Economic sustainability of airlines in the South Pacific

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2008 ATRF
31ST AUSTRALASIAN TRANSPORT RESEARCH FORUM

1 Research Background

Air transportation is essential for the countries of the Pacific region, no matter how small or insignificant, for economic development, as a public utility, and in some countries, for national prides as well (Gibb *et al*., 1991; Forsyth and King, 1996; Kissling, 1985; Doganis, 2001; Ballantyne, 2001; ASPA, 2002; SPTO, 2003). However, the costs of owning and operating an airline are high in the sparsely populated and remote Pacific Islands communities (Kissling, 2002; King, 2002; Campbell 2002a; Virelala 2003; Graham *et al*., 2008).

Government support, in the region, is still a vital necessity to assist in making the operation of national airlines viable (Guild, 2002; Campbell, 2002b; Virelala, 2003). Airline management strategies, operational practices, and market demand on air transportation need to be addressed concurrently (Holloway, 2002). Adopting world's best practices in these areas would give the small national airlines of the Pacific Islands better chances of continual viability and further contribute towards economic sustainability in the future; delivering increased social and economic benefits to their host countries and all stakeholders.

Global airlines are struggling to be viable and economically sustainable, given the current economic and commercial climate for aviation globally (PATA, 2007; IATA, 2007; Graham *et al*., 2008). Both the International Civil Aviation Organisation (ICAO) and the International Air Transport Association (IATA) have highlighted the continuing financial deterioration of the global airline industry with continual net losses annually between 2002 and 2006 totalling in excess of US$ 42.0 billion (IATA, 2007).

1.1 South Pacific air transportation

In the South Pacific, islands are characteristically scattered across great expanses of ocean. Their population and market size are small with high transport costs (Forsyth and King, 1996; Kissling, 2002; SPTO, 2003). These characteristics along with conflicts between the demand for socially desirable airline route networks, and the need to achieve adequate economic returns (Taumoepeau, 1989; Forsyth and King, 1996; Kissling, 1985; Gibb *et al*., 1991; Wheatcroft, 1994; King, 2002; Holloway, 2002; Virelala, 2003), create severe pressures on airline operations (Kissling, 1985; Campbell 2002a). Services by smaller national airlines in the South Pacific region are also treated by respective governments as an extension of their public utility services (Kissling, 1985; Findlay and Forsyth, 1988; Gibb *et al*., 1991; Campbell, 2002a; Virelala, 2003), in most cases providing the only essential link between the capital and the outlying communities (Vernaudon, 2002; Masson, 2002). These trends thus raise a very important question, how to ensure sustainability for these small regional carriers given the nature and variety of social, political and useful commercial roles they have to fulfil (Campbell, 2002a).

Recent financial losses of some government-owned airlines, such as *Royal Tongan Airline*, *Polynesian Airline*, *Air Niugini*, *Air Kiribati*, *Air Tahiti nui* and *Air Vanuatu*, have dominated recent aviation trends in the region and have absorbed a sizeable proportion of the national annual budgets from government reserves (Islands Business, 2007).

A recent survey of profit and loss situations of airlines of the region (Taumoepeau, 2007) showed that financial situations of airlines has deteriorated between the period 2001-2006, coupled with one national airline (*Royal Tongan Airline*) going into bankruptcy in 2004, *Polynesian Airline* being restructured with a new partner *Pacific Blue* in 2006 and most other airlines being restructured in order to survive. Most airlines are still in deep financial problems (except *Air Rarotonga*, *Air Pacific* and *Air Tahiti*), with even worst situations predicted for the immediate future in view of the recent hikes in the cost of fuel. Taumoepeau (2007) estimated that the combined regional airlines losses for six airlines (Table 1) exceeded US$44 million in 2006. These financial losses were also attributed to factors such as continual servicing of unsustainable social routes, inadequate commercial planning and mistakes in the choice of right aircraft for the routes served at the time. During the same period, the South Pacific governments have imposed little financial discipline on their airlines, decreasing incentives to undertake efficiency-enhancing measures (Campbell, 2002b; King, 2002; Taumoepeau, 2007).

