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While BAA, London City Airport, AdP and Schiphol Group make the news for their own reasons, be it takeovers or IPOs, there is a quiet revolution under way in Eastern Europe, where banks and private equity companies are lining up to take a piece of the action. But this under developed part of the world has potential pitfalls for the unwary.

Since the beginning of 2006 and the notification of intent from Ferrovial to take over BAA plc, the scale of airport privatisation and attendant opportunities has grown dramatically. It was a world scale event, even featuring as the lead item on international television news, an honour previously more likely to be bestowed on airlines, and particularly no-frills ones, than airports, which the media largely regards as mundane.

On the same scale as BAA is Aeroports de Paris (AdP), for which the French Government recently completed a 3.8 times oversubscribed IPO of 32.8% of its shares. It generated EUR1.1 billion, to help finance a EUR2.7 billion investment programme during 2006-2010, and of which EUR536 million of the funds raised will be used for expansion projects. After years of prevarication, the Dutch government has also given the green light for a partial IPO on the Schiphol Group, probably in Oct/Nov-06, and despite the opposition of Air France-KLM and upwards of 80 other airlines.

Perspective Continued Over Page →



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Perspective: Privatisation opportunities – what next? Look east, young man...

AdP's successful flotation, although strongly supported by ratings agencies such as Standard & Poor's, which allocated positive credit ratings before the issue on the strength of AdP's infrastructure and strong airline base (including Air France-KLM of course), contrasts with the apparent lack of interest in airline issues generally, and notably those of LCCs. In Europe, Air Berlin's offer was postponed by a week while greater enthusiasm was drummed up and the Indian LCC, Air Deccan, suffered a 33% slump in its share price on the first day of trading after its IPO in Jun-06.

It is interesting also to contrast what this all means for the respective airport developers. In the case of BAA/Ferrovial AIDL, events at its main home bases of Heathrow, Gatwick and Stansted dominate the agenda. Newly installed CEO Stephen Nelson, originally recruited by BAA less than a year ago, has far more of a background in food & beverage marketing, with supermarket operator J Sainsbury and drinks companies Guinness and Diageo, than he does in the nitty-gritty world of airport operation, rather suggesting that he might be expected to reinvigorate divisions such as World Duty Free (WDF) than sell them off, as indicated in some media reports.

WDF, BAA's duty free retail division, operates 65 outlets offering 15,000 sqm of retail space across seven UK airports, but often finds itself in direct competition with its own retail tenants. Although providing GBP26 million of profit last year, it is a non-core business for Ferrovial, whose strength, as we have previously stressed, lies firmly in construction and infrastructure management.

BAA faces up to a balancing act

It will be interesting to see how Mr Nelson balances the demands of the evident need for further infrastructure at the London airport, (with attendant charging issues and possibly a reduction of funds to do so), with a need to off-load underperforming or superfluous divisions.

BAA must also compete with the likes of Paris CDG, Amsterdam and Frankfurt airports and must keep up with international expansion opportunities, as the UK growth profile slows¹. After all, BAA has acquired a reputation as one of the global leaders in foreign airport investment, and one it will be difficult to forsake. It is a challenging assignment for anyone.

Top six European airports – year ending Feb-06 (preliminary)

Airport	Pax Traffic	% change	Cargo Volume tonnes	% change
London LHR	67,865,633	0.4	1,391,239	(1.8)
Paris CDG	54,185, 534	5.3	1,783,330	7.6
Frankfurt	52,196, 547	2.2	1,982,431	6.7
Amsterdam	44,275, 499	3.6	1,495,826	1.0
Madrid	42,397,259	8.8	-	-
London LGW	32,928,813	3.7	-	-

Source: Centre for Asia Pacific Aviation & ACI

¹ These three European airports are currently growing more quickly than the BAA London airports – in the year to end Feb-06, CDG grew by 5.3%, Frankfurt by 2.2% and Amsterdam by 3.6%, compared to Heathrow's 0.4% - although Gatwick did manage 3.7%. The cargo comparison is even worse with Heathrow on -1.8%, Frankfurt on 6.7%, CDG on 7.6% and Amsterdam on 1.0%.

AdP decided against foreign investment, but Schiphol Group makes a comeback

There is no such confusion in Paris where AdP has made it clear it will not invest in airport operators outside France for at least five years, focusing instead on Paris Orly and Charles de Gaulle airports. AdP has a similar reputation in foreign investment to that of BAA, since becoming a strategic partner in the IPO at Beijing Airport, seven years ago.

Schiphol Group, like AdP, has a foreign portfolio, although not at quite the same level. It has interests at Brisbane Airport, and at New York John F Kennedy Airport's Terminal 4. Even though it has shown greater interest in internal expansion and development, it is currently in negotiation with China's Jiangsu State-owned Assets Supervision and Administration Commission over the sale of a 40-45% shareholding in Nanjing Lukou International Airport, bringing it into competition with Singapore Changi for the asset.

Investors have a pool of USD50 billion to play with

It remains to be seen just how this flurry of business will affect other airports but it can hardly be a coincidence that Dermot Desmond, owner of the London City Airport, has decided to put the airport up for sale, given the widespread interest in airports right now. CAPA estimates that the 60 leading (active and potential) global airport investors have a combined pool of approximately USD50 billion ready and waiting to invest and the global airport privatisation pipeline is valued at up to USD40 billion.

This seems to be evident in the rush by major global airport investors, including Macquarie Airports, the Spanish group, Abertis, infrastructure group Babcock & Brown and Hochtief to express interest in acquiring the London airport. At the time of writing the highest offer appears to be EUR650 million but a bidding war seems likely to push that amount up.

Built and originally operated by the construction company Mowlem before Mr Desmond acquired it in 1995, London City was a white elephant, cut off from the mainstream of London society by very poor surface connections, putting many passengers at the mercy of London taxi and mini cab drivers, or walking through impoverished inner city suburbs from and to the Silvertown rail station. Once these were rectified, its strategic position six miles from the centre of London's commercial district ('The City'), compared with 17 miles for Heathrow, ensured its renaissance.

Passenger levels have been increasing at record levels, growing 18.1% in 2005 to two million passengers and a further 19% in 1Q06. Expectations are high that London City will continue to increase passenger throughput significantly up until and beyond the 2012 London Olympic Games - for which it is by far the closest airport to the main sites, even if it is never to see a B747 or A380, restricted as it is by a 1,199 m runway, a steep 5.5 degree angle of approach and tough noise restrictions.

"CAPA estimates that the 60 leading (active and potential) global airport investors have a combined pool of approximately USD50 billion ready and waiting to invest and the global airport privatisation pipeline is valued at up to USD40 billion"...

The London City sale comes at a good time. Airbus recently announced it successfully completed tests at the airport to operate 132-passenger A318s, as part of a major marketing push for the A318 in Europe. On top of that, any investor knows that full service airlines will continue to be attracted to an airport where up to 40% of passengers travel on standard business or economy fares, a higher ratio than that found at Heathrow and Gatwick and 20 times that at Stansted.

For all the interest being shown in major city airports in Western Europe however, perhaps it is to the East that investors should be looking?

Emerging market transactions are driven by the need for investment

Unlike the aggressive cross border M&A activity for 'mature assets' exemplified by the Ferrovial and Goldman Sachs bids for BAA and by the global interest in London City, these emerging market transactions are driven by the simple need for capital investment and the improvement of security and quality standards. As many of these countries gear up for entry into the EU (Poland is already there, Bulgaria and Romania hope to achieve membership in 2007 while Serbia, Croatia and Turkey are on the fringe and even the Ukraine aspires to join the 'project' at some date in the future), the need to upgrade their airports warrants greater urgency. Some have already followed the privatisation road, of course, like Bratislava and Kosice in Slovakia and Varna and Bourgas in Bulgaria, but not always smoothly.

Indeed, the new Slovak Prime Minister, Robert Fico, has announced that he is considering cancelling the sale of Bratislava and Kosice airports to the Flughafen Wien-led consortium TwoOne, stating it was "a big mistake" to sign the contract and that the airports "belong to the Slovak Republic".

"The countries offering the greatest medium-term potential for airport investment, are in Eastern Europe, including Poland, Ukraine, Romania, Bulgaria, Serbia and Turkey"...

Given the difficulties that Copenhagen Airports faced after achieving preferred bidder status for Varna and Bourgas airports (the concession has now been re-awarded to Fraport on technical grounds) and the underlying threat from opposition parties in Hungary to renationalise Budapest Airport, one wonders why developers would want to take the risk.

Regional investors the next big players

But they do, and nowhere is it more evident than in Eastern Europe itself, where Austrian and Czech/Slovak companies are on the verge of becoming the next big players in the market.

The first is Austria's Meinel Group, which was introduced to airport investment when the parent, Meinel Bank, acted as consultant to the Slovakian government on the privatisation of Bratislava and Kosice airports. Now, mimicking the change of emphasis at Goldman Sachs from advisor/dealmaker to investor, Meinel Group reveals that it has up to EUR500 million to purchase airport assets, and is looking at Russia and its neighbours and 'emerging' nations throughout Eastern Europe.

Meinel Airports International, a new company, has been formed, supported by the existing real estate division, Meinel European Land (MEL), which is listed on the Vienna

Stock Exchange and which has a EUR2.5 billion property portfolio throughout Eastern Europe, Russia, Latvia and Turkey. MEL is a specialist in retail development. Meinl's interest arises from the realisation that the majority of civil airports in the region continue to suffer from an acute lack of development funding from their government owners.

Another likely investor here is Penta Investments, a private equity company based in the Czech Republic, Slovakia and Cyprus, and which covets the Ukrainian airports Boryspil and Zolhany at the capital, Kiev, which the government may privatise. It also has its eyes on Prague Ruzyne airport, already scheduled for privatisation and where it is a substantial landowner. Penta would like to take part in the construction of the new runway here. Additionally it is eyeing airports in the Baltic States, the former Yugoslavia and Romania.

Penta's experience to date comes through its involvement with the TwoOne consortium (see above). Its speciality is to restructure companies to increase their value.

