Reproduced from Asia Pacific Air Transport: Challenges and Policy Reforms edited by Christopher Findlay, Chia Lin Sien and Karmjit Singh (Singapore: Institute of Southeast Asian Studies, 1997 This version was obtained electronically direct from the publisher on condition that copyright is not infringed. No part of this publication may be reproduced without the prior permission of the Institute of Southeast Asian Studies.

Individual articles are available at http://bookshop.iseas.edu.sg

Asia Pacific Air Transport

The Singapore National Committee for Pacific Economic Cooperation (SINCPEC) is Singapore's national charter in the Pacific Economic Cooperation Council (PECC). SINCPEC is a tripartite organisation consisting of academics, government officials and businesspeople. SINCPEC has been active in the Trade Policy Forum, the Pacific Economic Outlook Project, the Transportation Task Force, the Task Force on Financial Market Development and the Human Resource Development Task Force.

The Australia–Japan Research Centre (AJRC) is responsible for a bi-nationally funded research program established to enhance understanding of both countries' strategic interests in the Asia Pacific economy and Asia Pacific economic cooperation. The AJRC forms part of the Research School of Pacific and Asian Studies at the Australian National University. An active program of conferences, seminars and publications serves as a forum for dialogue on the Centre's ongoing projects and as a vehicle for dissemination of the Centre's research results. The AJRC collaborates on research activities and training with over 30 major institutions throughout the Asia Pacific region.

The Chartered Institute of Transport (CIT), a professional body for those engaged in transport, was formed in the UK in 1919 and received a royal charter in 1926. The Singapore Group was set up in 1971 and became a National Council in 1991. CIT Singapore has a membership of about a thousand and regularly organises professional courses, conferences, seminars and talks. It also publishes a journal and research papers relating to transport.

The Institute of Southeast Asian Studies (ISEAS) was established as an autonomous organisation in 1968. It is a regional research centre for scholars and other specialists concerned with modern Southeast Asia, particularly the many-faceted problems of stability and security, economic development, and political and social change. The Institute's research programmes are the Regional Economic Studies Programme (RES, including ASEAN and APEC), Regional Strategic and Political Studies Programme (RSPS), Regional Social and Cultural Studies Programme (RSCS), and the Indochina Programme (ICP). The Institute is governed by a twenty-two-member Board of Trustees comprising nominees from the Singapore Government, the National University of Singapore, the various Chambers of Commerce, and professional and civic organisations. A ten-man Executive Committee oversees day-to-day operations; it is chaired by the Director, the Institute's chief academic and administrative officer.

Asia Pacific Air Transport

Challenges and Policy Reforms

Edited by

Christopher Findlay Chia Lin Sien Karmjit Singh

Published under the auspices of
Australia-Japan Research Centre (AJRC), Chartered Institute of Transport (CIT),
Singapore National Committee for Pacific Economic Cooperation (SINCPEC)

Published by Institute of Southeast Asian Studies Heng Mui Keng Terrace Pasir Panjang Singapore 119596

Internet e-mail: publish@iseas.edu.sg World Wide Web: http://www.iseas.edu.sg/pub.html

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the Institute of Southeast Asian Studies.

© 1997 Institute of Southeast Asian Studies, Singapore

Cataloguing in Publication Data

Asia Pacific air transport: challenges and policy reforms/edited by Christopher Findlay, Chia Lin Sien and Karmjit Singh.

(ISEAS series on APEC, 0217-7264; 3)

- 1. Aeronautics, Commercial—Government policy—Asia.
- 2. Aeronautics, Commercial—Government policy—Pacific Area.
- 3. Airlines—Asia.
- 4. Airlines—Pacific Area.
- I. Findlay, Christopher C. (Christopher Charles).
- II. Chia, Lin Sien.
- III. Karmjit Singh.
- IV. Series

DS501 I5991 no. 3

1997

sls97-94341

ISBN 981-230-002-3 (soft cover)

ISBN 981-230-004-X (hard cover)

ISSN 0217-7264

The responsibility for facts and opinions expressed in this publication rests exclusively with the authors and their interpretations do not necessarily reflect the views or the policy of the AJRC, CIT, SINCPEC or ISEAS.

Copy-edited by: Pam Hewitt.

Typeset by Minni Reis.