Table 1 – Estimated profit/loss of selected South Pacific airlines

Airline	*Code*	*Country*	*Profit/(Loss) (US $ millions)*		
			2000/2001	*2002/2003*	*2005/2006*
Air Rarotonga	GZ	Rarotonga	0.8	0.9	N/A
Air Kiribati	VK	Kiribati	(0.8)	(1.2)	(3.0)
Air Nauru	ON	Nauru	(1.0)	(0.8)	(2.0)
Air Vanuatu	NF	Vanuatu	(1.5)	(2.0)	(2.0)
Solomon Airlines	IE	Solomon Islands	(1.2)	(0.6)	(3.0)
Polynesian Airlines	PH	Samoa	(2.0)	(2.0)	N/A
AirCalin	SB	New Caledonia	(11.5)	(20.0)	(16.0)
Air Tahiti	VT	Tahiti	2.5	3.5	1.0
Air Tahiti Nui	TN	Tahiti	(3.0)	(1.8)	(17.0)
Royal Tongan Airlines	WR	Tonga	(3.8)	(6.5)	-
Air Niugini	PX	Papua New Guinea	(6.0)	7.0	N/A
Air Pacific	FJ	Fiji	(11.0)	8.0	0.7
Total Profit/(Loss)			**(38.5)**	**(15.5)**	**(44.3)**

Sources: *Taumoepeau (2007), Airline Annual Reports, ASPA (2002-2003), Pacific Regional Transport Study 2004, interviews with airlines executives.*

Notes: *Figures were estimated by officials/airlines managers and reported in local currency in most cases and conversion rates to US$ varies during the study period. Currencies have been converted to US$ using exchange rates on 30th June 2007.*

1.2 The South Pacific regional boundary

The South Pacific regional boundary; spans islands and states south of the equator from PNG to Tahiti with Australia and New Zealand excluded. The islands of this region, discussed herein are shown on Figure 1 including: Papua New Guinea, Nauru, New Caledonia, Vanuatu, Tuvalu, Kiribati, Solomon Islands, Fiji, Samoa, America Samoa, Tonga, Niue, Cook Islands and Tahiti.

1.3 Research issue

Determine some of the factors that could contribute to the economic sustainability of the airlines of the South Pacific.