One Penta subsidiary recently made a bid to acquire the (military) aircraft manufacturer Aero Vodochody, which has its own airport.

Potentially, a modest investment there could enable the airport to handle one million passengers annually within a short time, so that it could act as a reliever airport for Prague. Vodochody is not the only Czech Republic airport belonging to an aircraft manufacturer to put its facility up for sale, the same also happened with civil airline manufacturer LET's private Kunovice airport last year and numerous military airports are becoming available for adaptation in countries such as Poland. (See the May-05 and Aug-05 editions of *Airport Investor Monthly* for further information on the Czech airports).

Stop Press! – Changi moves into Moscow

Changi Airports International (CAI) announced (19-Jul-06) a JV with Sheremetyevo International Airport Joint Stock Co (SIAJS) to manage and operate terminals at Moscow Sheremetyevo International Airport. The JV will manage and operate the new 520,000 sq ft Terminal 1 scheduled to be completed in early 2007.

Changi Airports International CEO, Chow Kok Fong, stated, "the signing of this agreement signifies the beginning of an exciting relationship between Singapore and the Russian Federation. Moscow has seen consistent passenger growth in the order of 12 to 15% p/a. This partnership is timely and its crystallisation will be fruitful and rewarding for both our countries and airports".

Terminal 1 is designed to handle 5 million passengers p/a and is expected to generate SGD110 million in revenue annually. The JV will also bid for the management and operation of Terminal 3, which is owned by Terminal OAO, a subsidiary of Aeroflot. In addition, there are also plans for the JVCo to eventually manage and operate Sheremetyevo Airport's Terminal 2 which is currently undergoing expansion and refurbishment. These works are expected to be completed by 2008.

Neither of these companies specifically mentions Croatia, but certainly Zagreb and possibly Dubrovnik airports are also ripe for privatisation. Since Croatia's independence, tourism industry recovery and development is the key factor influencing the civil aviation traffic. Zagreb, Dubrovnik and Split account for approximately 90% of the total passenger traffic in Croatia.

Croatian airports are 55%-owned by the government, with the remaining 45% split between different levels of local authority. Zagreb and Dubrovnik airports have ambitious expansion plans.

The construction of the new Zagreb Airport passenger terminal replaced the Port of Rijeka Gateway project as the single largest traffic infrastructure project in Croatia. The new passenger terminal will cost an estimated EUR120 million, a figure that includes expenses for land acquisition. The Croatian Government has been considering privatisation as the best option since it does not have the financial resources for such a large project. The Government hoped to issue the tender to either re-capitalise Zagreb Airport or award a BOT concession for the new terminal building by the end of 2005, but was handicapped by the need to settle land ownership issues.

Better opportunities but - beware the hazards

So, the moral here appears to be that, just as (low cost) airlines, both indigenous and foreign, have gone looking successfully for new opportunities in Central and Eastern Europe, attracted by the strong growth rates following EU expansion, so may the airport operators and investors. Indeed, opportunities may be better than those in the Western part of the continent.

But there will always be caveats to be wary of, such as the litigation mentioned above and investors will often be forced to make knowledge-led choices on just which opportunities to pursue. It should not be forgotten, for example that Fraport originally opted to focus its efforts on Hungary, where it eventually lost out to BAA, owing to higher growth rates there and a better 'fit' to the Group, and passing up the option to bid for the Slovakian airports, which even now may pass back into the hands of the State.

Ultimately it ended up taking on the two Bulgarian airports as the winning offer (Copenhagen) was reassessed, airports that some analysts believe to have been considerably overvalued.

As with most markets of high potential, there tends to be a higher level of risk.

Centre for Asia Pacific Aviation's 'Airport Development 2006' conference in Singapore, 29 August – 01 September 2006, includes a day dedicated on investing in the emerging markets of China, India, Middle East and Eastern Europe, as well as an Executive Workshop on Emerging Market Opportunities.

Recommended CAPA Resources



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FINANCE

Winning Airports – a comparison of best practice in productivity, cost competitiveness and charging

The University of British Columbia, in cooperation with a Task Force of the Air Transport Research Society (ATRS) has recently compiled the fifth Global Airport Benchmarking Study, which it calls 'Winning Airports'.

The results are summarised below. The study focuses on productivity, cost competitiveness, financial results and airport charging. It covers a wide range of airports, from < 1 million to 83 million passengers p/a. It does not use traditional measures of productivity such as passengers per employee because international comparison of airports is difficult owing to differences in regulation, business environment and so on. Instead it develops a new managerial efficiency measure in the form of 'residual variable factor productivity' after removing those factors that are beyond airport management's control.

This short summary alone highlights some key findings; such as that airports with greater non-aeronautical activity generally achieve higher productivity and that labour costs vary from just 9% to 73% of the total costs.

The study's authors are Tae H. Oum and Chunyan Yu of the University of British Columbia. Contact: Chunyan.Yu@sauder.ubc.ca and Tae.Oum@sauder.ubc.ca. www.atrsworld.org.

Airports performance compared to best practice

Corporatisation, commercialisation and privatisation of airports have become the worldwide trend. Airport managers are being confronted with fresh challenges in an era of growing commercial pressures, thus it is of paramount importance for airports to provide the best possible services in the most efficient manner. To do this, airports need to know the best practices over various dimensions of airport operations within the industry, and how their performance compares to these best practices.

Air Transport Research Society (ATRS), a worldwide research network, embarked on an annual endeavour in 2001 in the form of global airport benchmarking, to provide a meaningful global comparison of airport performance, and to investigate the relationships between the performance measures and airport characteristics and management strategies to provide a better understanding of the observable and measurable differences in airport performance.

The 2006 ATRS Global Airport Benchmarking Report is the fifth annual publication that provides a comprehensive performance comparison of airports worldwide. The main objective of the report is to measure and compare the performance of several important aspects of airport operation:

- Productivity and efficiency;
- Unit costs and cost competitiveness;
- Financial results and airport charges.

The report also examines the relationships between various performance measures and airport characteristics and management strategies to better understand the observed differences in airport performance. In particular, the report presents the results on the following measures for up to 135 airports of various sizes and ownership forms in North America, Europe and Asia Pacific.

The sample airports represent different sizes and ownership and governance structures and are located in Asia Pacific (including Australia and New Zealand), the Middle East, Europe, and North America. For example, the annual number of airport passengers ranges from 900,000 passengers for Bratislava's Milan Rastislav Stefanik Airport (Slovakia) to 83 million passengers for Hartsfield-Jackson Atlanta International Airport (US) in 2004.

Some airports serve mostly international traffic, such as Amsterdam, Brussels, Singapore, and Hong Kong, whereas others serve mostly domestic passengers, such as Reno, Kansas City, Shanghai Hongqiao where international traffic accounts for less than 1% of their total passenger traffic in 2004. Some airports derive most of their revenue from aeronautical activities, whereas for others, a significant portion of revenues comes from other sources including concession and rentals.

"94% of China's Shanghai Airport Authority's revenue arises from aeronautical activities, but only 24% at Incheon in Korea..."

For example, in 2004, aeronautical revenue accounts for 94% of Shanghai Airport Authority's total revenue, while it is only 24% of total revenue at Incheon (Korea). It would be interesting to see whether such variations would affect the observed productivity and cost performance of the airports.

Productivity Analysis

International comparisons of airports are difficult to make because of differences in regulations, price level and currency regimes, general business environments and culture, etc. Furthermore, airports vary greatly in terms of how various services and facilities are provided. Some airport operators provide most of the facilities and services themselves, whereas others rely on airlines, specialist agents or third party operators to provide many of the services.

Therefore, direct comparison of commonly used partial measures of productivity such as passengers per employee, passengers per gate, etc, would be misleading. The ATRS Airport Global Airport Benchmarking Report attempts to overcome these difficulties and issues by developing an overall managerial efficiency measure in the form of residual (net) variable factor productivity, after removing the effects of the factors beyond airport managers' control, including share of international traffic, share of non-aeronautical revenue, share of cargo traffic, constraints imposed by capacity shortage.

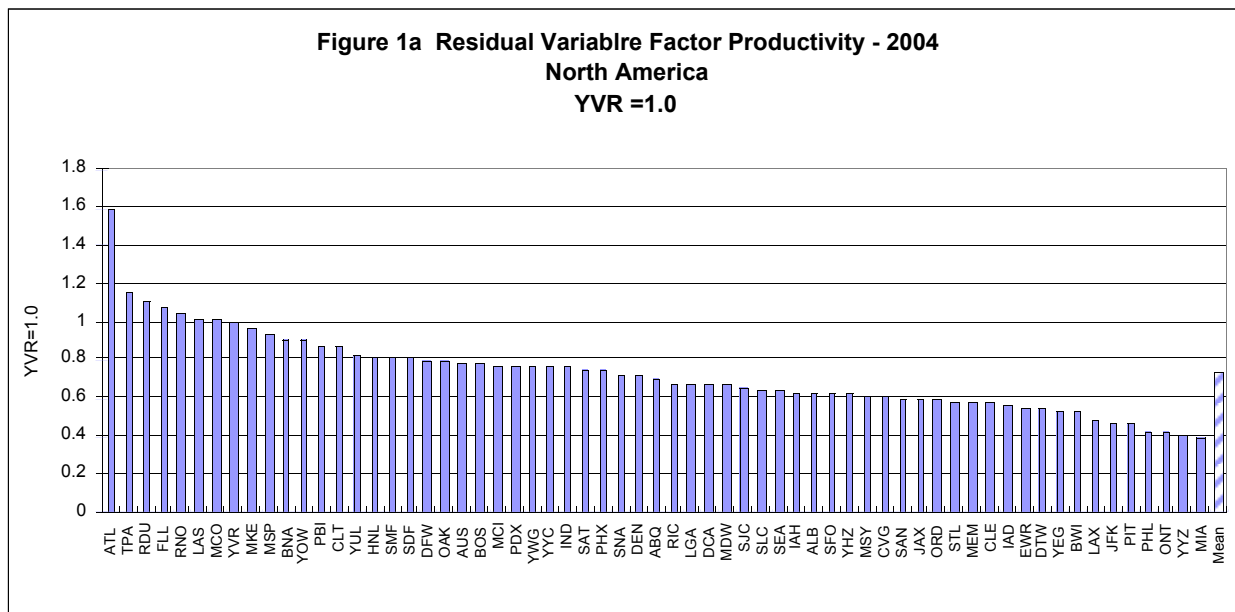
Airports with greater non-aeronautical activity generally achieve higher productivity