Printed in Singapore by SNP Printing Pte Ltd.

Contents

	Introduction Christopher Findlay, Chia Lin Sien and Karmjit Singh	ix
Part Or	ne: Overview	
1	Challenges and opportunities for Asian airlines and governments Tae Hoon Oum	1
Part Tw	vo: Policy issues	
2	Air traffic congestion and infrastructure development in the Pacific Asia region Paul Stephen Dempsey and Kevin O'Connor	23
3	Privatisation in Asia Pacific aviation Peter Forsyth	48
4	Impediments to liberalisation in Asia Pacific international aviation Michael Tretheway	65
5	Multiple designation policy in Korea Jongseok Kim	74
6	Multiple designation policy in Australia Christopher Findlay and David Round	84
7	Air transport policy in Japan: limited competition under regulation Hirotaka Yamauchi	106
Part Th	ree: Regional initiatives	
8	The Asia Pacific airline industry: prospects for multilateral liberalisation John Bowen	123

9	Canada–US Open Skies Michael Tretheway	154
10	Developments in the European Union: lessons for the Pacific Asia region Kenneth Button	170
11	Flying towards a single aviation market across the Tasman Christopher Findlay and Christopher Kissling	181
	Glossary	192
	Acronyms	196
	Index	199

Figures

Figure 1.1	Cost competitiveness: Major Asian carriers	6
Figure 1.2	Input price: Major Asian carriers	8
Figure 7.1	Changes of shares in domestic market, Japan, 1984 and 1994	112
Figure 7.2	Percentage of passengers by market structure, Japan, 1986–94	113
Figure 7.3	Relationship between real unit cost and available tonne kilometres	114
Figure 8.1	Silkair's network in the East and Southeast Asian region	131
Figure 8.2	Air transport routes from East Malaysia, by density of services	137
Figure 8.3	Cross-border air services in Southeast Asia, 1979	138
Figure 8.4	Cross-border air services in Southeast Asia, 1996	139
Figure G.1	Air transport freedom rights	
		193

Tables

Table 1	Air transport reform strategies	xiii
Table 2.1	Major airport development and expansion projects, 1996	25
Table 2.2	Asia Pacific airports: measures of traffic capacity	30
Table 3.1	Airline privatisation, 1985–95	52
Table 5.1	Frequency allocation scheme under guidelines for supervision and development of multiple national	0.1
	carriers	81
Table 6.1	Ansett's shares of Australian capacity, July 1996	89

Table 6.2	Market share of Australian carriers on multiple designation routes, 1994, 1995	89
Table A7.1	Summary of estimated parameters	119
Table 8.1	Passenger traffic growth on Asian NIE flag carriers	126
Table 8.2	New entrant airlines in the Asian NIEs	128
Table 8.3	Recent airline privatisations in the Asian NIEs	132
Table 8.4	Summary of airline alliances involving NIE airlines	144
Table 9.1	Market share of Canadian carriers, 1989	158
Table 9.2	American airline hubs, 1991	161

Appendices

Appendix 2.1	Airport construction projects	36
Appendix 7.1	Statistical analysis of airlines' cost levels	119
Appendix 8.1	Selected airline alliances by NIE carriers, 1996	146

Preface

This collection of papers grew out of a conference in July 1995 organised by four national committees of the Pacific Economic Cooperation Council — Australia, Chile, Korea and Singapore. The purpose of that meeting was to review the challenges and opportunities in regulatory reform in the air transport sector in the Asia Pacific region. The main aim was to make a contribution to the discussion of these issues that was taking place in the APEC process at that time. The conference was hosted by the Singapore National Committee for Pacific Economic Cooperation (SINCPEC) and we thank its chairman at the time, Dr Lau Teik Soon, for his support. David Parsons, then Director General of the PECC Secretariat, and Betty Chin, from the SINCPEC Secretariat, also provided the project with valuable support. SINCPEC distributed a summary report of the July 1995 meeting which was prepared by representatives of the four national committees. It was then proposed to take advantage of the papers prepared for the meeting to develop a longer manuscript which dealt with some of the issues in more detail.

This book is the result.