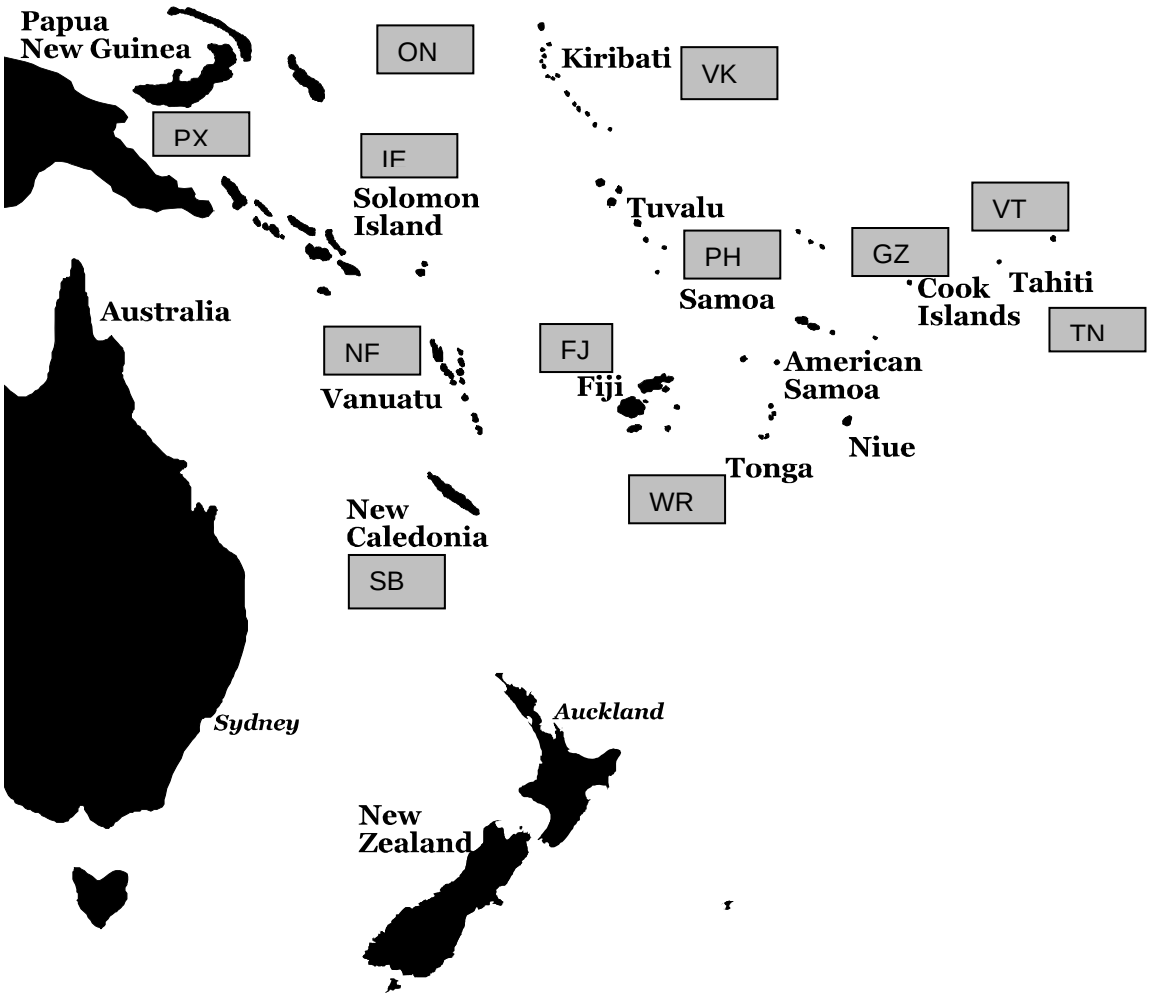

Figure 1 – South Pacific airlines covered in case studies

Source: *Taumoepeau (2007)*

2 Airline Economic Sustainability

Various discussions in the South Pacific have highlighted possibilities for ensuring airlines and governments can recover some of their costs including the following:

- pooling of resources
- codesharing of flights
- regional airservices office to streamline security and aviation compliance
- increase tourism activities through increased investments from overseas
- decreasing role for governments and bring in commercial management people.

2.1 Global Best Practice Framework

Figure 2 shows the pattern of key influences on airline practices from the 1980s to early 2000s, with much stronger influences from the commercial environment and cost control drive (Wheatcroft, 2000; Taumoepeau, 2007). Government influences played a diminishing and changing role from direct involvement to that of facilitation of infrastructure and environment conducive for airline growth (Taumoepeau, 2007). Airline practices during this period in most instances reflected these factors.

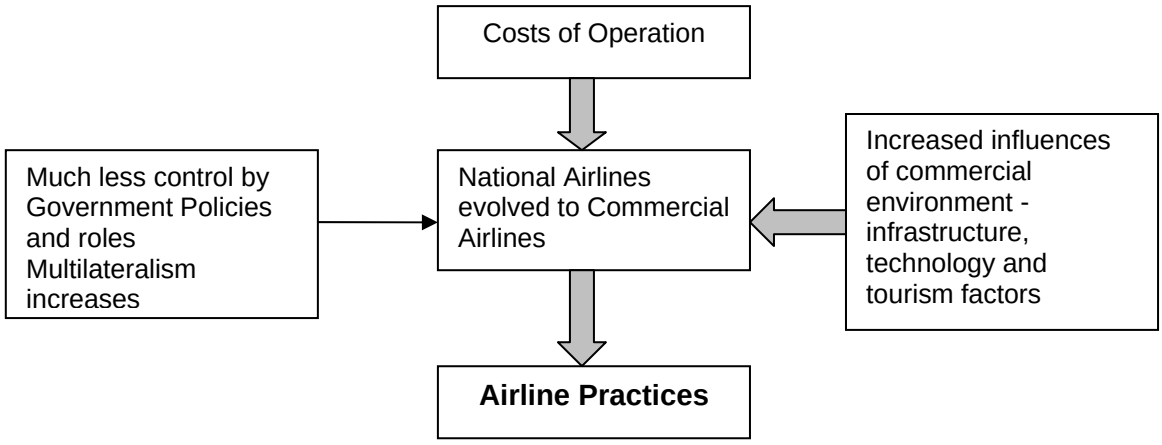

Figure 2 – Global developments of airline practices - early 1980s to early 2000s

Source: *Taumoepeau (2007)*

2.2 South Pacific Framework

Figure 3 shows that aviation development in the South Pacific region from the 1990s to the present day mirrors the development of the global airlines from the late 1940s to that of the late 1970s as shown in Figure 2. However, the South Pacific aviation scene is still strongly dominated by host government policies and direct involvement (Gibb *et al*., 1991; Kissling, 2002; King, 2002; Taumoepeau, 2007).