The report finds that airports with a higher share of non-aeronautical revenue generally achieve higher overall productivity. This implies that airports with proactive development of commercial opportunities related to airport activities appear to manage more efficiently their productivity than airports that rely heavily on their aeronautical revenue

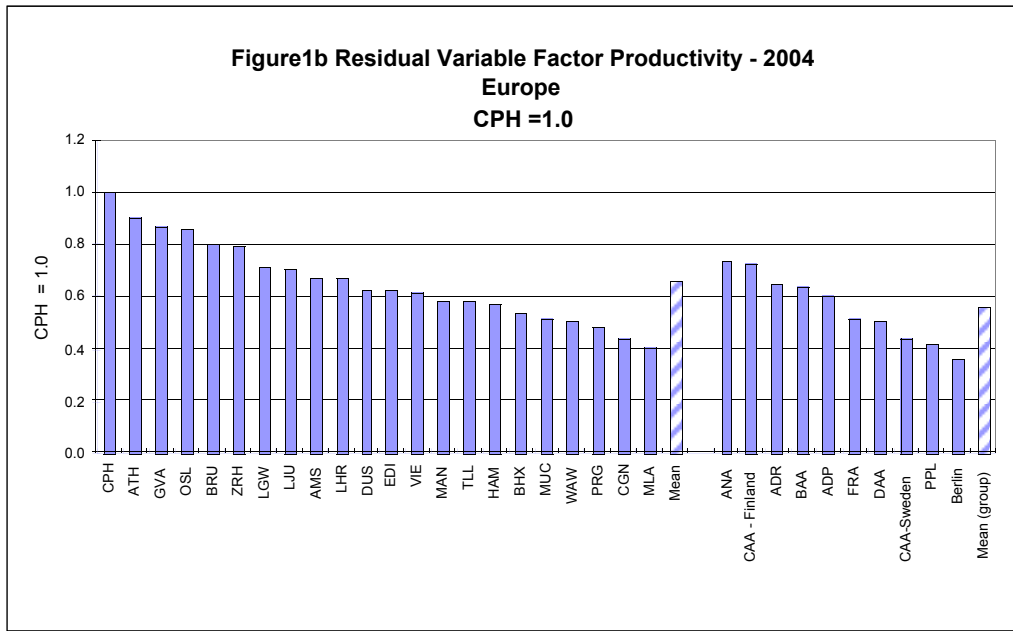
base. Furthermore, airports that outsource most of their services are clearly more efficient.

The report identifies high performers and low performers for each of three geographical areas (as summarised in the following):

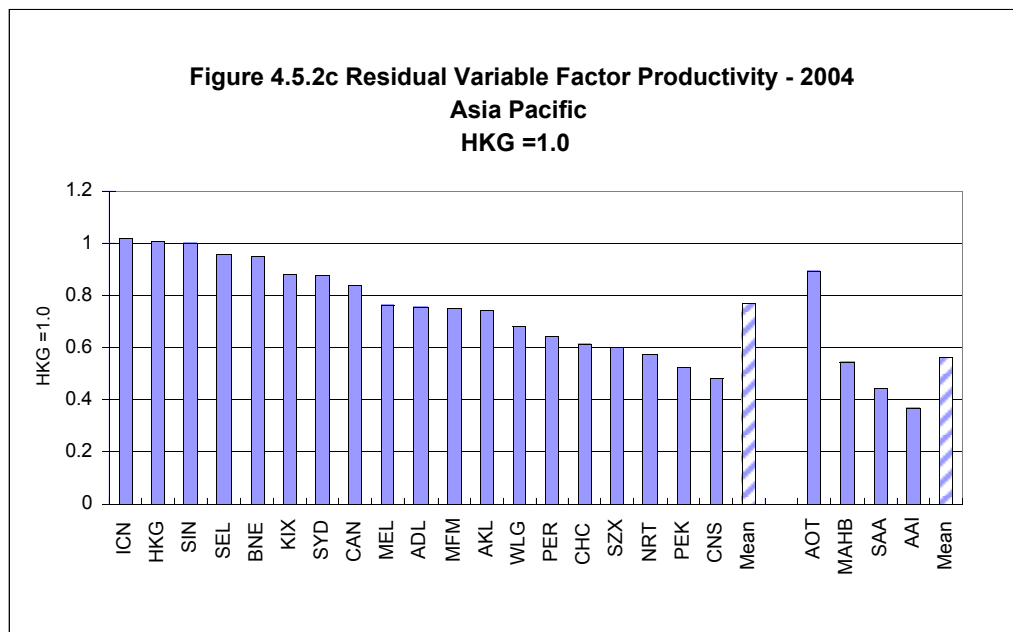
- Asia Pacific – 23 airports:
 - High Performers: Incheon, Hong Kong, Singapore, and Airports of Thailand (AoT);
 - Low Performers: Airports Authority of India, Shanghai Airport Authority, Cairns, and Malaysia Airports Holdings Berhad.
- Europe – 31 airports:
 - High Performers: Copenhagen, Athens, Geneva, and Oslo
 - Low Performers: Malta International, Polish Airports, Berlin Airports, CAA-Sweden, and Cologne/Bonn.
- North America – 63 airports:
 - High Performers: Atlanta, Tampa, Raleigh-Durham, and Fort Lauderdale
 - Low Performers: Miami, Toronto, Ontario, Philadelphia, and Pittsburg.



The base figure is YVR (Vancouver)



The base figure is CPH (Copenhagen)



The base figure is HKG (Hong Kong)

Cost Competitiveness

Airports vary widely in terms of their cost structure: labour costs account for 9% to 53% of total variable costs among the Asia Pacific airports in our sample; 24% to 73% for the European airports, and 18% to 68% for the North American airports. On average, the Asia Pacific airports have lower labour cost shares than the North American airports, which in turn have lower labour cost shares than the European airports.

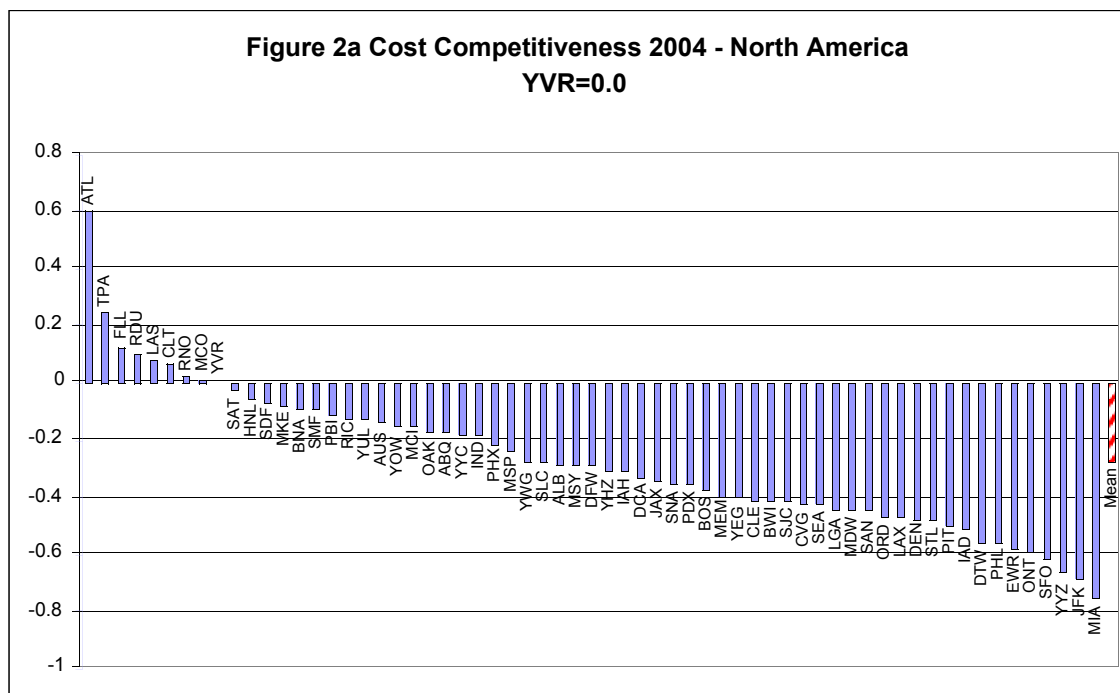
"Labour costs vary from just 9% to 73% of the total among Asia Pacific airports"...

