Introduction

Asia represents one of the fastest growing regions in the world with respect to both tourism and transport. Forecasts from airframe manufacturers such as Boeing and Airbus continue to point to the Asia-Pacific region as one with significant and sustainable growth potential. Many Asian destinations are benefitting from major shifts in markets and market access, including large intercontinental growth by China, India and Japan, substantially more connections between the Middle East and India, and the growth of secondary airports in China (e.g., Hangzhou, Chengdu) (Flightglobal 2014).

Hall and Page (2000) acknowledge the deep relationship between tourism and transport in the region, and various scholars have demonstrated significant linkages between the provision of transport and the rate of development of tourism (e.g., Lohmann 2003; Henderson 2009). Globally, the trend of enhanced access continues, with adjustments and refinements to existing business models for air services, cruise tourism and the degree to which some forms of land transport (e.g., self-drive tourism (Denstadli & Jacobsen 2011)) are integrated in tourism experiences. In Asia, the competitiveness of tourism destinations is acknowledged to be contingent upon the provision of transport (Leung & Baloglu 2013). As a consequence of the strong role that transport plays in economic development, it is not terribly unusual to see innovations in transportation be first manifested in the Asian region. One example is the development of the Airbus A380, which was delivered first to Singapore Airlines in October 2007.

This chapter offers a restricted overview of transportation and infrastructure issues in Asia. Our focus is largely modes of transport that have had the most visible and significant impact on tourism development and government policy, namely air and marine transport. Our treatment of air transport reviews issues of liberalization and protectionism and assesses new and emerging business models in commercial air transport within the region. Our attention to marine tourism assesses the region’s cruise sector. The dominant theme of this chapter is that air carriers and cruise lines operating in Asia are adapting to a business environment that is sometimes unfamiliar and uneven, but is no doubt changing dramatically. There are uncertainties to consider, arising from, for instance, the development of markets and organizational structures tied to governance and, to be discussed briefly later in the chapter, uncertainties associated with global challenges.
such as greenhouse gas emissions. The chapter concludes with a case study that highlights the implications of a sudden, tragic event – namely, the means by which such an event can illustrate recent (but hitherto not widely publicized) changes to the way in which an industry functions and, furthermore, can trigger regulatory responses that have far-reaching consequences, including those that generate short-term uncertainties.

Not unlike other geographic regions – and even global systems – of trade and commerce, connectivity is a paramount issue in Asia. A report by Gautrin (2014) offers a synopsis of the means by which connectivity can be fostered through ground transport linkages between South Asia and Southeast Asia. Importantly, Gautrin (2014) signals the value in tourism from improving such linkages, but also cautions that obstacles exist such as the high cost of infrastructure development, wider connectivity imperatives (as policy issues), uneven demand and the challenges of incongruent networks (World Bank 2014). The Asian Development Bank (ADB) and the ADB Institute (2014) released an interim report on connectivity which noted that “Rail transport is an underutilized transport mode in South and Southeast Asia because of serious limitations in the rail network, particularly in facilitating regional connectivity.”

While the range of transport options in Asia is vast, there is an argument to be made following studies elsewhere (e.g., Stubbs & Jegede 1998) that, unlike some air cargo services (Lin & Chen 2003), the wider region struggles with multi-modal integration (see also Das 2004). This assists the seamless movement of goods in the context of international trade. It also aids in ensuring that passenger services are not rendered inefficient as tourism development expands outward from major centres to include more remote regions. Transport networks, then, need to have planning imperatives and milestones that incorporate modal use by tourists (Koo et al. 2010). Doing so would reduce what Graham (1998) identified, in the case of the EU, as disparities in accessibility. Indeed, the rapid growth trajectory of economies in the region makes integration a problematic issue (UNESCAP & AITD 2007: 134):

the dynamic economic, trade, investment and tourism development in the region since the 1980s, as well as the concomitant adoption of outward-looking policies, positive changes in the political environment and the advent of container technology, have resulted in the revival of a keen interest in regional cooperation as a means of improving and developing interregional land transport linkages.

Solutions are not always apparent to ensure transport and tourism are linked in future development implementations. De Alwis (2010), however, offers a prescription to foster enhanced tourism development in Southeast Asia, some elements of which focused specifically on transport initiatives, including the further liberalisation of access between countries and the support for fast ferry and cruise options for tourist movement.

