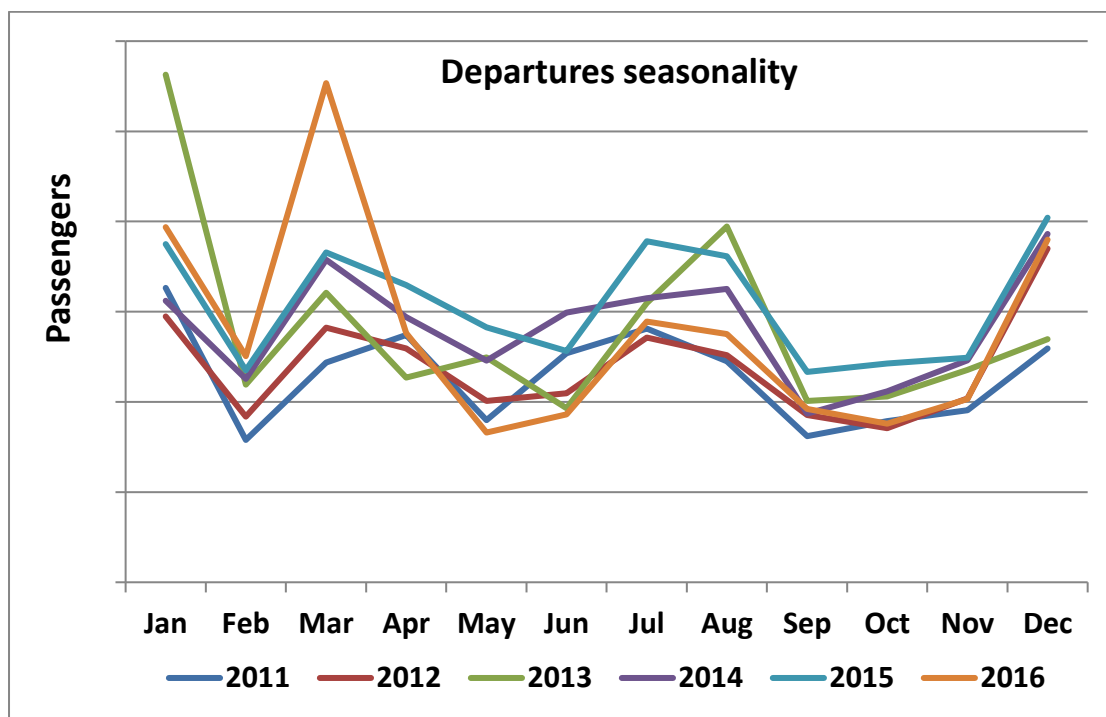
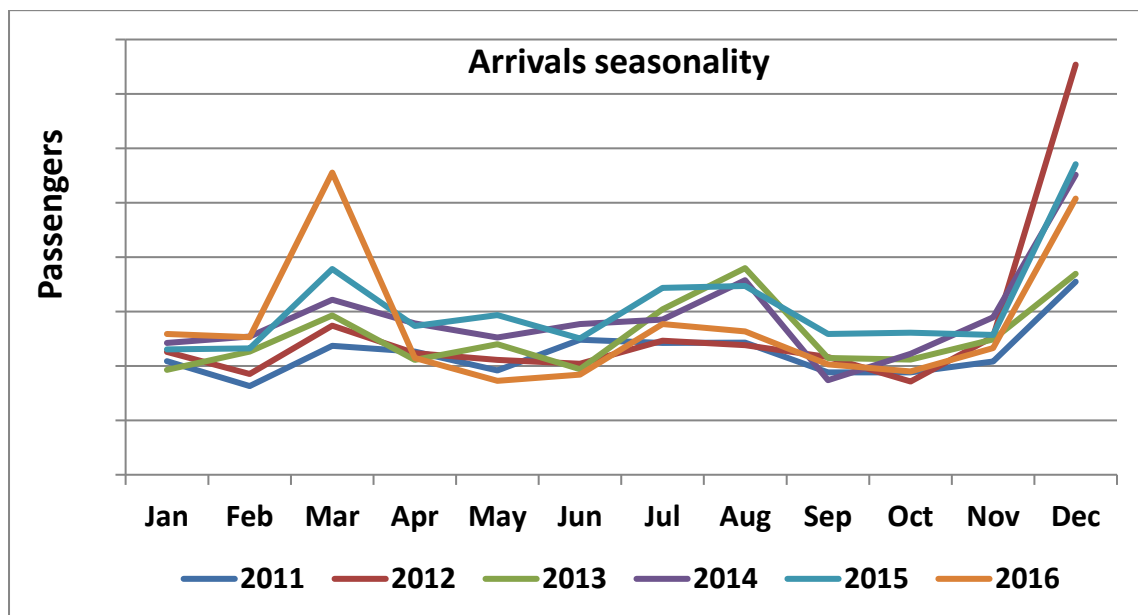
Air travel day trips, although smaller in number, were evenly spread through the year.



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4.4 Seasonality analysis

Arrival and departure figures using the 2011 – 2016 data enabled an assessment of seasonality trends, differentiated by arrivals and departure flows. Lack of directly comparable data for 2017 and 2018 restricted the addition of those two years to the analysis although they are not expected to have altered the underlying seasonality factors.

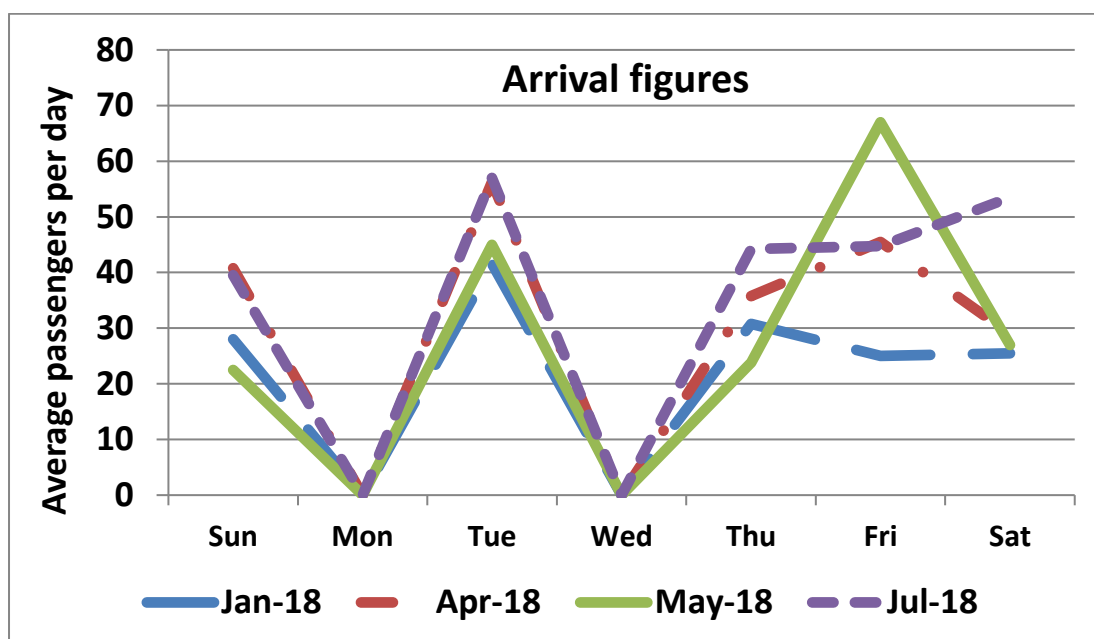
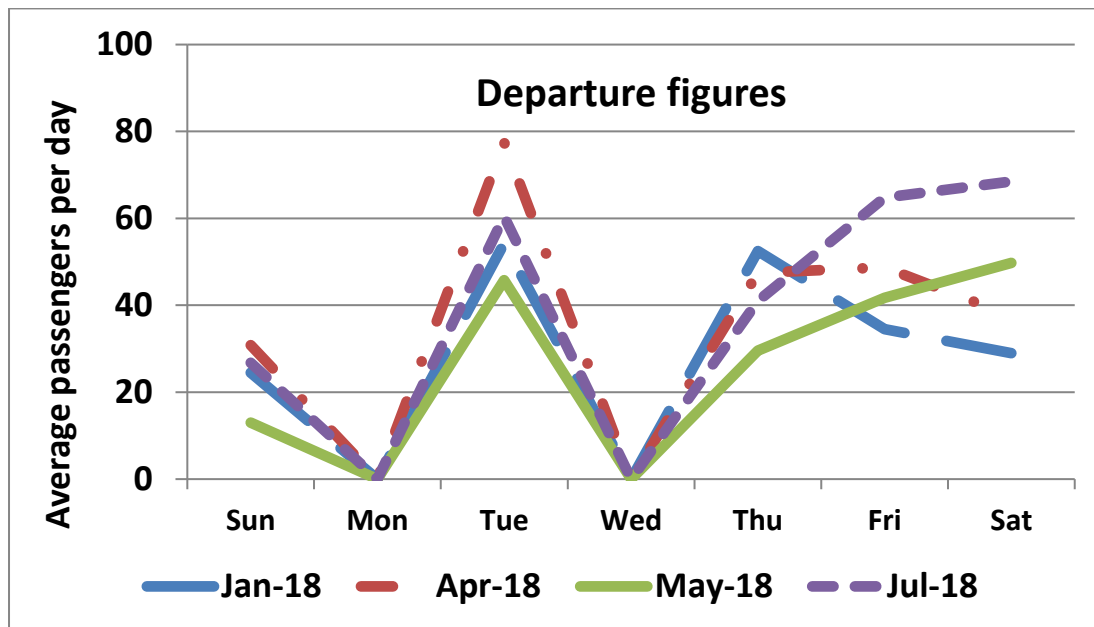




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4.5 Day of the week

The final set of data used for analysis relates to ferry travel by day of the week. This aims to assess whether the current schedule could be optimised to meet the needs for access. Four months in 2018 were analysed to remove distortions associated with peak period travel.