A co-host of the July 1995 conference was the Chartered Institute of Transport of Singapore. The conference programme was prepared by a joint committee of the two organisations whose members included Chia Lin Sien, Betty Chin, Donald Wyatt, Lim Ho Hup, Karmjit Singh, Ivan Neo Sekkok, Aric Oh, and K. Raguraman. We wish to thank in particular Dr Raguraman for his inputs into the planning of the conference. Our thanks also go to Far East Organization and the Singapore Tourist Promotion Board for sponsoring the event.

The manuscript was prepared for publication at the Australia–Japan Research Centre (AJRC), the Australian National University. We thank the Centre's Executive Director, Professor Peter Drysdale for his support and Denise Ryan who managed the project. We also thank the Director of the Institute of Southeast Asian Studies, Professor Chia Siow Yue, for her interest in the project.

Christopher Findlay, Chia Lin Sien and Karmjit Singh

AUTHORS

John Bowen received his PhD in geography from the University of Kentucky in 1993. He has taught at tertiary institutions in the United States and Singapore. From 1994 to 1997, he worked as a marketing analyst with Singapore Airlines. His publications include several articles concerning air transport liberalisation in Asia Pacific.

Kenneth BUTTON was head of the OECD Project on International Aviation and is currently Distinguished Research Professor at the Institute of Public Policy at George Mason University.

CHIA Lin Sien PhD, FCIT is a senior member of staff of the Department of Geography, National University of Singapore. He is a member of the Advisory Panel of the Chartered Institute of Transport, Singapore.

Paul Stephen Dempsey is Professor of Law, Director of the Transportation Law Program, and Associate Director of the Intermodal Transportation Institute at the University of Denver. He is also Vice Chairman and Director of Frontier Airlines, Inc.

Christopher Findlay is Associate Professor of Economics at the University of Adelaide and also an Associate of the Australia–Japan Research Centre at the Australian National University.

Peter Forsyth is Professor of Economics and Chair of the Department of Economics at Monash University in Melbourne.

Jongseok Kim is Research Fellow and Head of the Aviation and Maritime Department of the Korean Transport Institute and is Coordinator of the PECC's Transport Task Force.

Christopher Kissling is Foundation Professor of Transport Studies at Lincoln University in Canterbury, New Zealand, and Immediate Past Chair of the Chartered Institute of Transport in New Zealand as well as Convenor of the New Zealand PECC Committee on Transport.

Kevin O'CONNOR is an Associate Professor in the Department of Geography and Environmental Science at Monash University. His research interest focuses upon development and change in metropolitan areas. His emphasis upon airlines and airports reflects the role that these play in shaping the business context of today's major cities.

Tae Hoon Oum is Van Dusen Professor of Management in the Division of Transportation, Logistics and Public Utilities in the Faculty of Commerce and Business Administration at the University of British Columbia.

David ROUND is Associate Professor of Economics at the University of Adelaide, an Associate Commissioner of the Australian Competition and Consumer Commission and is currently Chairman of the (Australian) Employment Services Regulatory Commission.

Karmjit SINGH is Assistant Director of Corporate Affairs at Singapore Airlines. He has served with the airline since 1974 in a variety of managerial capacities covering planning, aviation fuel, administrative services, apron services, security, public affairs, aeropolitical and regulatory affairs. He has also served in government committees on foreign affairs and defence as well as on community relations. He participated in the GATS deliberations on air transport services in 1991. He is a Fellow and Chairman of the Chartered Institute of Transport in Singapore.

Michael Tretheway is Vice President, Marketing, at Vancouver International Strategic Services, the marketing and strategic planning subsidiary of the Vancouver International Airport Authority, and also adjunct Professor at the Faculty of Commerce, University of British Columbia.

Hirotaka Yamauchi is an Associate Professor in the Faculty of Commerce at Hitotsubashi University. His main research fields are transport economics and the economics of regulation. He has published widely on air transport issues.

Introduction

Christopher Findlay, Chia Lin Sien and Karmjit Singh

The Asia Pacific air transport sector has outgrown its regulatory framework. That framework is based on the country-to-country system of bilateral negotiation. The consequences have been higher costs and fares, limits on the scope for airlines to develop their networks and constraints on the options open to travellers. In this volume we explore the current features of the system for managing the international trade in airline services, the economic and other pressures on that system, likely directions of reform and some issues related to specific reform options. An important theme is the scope for the use of regional trade agreements, including these between pairs of countries, to pursue reform in international aviation.