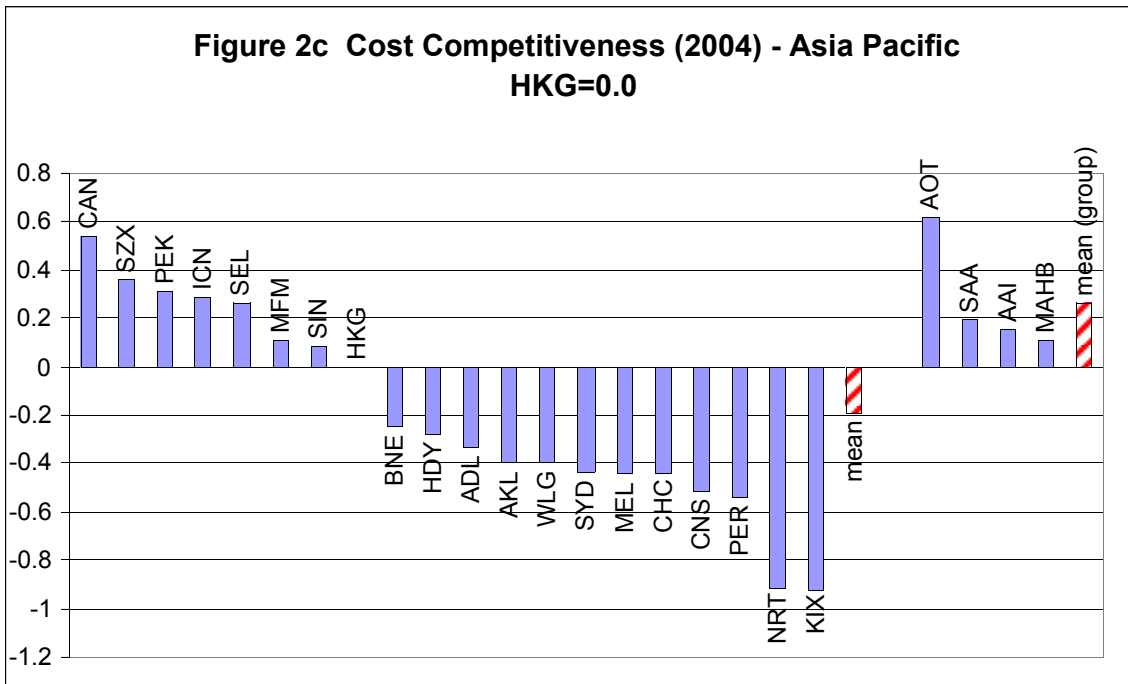
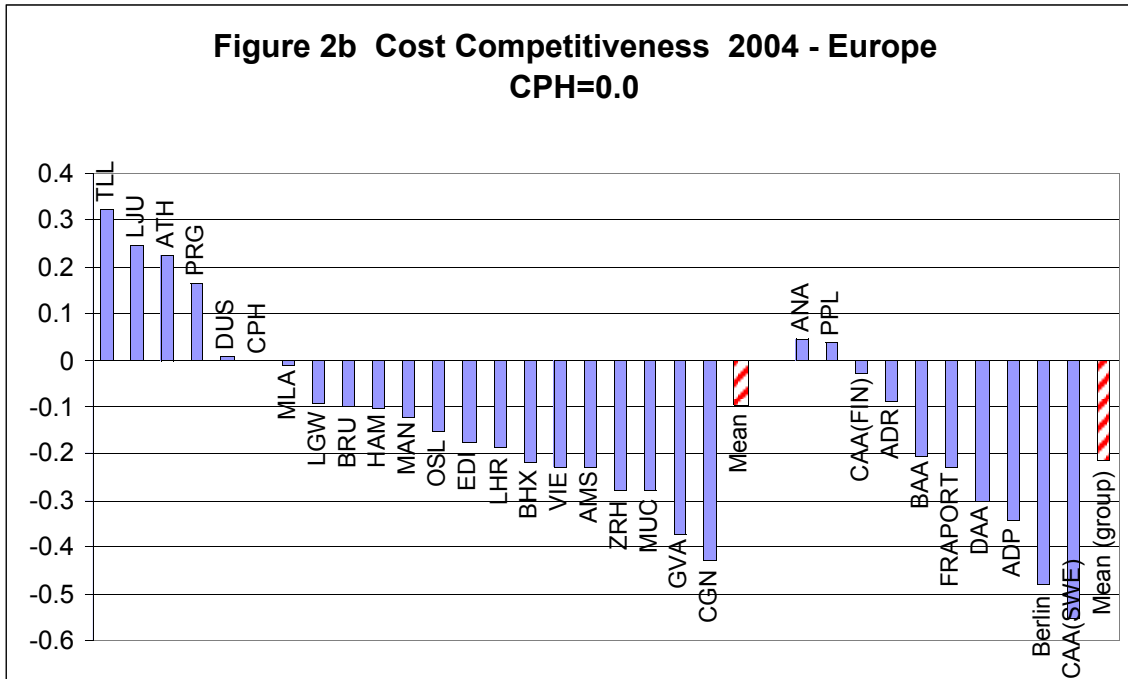
This may be a result of the fact that European airport operators tend to provide more services directly than their North American and Asia Pacific counterparts. An airport enjoys lower unit costs than other airports because it is more efficient, pays less for its inputs, or both. The ATRS benchmarking report constructs an airport cost competitiveness indicator by aggregating the effects of input prices and the effects of operating efficiency.

In Asia Pacific (24 airports), Guangzhou, Shenzhen, and Beijing were highly cost competitive because of their low input prices, whereas Incheon and AoT achieve high cost competitiveness as a combined results of high efficiency and low input prices. On the other hand, Narita and Kansai were the least cost competitive airports in the region because of high input prices and low efficiency.

In Europe (31 airports), Tallinn, Ljubljana, and Prague were highly cost competitive because of their low input prices, and Athens was highly cost competitive as the combined results of high efficiency and low input price. Cologne/Bonn, Berlin Airports, and CAA-Sweden were the least cost competitive airports among our European sample airports as the combined result of high input prices and low efficiency.

In North America (63 airports), Atlanta and Tampa were the most cost competitive airports, whereas Toronto, New York JFK, Miami and San Francisco were the least cost competitive.





Financial Performance

Traditionally, aeronautical revenues are the primary sources of income for airports. However, increasingly, airports are actively seeking other sources of revenues. European airports appear to have a larger share of non-aeronautical revenue than the Asia Pacific and North American airports.

In 2004, non-aeronautical services accounted for 48% of an average Asia Pacific airport's total revenue, and 53% for an average European airport, whereas 49% for an average North American airport.

"Europe has the lead in non-aeronautical revenue generation..."

Overall, European airports generate higher revenue on both a per-passenger basis and per-aircraft movement basis than Asia Pacific airports (excluding Narita and Kansai), which in turn generate higher revenue than North American airports. However, North American airports generate higher revenue per employee than both Asia Pacific airports (excluding Narita and Kansai) and European airports. Narita and Kansai were able to generate substantially more revenue than all the other sample airports on all accounts.

Other key findings include:

- Asia Pacific airports appear to be more profitable than the North American and European airports in our sample in terms of both net income and profit margin;
- North American airports tend to have higher level of liquidity than the Asia Pacific airports and European airports in 2004;
- European airports appear to have considerably higher returns on asset than Asia Pacific and North American airports, but Asia Pacific airports tend to have higher returns on equity;
- North American airports appear to rely more heavily on debt financing than their Asian and European counterparts;
- Melbourne has the highest debt burden among all the sample airports.

"...But Asia Pacific airports are more profitable overall"

Airport Rates and Charges

Landing charges and terminal (passenger) charges represent the dominant portion of airport aeronautical revenues. Landing charges vary greatly across the airports. Most of the US airports calculate their landing charges based on Maximum Gross Landing Weight (MGLW), whereas airports in Europe and Asia generally use Maximum Take-off Weight (MTOW) as the basis. Airports in Australia apply passenger-based landing charges. On average, landing charges at European airports tend to be significantly higher than those in Asia Pacific and North America.

Key findings include:

- Toronto, Narita, Kansai, and Birmingham (UK) have the highest landing charges among all our sample airports for both Boeing 747 and Airbus 320;
- In Asia Pacific/Middle East: Kuala Lumpur, Thailand's international airports, Dubai, Adelaide, Jakarta Soekarno-Hatta, and Singapore Changi have the lowest landing charges, whereas Kansai and Narita have the highest landing charges followed by the major international airports in China;
- In Europe: Gatwick, Heathrow, Manchester during the off-peak period, Berlin Tegel and Stansted have the lowest landing charges for large aircraft such as the Boeing 747, whereas Berlin Tegel, Milan Malpensa, Rome Fiumicino and Ciampino, and Gatwick during off peak have the lowest landing charges for a medium aircraft such as Airbus 320. Birmingham (UK) and Ljubljana (Slovenia) have the highest landing charges;
- In North America: Atlanta, Nashville, Charlotte, Tampa have the lowest landing charges, and Toronto, Newark, and New York JFK have the highest landing charges.

Terminal (Passenger) charges are generally levied on airlines based on the number of passengers at time of departure, less frequently upon arrival, and in a few cases, upon both departure and arrival. On average, terminal charge per passenger at European airports is about 22% higher than those at Asia Pacific airports, and seven times that of North American airports.

"European airport charges are the highest"...

Other findings include:

- Frankfurt, Kansai, and Cairns have the highest terminal charge per passenger among all of our sample airports;
- In North America: Atlanta, Charlotte and General Mitchell (Milwaukee, USA) have the lowest terminal charges per passenger, whereas Miami, San Francisco, Denver, and Newark have the highest terminal charges per passenger;
- In Europe: Dublin, Barcelona, and Madrid have the lowest terminal charges per passenger, whereas Frankfurt, Ljubljana, and Heathrow have the highest terminal charges per passenger;
- In Asia Pacific/Middle East: Major international airports in India, Hong Kong and Dubai have the lowest terminal charges per passenger, whereas Kansai, Narita, and Cairns have the highest terminal charges per passenger.

Conclusion – Benchmarking becoming vital

Corporatisation, commercialisation and privatisation of airports, coupled with liberalisation and new aircraft technologies are putting airports on an inevitable path to increased competition and only the best-performing airports will attract levels of investment required to sustain growth.

Based on projected airline traffic growth rates, there is a global airport capacity crisis looming and governments will need to turn increasingly to the private sector to help fund urgent infrastructure development. But only the best-performing airports can be assured of funding support into the future. Furthermore, hub competition will only intensify and more contenders will rise as airline strategy evolves, to take advantage of long-range aircraft and emerging growth markets stimulated by expanding economies and easing market restrictions.

Airport benchmarking will therefore become increasingly crucial for the airport sector, as airports seek to compete effectively in the market, in terms of facilities, charges and service quality – and to ensure they are attractive to investors and lenders.

The Airport Development 2006 conference in Singapore on 29 August – 1 September 2006 includes a cutting-edge Airport Benchmarking Executive Workshop, facilitated by Airports Council International (ACI), which is leading the charge to develop a set of global airport benchmarking standards.

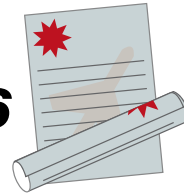
Delegates attending this workshop can expect to gain a clear 'ABC' of current industry best-practice approaches to benchmarking. Airports can and do want to compete – this workshop will show them the basis for how to do it effectively. Lyn Hampton, CFO & Vice President, Washington Metropolitan Airports Authority and Chairperson of the ACI World Economics Committee will lead this workshop.