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4.6 Conclusions

The following conclusions have been reached in relation to the analysis of demand.

4.6.1 Demand

- i. Capacity on the ferry service exceeds demand by a large percentage, with the exception of one or two peak periods each year
- ii. Peak demand appears capable of being met through higher frequencies for the relevant period. This includes the St Patrick's holiday period, when a combination of double-daily sailings, six times per week sailings and increased aircraft schedules would appear to be adequate

4.6.2 Segmentation analysis

This section will be added following receipt of the 2017 and 2018 tourism data in early April, to act as comparators to the 2016 figures provided.

4.6.3 Day trip travel

- i. The demand for day-trip travel on the ferry appears to be inadequate to justify two days per week throughout the year
- ii. Reducing the number of days that this service is offered, from twice a week to once per week between April and October would allow other options for the vessel, including joint venture operations with the Government of Antigua for ferry services to Barbuda, for example
- iii. Decisions on offering day trip travel to cruise ship visitors to Antigua require an assessment of demand and cost to verify that the service adds value to the Montserrat economy

4.6.4 Seasonality conclusions

The following summary conclusions have been made:

- i. There is pronounced seasonality for three periods
 - a. March for the St Patrick's holiday period
 - b. December/January
 - c. A smaller July/August peak
- ii. The peak periods have significant directionality characteristics which will influence the capacity offered by each transport mode
- iii. Average passenger numbers (January 2017 – July 2018), excluding the St Patrick's holiday period, are:
 - a. Sea: Arrivals 198 per week; Departures 182 per week
 - b. Air: Arrivals 127 per week; Departures 153 per week
- iv. Peak demand for sea travel during the St Patrick's holiday periods in 2017 and 2018 indicates:
 - a. Arrival daily demand for the 7 day period ahead of St Patrick's Day, plus the day itself: between 190 and 212 sea passengers
 - b. Departure daily demand for the 7 day period after St Patrick's Day, plus the day itself: between 160 and 180 sea passengers



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4.6.5 Day of the week

- i. The daily volume of passengers is broadly comparable throughout the week. Peaks on Tuesdays appear to be a factor of the double-daily service and the lack of sailings on the Monday and Wednesday
- ii. Sunday demand appears to be unusually low. Work to understand the factors behind this – time of sailings, segmentation analysis of passengers, other – would be of value. This should be carried out through focused surveys of passengers, including residents and visitors to inform qualitative decision making

4.7 Recommendations

The following table lists the recommendations with respect to data gathering and analysis.

Number	Recommendation
4.1	<p>A combined database should be created to link the various sources of information – Statistics, Tourism, Access Office – to allow true segmentation analyses to be conducted.</p> <p>This will allow better understanding of demand characteristics which will, in turn, inform better decision making.</p>
4.2	<p>Surveys of passengers – both sea and air – should be undertaken on a continuing basis to identify preferences for key variables – schedule frequency; day-of-the-week; same-day options; willingness to utilise both transport modes.</p> <p>Where possible, these surveys should be requested of every passenger, with suitable collection points in the terminals and on board the ferry.</p>
4.3	<p>Consider reducing the frequency of the double daily services from twice per week to once per week during the period from April through October.</p>



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5.0 Selection of transport options

The characteristics required to inform a decision on sea and air access are influenced by at least the following issues:

- Demand
- Forecast growth in demand over the short-medium term
- The ability to provide safe, reliable, comfortable travel between Montserrat and identified destinations
- Costs
- Availability – discussed in the section on tender methodologies

5.1 Ferry characteristics

5.1.1 Demand

Existing demand data would indicate that a vessel with a passenger capacity of approximately 100, with some space for bulk cargo, would be sufficient. Peak demand during March and December/January could be addressed through a combination of higher frequency, short term contracting of another vessel and/or increased flights.

However, a vessel of this size is not recommended as being suitable for the sea state between Montserrat and Antigua, where a minimum length of 25 metres, and ideally 30 metres+, is believed to be required.

Meeting demand requirements with a vessel capable of carrying 200+ passengers could be achieved through a reduction in frequency from the present 7 return sailings per week. Other than during the March peak, a frequency of twice per week could cater for demand. This, however, would increase the fixed costs per return trip, whilst reducing access to the island, negatively affecting residents and visitors.

5.1.2 Growth in demand

Organic growth in passenger demand is unlikely to exceed capacity on ferry services over the timeframe associated with this project. As such, new initiatives will be required to improve the financial performance of the service.

These will be through a combination of marketing initiatives and targeted cost reductions. The latter are briefly discussed below, and will be expanded upon in the Updated Strategy document.

5.1.3 Type of vessel

The principal choices required is whether a catamaran or monohull vessel is the most appropriate for Caribbean Sea conditions and distances.

There are over 1,100 catamarans and just over 330 monohulls operating in the world that may be considered comparable to the requirements of the Government.

Opinions as to the relative advantage or disadvantage of one design over the other vary considerably but are ultimately divided into two different areas:



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Seakeeping – Passenger only Monohull

- When comparing vessels of the same or similar capacity monohulls tend to have a longer waterline length which often means that the vessel can more comfortably span the troughs in a seaway;
- The roll motion of a monohull is like that of a conventional ship albeit that vertical acceleration is accentuated due to the vessel's speed through the water;
- Where fitted, conventional stabilisers, similar in principle to those fitted to conventional ships can reduce the roll as well as the pitch.

Accommodation - Passenger only Monohull

- The longer, slender design of a monohull restricts interior design and can often make the cabin area less interesting for the passenger.

Seakeeping – Passenger only Catamaran

- Catamarans produce a different non-ship-like motion that is difficult to predict and counter. It is this motion that often leads to seasickness amongst passengers;
- Catamaran designs tend to have a shorter waterline length and their wider beam translates into increased manoeuvrability;
- The motion associated with less than ideal sea conditions can be reduced to some extent with so-called ride control equipment the effectiveness of which can be influenced not only by a confused sea and swell, but also poor set-up

Accommodation - Catamaran

- The key advantage with a catamaran is derived from its wide superstructure that provides better options for seating and on-board retail and food & beverage sales, even on short crossings;
- The wide superstructure may also offer advantages in facilitation – immigration processes in particular – discussed further in a later section

There are other considerations, but the conclusion is that the most appropriate vessel design for use on the Montserrat to Antigua (or other 'close' destination, such as Nevis or Guadeloupe) is a catamaran with a minimum length of 25 metres, ideally 30+ metres. By virtue of the fact that vessels of the catamaran exceed monohulls by a factor of 3.5 it is clear that there is a greater choice when considering purchase of a second-hand vessel.

This results in a vessel with the capability of carrying typically 200+ passengers depending on seating comfort and layout.



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5.1.4 Costs

A larger vessel will inevitably cost more to operate in terms of fuel and maintenance but with a desire to have some open deck capability a vessel capable of carrying 200-250 passengers would provide comfortable accommodation and, if selected carefully, reasonable seakeeping.

Crewing numbers and maintenance requirements are largely influenced by the length of the working day for crew rosters and engine hours for maintenance. In essence a crew of four or five could operate the vessel for a working day of between 8 and 10 hours, with restrictions on the number of days per week for service. If the working day is extended, or daily services are required, then another crew would be required to take over.

Cost reductions over the existing Jaden Sun contract would appear to be feasible, in a number of areas, including fixed costs and fuel. These are discussed in more detail in the relevant sections below.

5.2 Aircraft characteristics

5.2.1 Air access

The choices for air access are constrained by a number of factors.