While the volume covers the Asia Pacific region, our focus is mainly on reform options on the western side of the Pacific, that is the Pacific Asia region. The book begins with an overview of the issues. The second section examines a series of policy issues, including capacity of the air transport infrastructure (airports, air space and so on), privatisation, options for the design of strategies for reforming the bilateral system and the introduction of multiple designation policies. Issues involved in the design of regional or sub-regional (bilateral) arrangements are examined in the third section. This includes a discussion of the European Union (EU) experience and that in North America.

Our aim therefore is not to provide a comprehensive assessment of the situation and outlook for the industry in the region but to canvas options for the improvement and development of the regulatory system which draw on experience from around the world, but especially within the region.

As noted in the first chapter by Oum, the Asia Pacific region (as defined in industry statistics) accounts for over a third of international scheduled traffic and available forecasts suggest this share could rise to more than half by the end of the first decade of the next century. This traffic growth is driven by strong economic growth in most economies in the region in the context of the early stage of development of some of its members. Bowen in Chapter 8 also points to the rapid

growth of airlines based in the newly industrialising economies (NIEs) in this region.

Oum argues that within the Asia Pacific, Asian airlines will face challenges associated with rising costs which will affect their competitiveness. A particularly important force in that direction which he stresses is the diminishing input price differentials in favour of the Asian carriers. Furthermore he argues the weight put on consumer interests in policy making in this sector is expected to increase. At the same time, however, average yields are expected to decline, partly a consequence of the change in the mix of traffic towards leisure travellers but also due to the effects of competition on prices.

Other challenges he finds are those from the global alliance networks in which members have set up networks with more than one hub spanning entire continents at the same time as acquiring ownership shares in the feeder carriers. Asian carriers have so far achieved only limited alliance networks (there are some exceptions and details of alliances involving airlines in this region are examined by Bowen in Chapter 8).

The responses to these challenges, Oum argues, are constrained by the current highly restrictive regulatory regime in Asia. He argues that regulation fragments the region and makes it more difficult for Asia Pacific airlines to build an intra-regional network. It also reduces their bargaining power when dealing with foreign carriers seeking to extend their own alliance networks into Asia.

Oum makes a particular reference to agreements between Asian countries and the United States. He notes that agreements between each Asian country and the United States can be more liberal than those between the Asian economies. This, he observes, can give the US carriers some advantages over their Asian counterparts. As noted by Button in Chapter 10, several of these sorts of agreements have been signed in Europe. More recently, the United States has signed a number of these agreements with Asian countries. The effect is to create a hub-and-spoke structure of relatively liberal agreements, each of which puts pressure on those economies yet to sign. By their treatment of beyond rights, the agreements also give the United States relatively liberal access to intra-Asia routes, especially those between signatories. The next development related to these agreements is likely to be a series of reviews of the bilateral agreements between the United States' partners. The issues and experiences discussed in this book are relevant to that examination, and in particular our authors make a case for approaching reform in a multilateral rather than a bilateral manner within the region.

Another effect of the restrictive regulatory regime, Oum observes, is that it reduces the incentives to become more efficient. It postpones the time of adjustment, but does not remove the pressure for adjustment. This delay will increase adjustment costs for airlines and their national economies. Continued regulation is also likely to lead to faster rises in input prices (labour in particular) than otherwise. A more open system, he argues, would give airlines facing greater pressures of rising input costs more options for sourcing their inputs around the

region. That observation is also relevant to high cost carriers in the region, such as those in Japan.

Having made a case for liberalisation which yields long-run gains to both producers and consumers, Oum identifies a number of impediments. These include differences in capability among the airlines and the perception that reform will involve a highly uneven distribution of benefits. Identifying the effects of reform for airlines operating out of countries at different stages of development is an important topic for further work. Oum then reviews a number of short-term strategies for reform as well some longer-term approaches. These are summarised in Table 1 and each is examined in greater detail in Chapter 1. Oum builds on an earlier canvassing of these options in the report of the Pacific Economic Cooperation Council (PECC) conference on 'Air transport in the Asia Pacific: challenges, opportunities and options' (see Findlay, Paredes-Molina, Kim and Raguraman 1995).