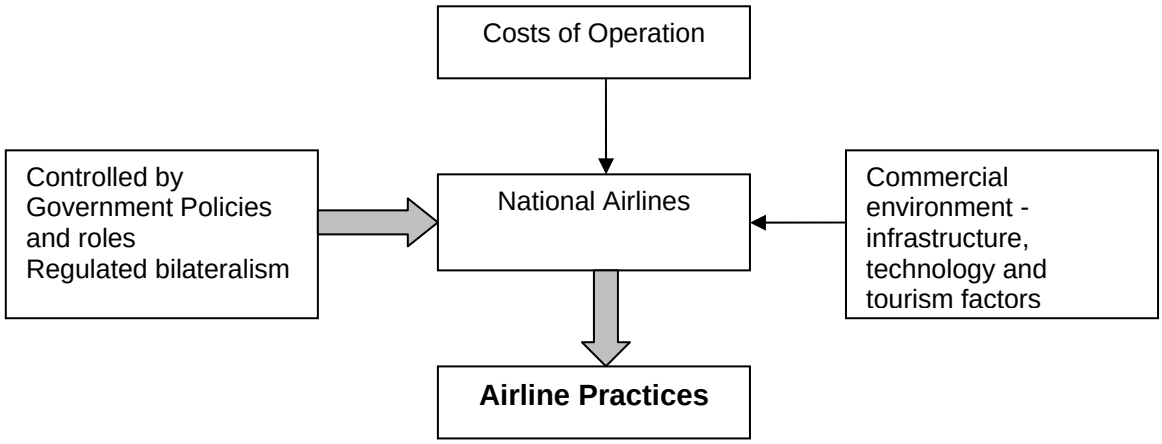

Figure 3 – South Pacific airline practice from 1990s to early 2000s

Source: *Taumoepeau (2007)*

3 Research Methodology

This study employed the following research tools: an airline's passenger survey, experience surveys, case studies and a Delphi group[1]. These are listed with the study objectives and propositions in Figure 4.

[1] Delphi technique consists of convening a panel of interested parties, experts and stakeholders on a particular issue/topic/industry. After differing interests and views have been adequately expressed and advocated, a meaningful outcome is arrived at and documented.

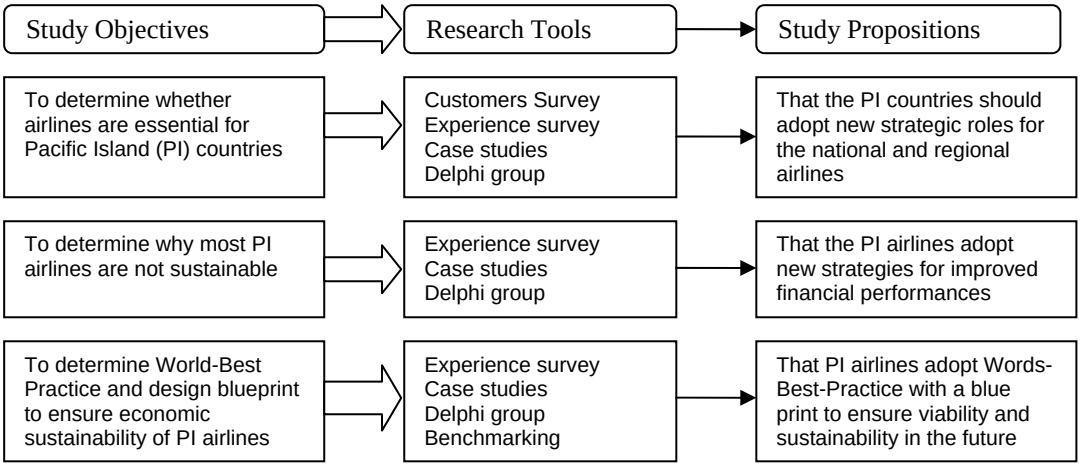

Figure 4 – Study objectives, research tools and the study propositions

4 Findings

4.1 Should a Pacific Island nation like Tonga provide a national air service?

A passenger survey indicated there is a need for domestic air services for Tonga. Of the 530 passengers surveyed, approximately 81% of the passengers replied “yes” to the question whether Tonga needs a domestic service or not. About 2% of the passengers surveyed, replied no and 16% were not sure with no comment from one passenger. The passengers were asked reasons why Tonga needs an airline service. The reasons are ranked in order of importance below. On family reunion benefit, 168 passengers (31.7%) ranked this as very important. Enable visits to outer islands, 260 passengers (49.0%) ranked this as very important. Help Government carry out their duties and services, 211 passengers (39.8%) ranked this as very important. Assist with emergency cases, 326 passengers (61.5%) ranked this as very important. Improve tourism, overall economic and social development with 339 respondents (64%) ranked this as very important. Figure 5 summarises the survey findings.