- The runway length at Montserrat Airport (MNI) is such that only a few aircraft types are capable of landing and taking off within regulatory limitations;
- This issue is compounded by the Governor's Instruction in place for commercial operations at MNI, which restricts aircraft to those with a maximum seating capacity of 9, although the De Havilland Twin Otter is an exempted, named, aircraft
- Single-engined aircraft operations, whilst likely to be capable of being approved under daylight Visual Meteorological Conditions (Day VMC) are unlikely to be acceptable to the travelling public, and both relevant types – the Cessna Caravan and the Quest Kodiak – exceed the Governor's Instruction seating limitation

These issues result in a restricted set of options:

- i. Continue with, or expand, the existing BN2 Islander operation to Antigua
- ii. Introduce Twin Otter services, either to replace or supplement services to Antigua
- iii. Introduce Twin Otter services to new destinations, either contracted to one or both of the existing airlines serving MNI or with new operators



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5.2.2 Potential demand

Assessment of potential demand for air services is influenced by a number of factors, including:

- Type of aircraft
- Frequency of service
- Choice of connecting points
- The size of the resident population and diaspora
- Price of tickets
- Competition for tourist visitors
- The effectiveness of tourism marketing

For Montserrat, the constraints that affect the island – population, runway length (which affects aircraft type) and others – would indicate that potential demand is being met by the existing operation.

However, experiences in other destinations in the region would indicate that providing access that meets customer expectations may lead to increased demand.

5.2.3 Connectivity

Currently, Montserrat is limited to connecting with international flights through a single airport, Antigua. Antigua is served by a significant number of airlines from the UK, the USA and Canada in particular.

Limitations exist due to the arrival and departure times of the intercontinental flights and the requirement to clear Immigration and Customs in Antigua, in both directions, before checking in for the next sector and clearing security processes. These act as a constraint to passenger acceptance of Montserrat as a 'straight through' connection option, increasing the competitive threat to the island.

5.2.4 Cost differentials

The BN2 Islander and Twin Otter aircraft have significantly different costs. These can be assessed in three principal areas:

- i. The capital cost of the aircraft – whether owned or leased. The Twin Otter, as a 19 seat turbo-prop aircraft that remains in high demand, is significantly more expensive to acquire than an Islander. Typical costs for Twin Otters are US\$ 3.1 million for a -300 model to US\$ 5 million + for a used -400 model, the current production variant
- ii. The fuel burn on the Twin Otter is higher than the Islander, partly because it uses Jet A1 fuel (AVTUR) compared to aviation gasoline (AVGAS). However, the cost differential is offset by the difference in price per gallon, with AVGAS becoming very expensive due to limited demand for this leaded type of fuel. On a cost per available seat basis, the fuel cost for the Twin Otter, on short range flights is approximately 25% lower
- iii. The Twin Otter requires two pilots



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Offsetting factors for the higher costs for the Twin Otter operation include:

- i. Greater revenue potential due to the greater seating capacity
- ii. Potential cargo revenue from the larger aircraft
- iii. Enhanced opportunities to interline with international airlines, increasing passenger numbers

5.2.5 Economic regulatory environment

Montserrat is a UK Overseas Territory. As such, approvals to operate to and from the island are governed by bilateral agreements agreed by the UK Department for Transport.

Caribbean nations have traditionally guarded their traffic rights with care, in part to support local airlines. This has often resulted in bilateral agreements being restricted to third and fourth freedom rights (the right to carry commercial payloads from your home country to another country and back). Some countries are believed to offer Fifth Freedom rights (the right to sell tickets beyond another country to a third country without having to return to the home airport). It is understood that Winair has certain Fifth Freedom rights granted by Antigua, for example.

It has not been possible to meet with the relevant personnel within the UK Department for Transport as of the date of this report due to the mitigation planning underway in relation to Brexit. Further attempts will be made ahead of the final report.

Airlines that are not regulated by the UK or another Overseas Territory require a Foreign Operator Permit, issued by the Governor in accordance with the Air Navigation (Overseas Territories) Order. This imposes conditions on the aircraft operator.

5.2.6 Technical regulatory environment

Aircraft operations are governed by the requirements to meet technical regulations, demonstrated through the granting of an Air Operator's Certificate (AOC). The AOC is issued by a national regulator. In the case of Montserrat, the regulator is Air Safety Support International (ASSI), a subsidiary of the UK's Civil Aviation Authority. Other regional regulators include the East Caribbean Civil Aviation Authority and the Bermuda Department of Civil Aviation.

Any commercial operation requires an aircraft to be included in the operations specification of an airline holding an AOC. Any strategy by the Government of Montserrat to acquire an aircraft, as previously considered in 2013, requires an agreement with an AOC holder to operate the aircraft.

Operations to Montserrat Airport are controlled through an ASSI requirement to demonstrate recency of flight experience to MNI, or a specific flight check with a limited number of examiners.



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5.2.7 Schedule integrity

Maintaining schedule integrity is an important requirement for scheduled services. This may require having more aircraft than strictly required for the operating schedule.

The practical implications of this, for Montserrat, is that any decision to contract for Twin Otter operations will require a review as to how the airline will maintain the schedule in the event of technical problems to a single aircraft operation. Some options include:

- Contracting with an airline that has more than one Twin Otter in the fleet
- Adding a Twin Otter, through an underwriting of the fixed costs associated with the fleet expansion
- Ensuring back-up arrangements with alternative airlines are in place to support any long-term disruption to services
- Enhancing the maintenance capability of a Montserrat based airline through the funding of a limited engineering capability and spares support

5.2.8 Conclusions

Changes to the air access provision will require some form of enhanced financial support, which is expected to be available due to cost improvements for the ferry service.

Issues that need to be addressed, in relation to air access include:

- i. The increasing age of the Islander fleet in the region, and a lack of any direct replacement
- ii. The potential involvement of a number of airlines, operating Twin Otter aircraft, capable of adding Montserrat into their networks at minimum cost
- iii. The option of replacing Twin Otter flights with the Viking 400 aircraft – the updated and improved version of the Twin Otter – future proofing air access
- iv. The possibility of adding Montserrat into the Global Distribution Systems (GDS) via airlines that already have interline agreements with European and North American carriers such as British Airways, Virgin Atlantic, Air France – KLM, American and Air Canada

5.3 Coordinated approach to access for Montserrat

The two modes of transport offer opportunities to coordinate access to and from Montserrat.

The following section addresses connectivity options involving different points of departure or destination. Within the existing arrangements, the availability of one-way tickets offers options for travel by sea in one direction and air in the other.

This would supplement the current, or reduced, day-trip offering on the ferry, and provide a less expensive option for passengers who currently use air travel in both directions.



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6.0 Connectivity options

As argued in the Coffey Report, the benefits to Montserrat will accrue through enhanced connectivity rather than a narrower focus on access. This is due to the increased options that will become available through alternative connecting points than just Antigua.

6.1 Ferry connectivity

Subject to the contract structure for the ferry service, options may exist to work with other operators in the region to coordinate schedules and fare structures to allow a wider network and frequency than currently available.

Websites highlighting ferry services throughout the Caribbean are increasing in popularity, including companies such as caribya.com. At present, Montserrat does not appear to feature on the list of options; updating the company's database offers potential for increased passenger numbers.

6.2 Aircraft connectivity

A greater potential for connectivity lies with the air services. Currently, flights operate to and from Antigua offering:

- i. Same day potential connections to the USA and Canada if the morning flights are taken from Montserrat, but with several hours of waiting in the terminal for the northbound services
- ii. Same day connections to the UK, in either direction, again with a significant dwell time in Antigua to make the late evening connections on British Airways or Virgin Atlantic

Enhanced access and tourism opportunities exist through increasing, and varying, the origin and destination points for air travel.

Overleaf is the current route map for Winair, based in St Maarten, operating Twin Otter aircraft.

The airline has operated to Montserrat in the past, and retains the recency experience for its flight crews.

Winair has code-share agreements with Air France-KLM and most of the US and Canadian carriers that operate to St Maarten. Flights from St Maarten to Montserrat, either directly or via Antigua (in either or both directions) enhances the travel product for North American and European passengers, including the large Montserrat diaspora residing in Canada.



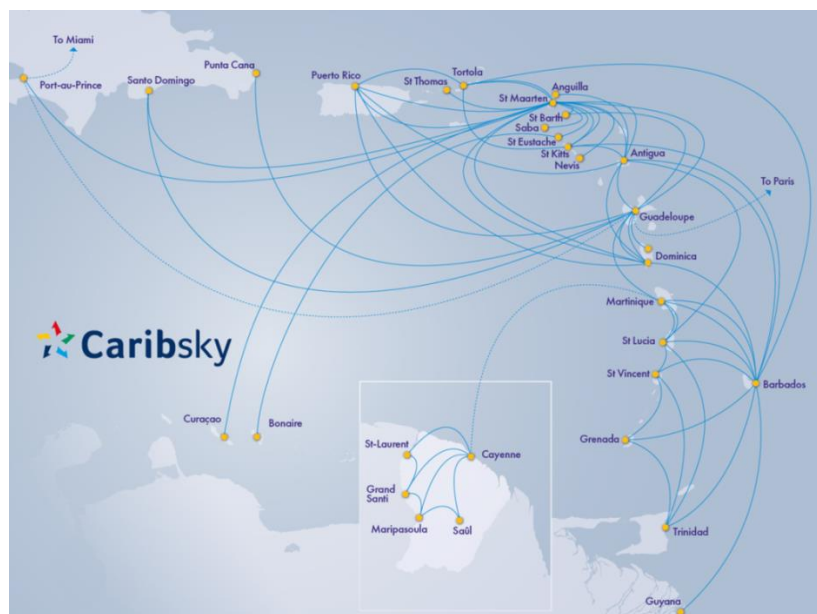
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6.3 Other connection options

Within the wider Caribbean context, three airlines – LIAT, Winair and Air Antilles – are establishing the Caribsky project aimed at harmonising schedules, networks and pricing structures as a way to resolve perennial problems in the region of limited frequencies and bilateral constraints, particularly for Fifth Freedom operations.