**Air transport issues**

The scale and scope of commercial aviation in the region has grown significantly in recent decades. The industry is project to earn a net post-tax profit in 2015 of US$5 billion with a 7.7 per cent growth in the number of passenger kilometres over 2014 (International Air Transport Association (IATA) 2014a). IATA released a series of 20-year projections in October 2014 (IATA 2014b). Most notable in the report was the fact that the size of the commercial passenger market in China is expected to overtake that of the United States by 2030. Furthermore, strong economic and demographic trajectories and the Asian and South American markets will result in the fastest growth, according to IATA (2014b).
While the broader Asian region is largely robust in terms of air services from a business and geographic scope, there are nonetheless significant challenges. Here, we consider three, each of which have complex interrelationships with each other. For instance, the business models of subsidiary airlines can have an important effect on forward planning at regional airports, as well as considerations by regional governments with respect to market access.

**Liberalisation of air services**

One of the more complex and long-standing issues with respect to commercial passenger air services is the liberalisation of those services. This is especially relevant in the Southeast Asian region, where slow ("inching" as described by Chin 1997) progress is sought toward an Association of Southeast Asian Nations (ASEAN) single aviation market. The approach ASEAN governments have taken with respect to developing a single market for access and connectivity is largely economic, and thus to secure long-term development opportunities and regional growth (Yue 1998). In this sense, the intent is not dissimilar to the regional liberalisation approach in the 1990s in Europe (Forsyth et al. 2006), with an intentional design of a staged approach. A 2008 multilateral agreement by the ten member states of ASEAN served as a precursor to a planned future implementation of the single market. As Tan (2010: 289) notes, the multilateral agreement is limited:

> For now, the Agreement goes only as far as providing market access relaxations for certain key routes, principally between the ASEAN capital cities. At the same time, it seeks to relax airline ownership and control requirements beyond the traditional substantial ownership and effective control rule.

The wider agreement for a single aviation market is scheduled for full implementation in 2015, despite the fact that, at the time of writing, the Philippines had not fully adopted the full list of principles of the agreement (Tan 2014). Various news reports in the early part of 2015 cast doubt over whether an agreement is even likely. As Tan (2009) argues, the ASEAN approach to liberalisation can sit alongside the Philippines’ approach to aviation policy, but the country may be reluctant to fully adopt the stated principles of open market access for fear of reducing the competitiveness of its own national carrier.

In East Asia, the same fundamental elements of liberalisation as outlined by Tan (2010), namely market access and ownership, are also debated. Wang and Heinomen (2015) argue that the aeropolitical landscape has largely been shaped by fundamental changes in economic orientation in states such as Hong Kong, China and South Korea, but the wider political framework is responsible for these changes. Oum and Lee (2002) consider the restrictive bilateral relations between China, South Korea and Japan, arguing that a pan-national committee would seek to help liberalise these markets. Today, however, several Chinese airlines, for instance, have been actively seeking new routes through the southern Asian region, including further into Australia and New Zealand in order to support growing tourism demand.

Air access agreements have important implications for tourism. For one, they allow for a more seamless flow and allow for passengers to undertake multi-destination itineraries. This, in turn, can lead to more even, and perhaps positive, economic impacts from tourism receipts. Liberal agreements also present countries with more problematic economies an opportunity to use tourism to further economic growth. That said, it can be difficult to craft a multilateral agreement in complex regions such as Asia that touches various types of economic development so deeply and has general support from all parties. Tan (2009, 2010) signals multiple political
and economic roadblocks that have challenged the seamless implementation of the approach to ASEAN open skies. Most of these relate to the perceived imposition of a regional open skies approach on a nation’s desire to ensure its own airlines are protected.

**Airports**

Infrastructure in support of tourism is often overlooked in the assessment of transport and tourism. While airlines provide the business case for the mobility of international and domestic tourists, it is the airport infrastructure which facilitates such mobility. Airports in the region are actually very much competitive. They exist within a marketplace where profits can often be quite thin, customers are varied and numerous, and there are extensive performance expectations and metrics. Airports should be seen as the vectors by which economic development is fostered, and thus their ownership structures (as strategic assets) offers some unique regulatory perspectives given many (if not most) are expected to operate as profitable entities (Gillen 2011).

De Wit *et al.* (2009: 640) note that “airline networks are progressively transforming into hub-and-spoke networks, as international aviation markets become increasingly liberalized”. On this basis, they (de Wit *et al.* 2009) measure the performance of Asia-Pacific airports by incorporating the supply elements (whereas other studies have used demand) of airline schedules and resulting hub performance. They find that Chinese airports have a significant number of direct connections, but Sydney and Tokyo had the highest overall hub performance. The airports in the de Wit *et al.* (2009) study were, however, primary airports. With the overall increase in air service growth, including the growth in low-cost carriers, it is important to consider the impact on secondary ports. Zhang *et al.* (2008) argue that, interestingly, a regional response to the growth in low-cost services has been the construction of secondary terminals (e.g., AirAsia’s terminal at Kuala Lumpur) as opposed to the direct utilisation of scarce secondary airports:

> as availability of secondary airports seems to be a key requirement for the implementation of the LCC business model, how to deal with the scarcity of secondary airports in Asia appears to be a major problem for airports, airlines, and governments.  