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DEVELOPMENT

GMR finds the successful formula

As India takes stock of the first stage, and ramps up for the next one, of the airport privatisation process, the PPP on Chennai and Kolkata airports, we look at one of the major infrastructure companies. GMR Infrastructure, slated for an Aug-06 IPO, has been successful in the maelstrom of Indian airport development.

We ask just what it takes for any potential player in the airport development business to become established in India.

A long and tortuous road

Privatisation of India's airports via the process of public-private-partnerships was first raised in principle in the late 1990s when it was realised that at least US\$4 billion would be required to finance the airport infrastructure requirement in the period 2000-2009 and that the government simply could not fund that sort of obligation. The focus would be on the four main international gateways of New Delhi, Mumbai, Chennai and Kolkata (initially with Bangalore also, which ended up as a green field development), and with New Delhi and Mumbai first.

1998: Only one of India's airports made it into the world's top 100

At that time only one of India's airports made it in to the world's top 100 – Mumbai, with 10,914,000 passengers in 1998, a reduction of 1.4% from the previous year! (Passenger growth rates are currently running at around 25% per annum while full service and low price airlines abound). Perhaps that helps explain the lack of urgency just eight years ago. Even before then India's Tata Group planned, with Raytheon (USA) and Singapore Changi Airport to develop Bangalore Airport in 1994, but the plan fell through because of a disagreement over the sharing of commercial and military facilities.

TABLE: TOTAL TRAFFIC HANDLED APRIL – MARCH 2005-06

Category	Apr-Mar 2005-06	Apr-Mar 2004-05	% Change
Aircraft Movements (in '000)			
International	190.89	163.28	16.9
Domestic	647.42	554.32	16.8
Total	838.31	717.60	16.8
Passengers (in million)			
International	22.36	19.42	15.1
Domestic	50.98	39.86	27.9
Total	73.34	59.28	23.7
Freight (in '000 tonnes)			
International	920.15	823.61	11.7
Domestic	483.79	456.66	5.9
Total	1403.94	1280.27	9.7

Source: Centre for Asia Pacific Aviation & Airports Authority of India

It has been a long and tortuous road since, perhaps because the Airports Authority of India (AAI) also has responsibility for air traffic control, a serious and time consuming issue. More pertinently perhaps, the AAI then had, and still has, a rather strange dual role of 'inviting greater involvement of the state government in airport development' and of encouraging development through private participation at selected places. Actually, that is a job it does quite well, given that there would be few takers for an investment proposal at some of India's more remote airports.

More pertinently still, at the end of the last decade no foreign bidders were allowed for the major airports and it was unclear just which Indian companies had the wherewithal to do it themselves.

This left the development of airports in a parlous state. For example the Finnish telecommunications company Nokia, searching for a suitable site for an Indian regional headquarters and manufacturing plant, found only three locations where airport capacity and ambience was remotely close to the management's expectations for a prestige development (Delhi, Mumbai and Chennai). In a country that has 239 airports, no others even came on to the radar.

Eventually, after some five years of wrangling, the privatisation/modernisation issue at Delhi and Mumbai was resolved in Jan-06, allowing for the fact that even now, an unsuccessful bidder, the Reliance Group, is bringing a case in the Supreme Court about the government's handling of the first privatisation stage. The GMR-Fraport and GVK-ACSA (South Africa) groups ultimately triumphed by securing government approval for the Delhi and Mumbai airport upgrade and modernisation projects respectively, foreign bidders now being permitted (limited to 49%).

The GMR-Fraport team matched the highest bidder, Reliance-ASA, for Delhi Airport by offering 45.99% revenue share to the Government, but only after having been the second highest bidder, but crucially the only one to qualify on technical grounds. For Mumbai, GVK-ACSA offered a 38.7% revenue share.

Fraport's shareholding in Delhi International Airport Private Limited (DIAL) is 10%. Fraport and DIAL have made an Airport Operator Agreement to assist DIAL with the operation, management and development of the Indira Gandhi International Airport.

Each consortium holds a 74% shareholding in each airport, with the Airports Authority of India owning the remaining 26%. The concessions run for 30 years, with an option to renew for another 30 years. Fraport confirmed Delhi International Airport Ltd planned to invest EUR30 million quickly in Delhi Airport then a further EUR530 million to develop the first of the three terminals (each with capacity of 35 million passengers per annum) and a parallel runway by the end of 2007. A new terminal will be commissioned by 2010. Two additional runways form part of longer-term plans.

Delhi handled 16 million passengers in 2005/06. Double-digit growth is expected over the next few years, with passenger figures exceeding 30 million within five years.

Government estimates now are that USD4.5 billion will be needed over five years to bring the two airports up to scratch in terms of parallel runways, world class terminals and shopping facilities (compare with the figure in the first paragraph for all airports), while the 2010 Commonwealth Games loom large on the horizon.

The two consortia were made up as follows:

- (1) Delhi: GMR Infrastructure Ltd; Fraport; IDF and Niaga (subsidiary of Malaysia Airports Holdings Bhd)
- (2) Mumbai: GVK Industries Ltd; Airports Company South Africa; Old Mutual Asset Managers and Bidvest Group Ltd.

AAI is the JV partner with both consortia, retaining 26%.

Interestingly, several potential bidders, including major international operators, had previously quit the process saying the government's evaluation parameters were too high. So just what is GMR and what qualities does it have to forge a successful alliance with one of the world's biggest operators, Fraport?

From civil servant via Jute Mill owner to dollar billionaire

Like many Indian companies, Bangalore based GMR is a conglomerate active in several different sectors. UB Group, the parent company of leading airline Kingfisher, for example, is one of the country's biggest breweries. Although having started life as a jute mill and sugar refining company, a business in which it still has a major presence, and with Ferro Alloys interests, GMR does largely restrict itself to three main business units – energy, roads and airports.

This is hardly coincidental, the government having identified them as critical to the country's development. It is almost gratifying to know that it is not only in the aviation business that inefficiencies exist; apparently it can take eight days, including 32 hours waiting at toll booths and checkpoints, for a lorry to travel the 2000 km from Kolkata to Mumbai.

The GMR business was set up in 1974 by Grandhi Mallikarjuna Rao, an employee of Andhra Pradesh's Public Works Department and is now one of India's biggest private companies. Rao moved into the big league when he bid for and won the Basin Bridge Power Project in Tamil Nadu in the early 1990s. Rao is renowned as a tough manager but one that knows how to delegate. GMR Group's earnings in 2005-6 were INR1.6 billion.

An enterprise value of INR71.1 billion

In the first week of Jun-06, Citigroup Venture Capital bought a 1.12% stake in GMR Infrastructure, thus, pegging its enterprise value at INR89 billion and valuing Rao's 80% stake in the company at INR71.1 billion or USD1.58 billion.

In the energy sector, GMR Group supports integrated development of power sector projects in India, from captive mining to delivering power to the end consumer. A typical project is a joint bid with Hong Kong's China Light & Power Company for a 4,000 megawatt power plant at Sasan, Madhya Pradesh.

In the roads business, GMR aims to build integrated transport systems that include basic road infrastructure management and the creation of income-generating opportunities for ancillary businesses. It is often involved in complex turnkey packages such as the project to Design, Engineer, Construct, Develop, Finance, Operate and Maintain a 73 km stretch of the NA-45 road in Tamil Nadu State.

Evidently, GMR is typical of the new breed of airport operator globally that is equally active across many construction sectors. In the late 1990s, these were often property development companies but they are presently superseded by larger multinationals including Ferrovial, Abertis and Vinci, which have road divisions, in Europe, and New Zealand's Infratil, which remains active in the financing of power generation.

Bangalore is a self-contained airport city

Apart from its involvement with Fraport at Delhi, GMR also entered into airport development through the PPP initiative to build a green field airport at Shamshabad, 30 km from Hyderabad, in conjunction with Malaysia Airport Holdings Berhad, the Andhra Pradesh Government and AAI. With an initial capacity of five million passengers and 100,000 tonnes of cargo annually, the airport is being developed as a self-contained airport city on 5,400 acres with amenities such as hotels, business and exhibition centres and food courts. The estimated cost is INR13.5 billion.

GMR expects 60:40 revenue split between non-aeronautical and aeronautical activities at this airport by 2014. It plans to achieve this through developing 1,000 acres within the airport perimeters for non-aeronautical activities. Just a few years ago this would have been unthinkable – 10% non-aeronautical revenue would have been a remarkable achievement at any Indian airport and the new commercially oriented thinking is evident here.

Throughout its endeavours, GMR promotes the Public-Private Partnerships model, which it believes are ideally suited to infrastructure development projects in India because it combines "the best features" of the public and private sectors. GMR insists Government involvement brings a sense of stability and security, while private participation draws on the sector's efficiency, expertise and cost-competitiveness.

Flush with the success of the Delhi deal, GMR is reportedly now considering bidding for the forthcoming privatisation of Kolkata and Chennai airports and participating in the development of an undisclosed number of the 35 non-metro airports due to be upgraded within the next few years.

Beyond this, the scope for GMR is considerable: the Central Government recently confirmed that 170 of the 454 airports and airstrips (unpaved runways) in India are currently non-operational.

At Delhi itself, GMR has moved to consolidate its position by acquiring GVL Investments for INR4 billion, thus giving the GMR Group a 50.1% shareholding in Delhi International Airport Ltd. GVL Investments was a member of the GMR consortium for Delhi International Airport, holding a 9% stake in the consortium. It also holds other equity investments, though marginal. GVL Investments clocked a total income of INR150 million and net profit of INR65 million in fiscal year 2005 and had net worth of INR735 million.