The map below summarises the planned connectivity of the three carriers; it should be noted that Montserrat is ‘by-passed’ by the participants in the project, as neither flyMontserrat nor SVG Air are part of the initiative.





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6.4 Conclusions

There are opportunities for Montserrat to be involved in wider connectivity projects in the Caribbean.

Linking in to a network of ferry operators could expand destinations served directly from Montserrat, including the French and Dutch territories, expanding access options and improving the tourism product.

Connectivity options for air access are potentially faster gains, subject to agreements with operators to provide service, probably underwritten in part by the Government of Montserrat, and identification of Fifth Freedom rights in the region to allow better links between islands.

6.5 Recommendations

The following table lists the recommendations with respect to connectivity.

Number	Recommendation
6.1	Identify ferry databases and add the Montserrat to Antigua service
6.2	Engage with Caribsky – through LIAT or Winair - to identify how Montserrat could be added to the network, and under what conditions



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7.0 Fare policy

Basis of the fare policy recommendations

The basis of the fare recommendations below is as follows:

1. Comparing similar services in other Caribbean markets to ensure there is no significant variation in prices charged for comparable services;
2. Meeting the price expectations of Montserrat residents for access to Antigua and beyond;
3. Creating a pricing regime that can form the basis of a coherent tourism product to encourage increased demand. This is a key factor, as the marginal costs of carrying an additional passenger are almost zero, once the minimum access requirements (frequency and schedule) have been met;
4. Having a simple fare structure to ensure the conditions are easy to understand, the reservation system(s) can be programmed to address the purchase options;
5. Adopting some of the features of an airline-type revenue management system to encourage frequent use, advanced bookings and premium pricing for bookings close to departure dates.

Other regional ferry services

Comparisons with other inter-island ferry services in the eastern Caribbean are affected by a number of factors, including a willingness to provide financial support for lifeline services; the level of demand which will influence frequency and vessel size, with consequent impacts on fixed and variable costs; and sea distances which have a role to play on speed requirements, reliability and comfort.

For the purposes of this review paper, the following table is a summary of ferry services that were assessed.

Service	Journey time	Round trip adult prices	Comments
Montserrat - Antigua	90 minutes	US\$ 109	One way fares at half price; Children (3 – 12) half adult fare; Infants (0 – 2) US\$ 18; Day fare at 50% discount
Antigua - Barbuda	90 minutes	US\$ 85	One way fare at US\$ 45
Martinique – St Lucia	95 minutes	US\$ 115 – US\$ 135	Same price for Dominica – Guadeloupe and Dominica – Martinique (both longer journeys: 2:00 and 2:15 hrs)
St Maarten – St Barth	45 minutes	US\$ 110	Variations with competing operators; range of pricing points; Day-trip fares available; One-way fares at a premium to half the round trip fare



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Comments

The Montserrat – Antigua fare is comparable to other services of similar journey times, other than the relatively expensive St Maarten – St Barth fare, probably influenced by the status of St Barth.

Other services charge a premium for one way fares – set at between 53% (Antigua – Barbuda) and 75% (St Maarten – St Barth) of the round trip fare.

Competing air services

Comments have been made on Montserrat regarding the price differential between ferry and air services. Direct comparisons are complicated by the need to understand the propensity to pay the higher fare in exchange for greater speed, plus the complication of Government and airport taxes that distort the ticket price.

For the purposes of this paper, the gross air fare – including taxes – has been compared as shown in the table below.

Sector	Air fare	Ferry fare	Multiple
Montserrat – Antigua	US\$ 218	US\$ 109	2.0
Antigua – Barbuda	US\$ 220	US\$ 85	2.6
St Maarten – St Barth	US\$ 261	US\$ 110	2.4
Martinique – St Lucia	US\$ 215	US\$ 115	1.9

Comments

As with the ferry price comparisons, the assessment of air:ferry multiples are broadly similar across the region, with the exception of Antigua – Barbuda, where the ferry price is lower than other services, possibly as a consequence of Government policy for domestic connectivity.

Schedule review

Certain elements of the fare and concessions policy will be impacted by the schedule of the ferry service to Antigua.

The Updated Strategy document will explore this in more detail, but the following options are under review so as to form part of the strategy recommendations.

- i. Twice daily trips are to be determined following analysis of travel patterns and discussions with schools on Montserrat and Antigua as to the preferred day(s);
- ii. A review of the commercial viability – frequency, price, minimum visitor numbers, cancellation policies - of operating 'cruise liner' day trips, within the Immigration Department restrictions;



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- iii. Saturday and Sunday sailings from Montserrat may need to be adjusted to allow travel to/from Antigua on Friday afternoon and return following a one or two day weekend in each country at more appropriate times (departure from Montserrat at 16:00 on each of Saturday and Sunday with an immediate turnaround for Montserrat). The current departure times (06:30, with a check-in time of 05:00) are felt to be a constraint on the development of a weekend market, requiring two nights' accommodation on Montserrat for one day on the island;
- iv. Discussions could be held with the Government of Antigua to take over some or all of the Antigua – Barbuda sailings, increasing crew complement for the Montserrat service, possibly retaining the existing Antigua – Barbuda ferry as a back-up/dry dock replacement each year (dry dock to be scheduled for when sea conditions are at their most benign). The basis of this would be no risk to the Government of Montserrat on revenues, with an agreement with the Antigua Government for paying a cost per trip aimed at covering fuel, berthing fees and a contribution to maintenance and fixed costs.

7.1 Ferry fare and concessions policy

Fare policy

The following ferry fare policy is recommended for the short-medium term, to be reviewed following implementation of a new access strategy, with the anticipated savings in fixed and variable costs for the ferry, and an amended schedule.

Base fare

The base fare is retained at XCD 300 per round trip for adults.

The one-way fare is retained at XCD 150 for adults, for simplicity, although this will have an impact, possibly small, on elements of the updated strategy that aims to offer a holistic approach to access, allowing passengers to travel by sea in one direction and air in the other.

Children's fares should be retained at 50% of the equivalent adult fare for round trip and one-way travel. The existing age bracket (3 years old – 12 years old) should be retained.

Infant fares should be retained at XCD 25 per one way trip / XCD 50 per round trip. The age bracket of 0 – 2 years old is consistent with other markets.

Late booking charges

These fares are applicable to bookings made a minimum of 14 days in advance, after which the base price is increased by 10% for all categories.

Reservations made on the day of travel should be subject to a premium of 20% over the base fare to act as an incentive to book in advance. The segment of travellers anticipated to be affected by the premium fares are tourists to Antigua.



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Cancellation and change conditions

The standard and premium fares should be subject to the following cancellation and change fees:

- Cancellation (refund) charge of XCD 50
- Change of travel date fee of XCD 25 plus any increase in fare due to any advance booking restrictions

Special fares

The following special fares are recommended, subject to amendments to the current schedule:

- i. Weekend fare, valid for travel on the late sailing (either direction) on a Friday with a return on any sailing on the subsequent Saturday or Sunday: XCD 200. Minimum reservation to be 30 days in advance of the outbound travel and subject to a 50% cancellation/change penalty
- ii. Round trip fare of XCD200 for travel on official Government business, with the protocols to be set out in a formal operating procedure

Concessions policy

The following concessions policy is recommended for the short-medium term.

Regular travel discount

Consideration should be given to operating a 'carnet' system where 10 tickets can be bought for the price of 9 (effectively a 10% discount). The tickets would be available for use by anyone, not just the purchaser, encouraging hotels in Antigua and Montserrat to either offer benefits to their guests, or tour and taxi operators on Montserrat to enhance their revenues.

The tickets would have an expiry date of 12 months from date of purchase.

Group discounts

It is recommended that the following discounts should apply for group travel:

- v. 10% discount on the base fare(s) for groups of 10 or more. A group is defined as a single booking made through a recognised tour operator or from any recognised sports, cultural or religious organisation in Montserrat or Antigua;
- vi. A 20% discount on the day trip fare (XCD 150 for ages 13 and above) for school groups of 20 or more. A 50% discount for each accompanying teacher per group of 10 pupils.

Other discounts

It is recommended that a discount of 80% of the base adult fare should apply to a passenger acting as a carer, and accompanying a passenger registered as physically disabled or blind, or for other factors to be agreed by Government.

Consideration was given to introducing a discounted fare for Montserrat residents, as exists in some other countries. However, this would act as a complication that is felt to be better addressed through affordability of the base fares, with concessions available to reduce the costs.