An especially interesting suggestion is that a group of like-minded countries could liberalise together. The issue in that case is the rule on joining the 'club'. Snape (1996) stresses the importance of the membership rule as a test of openness of regional arrangements which apply to 'deeper' forms of integration. He notes that regional arrangements may cover new measures not now covered by the General Agreement on Tariffs and Trade (GATT), and this observation would also include air transport. Regional agreements may not be inconsistent with GATT principles even if only sub-groups of the signatories to the regional agreement take action of this type. This is the case, he argues, as long as the other signatories to the regional agreement can join subsequently on similar terms (p. 52). A recent seminar discussion raised the possibility that a test of the United States' intentions in negotiating the open skies agreements would be to work, in Asia Pacific Economic Cooperation (APEC) for instance, to liberalise them multilaterally by this method (McFadyen 1997).

Table 1 Air transport reform strategies

Short term	Long term	
Liberalise bilaterally Liberalisation of third and fourth freedom rights Relax code-sharing rules Open charter markets Open freight markets Open secondary airports Relax rules on foreign ownership of secondary carriers Multiple designation	Intra-Asian open skies Relaxation of ownership rules Liberalisation of bilateral agreements with countries outside the region The application of the GATS	

region. That observation is also relevant to high cost carriers in the region, such as those in Japan.

Having made a case for liberalisation which yields long-run gains to both producers and consumers, Oum identifies a number of impediments. These include differences in capability among the airlines and the perception that reform will involve a highly uneven distribution of benefits. Identifying the effects of reform for airlines operating out of countries at different stages of development is an important topic for further work. Oum then reviews a number of short-term strategies for reform as well some longer-term approaches. These are summarised in Table 1 and each is examined in greater detail in Chapter 1. Oum builds on an earlier canvassing of these options in the report of the Pacific Economic Cooperation Council (PECC) conference on 'Air transport in the Asia Pacific: challenges, opportunities and options' (see Findlay, Paredes-Molina, Kim and Raguraman 1995).

An especially interesting suggestion is that a group of like-minded countries could liberalise together. The issue in that case is the rule on joining the 'club'. Snape (1996) stresses the importance of the membership rule as a test of openness of regional arrangements which apply to 'deeper' forms of integration. He notes that regional arrangements may cover new measures not now covered by the General Agreement on Tariffs and Trade (GATT), and this observation would also include air transport. Regional agreements may not be inconsistent with GATT principles even if only sub-groups of the signatories to the regional agreement take action of this type. This is the case, he argues, as long as the other signatories to the regional agreement can join subsequently on similar terms (p. 52). A recent seminar discussion raised the possibility that a test of the United States' intentions in negotiating the open skies agreements would be to work, in Asia Pacific Economic Cooperation (APEC) for instance, to liberalise them multilaterally by this method (McFadyen 1997).

Table 1 Air transport reform strategies

Short term	Long term	
Liberalise bilaterally Liberalisation of third and fourth freedom rights Relax code-sharing rules Open charter markets Open freight markets Open secondary airports Relax rules on foreign ownership	Intra-Asian open skies Relaxation of ownership rules Liberalisation of bilateral agreements with countries outside the region The application of the GATS	
of secondary carriers Multiple designation		

Dempsey and O'Connor in Chapter 2 stress some important features of the characteristics of the geography of the region. For example, they stress the shift in traffic to a North–South alignment as well as the rise of China as a market. The economic growth in the region is also related to the rapid growth in air traffic, including intercontinental traffic. They observe that most of the changes are occurring within a narrow corridor.

They draw together these trends to discuss the implications for international airports in the region and whether the expected growth in airport capacity will be sufficient. Their conclusions are that more sophisticated regional approaches to air space management within the narrow growth corridor are a priority if rapidly rising congestion costs are to be avoided. They also argue that the next generation of international airports in the region will have to do a better job of integrating and managing their links to other transport modes.

Dempsey and O'Connor observe that better management of existing space could make a significant contribution to the productivity of the airport system. These options include the use of pricing systems to ration the space available, especially if such systems can reallocate demand away from the peak periods. Reform of bilateral agreements in the international market could have a number of implications for this set of issues, on the one hand increasing traffic volumes, but on the other hand creating more flexibility for airlines to put together networks that minimise the costs of congestion that they bear.