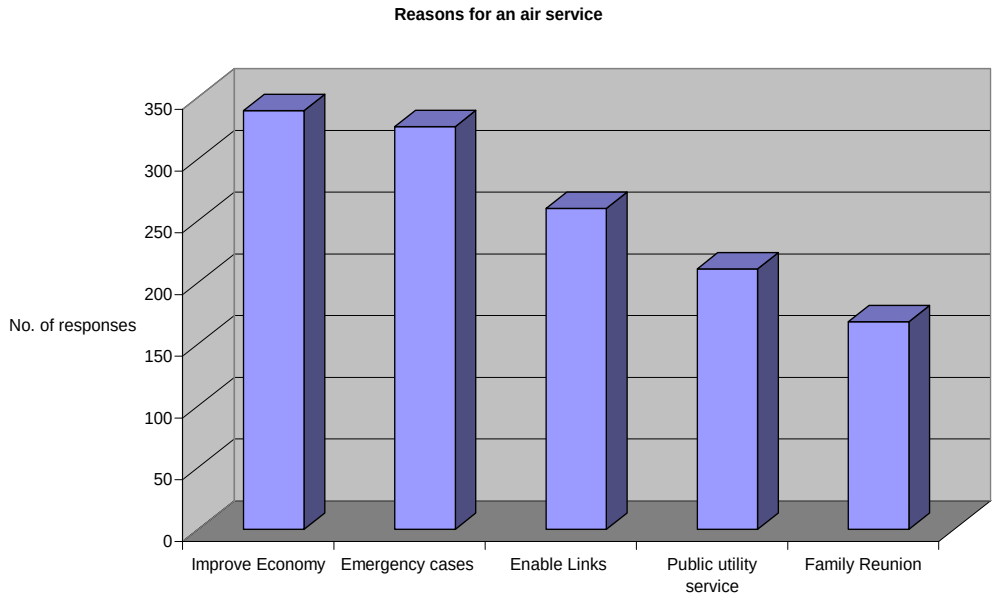

Figure 5 – Reasons why Tonga needs a domestic service

4.2 Economic sustainability of current Pacific Island airlines' practices

Findings from the case studies, passengers' survey, experience surveys and the Delphi group provided data that current practices of Pacific island airlines are not economically sustainable. Findings are summarised in Table 2 below.

Table 2 – Summary of selected regional airlines sustainability

Airline	*Financial status 2003*		*Core business*	*Market outlook*	*Why airline is not economically sustainable?*
	2003	*2006/07*			
GZ	Profitable	Profitable	Tourism	12% growth	If there is too much government intervention, wrong equipment, not enough demand and unable to manage cost of operation
VT	Profitable	Profitable	Tourism	12% growth	Undercapitalised, small tourism plant, not enough demand
VK	Loss	Loss	Ethnic market	Negative growth	Undercapitalised, small tourism plant, not enough demand
FJ	Loss	Profitable	Tourism	10% growth	Not enough hotel rooms, if adopt open sky policy, terrorism and unstable politically
PH	Loss	Loss	Tourism and ethnic market	Negative growth market share	Undercapitalised, small tourism demand, can have overcapacity, unable to manage cost of operation, govt intervention
NF	Loss	Loss	Tourism	Negative growth market share	Undercapitalised, small tourism demand, can have overcapacity, unable to manage cost of operation
IE	Loss	Loss	Tourism	Negative growth market share	Undercapitalised, small tourism demand, can have overcapacity, unable to manage cost of operation
WR	Loss	Bankrupted	Tourism and ethnic market	Negative growth market share	Undercapitalised, small tourism demand, can have overcapacity, unable to manage cost of operation, government intervention

Sources: *ASPA (2004-2007), Annual Reports from each airline 2002-2006*

The Delphi Group also highlighted the following factors, why airlines are not economically sustainable:

- Remoteness and length of distances between islands and airfields
- Limited size of the markets and low volume
- Specific overrun factors
- High airport charges
- Low load factors
- Some necessary thin sectors are not sustainable
- Soft currency earned by regional airlines but pay out in hard currency (US $)

4.3 Best Practice and Blueprint for Economic Sustainability

This was addressed through an experience survey of airline stakeholders as outlined in Table 3 below.