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No concession fare other than the disability concession, including the use of any 'carnet' tickets, would apply for the following periods:

- One week before and one week after St Patrick's Day
- The 15th of December – 15th of January

7.2 Revenue enhancements to offset ongoing financial support

The fare and concessions policy is designed to increase the number of ferry passengers as a contributor to reducing the need for the amount of on-going financial support.

Once the strategy for the ferry service has been agreed, the Implementation Plan will address additional enhancements to the generation of revenue. These will include some or all of the following.

- i. Cargo revenue following the acquisition of a vessel that has greater options in this regard. Cargo may be stored in a specific area of the vessel or tied down to a specific part of the deck. It should be noted that one vessel identified as part of this strategy process has two crew cabin areas at the rear of the vessel that would be suitable areas for the carriage of cargo
- ii. Enhanced marketing to encourage additional passengers, as part of a wider tourism strategy
- iii. Improved scheduling of the vessel to increase demand through optimising the days and time of sailings
- iv. Implementation of the fares policy, particularly the premium payments for bookings close to departure and group bookings
- v. Additional destinations on a charter basis
- vi. Providing sea and air ticket combinations to encourage day trip travel and to enhance any charter services to nearby island such as Guadeloupe and Nevis
- vii. Cost sharing potential with Antigua on the ferry link between Antigua and Barbuda, to help offset the fixed costs of the vessel and to establish relationships with that Government

It is anticipated that, with the selection of the optimum vessel and operating contract and implementing the potential revenue enhancements, the ferry service could be subsidy independent over the medium term.



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8.0 Strategy

This section outlines the strategic options identified as being the most viable for the Government of Montserrat.

8.1 Ferry

The preferred type and capacity of ferry was discussed in Section 5, and is summarised as:

- A catamaran design
- Overall length to be a minimum of 25 metres, and ideally over 30 metres
- The ability to carry bulk cargo (up to 2 tonnes in easily handled quantities) in addition to passengers, with a means of securing the cargo – either in a compartment or through tie-down on the deck
- A minimum speed capability of 25 knots
- A maximum age of ten (10) years at the start of the contract
- Fuel efficient propulsion systems to reduce the cost of fuel compared to the Jaden Sun

8.2 Aircraft

Within the constraints of the Governor's Instruction for flight operations to John A Osborne Airport (MNI), there are only two aircraft types that are permitted:

- i. The BN2 Islander, as operated by flyMontserrat and SVG Air; and
- ii. The DHC 6 Twin Otter. From a performance and reliability perspective, this type is likely to be limited to either the -300 or -400 variants

As discussed in Section 5, the Islander is not considered a long term solution to the access requirements for Montserrat. In the short term, continuing to provide financial support to the existing operators is a feasible option, but a longer term strategy is recommended, as outlined below.

The recommendations for the ferry contract, if accepted, would allow some transfer of financial support from the ferry operation to the air services.

8.3 Contract model options

There are a number of contract model options for the two modes of transport, discussed below, with a recommendation for each.

8.3.1 Sea

The ferry contract options can broadly be differentiated by the ownership status of the ferry and the relationship between the ferry owner and the ferry operator. For the purposes of this updated strategy, it is assumed that there is no intention that the Government of Montserrat would be the operator of the vessel, given a lack of in-house expertise, and evidence in other jurisdictions that this is rarely, if ever, a successful strategy.



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Option 1: GoM ownership of optimum vessel; separate operator contract

This option envisages the Government tendering for two separate elements for the ferry operation:

- i. The acquisition, under a purchase, lease-purchase or lease agreement, for a vessel that meets the requirements for the operation
- ii. A contract to operate the Government owned vessel, under a multi-year contract, with a suitably qualified organisation. The options for the operating organisation would include:
 - a. A stand-alone business, operating the Government vessel alone
 - b. An operator with other vessels in the fleet

Option 2: Private sector ownership of optimum vessel; separate operator contract

Option 2 has the same characteristics as option 1, but the ownership of the vessel is by a private sector organisation. The availability of a suitable company will require assessment, although it is understood that at least one consortium has stated their willingness and capability of entering into such an arrangement.

Government interest and involvement in the selection of the vessel would be encouraged, but may not be acceptable to the bidder(s).

A separate operating contract would be required under this scenario, requiring a three way arrangement:

- i. A contract with the owner of the vessel, requiring financial support in the early years. This would require some Key Performance Indicators to be built in, and some form of cost transparency to ensure that the financial support mechanism is as efficient as possible. A contract with the operating entity. As with the ownership contract, Key Performance Indicators would be of value. Transfer of certain costs currently paid directly by the Government – fuel, oils, harbour costs and others may be possible
- ii. A contract between the owner of the vessel and the operating company to establish rights and obligations. Agreement on which costs would fall to the owner and which to the operating company – staff costs, insurance for example – would require the involvement of the Government to ensure there was no disruption to services due to disputes between the two other parties



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Option 3: Combined owner/operator contract – optimum vessel

Option 3 is based on the Government being involved in the selection of the optimum vessel, in coordination with an acceptable owner/operator.

Financial support for the operation is likely to be required. In addition, subject to the financial strength of the selected bidder, it may be necessary to provide additional financial support to:

- Provide for deposits (quasi-equity) for the vessel acquisition
- Provide guarantees during some or all of the financing period to allow for improved financing arrangements

The Government may wish to consider taking an equity position in any company created to run the ferry contract, as a replacement for any deposit requirements. Alternatively, some form of preferred loan structure could be devised such that the Government's interest in the operation falls away over some pre-determined period.

Option 4: Fall-back option of available vessel/operator

Option 4 is to continue with the same tender process as has been used previously.

Enhancements to the current situation could be available through offering a multi-year contract to increase the number of potential bidders.

The limitations of this option have been identified in the past – a small number of suitable vessels and operators willing to commit to a contract with the Government. A longer term contract is likely to improve this situation, but the outcome may still be sub-optimal compared to the other options.



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8.3.2 Summary of ferry options

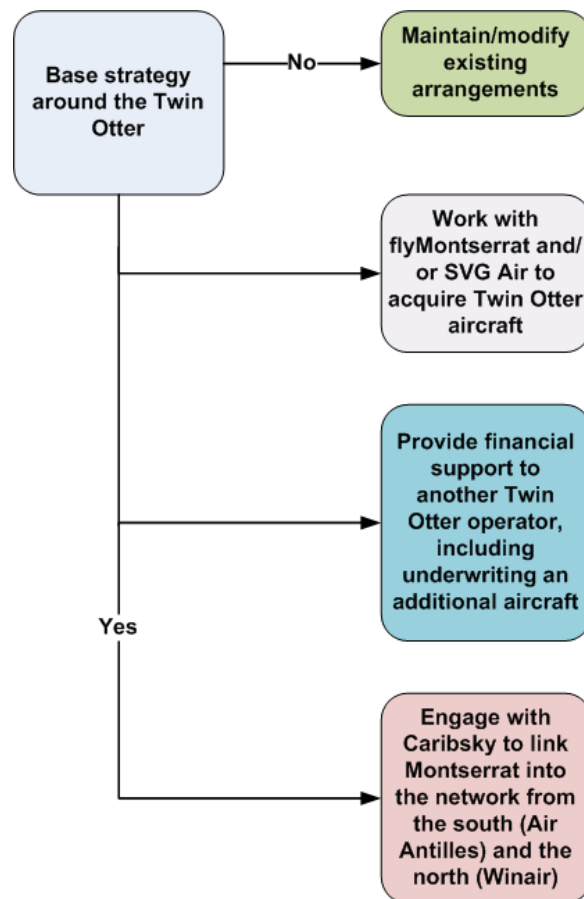
Option	Benefits	Disbenefits
1	Cost transparency; Likely to be lowest cost option overall; Residual value in the vessel; More flexibility on routes and frequencies; Optimum vessel may be acquired; Change of vessel may be simpler	Capital cost requirements; Requires an operator willing to take on a vessel owned by the Government;
2	Greater cost transparency possible through tender process compared to existing contract; No Government ownership requirements; Optimum vessel may be contracted	Multi-year contract likely to be a requirement; No financial benefit through ownership, despite contract; Due diligence on private owner will be required; Requires a three-party structure – owner, operator, contractor; Lengthens tender process
3	Tender process can stipulate the optimum vessel; No Government ownership requirements; Fewer contracted parties compared to option 2;	Multi-year contract likely to be a requirement; No financial benefit through ownership, despite contract; Due diligence on private owner will be required; Requires an operator to have, or be willing to acquire, the optimum vessel
4	Potentially more options; Potentially faster contracting process; Known procurement policies; Shorter contract period may be possible	Reduces options to define the choice of vessel; Limited options for cost transparency;



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8.3.3 Air

Contract options for air access require a decision as to whether or not a Twin Otter operation is the preferred strategy. The decision tree below summarises the options.



It should be noted that the Government of Montserrat equity position in flyMontserrat may involve conflict of interest challenges. A review of the value of this shareholding should be undertaken.