Dempsey and O'Connor mention that a number of governments are examining the costs and benefits of privatisation of airports. That issue is taken up in Chapter 3 by Forsyth.

Forsyth examines not only airport privatisation issues but also those associated with airline privatisation. Motivations for privatisation include the interest in raising the efficiency with which airports are used and also to raise revenue, and in some cases an interest in dealing with issues associated with market power among input suppliers, particular labour.

Forsyth documents the trend in privatisation and observes that so far, most change has occurred in airlines rather than airports. Airline privatisation has opened up the ownership to foreign carriers and facilitated the process of globalisation. He observes also that over time privatisation can lead to a more relaxed attitude by policy makers to regulatory reform, despite its initial effects of heightening the reluctance to liberalise.

Airport privatisation is complicated by concerns about market power and about noise and other environmental issues. He notes that contracting out some airport services may be just as effective as outright sale in achieving the objectives of a privatisation programme. Whatever happens, governments are likely to remain important actors in the international airport market either as owners or regulators.

Tretheway in Chapter 4 examines in greater detail the impediments to and options for liberalisation in international aviation. He makes the case against

bilateral reciprocity which is a feature of the current restrictive regulatory system and argues that moving the idea of reciprocity into a multilateral context offers a way of creating a situation where mutual gains from reform, and therefore progress towards reform, are more likely. He reiterates the argument that an important contributor to the reform process will be the documentation of the gains from reform, not only in air transport but also in other sectors such as tourism, trade and investment.

Tretheway discusses the criteria that might be used to define the critical group for the application of a regional approach to reform. He suggests starting by involving a group of high-growth economies with noticeably constrained air services and well matched carriers. Other suggestions which he stresses are increasing the weight on consumer interests, linking air transport to other sectors in trade liberalisation negotiations, moving to an automatic and unlimited exchange of third and fourth freedom rights, and starting the international liberalisation process in the air cargo sector.

The remainder of this section of the book is made up of a series of reports on specific issues in particular countries. There are papers on the introduction of multiple designation policies in Korea and Australia and a review of policy changes towards the introduction of domestic competition in the Japanese market.

The chapters on Korea by Kim and on Australia by Findlay and Round review different approaches to the introduction of more than one air carrier on international routes (multiple designation). Issues involved are the extent to which existing capacity should be reallocated and the sharing of incremental capacity between the carriers, including entrants who meet the fitness criteria. It is important that the principles used to make those allocation decisions are made transparent. The rules applied in Korea are closer to a formula approach, while Australia uses a more administrative method.

In the formula approach, new entrants are allowed on to operate on routes with increasing increments to capacity as traffic volumes reach a range of target steps. However, the consequence may not be more intense competition. Limits on capacity of the designated carriers are more likely to induce them to behave cooperatively and therefore anti-competitively. The addition of a couple of flights by a new carrier of the home country to those already offered by the incumbent home country carrier and foreign carriers is likely to have little effect, especially given that there is a cap on the entrant's capacity and that future increments to the entrant's capacity are predictable. For these reasons, Kim argues in Chapter 5 for a phasing out of the formula approach in Korea and its replacement with a system without capacity constraints. Exceptions to this non-competitive outcome may occur if the incumbent carrier expects that the formula is a transition to a more liberal system (as in the EU).

Kim found that the formula approach led to improved performance by the airlines in terms of routes and loads. The formula may appear to have the advantage of greater certainty, at least compared to other administrative approaches.

Over time, however, as the Korean experience also illustrates, the formula is not likely to be stable, as 'outsiders' continue to press for policy change and for access to markets.

One of the issues in the formula approach is that the size of the steps chosen may not reflect accurately the economies in aircraft size, flight frequency or network size. Higher cost operations may be the unintended consequence. Airlines may regard this option as less desirable than other alternatives which involve less certainty but offer greater flexibility. Variations on the formula system could be introduced to deal with issues of inflexibility. For example, some route rights could be allocated for a fixed time period (say five years) after which their allocation could be reviewed. This process however moves the formula approach closer to an administrative system like that discussed below. Another option is to allocate the route rights indefinitely but permit airlines to transfer rights between themselves. In this case the formula approach is a first step towards the use of a market oriented mechanism (see below).