Apart from Citigroup (see above) GMR has been in negotiations with several different organisations, including Temasek Holdings (Singapore), Chrysalis Capital, Standard Chartered, Ochziff, ICICI Ventures, Quantum Group (USA) and Blackstone regarding a private placement of up to 2% of its total equity, valued at up to INR2 billion, prior to its own anticipated INR10 billion IPO to fund various infrastructure projects, including the Delhi (INR3 billion estimated) and Hyderabad airports. Other than Citigroup, ICICI and Quantum picked up just under 4% in Apr/May-06.

The IPO, in which GMR will sell just over an 11% shareholding in the company, is now scheduled for Aug-06. JP Morgan Stanley, DSP Merrill Lynch Ltd, Enam Financial Consultants and SSKI Corporate Finance are lead managers for the issue. It will be interesting to see how the IPO progresses. Aviation is but one of GMR's interests of course but recent stock market falls in Mumbai adversely affected the Air Deccan issue in Jun-06 and others have been postponed.

GMR's projected Hyderabad terminal



GMR has the critical success factors

There are several factors within India that influence the potential for such a conglomerate's success in the airports sector. The two consortia that were recently awarded the Delhi and Mumbai airports contracts were headed by infrastructure companies - GMR and GVK respectively.

Since the selection process for Delhi/Mumbai any new entrant has now to face up to the significant scrutiny of the potential airport operator and of its global standing. It is thought that this particular issue resulted in the controversy with Reliance, in that its Mexican Airports partner was not considered to be running airports that were of an international ranking much higher than that of India and therefore there were questions asked about the level of expertise that might be found there. That may be more than a little unfair on Mexican airports generally, which have gone through a fairly successful transition from state enterprises to concessions and in two cases to IPOs within a decade, despite weak central political leadership and cultural problems facing some of the European based lessees.

Similarly, the South African airports operator, ACSA, which attached itself to the GVK consortium did not rate well in technical evaluation, but got through because of the way the selection process was structured. ACSA has performed poorly in some respects in its own country, for example provision of car parking space is inadequate at some airports, but broadly speaking it has tackled the problems emerging from the immense government and cultural changes in the last 14 years and provided an infrastructure strong enough to ward off the ambitions of most potential private airport operators. Most sub-Saharan countries' airport managers look to it for leadership. (See the Jun-06 edition of [Airport Investor Monthly](#) for more on ACSA).

Potential new entrants into the sector would need to tie-up with an operator recognised as being competent to stand any real chance of success. However, several major

operators like Singapore Changi and Hochtief pulled out during the protracted Delhi and Mumbai bidding procedure, dismayed at the regularly changing financial demands or simply just running out of patience and stamina.

And therein lies the secrets of GMR's success. It is a large, stable operator, active in all the business sectors the Indian government approves of, through the preferred method of the PPP, is well capitalised and is savvy enough to build into its master plans the capability to handle the changing demands of Indian aviation, such as a low cost terminal at Delhi and extensive retail concessions at Hyderabad. Of greater importance though is its relationship with Fraport AG and Frankfurt Airport Services Worldwide, companies that, despite earlier setbacks in Asia, still have the desire and staying power to make projects there actually work.

Of some importance too is the fact that Fraport has extensive experience in handling extra traffic during peak vacation periods and for 'mega' events like the World Cup 2006, the Catholic World Youth Day 2005 in Cologne, Turin Winter Olympics 2006 and Hannover World Expo 2000. All will be beneficial when Delhi hosts the Commonwealth Games in 2010.

Centre for Asia Pacific Aviation's 'Airport Development 2006' conference in Singapore, 29 August – 01 September 2006, includes a day dedicated on investing in the emerging markets of China, India, Middle East and Eastern Europe, as well as an Executive Workshop on Emerging Market Opportunities.

Airport Financing & Privatisation

Major Opportunities, Jun-06

Country	Airport	Prospects
Europe		
UK	Exeter	Put up for sale April 2006 for the second time by municipal authority owner. First sale fell through owing to competition concerns. 873,869 passengers over the last 12 months. 13 short-listed buyers from 58 EOIs (02-Jun-06).
UK	BAA plc	Taken over (09-06-06) following hostile bid from Spanish transport and construction conglomerate Ferrovial. Subject to approval by the Takeover Panel.
UK	London	Macquarie Airports reportedly likely to bid to acquire London City Airport. The airport's owner, Dermot Desmond, announced plans to sell the airport, which is reportedly valued at EUR500 million. Other bidders reportedly include Abertis, Fraport, Babcock & Brown and Hochtief.
Bulgaria	Varna & Bourgas	New tender procedure for management concession. Initial winning bid (Copenhagen Airports) rejected by Supreme Court
Bulgaria	General	Defence Ministry announced plans to sell 22 military airports across the country (Jun-06)
Germany	General	Macquarie Bank is reportedly considering acquiring regional airports in Germany and placing them in a new European fund focusing on infrastructure projects
Germany	(ATC)	Parliament approved privatisation of DFS, the air traffic control company. Potential bidders include Lufthansa (which has a share in Fraport), and airport operators Munich Airport and Hochtief AG.
Italy	Milan	Sale of 33% of equity to airport operators failed owing to 'regulatory uncertainties' but may be sold on Milan Stock Exchange.
Italy	Pisa	IPO announced. No date. Other Italian airports privatised to varying

		degrees: Naples (BAA), AdR Rome (Macquarie Airports), Venice SAVE (IPO)
Netherlands	Amsterdam	Partial IPO in Oct/Nov-06 of up to 30% of shares to also fund expansion projects. Expressed interest in acquiring a share in Nanjing Airport, China, first foreign venture for some time.
Slovakia		More privatisations possible following conclusion of sale of 66% of Bratislava and Kosice airports to TwoOne consortium (Vienna Airport). That decision now under review (Jun-06) and could be handed to second highest bidder, Abertis.
Spain		Four private airport projects – Don Quijote (Ciudad Real), Castellon, Antequera (Andalucia) and Corvera (Murcia). State operator Aena runs all other commercial airports.
Czech Republic	Prague	Slated for an IPO in 2006
Czech Republic	Regional airports	First partial sale of a regional airport reported, April 2006. 34% of East Bohemian Airport to Climax Fort Investment.
France	Aeroports de Paris (AdP)	IPO (32.8% of equity) completed Jun-06, generating EUR800 million capital to help finance EUR2.7 billion investment programme during 2006-2010, mainly CDG and Orly airports. Oversubscribed 3.8 times. French Government retains 67.2% of AdP. Ten regional airports to follow if successful. Three pilot project airports managed by Vinci Airports. Remainder operated by Chambres de Commerce under licence from government. Air France/KLM proposed financing of their own terminal at CDG Airport.
Portugal		Sale of undisclosed shareholding in ANA- Aeroportos de Portugal to be completed by end 2007. New Lisbon Airport to be built.
Greece/Crete	Kastelli	New US\$1.3 billion airport. Private financing may be required.
Hungary		Further privatisations may follow BAA takeover of Budapest Airport.
Ireland	General	Dublin Airport Authority is inviting tenders to acquire its hotel unit, Great Southern Hotels, operator of eight hotels, including three located at Dublin, Shannon and Cork airports. Tenders are due by 23-Jun-06.

Asia

China	General	BAA declared intent to invest in secondary airports
China	Xian	Fraport (Germany) negotiating to acquire 49% of equity.
China	General	The Chinese Government plans to invest CNY140 billion (USD17.5 billion) under the 11th Five-Year Plan (2006-2010) to develop airport infrastructure across the country
China	Yunnan Province	Yunnan Provincial Government announced plans to invest over USD2.5 billion in airport construction projects during the 11th Five-Year Plan period (2006-10).
China	Beijing	CAAC confirmed a second international airport would be developed in Beijing within five years. Capital Airport Holding and its listed subsidiary, Beijing Capital International Airport Co Ltd planning to raise up to USD3 billion through debt and equity by the end of 2006 to fund the construction of Beijing Capital International Airport's new Terminal 3.
China	Zhuhai	Airport Authority Hong Kong (AAHK) announced it received Civil Aviation Authority of China (CAAC) approval to establish a JV to manage Zhuhai Airport. AAHK will reportedly invest CNY200 million for a 55% shareholding in the JV that will manage the airport for 20 years.
China	Nanjing	40-45% shareholding in Nanjing Lukou International Airport (NLIA) for sale to strategic investors. Singapore Changi was close to an agreement in Jun-05 for a 45% holding in NLIA valued at USD200 million, but did not complete the sale. Other interested parties include Schiphol Group.
China	Hong Kong	Airport Authority Hong Kong IPO projected for 2006 but held up by poor IPOs in other sectors and legal challenges. Possibly delayed for a further two years.
Korea		Potential IPO at Incheon Airport by 2008.
India		Proposed IPO on the Airports Authority of India to raise funds to develop non-metropolitan airports. Joint ventures proposed. Timescale undisclosed
India		Civil Aviation Minister announced plans to develop 400 abandoned airstrips into operational airports by 2016.
India	Chennai & Kolkata Airports	Next stage of airport modernisation contracts at major metropolitan airports, due shortly.