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8.4 Contract process

8.4.1 Ferry Tender issues

A review of the tender history for sea access to Montserrat has reached the following conclusions:

1. The short-term nature of some tenders has restricted options and increased costs
2. Tendering for a vessel and operator as a single response has also limited options for the Government
3. Passenger projections in previous documents may have been regarded as excessive, increasing risks for bidders
4. Cost transparency is not an obvious feature of the current process

It is recommended that a tender to replace the Jaden Sun offers a wider range of options to bidders including:

- The potential separation of vessel supply and operation (but allowing combined bids if appropriate). This is aimed at contracting the optimum vessel available and the optimum operating company without constraining bids to a single entity
- Vessel supply options that include purchase by the Government of Montserrat which would allow asset value retention
- A range of contracting options that reflect the requirements of the Government of Montserrat including, *inter alia*, choice of destinations, frequency, funding mechanisms for operations and risk sharing

An initial search of suitable vessels available in the short term has identified the following:

Type	Built	Length	Capacity	Price	Availability
Catamaran	2016	33 metres	200 + space for cargo	US\$ 3.9 million	Immediate
Catamaran	2009	27 metres	200 (two decks)	US\$ 2.8 million	January 2019
Catamaran	2000	25 metres	200	US\$ 1.8 million	March/April 2019
Monohull	2017	42 metres	260	Not known	Immediate

All catamarans identified have fuel consumption figures that are lower than the Jaden Sun. Preliminary estimates indicate an annual fuel cost saving of EC\$400,000 or more.

Maintenance costs would be expected to be lower for newer vessels.

The time required to prepare a new tender, evaluate responses, whilst not unduly limiting options is expected to result in a recommendation to extend the contract with the Jaden Sun by a minimum of six months, covering the St Patrick's Day holiday period in March 2020 respectively.



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8.4.2 Other ferry factors

Other factors that will be addressed in the strategy document, but are summarised here, are:

The safety, certification and classification of the ferry should be a factor in the tender approach. Regulations for fast ferry services are being strengthened around the world, and operations in the Caribbean will be expected to comply, for those not currently doing so.

Interim enhancements for ferry operations are recommended to be put in place as soon as possible. The most important is the deployment of waverider buoys, ideally in Antigua as well as Montserrat. The Antigua MET Office provides some forecast data for sea travel, but based on wind information due to a lack of sea state data. It is understood that reliance is placed on a website for information that would almost certainly not be supportable in other environments.

The deployment of waverider buoys will also enhance safety for cruise ships visiting Montserrat and allow for a database of information to be built up over time.

8.5 Recommended ferry option

8.5.1 Type of contract

The first ranked contract model recommended is one where the Government of Montserrat owns the vessel, funded under a purchase or lease purchase arrangement to add equity value to the Government over time.

This is complemented with a separate contract with an operating company that provides crew and maintenance services, plus commits to finding a substitute vessel during any dry dock period for the principal vessel. The operating company may be remunerated in a number of ways, but the preference would be for a cost plus contract.

8.5.2 Benefits

Vessel value: Although written down to zero at the end of 10 years, a hypothetical vessel costing US\$3.9m to purchase today would, if well maintained, be worth around US\$1-2m at the end of the period.

Crews: There may be an opportunity to require the recruitment of Montserrat staff as part of any contract, providing employment and expertise within the country.

Legislation: Owning the vessel allows for strict compliance with international legislation and classification. In the event that Montserrat establishes a shipping register, the ferry would act as the flagship for the new operation.



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Other: There are a number of other advantages for Montserrat, not necessarily all quantifiable, but which include:

- Better value for money
 - Cost efficiency
 - Efficiency
 - Cost transparency
- Visibility on safety standards
- Ground breaking standard for the Caribbean
- National pride
 - Prestigious for Montserrat
 - Good advert
 - Media exposure
 - Creating increased awareness
- Controlled and operated as an autonomous business unit
 - Benchmarked/monitored standards
 - Control over operating criteria, including frequency
- Profit rather than cost centre discipline
- Opportunity for operator incentives
 - Charters to nearby destinations, such as Nevis and Guadeloupe
 - Cargo operations
- Engagement in any wider Caribbean initiatives
 - Ferry operations
 - Sea/air combination

8.6 Recommended air option

The air option is more challenging due to the existing relationships with flyMontserrat and SVG Air, especially due to the equity position held by the Government in the former.

The recommendation, therefore is to explore the options identified in Section 6 above, to identify what is commercially feasible and then to select the most appropriate partner to expand operations to and from Montserrat.

This may involve flyMontserrat re-equipping with two Twin Otter aircraft (the most expensive option) or acquiring one Twin Otter and retaining one or two BN2 Islanders as back-up aircraft.

Partnership arrangements between flyMontserrat and other Twin Otter operators, based at airports other than Antigua, are expected to yield the most comprehensive access solution at a lower cost than the single route to and from Antigua.

Other strategic initiatives, involving equity positions and underwriting of fixed costs, should be explored once a decision to base air access around the Twin Otter is taken.



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8.7 Cost analyses

The cost analysis of the alternative arrangements can only be determined following agreement on the ownership/operating structure and type of ferry and/or aircraft. This section aims to outline some of the identified differences between the current operations and the recommended strategy.

8.7.1 Sea

The current contract is based on the Jaden Sun being provided at a monthly charter rate that covers the vessel, insurance, crew, maintenance and a margin to the owner. There is little or no transparency as to the individual cost elements within the contract figure.

The remaining costs – fuel, harbour charges, terminal rents, handling and customs fees and other – are paid for directly by the Government of Montserrat.

Annual costs were provided for the financial year 2017/18 and the first three quarters of financial year 2018/19.

Using the full year data, the following costs were identified:

Item	Amount (XCD)	% of total
Ferry contract	5,500,092	65.8%
Fuel	1,115,759	13.3%
Additional maintenance	6,918	0.1%
Ferry operations – Montserrat	534,041	6.4%
Ferry operations - Antigua	1,102,537	13.2%
Other	104,919	1.3%
Total	XCD 8,314,268	

At almost two thirds of the total cost, the charge for the vessel, maintenance, insurance and crew is the area where significant savings are capable of being achieved.

In addition, modern catamaran designs offer significantly lower fuel burn figures compared to the Jaden Sun.

A preliminary analysis of a replacement vessel cost, with broad assumptions for crew and maintenance costs, indicates a saving in fixed and fuel costs of up to XCD 2.5 million per annum.

8.7.2 Air

Similar calculations for air access are more challenging to quantify due to the wide range of strategic options to be considered.



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8.8 Financial support requirements

8.8.1 Sea

Under all contract options, the ferry service will continue to require financial support for the medium term.

Over a five year period, with enhancements to the schedule and marketing activity, it is feasible that the ferry service could come close to breaking even, if the preferred ownership model is adopted.

The backup option – private sector ownership and operation – is likely to require further financial support, to provide a margin to the owners of the vessel, who will also benefit from the residual value by the time that the debt is paid out.

8.8.2 Air

The current air access financial subsidy should be reviewed, as it is paid to two separate companies operating different frequencies and carrying different passenger numbers.

As provided, there is no differential between the sums paid to flyMontserrat and SVG Air, and with no performance related payment.

8.8.3 Optimum mix

The optimum mix for financial support is recommended as a reallocation of funding between the two modes that recognises the similar passenger numbers carried by both types of transport and the greater potential offered by air services as additional destinations are offered and code-share agreements established with international carriers.

Over time, the requirement for financial support is expected to fall, although air services are likely to require continuing support due to the low utilisation levels possible for the aircraft and limited demand.



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8.9 Recommendations

The following table lists the recommendations with respect to strategy.

Number	Recommendation
8.1	Establish a procurement committee to draft requests for proposal for ferry services with all potential options identified
8.2	Engage with flyMontserrat and SVG Air regarding their willingness to acquire and operate Twin Otter aircraft
8.3	Initiate discussions with Winair and Air Antilles regarding adding Montserrat into their scheduled networks from St Maarten and Guadeloupe respectively
8.4	Approve the approach and timeframes identified in Section 9 below
8.5	Contract with the preferred bidder for each mode of travel



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9.0 Timeframe

The preferred recommendation, or a substitute one based on a long-term contract, will potentially require a significant timeframe for implementation. An outline summary of the issues and timescales is provided below.

The implication, if accepted, is that the contract with the Jaden Sun will need to be extended by between four and six months. As this period includes the Christmas peak and St Patrick's Day holiday period, it is essential that early decisions on implementation planning are made.