Table 3 – Key best practices for economic sustainability from airlines experience survey

	Airline											
Practice	*GZ*	*VK*	*ON*	*NF*	*IE*	*PH*	*SB*	*TN*	*WR*	*PX*	*FJ*	*NZ*
Alliances/code sharing			1	3	3	2	3	3	2			1
Minimum government involvement												
Cost control	1	1	2	1	1	1	1	1	1	1	1	2
More govt. subsidy/equity		2	3	2	2	3						
Good equipment choice	2	3					2			2		
Improve tourism infrastructure	3								3	3	3	
Improve marketing								2				
Improve commercial management											2	
More regional cooperation with airlines												
Adopt low cost airlines												3

Source: *Analysis of field data*

The findings listed cost control, code sharing and continued subsidies as the most important ones. Also indicated is the need for a gradual move towards multilateralism and less dependence on the stage of development of tourism and infrastructure and level of air services. These important factors were also reflected in the outcome of a separate stakeholder's survey that ranked alliance/code shares; cost control; good equipment choice; improve marketing; more cooperation and best practice as important key strategies that are most critical in bringing back economic sustainability to their airlines.

A case study of the Tonga national carrier operation in 2002/03 showed that the national airline was successful, after a relatively short period, in improving their financial operation after securing a code share arrangement with Air New Zealand up to four times per week between Auckland and Tonga in 2001/02. After 12 months of code share arrangement, the Tonga national carrier was able to improve their financial operation from a loss of TOP $7.6 million in 2000/01 to a break even situation in 2001/02. The national carrier also arranged code share arrangement with Air Pacific, with similar financial results recorded (Royal Tongan Airline, 2002/03).

5 Recommendations

5.1 Best practice and a blueprint for economic sustainability

The experience surveys and the Delphi group identified the following best practices:

- Cutting down costs of sales and distributions through Internet bookings
- Resource Pooling – Alliances and Code shares
- Market enhancement through tourism development
- Right choice of equipment
- Enhancement of aviation infrastructure best practice

Based on the literature reviewed and the findings of this study, certain characteristics of airline economic sustainability or unsustainability have been identified, as shown in Table 4.

Table 4 – Characteristics of unsustainable and unsustainable airline model in the South Pacific

Unsustainable airlines	*Sustainable airlines*
• Public sector domination • Mission emphasise public utility service and social links • Ad hoc equipment and capacity planning • No cost control • Under capitalised • Ad hoc views on open sky and bilaterals • Reliance on ethnic seasonal traditional market • Less tourism market orientated • Limited tourism infrastructure • Core accommodation rooms less than 1000 • Direct government intervention and high government representation on the Board • No private sector and/or professional representation on the Boards of airlines • Management and structure instability • Small airport hub • No links onto south-north hemisphere trunk routes	• Private sector domination • Mission emphasise profitability • Sound planning on equipment and capacity and scheduling • Cost control well developed • Keen to maintain routes protection from government tourism market oriented • Higher capacity for tourism with core accommodation rooms more than 1000 • No government intervention • Well capitalised • Bigger international airport as main hub • Major connections on south hemisphere-north hemisphere trunk routes • Stabilised with management assistance from metropolitan carriers • Management and structure stability • Link to major gateways • Good links onto south-north hemisphere trunk routes

Source: *Taumoepeau (2007)*

5.2 Managed Integrated Independent South Pacific Airlines (MIISPA)

In synthesising the findings and the strategies, with all their recommended activities, a cooperative strategy is suggested, a well managed integration of the independent airlines in the region (MIISPA) (as depicted in Figure 5). The rationale is to enable economies of scale and scope, pooling of managed resources, code shares, spare-parts inventory, joint training programmes, cooperative marketing, common reservation systems and deliberate cutting of costs of operation in all areas whilst maintaining the identities and flight codes of the participating airlines.

Airlines that could participate in the new MIISPA regional system include a new national Tongan Airline, *Polynesian Airline* (PH), *Solomon Airline* (IE), *Air Vanuatu* (NF), *Air Kiribati* (VK), *Air Fiji* (PC), Aircalin (SB), *Air Tahiti* (VT), *Air Tahiti nui* (TN), *Air Niugini* (PX), *Air Nauru* (ON) and *Air Pacific* (FJ).