*(Zhang *et al.* 2008: 37)*

**Airline business models**

Finally, a number of alternative business models have arisen in the region with respect to air transport. Two are prominent. The first is the carrier-within-carrier (or airline-within-airline) concept (Gillen & Gados 2008), where separate firms are created for specific competitive markets, often a response to the presence of strong low-cost carriers (Graham & Vowles 2006). Gross and Lück (2013) identify over a dozen airline brands in the region which are subsidiaries of parent firms. The second is the low-cost, long-haul model. Francis *et al.* (2007) and Morrell (2008) correctly question whether such a model could function profitably. Despite this, attempts have been made. Several carriers in the region already operate relatively long-haul routes on a low-cost model. Scoot, a subsidiary of Singapore Airlines, offers services from Singapore to Hong Kong and Nanjing, for instance, and Cebu Pacific, based in the Philippines, also targets cities such as Hong Kong, Beijing and Bangkok. AirAsiaX, perhaps the most successful, boasts a substantial route map and a growing fleet.
Case study 3.1 Indonesia AirAsia flight 8501

Indonesia AirAsia flight 8501 was announced as missing in January 2014 on a flight from Indonesia to Singapore. All 155 passengers were killed. In the weeks that followed, a number of issues were raised. Chief among these was the question of the safety of airlines in the region, specifically low-cost airlines, despite the fact that low-cost carriers are often credited with facilitating and spawning substantial growth in tourism numbers (e.g., Chung & Whang 2011; see also Lawton & Solomko 2005). Many of these concerns were raised in the popular press following revelations of problems relating to scheduling and authorisations.

The integration of safety and security mechanisms into an airline’s operation is largely the responsibility of the aviation regulatory authorities in that airline’s home country (Broderick & Loos 2002). With respect to Indonesia, the wider concern was the fact that a number of Indonesian airlines have been blacklisted by major markets such as Europe (see Reitzfeld & Mpande 2008 for an overview of the legislation enacted). Henderson (2009) explored the impact of the European ban on Indonesian airlines, noting that “defects” in suitable transport between source markets and destinations can have severe repercussions, especially given the relative popularity of nearby countries like Malaysia and Singapore.

Beyond the tragic human loss and the wider regulatory concerns regarding safety, the loss of flight 8501 also raised a number of issues with respect to air access within the region. The first of these is how airline branding fits within a single brand operating across multiple jurisdictions of regulatory oversight. In the case of Indonesia AirAsia, the airline itself was majority owned by a private company in Indonesia. However, the brand AirAsia was utilised via a 49 per cent ownership stake in the airline by the AirAsia group. The reason for this is that Indonesia, not unlike most countries around the world, requires that the majority ownership of a particular airline must be vested in nationals or citizens of that country. This presents some fairly unique business model issues. One of these is the complex nature of branding of airlines with multiple-ownership structures, where the brand may be seen throughout the region but is licensed by multiple operators. In incidents such as flight 8501, the ability for a wider airline group, which manages multiple airlines in multiple countries, to respond to crises becomes paramount.

The second issue is safety. It is well known that consumer perceptions of airline disasters are somewhat sticky in that they are perpetuated for quite some time after a disaster (Siomkos 2000). In some instances, governments are proactive, as in the case of Japan restricting the number of flights that Thai airlines can operate to its airports in March 2015 (Reuters 2015). Citing safety concerns, the Japanese Civil Aviation Bureau effectively banned on 27 March 2015 any increase in the number of flights operated by an airline designated by Thailand, and prohibited Thai airlines from changing aircraft type or routings. Thailand’s Transport Minister responded by indicating that “This seriously affects Thailand’s tourism sector” (Bangkok Post 2015). Following this, the International Civil Aviation Organisation (ICAO) downgraded the Thailand Department of Civil Aviation, arguing that it is not in compliance with international safety regulations. This could have significant repercussions for Thailand’s tourism sector given its overall importance to the country (see Kontogeorgopoulos, Chapter 11, this volume).
Marine and cruise tourism issues

Not entirely like air transport serving the growth of tourism in the region overall, the popularity of cruise travel is spreading to Asian markets (Mondou & Taunay 2012; Sun et al. 2014). There are multiple reasons for the increasing volume of Asian cruise travellers, many of which also account for the overall growth of outbound travel from Asia: increasing affluence and more free time in the region, the rising availability of affordable international travel, the development of (more suitable) infrastructure, and the positive support and national significance accorded by governments to tourism development. As well as an expanding source of outbound travellers, Asia has emerged as a prominent destination for a rising number of inbound travellers. Redeploying ships to Asia has enabled cruise lines to offer novel products to repeat customers in a range of markets, including the United States, and to entice first-time Asian passengers. The recent “discovery” of Asia as a cruise destination coincides with its growth as a market. Several issues are defining the development of cruise travel in Asia: the characteristics of Asian tourists, the importance of infrastructure and political relationships between countries.