9.1 Process Management

A management plan for the process will be developed following receipt of comments on the draft strategy, and agreement on a way forward. This management plan will detail the requirements for:

- Tender drafting and evaluation methodologies. This will focus on identifying critical, essential and desirable elements of submissions and a weighting system to arrive at a ranking system of preferred bids
- A timeframe, building on the outline timetable below, for each of the access modes, recognising any time imperatives, such as the need for a replacement for the Jaden Sun contract
- The resources required to manage the tender process and the execution of the contracts to which the Government of Montserrat commits

9.2 Institutional issues

The final Updated Strategy report will outline the institutional requirements to implement the strategy. These will include descriptions of the following tasks:

- i. Required legislation to allow the Government to establish an ownership company, if approved as the key strategy for the ferry services
- ii. Review of the equity position held in flyMontserrat, to determine the most appropriate way forward, whether to sell, cancel or increase the Government's shareholding position
- iii. Identify the staffing requirements to allow for efficient implementation of the strategy
- iv. Funding requirements for the agreed strategy, covering:
 - a. Capital or lease commitments for the ferry
 - b. Amendments to the financial support mechanism, share between modes and quantum



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9.3 Indicative timelines – Ferry contract

Project Implementation Plan - high level

Task/Date	April	May	June	July	August	September	October	November	December	January	February	March
Preliminary project tasks												
Define preferred ownership and operational structure of vessel												
Discuss and agree ownership/operational structure												
Propose and agree vessel specification												
> Spec includes: capacity (pax & cargo), safety, efficiency & cost effectiveness												
Commence global search for appropriate secondhand vessel												
Target and shortlist three suitable vessels												
> Provide 5-year vessel operating budget												
Agree budget and seek approval to proceed												
Once approval received arrange to survey (i) preferred vessel, or (ii) all three												
> Search vessel/s history including classification society records												
Ensure full certification and safety compliance												
Vessel purchase												
Commence negotiations on behalf of/with ultimate buyer												
Vessel purchase concluded												
Arrange delivery and delivery crew depending on location												
> Consider transport under own power or via mother vessel												
Delivery of vessel to Little Bay, Montserrat												



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Task/Date	April	May	June	July	August	September	October	November	December	January	February	March
Crewing and operational tasks												
Parallel with purchase, tender for crewing/maintenance contract												
Agree outline proposal and assist with tender documentation												
Evaluate responses and update budget and forecast												
Recommend preferred bidder												
Commence crew training and familiarisation												
Vessel/crew attain full compliance/operational competence												
Complete safety manuals, statutory and pax safety notices												
Agree timetable, target crossing time/economical running												
Voyage planning, operational reporting and running repairs												
> Agree safety demonstration, public address messages and safety cards												
> Agree punctuality targets												
> Agree onboard standards of cleanliness through to food & beverage												
Public relations campaign launched												
Service commences												
Parallel tasks												
Survey and recommend berth/pax gangway improvements if required												
Organise simple yet efficient reservation and check-in system												
Agree preventative maintenance regime and reporting												
Arrange contracts for spare parts and service engineers												
Source and have installed Waverider buoys in strategic positions												
Arrange Search and Rescue (SAR) and disaster training												
Fuel oil and lubricating oil testing to be arranged												
Plan dry-docking arrangements, surveys and statutory checks												
Monitor and regulate crew and vessel performance												



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9.4 Indicative timelines – Air

Project Implementation Plan - high level

Task/Date	April	May	June	July	August	September	October	November	December	January
Preliminary project tasks										
Confirm selection of Twin Otter										
Confirm preferred network										
Identify appropriate operational partner(s)										
Agree the preferred financial support model										
Aircraft acquisition										
Agree the preferred acquisition structure										
Identify suitable aircraft										
Recruit and train additional flight crews										
Regulatory issues										
Ensure technical regulations complied with										
Ensure economic regulations can be complied with										
Work with airline partner to enhance marketing presence										
Add new schedules to Global Distribution Systems										



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9.5 Risk analysis

There are a number of risk factors associated with the process that require mitigations. The table below provides a high level assessment of the principal risks.

More detail will be included in the final report, following receipt of comments and agreement on the way forward.

Ref.	Risk	Degree of risk	Mitigations
1	An extension to the Jaden Sun contract cannot be agreed, resulting in a cessation of ferry access from the 1 st of October	High	<p>Early engagement with the owner/operator to determine the willingness to extend the contract through March 2020;</p> <p>Preliminary assessment of alternatives to the Jaden Sun for a short-term contract;</p> <p>Assessment of the feasibility of accelerating the implementation of the preferred strategy</p>
2	Multi-year funding for the financial support from DFID cannot be agreed, limiting options for the acquisition of the optimum ferry	High	<p>Discussions within Government as to whether direct financial support is feasible;</p> <p>Assess whether a fully private sector option for sea access is feasible with an acceptable owner/operator</p>
3	No 'transfer' of funding between the sea and air access modes restricts the implementation of the air access strategy	Medium	<p>Maintain the status quo for air access;</p> <p>Review the validity of providing financial support to two operators;</p> <p>Engage with flyMontserrat on aircraft options;</p> <p>Engage with other airlines to add service to Montserrat as part of an adjusted network strategy, linking Montserrat into additional airports</p>



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9.6 Recommendations

The following table lists the recommendations with respect to management and timescales.

Number	Recommendation
9.1	An early decision on the strategy for the ferry replacement is vital, given the imminent expiry of the contract for the Jaden Sun
9.2	Extension options may be required to be explored with the owner/operator in the near future to ensure continuation of service after the 30 th of September. It is not clear that the contract provides for automatic extension should the Government request this
9.3	Establish a formal Procurement Board to develop requests for proposal and an evaluation methodology that is suitable for long term contracts
9.4	Confirm the availability of long-term funding from DFID to permit the Government to enter into appropriate contracts



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10.0 Implementation

This section is to be drafted following receipt of comments on the draft Updated Strategy, as part of the final report.

10.1 Resource requirements

10.2 Facilitation enhancements

10.3 Management and monitoring plan

10.4 Institutional framework



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Annex 1: Terms of Reference

DEVELOPMENT OF SEA & AIR ACCESS STRATEGY, IMPLEMENTATION & RESOURCING PLAN FOR MONTSERRAT

1. Brief Description

- 1.1.1 This is a short-term consultancy to support the Government of Montserrat (GoM) to update the strategic framework for sea and air access & connectivity for Montserrat, and to inform the procurement of a new ferry contract. Access is an essential component of every country's economic development agenda. Montserrat is no exception and, over the years since the start of volcanic activity in the mid-1990s, access to and from Montserrat has negatively impacted the island's economic development.
- 1.1.2 Adequate access & connectivity continues to be critical for Montserrat. Therefore, the Consultant will review previous work on access & connectivity, and complement this with research on appropriate connectivity modalities. This will result in an assessment of the technical, economic and financial feasibility of operating sea and air services and a clear implementation plan to deliver relevant recommendations of previous studies and this consultancy.
- 1.1.3 This Consultancy will produce two documents: (a) an Optimized Connectivity Strategy and (b) a Sea and Air Access Implementation and Resourcing Plan for Montserrat, which will detail the sea and air access & connectivity requirements.

2. Background and Rationale

2.1 Montserrat

- 2.1.1 Montserrat is a UK Overseas Territory (OT) located in the Caribbean. Montserrat is a full member of both the Organisation of Eastern Caribbean States (OECS) and the Caribbean Community (CARICOM).
- 2.1.2 From the 1960s to the 1990s, Montserrat underwent economic modernisation, led by the tourism sector, and was regarded as one of the most successful islands in the region. Unfortunately, a series of volcanic eruptions in mid-1990s, resulted in nearly two-thirds of Montserrat becoming uninhabitable, with a similar proportion of its population displaced, mainly to the United Kingdom (UK) and to the collapse of its economy, especially the private sector. Currently, in real terms the economy is about half what it was in 1994, on the eve of the eruption, with productive sectors in some cases 1/3 or 1/5 what they were. Due to the subsequent loss of critical infrastructure, including seaport, airport and subsea fibre optic link, and most of its economic base, Montserrat became largely dependent on UK for



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financial aid. Over twenty years later, the economic base remains underdeveloped and Montserrat continues to face serious challenges, which are outlined in many studies, including the recent Economic Growth Strategy and Delivery Plan. Access is one of the key constraints on exploiting opportunities for Montserrat's growth and development. This is especially evident when it is recognised that tourism is a major opportunity, with Antigua, St Kitts and Guadeloupe all being 20+ - 50+ miles away. Antigua currently has almost 900,000 visitors per year, and St Kitts over a million.

- 2.1.3 As a result of the disaster, various emergency interventions such as provision of a subsidised ferry and of subsidised rotary then fixed wing air services were undertaken, which continue to date. The airport in Gerald's was constructed with a short strip designed for aircraft such as the De Havilland Twin Otter (current services are based on the Britten-Norman Islander.) Since 2016 the Jaden Sun has been contracted to provide ferry services including both passenger and small cargo connectivity. Utilisation of both air and ferry services by visitors and Montserratians remains significantly under their maximum capacity, apart from a limited number of days in the year. This consequently requires large subsidies, especially with regard to the ferry service and raises concerns over the Value for Money (VfM) of the current access modalities.
- 2.1.4 The process of building a breakwater for Montserrat, in Little Bay has been initiated. In 2016 of 475 ships coming to Montserrat, 58 had to turn away due to poor sea conditions. This is unacceptable for cargo handling and undermines tourism development. For example, the growing St Patrick's Festival in March 2018 and the 2017/18 cruise ship season were affected by disruptions caused by rough seas that forced many vessels to turn away. The need for a breakwater has been identified as the main constraint to sea access and this will be addressed through the development of the breakwater from 2021.
- 2.1.5 Tourism is one of Montserrat's most promising exports and its growth will be supported by efficient access links. Montserrat's local private sector needs cost-effective access to the regional market to source inputs, leverage new commercial opportunities and build a larger customer base. Montserratians rely on affordable access to goods and services that might not be available on island, in particular specialised health care and education. This also includes emergency evacuation.