This cooperative strategy suggests new collective governance of South Pacific national airlines to cope with uncertain futures. This is especially significant in view of the emerging global situation for airlines and the limited opportunities within the region for more economic growth. It is seen as vital to avoid duplication of resources, adopt more commercial best practice strategy and lessen the burden on taxpayers for the operation of their national carriers.

5.3 Policy implications for the South Pacific governments and airlines

The policy implications for the South Pacific governments and airlines include:

- A gradual move towards multilateralism and deregulations of air services in the region for the future, but is not an immediate need as local national airlines need to become economically sustainable without the impact of other carriers in the region.
- Strategies for facilitation of code shares amongst airlines on bilateral air services agreements and to cut operational costs as well as gaining new market segments.
- Adoption of best practice management strategy, with no political intervention, for the economic sustainability of airlines in the region.
- Governments to continue to work cooperatively in all areas of regional tourism marketing, sharing of resources and in the commercial front.

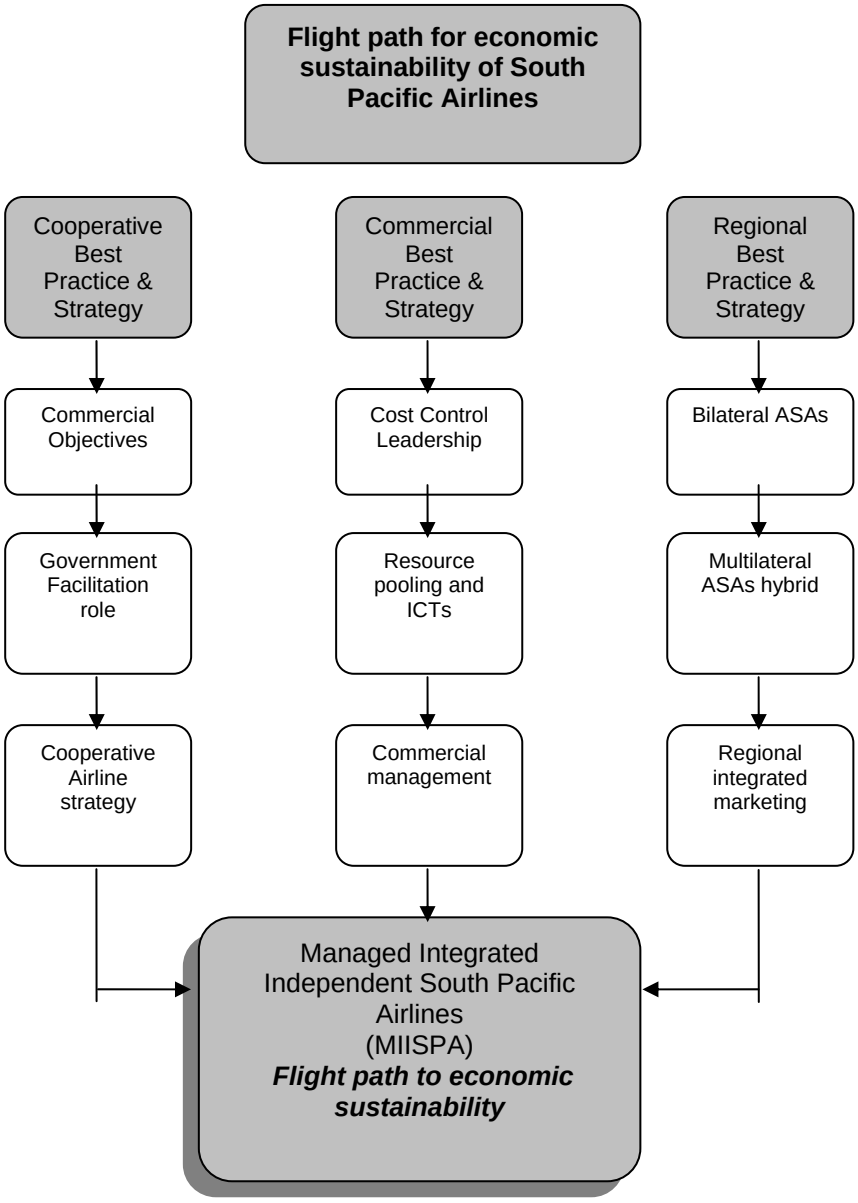

Figure 5 – MIISPA flight path for economic sustainability of South Pacific airlines

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