Bold projections have been made regarding the future growth of the Asian cruise market. Asian travellers are by no means peripheral to the concerns of the global cruise industry. Pier Luigi Foschi – the former chief executive officer of Carnival Asia, a subsidiary of Carnival Corporation – predicts that “Asian passengers will account for one in every five cruisers” by 2020, nearly double the number in 2013 (Stieghorst 2013: 1). Chinese consumers, in particular, will contribute substantially to the anticipated expansion of the Asian cruise market. The rising demand for cruise travel among Asian travellers has prompted a range of supplier responses. Shorter cruises that are three to five days in duration, for example, are preferred (Mondou & Taunay 2012; Stieghorst 2013; Sun et al. 2014). The dining experience typically offered to cruise passengers is modified to suit Asian travellers. These travellers “prefer not to be assigned to a table with total strangers” (Bachman 2014: 21), a common practice on board cruise ships. Themed dinners – and meal menus more broadly – require adjustment. A Carnival cruise ship that sailed with Chinese passengers featured a “presidential menu” (Shao 2014: 18). The dishes served were those that China’s former president, Hu Jintao, received during a 2011 visit to the White House.

Shipboard environments are being altered to accommodate Asian travellers. Princess Cruises “has added a 66-seat sushi restaurant” on board one of its vessels that sailed from Japan in 2014 as well as “a huge bathing complex to cater to the Japanese enjoyment of onsen, or dips in hot springs” (Bachman 2014: 21). The Japan-oriented thrust of Princess Cruises’ recent activities in Asia contrasts with the China-focused endeavours of Royal Caribbean International (RCI) and Carnival Corporation. In order to attract Chinese passengers – namely, families with children – RCI has “partnered with DreamWorks Animation to feature the studio’s animated characters onboard” (Stieghorst 2012: 14). The characters from the film Kung Fu Panda are prominently featured – that is, vessels are populated with images of, and people dressed as, cartoon animals – because this motion picture is “one of the highest-grossing movies of all time in China” (Stieghorst 2012: 14). In the near future, more radical changes to the cruise-ship environment are forecast. The types of onboard revenue generated by cruise lines has historically had implications for ship design. There is speculation “that ships built for a Chinese or Asian passenger may eventually look quite different from the US model, in the same way that ships built for German lines are different” (Stieghorst 2012: 14).

However, despite the differences between Asian and Western consumers, adapting “the onboard experience to Chinese tastes” must be balanced with retaining a company’s “brand identity” (Stieghorst 2012: 14) and the distinctive appeal of cruise travel. There are established features of the shipboard experience that will probably remain unchanged. Consumers in
China, for example, are thought to be “keen to sample chocolate buffets and stroll the lido deck” (Bachman 2014: 20). When RCI redeployed Voyager of the Seas to China, the on-board Italian-themed restaurant was “sold out every night” (Stieghorst 2012: 14). Chinese passengers “don’t want to go on Chinese product [sic]” because they are “enamored with Western culture” (Stieghorst 2012: 14). The gastronomic profile of Chinese travellers is different from that of Americans, but there are similarities worthy of note.

“[T]rial-and-error discoveries” (Stieghorst 2013: 1) occur, and sometimes they inform cruise-industry product development. Princess Cruises expected its Japanese itineraries in 2013 to appeal to mainly Japanese consumers. In fact, the number of reservations made by Americans and Europeans prompted the company to hire “English-speaking tour guides for its shore excursions” (Stieghorst 2013: 1). A product developed for an Asian market became popular with the company’s more established markets that were seeking an alternative to the types of mass-market cruise itineraries often available. RCI, according to its vice president for commercial development, is “at an experimental stage” (Stieghorst 2013: 1) with respect to the adaptations it is making for Asian passengers. “[T]he initial burst of gold-rush enthusiasm about China’s staggering potential” (Weissmann 2014: 12) is accompanied by an acknowledgement that a carefully considered mixture of Chinese and Western shipboard amenities is a potential recipe for success.