As Kim observes, the formula approach creates a new set of strategic issues and opportunities for airlines. For example, the incumbent carrier may have the incentive to keep up fares or constrain the growth of capacity to limit traffic growth so that the total traffic volume lies below the ceiling which attracts entrants. This strategy is likely to be less feasible in the absence of capacity controls since an initiative by the incumbent carrier could invite a response of rival carriers from the other end of a route.

Airlines under the administrative arrangement must make submissions to the regulatory agency to show how their proposal satisfies a set of established criteria. Findlay and Round examine this approach in the Australian market. The applicants compete in terms of the depth of their proposals and their consistency with the criteria. Depending on the resources spent in this process, airlines also win and retain the bulk of the rents associated with the allocation.

The administrative approach is designed to add to the competitiveness of the market but may not do so. Consumers may gain from aspects of competition in service quality. A more vigorous response, which sets off a price war for example, appears to have been avoided by competitors in the international market in the Australian case.

Another issue for airlines is the sequencing problem in which competitive outcomes are in fact determined by network considerations, but the administrator must operate sequentially route by route. A response to this problem by the regulator is to consider variations in original allocations. But that adds to the uncertainties associated with the system.

Even though the system appears to be transparent and involves substantial flexibility in its application, airlines may be increasingly frustrated by the intervention of the regulatory agency in their affairs.

From the economic efficiency perspective, the administrative approach may only be a 'deck chairs' solution (rearranging the rights without a substantial con-

tribution to competition). Governments incur a substantial administrative cost, and face the possibility of an increasingly intense debate about the application of the policy.

The design of a multiple designation system can be split into a number of parts: the first is the initial allocation of rights, the second is the subsequent transfer of those rights and the third is the management of the competitive process between the carriers once the rights have been allocated. The administrative approach, as defined here based on current examples, appears to mix all three steps. In fact, they can be separated. Competition policy authorities can be given the task of overseeing the competitive process once the rights have been allocated. The main question is then the process for the initial allocation and the subsequent transfers.

Apart from an administrative approach, another option is to use market mechanisms, in which for example, airlines bid for access to new capacity that becomes available as a consequence of bilateral negotiations. This approach deserves more attention as a mechanism for managing the introduction of multiple designation systems. One of its advantages is that it would increase the transparency of the system, including its impact on fares and airline profitability. It could also be used to guide negotiators in their planning for the reform of the bilateral agreements.

Yamauchi in Chapter 7 focuses on developments in Japanese policy which have been evolving towards a more procompetitive stance, but at a very slow speed. Yamauchi argues for an acceleration of the rate of change. Yamauchi reviews the history of the air transport regime and the forces acting on it. He explains how international factors led to the adoption of a multiple designation policy on Japan's international routes which in turn had implications for the regime applied in the domestic market. Yamauchi explains how the presence of airport congestion in Japan has affected the path of policy change. He also observes the increasing weight on consumer interests in policy making in Japan. The chapter includes some evaluation of the effects of the introduction of a greater degree of competition into domestic markets. Yamauchi reviews developments in the Japanese international agreements, with a special focus on the bilateral agreement with the United States (see Yamauchi and Ito (1996) for more detail).

The third part of the book contains a series of papers which report a perspective on regional developments.

Bowen (Chapter 8) reviews aviation developments in the Pacific Asia region with special reference to Southeast Asia. He argues that the sector should be given priority in the APEC process as well as other multilateral fora. He notes, however, the presence of forces resisting liberalisation but observes some evidence of the willingness of governments to move beyond bilateral agreements, in the form of sub-regional arrangements. Bowen reviews the scope for including air transport in ASEAN Free Trade Agreement (AFTA). He also presents the

argument that airline alliances are a force towards multilateralism, since these provide avenues for growth not available under the restrictive bilateral structures.

Tretheway (Chapter 9) examines the origins of the Canada–US Open Skies Agreement, which has some important lessons for the development of liberalisation within the bilateral system. Tretheway notes that the US–Canada Free Trade Agreement specifically excluded air transport and that NAFTA also excluded that sector. Tretheway notes that the rise in consumer interests in response to obvious distortions induced by the inflexibility of the previous regulatory regime was a powerful force for reform. He then reviews the features of the 1995 Open Skies Agreement, noting that some important restrictions still remain (on cabotage, fifth freedom traffic, rights of establishment and code-sharing). Tretheway argues that a breakthrough in the development of the open skies regime was the shift to the principle of equality of opportunity rather than the principle of equality of benefits. He explains how a phase-in period can be used to deal with the concerns about the dominance of particular carriers in a more open market. He notes the gains that accrue to smaller communities from open skies arrangements and notes how smaller carriers can survive by building alliances with larger ones.

