

ACI World AIRPORT DEVELOPMENT NEWS

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Focus on South-east & Northern Asia

INDIA

Public-private partnership in the development of airports has been praised as 'one of the significant achievements' in India's civil aviation sector in the Economic Survey 2014-15. The Survey, which was tabled in Parliament on 27 February 2015, points out that the PPP model has led to a significant improvement in infrastructure and in the collection of revenue. The Survey points out that there has been a healthy increase in international passengers and cargo handled at Indian airports during 2014-2015. The Survey states that domestic passenger traffic throughput increased by 7.1% while international passengers increased by 10.3% during April to December 2014, as compared to the same period in the previous year. During the same period, international cargo throughput at Indian airports was 1.17 million tonnes (+8.3%) while the domestic cargo volume stood at 0.74 million tonnes (+19.3%). **As of now, five Indian airports have been given to private developers on a revenue-sharing model: Delhi, Mumbai, Hyderabad, Cochin, and Bengaluru.** Four more are in the process of being handed over to the private sector for development: Kolkata, Chennai, Jaipur, and Ahmedabad . The Economic Survey says that state-owned AAI is managing 125 airports and has finalized a no-frills airport model for enhancing remote-area connectivity. During 2014-15, the AAI has completed development of airports at Bikaner and Jaisalmer in Rajasthan,, Bhatinda in Punjab, and Cuddapah in Andhra Pradesh. The other initiatives taken by the AAI are setting up greenfield airports at Mopa in Goa, Navi Mumbai, Shirdi and Sindhudurg in Maharashtra, Shimoga, Gulbarga, Hassan and Bijapur in Karnataka, and Kannur and Arnamula in Kerala. Other airports in this initiative are at Durgapur in West Bengal, Pakyong in Sikkim, Datia/Gwalior (cargo) in Madhya Pradesh, Kushinagar in Uttar Pradesh, and Karaikal in Puducherry, the Survey said. The AAI is also looking at developing small airports in Tier II and Tier III cities like Hubli and Belgaum in Karnataka, Kishangarh in Rajasthan, Jharsuguda in Odisha, and Tezu in Arunachal Pradesh.

PHILIPPINES

The local Ayala Corporation has expressed interest in the proposed PHP 15 billion (USD 338 million) development project of Manila's saturated 'Ninoy Aquino International Airport' (NAIA) but is not interested in the on-going bidding for five regional airports worth PHP 108.2 billion. Ayala, through AC Infrastructure Holdings Inc., would like to focus on existing infrastructure projects. "We are interested in NAIA if it happens, but for now it is still up in the air," said John Eric Francia, Ayala's Managing Director. The feasibility study for the project is being prepared to determine the project's scope and viability as part of the country's Public-Private Partnership (PPP) programme. **The Department of Transportation & Communications (DOTC) and the Manila International Airport Authority (MIAA) would undertake the NAIA development project which aims to improve, upgrade and enhance the operational efficiencies of all existing NAIA**

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terminals covering both landside and airside, apart from air traffic services. The project, which would help the country's main gateway meet the standards set by ICAO, would be submitted to the Investment Co-ordinating Committee of the Cabinet-level National Economic & Development Authority (NEDA-ICC) in the second 2015 quarter for approval. Similar projects to refurbish NAIA include the on-going NAIA expressway project and the rehabilitation of NAIA's Terminal 1.

The Sangley International Airport would be able handle about 55 million passengers per year when it opens in 2025, which together with the existing NAIA in Manila would be enough to meet the area's estimated demand of 59.1 million annual passengers. The Sangley facility can eventually be expanded to handle 130 million passengers annually by 2050. -- The DOTC has also awarded the PHP 17.5 billion Mactan-Cebu International Airport passenger terminal project to the Megawide-GMR Consortium and is set to start the PHP 7.2 billion low-cost passenger terminal project at Clark International Airport in Pampanga.