Steps have been taken by cruise lines to develop their own administrative infrastructure in response to the growth of the Asian market. These companies have, in recent years, built this infrastructure by expanding the presence of their organizations in Asia. RCI has opened a corporate office in Shanghai (Christoff 2013). Carnival Asia, a subsidiary of Carnival Corporation, was established in Singapore (Stieghorst 2012). Princess Cruises has sales offices in a number of Asian countries (Mathisen 2014). In addition to sales, corporate offices in Asia are used by cruise lines for purposes related to strategy and logistics. Propinquity with respect to the Asian market and potential business partners is seen as a necessity for cruise lines wanting to reap the benefits of operating in the region.

Also, port-based infrastructure has been built in order to accommodate the expansion of cruise tourism in Asian destinations. Port development is crucial to accommodating more – and larger – cruise ships (Sun et al. 2014). Cruises lines are demonstrating a willingness to have some of their larger vessels operate in Asia during certain times of the year. Expanded port facilities have been built in Hong Kong and Singapore. Singapore is seen by Carnival Asia as “fortunately situated” and a home port from which a cruise line “can go to Thailand, Malaysia and Indonesia” (Weissmann 2014: 12). However, there is still scope to build better port facilities in a number of destinations. A regional vice president for the parent company that owns RCI has noted that “[t]he lack of destination ports [in Asia] with the capability to handle big ships may be the biggest challenge” (Stieghorst 2013: 1). Serving more cruise passengers in the region at an appropriate standard inevitably involves creating more suitably sized and equipped port facilities in more places.

Support for the cruise industry in Asia through the development of infrastructure has occurred at the same time that regional tensions pose challenges. Tourism typically flourishes in the context of political stability and harmony. Simmering conflicts create complications. Territorial disputes between China and Japan are an ongoing concern. In the middle of 2014, “China informed … cruise lines that ships leaving Chinese ports could no longer include Japan on their itineraries” (Weissmann 2014: 12). Political relations between China and Taiwan have been strained from decades. Cruise lines are acutely aware of these issues and ship itineraries could feasibly include more private island stops should circumstances dictate that some Asian ports of call had to be dropped. Private islands are a means of providing passengers with a visit to a bubble environment that conforms to passengers’ perceptions of a remote, exotic paradise, but they have also been described as “a hedge against the vagaries of Asian government policies” (Weissmann 2014: 12).
Despite the influence of globalization and international market forces, the policies and practices of national governments continue to have implications for transnational enterprises.

**Conclusion**

Future trends in global transport will undoubtedly have an impact on tourism in Asia given the projections for growth and business model innovations already witnessed in the region. Several global trends can be highlighted. The first is the role of emissions in transport, especially with respect to aviation. What is still unclear is whether regional and/or global approaches to emissions mitigation and externality internalisation will have an impact on the cost of transport, and whether this increase in cost will ultimately have an impact on tourist flows to, from and within Asia (Veryard 2010; Steppler & Klingmüller 2009).

While transport accounts for a substantial proportion of greenhouse gas emissions in international tourism (Dubois et al. 2011), the relationship between specific countries or regions and their national emissions profile is still a slowly emerging (and necessarily precise) area of enquiry (e.g., Pentelow & Scott 2011). Gössling, Scott and Hall (2015), for instance, note that some countries may positively change their overall emission intensity by specifically targeting visitors from markets where associated emissions are fewer. It is more likely, however, that initiatives such as efficient flight paths and continuous descent will be attempted first. The so-called “Seamless Asia Sky” project from IATA is attempting to have air traffic managed regionally, thus saving considerable fuel and reducing emissions.

Another trend that will impact on tourism in Asia is the shifting business models of transport providers in the region. As the case study in this chapter demonstrates, large brands circumvent ownership restrictions in order to ensure seamless service expectations and delivery. The air transport and cruise tourism sectors have demonstrated a desire to adapt their activities in Asia by catering to consumers with different needs and tastes, developing organizational structures that are specific to the region, and – initially – tailoring their activities so that they are compatible with the infrastructure that is available. A final trend to be identified involves the linkage and alignment of the broader economic policies for the region and the overall approach that individual, and collective, governments take with respect to access (Grosso 2012). It will be important that economic development initiatives take into account the role of transport in the trade of goods and services (see Moore & Heeler 1998). In the case of tourism, the liberalisation of access will need to closely follow desired economic development trajectories. The risk of not aligning these could be risky as other regions in the world (e.g., South America, Africa) build on existing liberalised and common market policies. The benefits of alignment will ensure that tourism is assured a meaningful place within a wider economic development trajectory of the region.

**Key reading**


References


Transport and infrastructure