India	Shirdi	New airport proposed by Maharashtra Airport Development Corporation.
India		Tata Group will bid for 52 airport modernisation projects, including 15 international projects
India	Cochin	IPO by mid 2006 projected to raise funds for future expansion.
India	Rajasthan	State Government plans to develop airports at Kota and Kishangarh
India	West Bengal	Second international airport proposed for Kolkata. The proposed green field airport, which would be established by a private party with land provided by the government. Singapore government may invest in airports in West Bengal.
Pakistan		Various private airport projects e.g. Sialkot and New Gwadar. New Greenfield airport to be built at Islamabad.
Kyrgyzstan	Issyk Kul Lake	Airport operator Vnukovo proposes new airport.
Bangladesh		Further management opportunities anticipated following Thai Airways contract to manage Chittagong Airport. Thai Airways intends to manage more airports in the region and has set up a division to do so.
Cambodia/Laos		Bangkok Airways plans to build small airports
Indonesia	General	Indonesian Government confirmed it is considering plans to allow the private sector to invest in airports, as part of wider plans to increase private sector participation in infrastructure development. Government will invest IDR100 billion in the construction and upgrade of 20 airports across the country
Indonesia	Jakarta	Low cost terminal to be built by 2008.
Indonesia	Medan	Government plans to invest USD225 million in the construction of the proposed USD450 million Medan Kualanamu Airport in North Sumatra province. A foreign loan will be sought. Anticipated that equivalent funding will emanate from the private sector for the commercial parts of the project.
Vietnam	Cam Ranh	International airport to be developed within 10 years.
Vietnam	Kien Giang province	New airport projected by 2010.
Philippines	General	Department of Transportation and Communications confirmed PHP3.2 billion 2006 budget for aviation infrastructure, of which 80% will focus on airports with commercial operations. Philippine Airlines has requested that the Transportation Department develops 22 of the country's 85 airports to support the airline's planned domestic route reorganisation.
Philippines	Diosdado Macapagal	BOT terminal planned for Diosdado Macapagal. President Arroyo previously approved a PHP800 million expansion project. May become principle hub by 2015, replacing Manila Ninoy Aquino International Airport
Philippines	Mandurriao Iloilo Airport	To be privatised on Presidential instructions seemingly to generate funds for the new PHP6.2 billion Iloilo International Airport. Also plans to privatise Legazpi Airport in the Bicolanos region.
Malaysia	General	Malaysia Airports Berhad shortlisted to build airport in Kazakhstan and is set to develop its international strategy and portfolio.
Australia	General	Babcock & Brown Ltd to bid for European airports and sea ports, Currently has interests in airports in Germany and the Czech Republic, expects revenue from the firm's infrastructure division to overtake property as the largest contributor to earnings by the end of 2006.

Middle East/West Asia

Saudi Arabia	Abdullah City	Proposed new airport (Emaar Properties)
Saudi Arabia	General	The Deputy Premier and Minister of Defence and Aviation, Crown Prince Sultan, stressed the private sector's future role in developing the aviation sector, including airport development. In Mar 2004, the Cabinet approved transforming the civil aviation sector into a state-owned agency with "financial and administrative independence." Private provision of duty free facilities now permitted.
Abu Dhabi		Airport joint stock committee to be established – first stage of airport privatisation.
Oman		Three new airports planned at Ras Al Hadd, Duqm and Sohar. Also proposed Sohar Wilayah Airport in the Batinah region. Foreign participation in privatisation projects is encouraged but BAA withdrew from Seeb/Salah development projects in 2004.

Israel	Tel Aviv	Israel Airports Authority plans to lease Ben Gurion Airport's Terminal 1 to a private investor for 25 years.
Russia	St Petersburg	Pulkovo Airport is on a list of enterprises slated for privatisation in 2006. The City of St Petersburg keen to acquire 50% of the airport, opening the door for a potential JV bid.

Latin America & Caribbean

Mexico	General	Two of three airport management companies have now gone through IPOs – Grupo Aeroportuario del Pacifico and Grupo Aeroportuario Central Norte.
Colombia	Bogota	20-year concession tender for El Dorado airport. Bids presented 16-Jun-06. Five main consortia from nine EoI, including Flughafen Zurich/Odinsa, Corporacion America and Siemens.

Africa

South Africa	Airports Company South Africa (ACSA)	Potential IPO on ACSA, depending on success of South Africa Airways' disentanglement from Transnet. Issuing bonds to finance ZAR5.2 billion domestic airport expansion and heavily involved with Mumbai (India) modernisation as consortium member. La Mercy Airport to open (Durban) by 2009. Occasional proposals for new airports under Public/Private Partnership deals, e.g. to relieve pressure on Johannesburg Airport, but only one came to fruition – Kruger Mpumalanga, financed by ABB Equity Ventures. ACSA looking for more foreign concessions following success at Mumbai.
Ghana		Second international airport planned as private sector BOT model. Project to commence within six years.
Malawi		Malawi Government released details of a draft report on privatisation options, which calls for significant capital investment in airports in the country.
Kenya		Three international airports to be upgraded – World Bank aided and private sector funding sought.
Zimbabwe		Zimbabwe Civil Aviation Authority is seeking to raise ZWD2.0 trillion from local and foreign investors to upgrade airports to international standards.
Sudan	Khartoum	New international airport planned. Government is considering both local and international offers to finance the project.
Nigeria	General	Federal Airports Authority being privatised. Akwa Ibom State awarded a USD125 million contract to US company DynCorp International for the construction of an international airport. It will be the first privately managed airport in the country. Nigeria's National Council on Privatisation has asked for private sector Expressions of Interest in the operation of Nnamdi Azikiwe International Airport in the capital, Abuja, through a concession of 25-35 years. Three initial bidders include ACSA and Vienna Airport.
Mozambique	General	World Bank notes that Mozambique is demonstrating "growing attractiveness as an investment destination". The Bank's Multilateral Investment Guarantee Agency has already facilitated USD2.8 billion in foreign direct investment into the country. With tourism also a nascent but promising sector here Mozambique is being prepared for an influx of intercontinental tourists within a few years.
Madagascar	General	Ministry of Transport invited EoIs during 2005 to identify potential strategic partners for a public private partnership (PPP) to develop the Republic's airports, with the aim of improving the competitiveness of the aviation industry there. Targeted organisations were national and international airport operators and investors.
Tunisia		The government has opted for a build-operate-transfer philosophy, by which a 40-year concession was offered on the country's ninth airport at Enfidha, 80 km south of Tunis.
Egypt		The Ministry of Civil Aviation signed contracts with German airports operator Fraport and Aeroports de Paris (AdP), for them to operate Cairo International Airport (Fraport) and five other airports (AdP). The government had been keen to lock foreign companies into build-operate-transfer schemes wherever possible but these are management deals only – no financial input is required from either Fraport or AdP.

North America

USA	General	Most investment opportunities likely to arise from (budget) airlines seeking capital to develop their own airport terminals rather than rent gates and facilities from other airlines.
USA	Privatisations	Plans agreed to privatise Chicago's Midway Airport by leasing it to boost city revenues without increasing taxes. Non-US capital probably not sought if it went ahead but Macquarie Bank is reportedly expected to bid.
USA	General	GE Infrastructure and Credit Suisse announced plans to form a USD1 billion 50:50 JV to invest in global infrastructure assets, including airports. The infrastructure JV estimates the market opportunity at USD500 billion in developed markets and USD1 trillion in emerging markets over the next five years. Macquarie Bank announced plans to establish a "substantial" wholesale infrastructure fund to take advantage of opportunities in North America.
Canada	Montreal	Mirabel Airport terminal to be converted into theme park with private sector funding.

Airport Capex Update – May/Jun-06

Country	Airport/s	Details	CAPEX USD millions	Date
USA	San Luis Obispo County Regional Airport	Announced the following upgrades, to commence from Aug-06, as part of a Master Plan accepted in Jan-05: 800 ft extension of the airport's primary runway; USD4.7 million aircraft hangar with capacity for 65 small aircraft; 66,000 sq ft passenger terminal; Realignment of access roads.	n/a	23-Jun-06
Canada	Abbotsford International Airport	Abbotsford International Airport in British Columbia, announced a CAD113 million Master Plan. Details include: Construction of a five-gate 150,000 sq ft terminal; Runway extension to 12,000 ft and associated taxiway works.	100	24-Jun-06
USA	Beverly Municipal Airport	Beverly Municipal Airport, in Massachusetts, announced plans to upgrade its two runways at a cost of USD12.2 million. The project, which is scheduled to commence in Jul-06 and be completed in 2012, will be 95% funded by the FAA, while the remaining funds will be provided by the Massachusetts Aeronautics Commission and the Municipality.	12.2	22-Jun-06
Germany	Frankfurt International Airport	Fraport announced plans to proceed with a EUR660 million real estate project at Frankfurt International Airport after signing an agreement with Hilton Hotels Corp (HHC). HHC will manage two new hotels, including a 314-room Hilton Garden Inn and a 247-room Hilton Hotel at the airport site. The hotels are scheduled to open in Spring 2009.	831	22-Jun-06
Russia	Moscow Sheremetyevo International Airport	Vneshtorgbank and Vneshekonombank opened a 13-year term credit line for Terminal, which is currently developing Moscow Sheremetyevo International Airport's Terminal 3. The investment banks will provide USD264 million and USD211 million respectively for the construction of Sheremetyevo's Terminal 3, scheduled to be completed in late 2007.	475	21-Jun-06
USA	Waco Airport	Department of Transportation awarded Waco Airport a USD4 million grant to fund runway expansion plans, upgrades to the existing airport terminal and construction of a new fire house.	4	20-Jun-06
Israel	Ben Gurion International Airport	Israel Airports Authority announced plans to invest USD200 million in an expansion project at Ben Gurion International Airport. The project, which will commence in 2007 and take up to four years to complete, includes: Construction of a new runway: USD100 million; Expansion of the apron: USD100 million.	200	21-Jun-06