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- 2.1.6 Key documents to be reviewed are the 2017 Coffey report, the recent Economic Growth Strategy and Implementation Plan, as well as Montserrat's Sustainable Development Plan, Physical Development Plan, and Montserrat Tourism Master Plan 2015-2025. The Coffey report provides recommendations which should be reflected in an updated Connectivity Strategy and a clear implementation plan. Such an approach, duly informed by wider sustainable development, resiliency and value for money considerations (ethics/equity, effectiveness, efficiency and economy), should then justify strategic options in light of commercial, economic & development, resiliency and welfare trends, issues and opportunities.

2.2 Regional Context

- 2.2.1 Montserrat is part of the Eastern Caribbean (EC) which is a group of Islands within the Lesser Antilles that forms an arc on the boundary between the Caribbean Sea and the Atlantic Ocean lying east of Puerto Rico and extending towards Tobago and Trinidad off the Venezuelan coast.
- 2.2.2 In light of the limited geographic and economic size of Montserrat, creating enlarged market access through better interconnectivity and logistics among the islands is considered a cornerstone to support enhanced private sector growth opportunities. The updated strategy and implementation plan will support these goals by exploring possibilities for an enhanced sea and air service provision that would facilitate the movement of tourists, people and goods to and from Montserrat.
- 2.2.3 Tourism is one of the key economic pillars of Montserrat and as such has an important role to play. As part of the mix there is a strong case for increasing cruise passenger numbers and spending (especially in anticipation of greater port capacity from 2021 onwards), and to increase arrivals of day trippers; as well as stay-over tourists that arrive via ferry and air. Among the challenges that hinder growth of stay-over tourism has been a lack of intra-regional travel, which is constrained by low demand and disruptions to ferry services during poor weather conditions. This study should consider regional comparative cases such as St Barth, Guadeloupe, St Maarten, Antigua and Barbuda and St Kitts and Nevis, with a particular view to options for building up the tourist sector.



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3. Summary of Objectives

3.1.1 The Consultancy has two main objectives:

- To review and improve the VfM of basic access provision modalities. A key question answered by the consultancy should be what is the most cost-effective option to provide reliable fit-for-purpose access to Montserrat at an affordable price for the people of Montserrat, and what combination of ferry and aircraft sizes and types can provide adequate access at the lowest reasonable cost, bearing in mind the need to open up room for economic growth and development across time. This should take into consideration other factors such as comfort, speed and reliability (the consultancy should also provide evidence on these). Reliable access at reasonable costs is critical for Montserrat and must be maintained, but the current combination of vessel and aircraft types may not be the most cost effective way of providing this, given very low utilisation rates for most of the year, and;
- To integrate the recommendations of the Coffey report into a revised Optimized Connectivity Strategy, review how recommendations of this review have been implemented to date and what actions need to be taken in the short to medium-term. This will take the form of a:
 - **Optimised Connectivity Strategy** providing the two-way transport connectivity needs for Montserrat and Montserratian businesses, including taking into consideration:
 - Investment in the planned breakwater/quay construction;
 - Operational improvements in fit-for-purpose air and ferry services;
 - Supporting institutional development and capacity building, and;
 - A ferry pricing & concessions policy.
 - **Connectivity Implementation & Resourcing Plan:** Complete an Implementation & Resourcing Plan, based on the updated Strategy. This Plan must present a series of actions (investment, operational and institutional related, spread over a short-term Immediate Action Plan period), plus an appropriate number of interventions extending into the medium-term, and a detailed Risk Analysis and Monitoring and an Evaluation Framework.



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Air Access Connectivity

- 3.1.2 The strategy and implementation plan will look at the current state of air access and will further explore ways to combine air access efficiency in the context of increasing the number of arrivals in Montserrat. Based on the Coffey Report and other relevant documents, it will identify concrete deliverables which will enhance the air access in and out of Montserrat. The implementation plan will identify and recommend the optimal aircraft for the John A Osborne Airport considering performance, safety aspects and development of commercial opportunities given current and potential future demand. Suggestions regarding integration into booking networks would also be relevant.

Sea Access Connectivity

- 3.1.3 The implementation plan will look at the current state of sea access and will further explore ways to combine sea access efficiency and safety in the context of the possible goal of increasing the numbers of arrivals in Montserrat, while reducing over time the average subsidy per passenger.
- 3.1.4 The Ferry Pricing Policy (FPP) will look at ways in which concessions and policy measures can increase numbers as well as revenue and try to balance the two. It will identify concrete deliverables which will enhance the sea access in and out of Montserrat, and improving the VfM of sea access. The current short-term contract with the ferry provider must be renewed soon, so the study should form the evidence base to contract a new longer-term provider.
- 3.1.5 The study should focus on the next 2-5 years, to inform the procurement of a new ferry service. The main focus should be on connectivity between Antigua to Montserrat.

4. Beneficiaries

- 4.1.1 The beneficiaries will be the Government of Montserrat, and key stakeholders (such as air & sea operators, travel agents, tour and taxi operators, private sector businesses and the travelling public).

5. Methodology

- 5.1.1 This assignment shall be carried out in two distinct parts each involving specific tasks as described below:

Part A is designed to assess business options and develop a sound business case for sea and air service for Montserrat. This includes a number of options for ferry services and ways in which it would be able to better connect with airline services, both on island and with international markets.



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This part will collect and review information on:

- Detailed current passenger numbers between Montserrat and Antigua, including an assessment of seasonality and the occurrence of demand during periods of peak traffic (incl. Christmas and St. Patrick's festival), while taking into consideration evidence on regional transport assessed in the Coffey Report. A study of the local sea crossing environment to inform the optimal vessel type. Such study would benefit from looking in more detail at what works and what does not within the short-distance Caribbean ferry market, with an aim to provide a safe, comfortable, popular and sustainable lifeline ferry service, with minimal subsidy requirement.

Part B is designed to update the framework for Air and Sea Connectivity to achieve the operation of the sea and air services that were identified in Part A. This will include the drafting of an updated Optimized Connectivity Strategy and Implementation Plan, including a Ferry Pricing and Concessions Policy.

- 5.1.2 The strategy and implementation plan will be based on an evidence-based review of suitable options for the most cost-effective combination of vessel and aircraft types and sizes (including a potential seasonal approach such as contracting an additional vessel during St Patrick's festival). This will take into consideration current and future baseline and peak demand and expected costs as well as comfort, safety, speed reliability and availability of regional providers as reviewed in Part A.
- 5.1.3 All parts of the study are expected to run concurrently and the Consultant is expected to deliver each in a harmonized and logical manner. The Consultant shall be responsible for evolving an appropriate methodology based on the tasks as elaborated in the scope of work below. The Consultant shall furthermore undertake all fieldwork and ensure all data gathered is quality assured and corrected wherever appropriate. The Consultant shall keep a record of all information collected and present this in a manner that allows statistical comparisons to be made. Qualitative assessments must be backed up by case studies and relevant industry examples.
- 5.1.4 A degree of proportionality and simplicity should be applied to all documents, as the complexity of previous studies has led to slow implementation, to date.



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6. Deliverables

6.1.1 The Consultancy is expected to achieve the following deliverables at the end of the contractual engagement:

- a. Updated Optimised Connectivity Strategy, that factors in previous work, such as the Coffey Report, and;
- b. Access & Connectivity Implementation & Resourcing Plan, based on the updated Strategy. Key elements include Risk Analysis and Monitoring and Evaluation.

6.1.2 The sequencing of the outputs of the Consulting Services will be:

- i. An **Inception Report**, which has to be submitted 1 week after the commencement of the assignment. This Report shall summarise the Consultants' initial findings and will present a first assessment of available data. The Inception Report shall also contain:
 - a. details regarding the methodology to be applied by the Consultant during the preparation and finalisation of the consultancy;
 - b. an outline of activities expected to be completed until the date of the presentation of subsequent reports, and;
 - c. an established matrix, defining the schedule of stakeholder engagements, reporting format and timelines and other pertinent related activities;
- ii. **Recommendations for ferry and aircraft types and new ferry contract** with a view to enhancing the VfM of basic access provision. This has to be submitted 3 weeks after the commencement of the assignment.
- iii. **Draft Updated Strategy** including a detailed Management Plan and Institutional Framework, which has to be submitted 6 weeks after the commencement of the assignment;
- iv. **Updated Strategy**, which will be presented 8 weeks after the commencement of the assignment and feedback from GoM, to include all areas outlined and preparation of the necessary Cabinet papers to present all findings and seek approval;
- v. **Implementation & Resourcing Plan**, which will be presented 2 weeks, after Cabinet's approval of the Updated Strategy.