Button (Chapter 10) outlines the developments in the European Union (EU) and discusses the implications for the Asia Pacific region. A special interest here is the lessons from the EU experience for the Asia Pacific region. He observes that the changes within the EU market were part of a larger programme leading to a single market in Europe and that there was pressure for coordinated action on air transport as result. That pressure is currently missing in the Asia Pacific and Button concludes by looking for other institutions which might have a similar catalytic effect. One he highlights is the World Trade Organization (WTO) process. He stresses the importance of complementary policy development on safety, environmental policy and consumer protection (the latter for example with respect to computer reservation systems). He also highlights the value of considering the impact of regulatory reforms on related aspects of the air transport sector, such as air traffic control systems and airport access. A special issue in the EU was dealing with the financial assistance to the carriers and the process of managing change. The design of the phase-in periods is of particular interest. Tight timetables and advance announcements are important features of any strategy adopted for effective change.

Findlay and Kissling (Chapter 11) review the development of a single aviation market across the Tasman between Australia and New Zealand. This agreement is notable because of its inclusion of cabotage although the extent of actual new entry into domestic markets has so far been minimal. One issue is whether the arrangements will create more gains for international passengers but at the expense of some domestic travellers. This was certainly a concern of competition policy regulators in New Zealand. The trans-Tasman experience also highlights the increasing impact of competition policy regulators on the development of the air transport regulatory system, and the pressures on foreign ownership rules that are created by the development of more competitive regimes. The latter pressure is for a relaxation of the limits on foreign involvement.

These papers on the EU and on the trans-Tasman arrangement both highlight the outstanding issue of how to deal with the exchange of traffic rights with non-members of the agreement. This is an issue no matter whether the group of liberalising economies is two or twenty-two. The so-called 'beyond rights' were quarantined in the Australia–New Zealand negotiations. The EU is still trying to work out its external relations policy and whether it wants to negotiate with other non-European countries as a group and, if so, how. Similar issues arise in the discussion of how to multilateralise US open skies agreements noted earlier.

In summary, the contributions to this volume present a series of important points about the management of both deregulation and liberalisation in aviation. The traditional international air transport regulatory framework is highly restrictive, not only from a passenger perspective but also from the point of the view of the airlines. This is especially apparent as pressures of rising input prices on established carriers become more intense and as competition from entrants in the region and from carriers in the rest of the world intensifies. Some directions of reform are already evident, including an attempt to grow out of the bilateral system. But that approach, it is argued here, is flawed. Even bilateral agreements which are presented as 'open skies' arrangements need not always deal with the underlying discriminatory nature of aviation bilateralism. An effort is made here to examine how new principles, which are common to other tradeable goods and services sectors but which have not been the foundations of aviation negotiations, can be applied. A variety of intermediate steps in a reform programme are noted. The evaluation of models for inter-group negotiations, including between pairs of countries who have liberalised their own aviation bilaterals, illustrates the value of the application of the principles of a 'club' approach by a group of likeminded countries. These principles include a focus on the rules of accession for new members. These ideas offer valuable routes to reform in international aviation.

References

- Findlay, C., R. Paredes-Molina, J. Kim and K. Raguraman (1995) Air Transport in the Asia Pacific: Challenges, Opportunities and Options, Singapore: Singapore National Committee for Pacific Economic Cooperation.
- McFadyen, J. (1997) 'US–Japan Civil Aviation: prospects for progress, Working Paper Series 97(2), Washington: Institute for International Economics.
- Snape, R. (1996) 'Which regional trade arrangement?' in B. Bora and C. Findlay, eds, *Regional Integration and the Asia–Pacific*, Oxford: Oxford University Press.
- Yamauchi, Y. and T. Ito (1996) 'Air transport policy in Japan', in G. Hufbauer and C. Findlay, eds, Flying High: Liberalizing Civil Aviation in the Asia Pacific, Washington and Canberra: Institute for International Economics and the Australia–Japan Research Centre.