Qatar	Doha International Airport	Doha Asian Games Organising Committee awarded Siemens a contract to construct a temporary terminal at Doha International Airport for the 15th Asian Games 2006. The EUR19 million project includes the supply of all check-in, security, baggage handling and reclaim equipment.	23.9	20-Jun-06
Philippines	Dipolog Airport	Philippine Government announced plans to invest PHP140 million in the expansion of Dipolog Airport in Zamboanga del Norte. The project includes the extension of the runway and seawall.	2.6	20-Jun-06
India	Ranchi Birsa Munda Airport	Airports Authority of India (AAI) confirmed plans to upgrade Ranchi Birsa Munda Airport in Jharkhand for international operations. Details include: Terminals: Construction of an international terminal; Runway: A second parallel runway is included in the project; ATM: The present air traffic control tower needs to be relocated.	n/a	20-Jun-06
USA	Valley International Airport	Ballenger Construction Co has been awarded a USD5.4 million contract to upgrade the taxiway at Valley International Airport in Texas. Construction is reportedly scheduled to commence on 17-Jul-06, and be completed in ten months.	5.4	19-Jun-06
St Vincent and the Grenadines	St Vincent	Taiwan's Government will reportedly invest USD15 million and provide a USD10 million "soft loan" to fund construction of an international airport on the island of St Vincent.	15	19-Jun-06
Saudi Arabia	Yanbu Airport	Saudi Arabian Government announced plans to upgrade Yanbu Airport at a cost of USD51.2 million. Phase I is scheduled to be completed in 18 months. The project includes: Departures and arrivals lounges; Control towers and cargo facilities; Security and safety systems, a power station and a mosque.	51.2	19-Jun-06
Australia	Hobart International Airport	Hobart International Airport commenced preliminary construction of the AUD15 million international terminal, as part of Phase II upgrades. The new terminal will incorporate three combined domestic and international check-in counters and x-ray facilities.	11	16-Jun-06
USA	Kahului Airport	Hawaii State Tourism confirmed USD134 million will be invested at Kahului Airport over the next 12 years. The expansion project is part of a USD2.3 billion modernisation plan for Hawaiian airports. Projects at Kahului Airport include: Additional gates and ramp space; New centralised passenger security checkpoint; Expanded public parking facilities.	134	17-Jun-06
UAE	Ras Al Khaimah International Airport	Ras Al Khaimah Department of Civil Aviation announced plans to invest AED110 million in airport expansion projects and AED120 million for an airport hotel over the next five years. The projects are part of a 20-year Master Plan that has been under development for the past three years, which also includes the establishment of an airline.	63	18-Jun-06
Sierra Leone	Lungi International Airport	Sierra Leone Airport Authority (SLAA) confirmed it has received USD8 million in World Bank funding to upgrade the runway, improve electricity and water supply systems and improve the ATM system at Lungi International Airport.	8	15-Jun-06
Japan	Tokyo Haneda International Airport	Japan Airport Terminal Co Ltd (Jatco) announced plans to construct a new international terminal at Tokyo Haneda International Airport. The Government will award a 30-year contract to the Jatco led-consortium that will own and operate the new terminal building. Construction is expected to commence shortly.	n/a	16-Jun-06

China	Shenzhen Airport	National Development and Reform Commission approved Shenzhen Airport's CNY5.9 billion expansion plan, which includes the construction of a second runway. The project will be financed by the Shenzhen Municipal Government, the CAAC, and commercial bank loans and will increase capacity to 36 million passengers and 1.8 million tonnes of cargo p/a.	739	18-Jun-06
UK	Liverpool John Lennon Airport	Liverpool John Lennon Airport announced plans for a GBP22.5 million hotel and car park development, subject to approvals. The project includes: Three-star 150-bedroom hotel; Multi-storey car parking facility with 869 spaces.	41	15-Jun-06
USA	Gary/Chicago International Airport	Gary/Chicago International Airport confirmed it is preparing to borrow up to USD35 million as early as Summer 2006 to fund its runway expansion project. Late last year, the airport secured USD57.8 million in FAA funding for the project, which will increase the runway by almost 2,000 ft.	92.8	15-Jun-06
Qatar	New Doha International Airport	Civil Aviation Authority awarded SKYORYX and TAV Investment a QAR3 billion contract to construct the main departure lounge at the New Doha International Airport (NDIA). Construction of NDIA's Phase I is scheduled to be completed in 2009, with capacity to handle 12 million passengers p/a.	825	26-Jun-06
Iraq	Najaf International Airport	Najaf Province Government awarded Dubai's World Strategic Initiatives Group and the Sahel Al Jazeera Group a USD300 million contract to upgrade and modernise Najaf International Airport.	300	26-Jun-06
Sri Lanka	Weeravila Southern International Airport	Sri Lankan Government confirmed construction of the USD125 million Weeravila Southern International Airport in Hambantota will commence in Sep-06, a six-month delay. Approximately 800 hectares of land adjacent to a Sri Lankan Air Force airstrip have been allocated for the development, expected to be completed by 2010.	125	27-Jun-06
USA	Eastern West Virginia Regional Airport	Eastern West Virginia Regional Airport awarded Clark Construction Group a USD16 million contract to extend the runway from 7,000 to 7,800 ft.	n/a	28-Jun-06
USA	Wayne County Airport Authority	Wayne County Airport Authority plans to award John Carlo Inc a USD41 million contract to upgrade the apron and runway at Detroit Metropolitan Wayne County Airport.	41	29-Jun-06
USA	Midway Airport in Texas	Announced plans to undertake expansion plans valued at USD9 million. Details include: Runway: Extension from 5,000 ft to 6,500 ft; Land acquisition: Purchasing an additional 100 acres of surrounding land.	9	29-Jun-06
USA	Eastern West Virginia Regional Airport	Eastern West Virginia Regional Airport awarded Clark Construction Group a USD16 million contract to extend the runway from 7,000 to 7,800 ft.	16	28-Jun-06
USA	Metropolitan Wayne County Airport	Wayne County Airport Authority will reportedly award John Carlo Inc a USD41 million contract to upgrade the apron and runway at Detroit Metropolitan Wayne County Airport.	41	29-Jun-06

Airport Financial Results – May/Jun-06

Asia Pacific

Airport Authority Hong Kong reports record profit

Airport Authority Hong Kong (AAHK) announced (05-Jul-06) a record profit attributable to shareholders of HKD1,615 million for the 12 months ended 31-Mar-06, up 33% year-on-year. The result was driven by strong revenue growth of 10% to HKD7,076 million. Operating costs rose less than 1% to HKD2,820 million, while EBITDA rose to a record HKD4,256 million, up 16% year-on-year.

A total of 41.6 million passengers and 3.5 million tonnes of cargo passed through Hong Kong International Airport (HKIA) in the period, a year-on-year increment of 9% and 10%, respectively – well above the global average.

According to outgoing AAHK CEO, Dr David Pang, the outlook is positive as Hong Kong International Airport (HKIA) would continue to benefit from the exponential growth in the Chinese Mainland's burgeoning economy and air traffic. The Centre believes HKIA will also be a major beneficiary of the Air China/Cathay Pacific/Dragonair ownership restructure, boosting its competitiveness with other Asian hubs.

AAHK stated it would continue to "explore new opportunities and bring added value to Hong Kong and the Chinese Mainland by strengthening the competitiveness of HKIA and integrating with airports on the Mainland".

But none of this would be good news for nearby Macau, sandwiched between HKIA and Zhuhai.

Airport Authority Hong Kong financial highlights 12 months ended 31-Mar-06

Currency: HKD (mill)	FY06	% change Y-O-Y
Revenue (million)	7,076	+10
Operating costs	2,820	+1
EBITDA	4,256	+16
Net profit	1,615	+33
Passenger numbers (million)	41.6	+9
Cargo Volume (tonnes)	3.5	+10

Source: Centre for Asia Pacific Aviation, & Company Reports

Sydney Airport earnings bolstered by commercial businesses

Southern Cross Airports Corporation Holdings (SCACH), parent of Sydney Airport Corporation Ltd (SACL), reports revenue rose 6.5% year-on-year, while EBITDA rose by a slower 6.2% in the 12 months ended 30-Jun-06, as costs rose 7.9% due to security related expenditure. Fourth quarter EBITDA growth was stronger, coming in at +7.1%, as revenue rose 5.7% and operating costs fell 1.5% year-on-year. Total passenger traffic in the full year rose 2.9% to 29.1 million, but traffic has been stronger in 2006, with the Jun-06 result up 5.6% year-on-year on the back of stronger domestic travel.

Overall, it was a good result for SACL's new CEO, Russell Balding, and underpinned by growth in the airport's commercial businesses. "A wide range of retail, parking and

property initiatives improved the revenue yield”, according majority shareholder, Macquarie Airports.

Looking ahead, a major focus for Sydney Airport will be to refinance AUD1.8 billion in maturing debt facilities – with an aim to arrange most if the new facilities by Dec-06. It also plans to raise new debt in 2007 to support planned capital expenditure and provide working capital.

Significant ongoing investment is planned at Sydney Airport over the next five years to cater for the next phase of growth, including the AUD500 million programme to upgrade the airfield and facilities at T1, including improving the baggage system and introducing self-service check-in.

Sydney Airport financial highlights 12 months ended 30-Jun-06

Currency: AUD (mill)	FY06	% change Y-O-Y
Revenue	659.3	+6.5%
Operating costs	133.7	+7.9%
EBITDA	523.8	+6.2%

Source: Centre for Asia Pacific Aviation, & Company Reports

Airport Ratings

Airport Ratings					
Airports	Announcement Date	Bonds	Ratings	Outlook	Rating Agency
Hartsfield-Jackson Atlanta International Airport	20-Jun-06	Long-term rating on the City of Atlanta's general airport revenue bonds, issued for Hartsfield-Jackson Atlanta International Airport.	A+	Stable	Standard & Poor's Ratings Services
Hartsfield-Jackson Atlanta International Airport	20-Jun-06	Long-term rating on the City's passenger facility charge subordinate-lien general airport revenue bonds, also issued for the airport.	A	Stable	Standard & Poor's Ratings Services
Alabama's Birmingham International Airport	22-Jun-06	Birmingham Airport Authority's USD82 million airport revenue bonds.	A-	Stable	Fitch Ratings
Greater Orlando Aviation Authority's	22-Jun-06	USD864.6 million of outstanding senior lien bonds.	AA-	Stable	Fitch Ratings
Greater Orlando Aviation Authority's	22-Jun-06	USD427.9 million of outstanding subordinate lien bonds.	A+	Stable	Fitch Ratings
State of Hawaii's	22-Jun-06	State of Hawaii's approximately USD670 million airport system revenue bonds.	A	'negative' to 'stable'	Fitch Ratings
Denver International Airport	27-Jun-06	USD3.8 billion outstanding revenue bonds.	A+	Stable	Fitch Ratings
Denver International Airport	27-Jun-06	USD285 million Airport System Revenue Bonds.	A+	Stable	Fitch Ratings
Denver International Airport	27-Jun-06	USD180 million Airport System Revenue Bonds.	A+	Stable	Fitch Ratings
Fresno Yosemite International Airport	29-Jun-06	City of Fresno's USD40.4 million in outstanding airport revenue bonds.	BBB+	Stable	Fitch Ratings

Source: Centre for Asia Pacific Aviation & Company Reports

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