The diversified conglomerate San Miguel Corp. (SMC) remains keen on its proposal to build a new USD 10 billion airport in Metro Manila and bid for key regional airport deals to be granted under the Public-Private Partnership (PPP) programme. In May 2014, SMC, which used to manage Philippine Airlines, had presented to President Benigno S.C. Aquino III plans to build a new airport along the Manila - Cavite coastal road at the waterfront reclamation site straddling Parañaque and Las Piñas cities to replace aging Ninoy Aquino International Airport (NAIA). "We will still pursue [our plan to build an airport along the Cyberbay reclamation area by urging the Government to call for a public bidding," said San Miguel President & Chief Operating Officer Ramon S. Ang recently. Mr Ang also confirmed that details of the airport plan - involving five years of construction - have not changed.

There are two other plans for a new airport involving conversion of the former U.S. Navy station at Sangley Point, Cavite: one by the Japan International Co-operation Agency and another by All-Asia Resources and Reclamation Corp.

Mr Ang also confirmed that his company will also bid for the development as well as operation and maintenance (O&M) of regional airports under the PPP scheme. Aside from taking over O&M of the regional airports' existing facilities from the Civil Aviation Authority of the Philippines, the winning bidder can enhance and develop landside facilities, including passenger and cargo terminals, along with all associated infrastructure and facilities, according to an instruction to prospective bidders on the PPP Center Web site. The five airport PPP deals, cumulatively worth some PHP 108.9 billion, will be offered in two bundles. The first bundle consists of Bacolod-Silay Airport (PHP 20.26 billion) and Iloilo Airport (PHP 30.40 billion), while the second package includes the New Bohol (Panglao) Airport (PHP 2.34 billion), Laguindingan Airport (PHP 14.62 billion), and Davao Airport (PHP 40.57 billion).

San Miguel is one of the companies that bought bid documents for the regional airport PPP deals. Others are Aboitiz Equity Ventures, Inc.; Ayala Corp.; JG Summit Holdings, Inc.; Metro Pacific Investments Corp.; MTD Philippines, Inc.; Megawide Construction Corp.; and Philippine Skylanders Inc.

The submission of pre-qualification bid documents will be on 18 May 2015 and the issuance of the notice of awards in March 2016.

In early March 2015, DOTC said it will leave out the Puerto Princesa Airport Development and O&M Project, which initially formed part of the regional airport PPP package in an invitation to pre-qualify and bid published in December 2014. Instead, it will be "bundled... into a comprehensive tourism airport-centric strategy for Palawan airports, such as San Vicente, which will be completed in around three months, and also Busuanga," DOTC Spokesperson Michael Arthur C. Sagcal had said. **SMC is interested in both airport bundles and does not have a foreign partner for the deals.** Besides the bundled airport projects, Mr Ang added that San Miguel will also bid for the PHP 5.81 billion Puerto Princesa project.

Five airports around Mindanao are being proposed for funding by the Mindanao Development Authority (MinDA), though much of the investment cannot be funded from the 2015

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approved budget. The projects on the list are grouped into two priority levels, the first covering those that are proposed to start in 2015 and the second will be pursued in 2016. MinDA Executive Director Janet M. Lopez said these projects, identified under the Mindanao Development Corridors programme, are crucial to the efforts both of Government and the private sector to develop economic zones on the southern island. "The development of these infrastructure facilities will provide better logistical support to the efforts of expanding our agricultural production areas as well as facilitating the travel of both workers and business people," Ms Lopez said. Included under the airport priority list is the modernization of the Mapun Airport in Tawi-Tawi, an island province in the southwest that is part of the Autonomous Region in Muslim Mindanao. The project will require PHP 1 billion, of which about PHP 10 million was allocated in the 2015 budget, and MinDA is pushing to have the full amount covered within the year with the remaining PHP 90 million to be taken from the Government's savings. **Mapun Airport is being positioned as a hub for trade within the Brunei-Indonesia-Malaysia-Philippines East ASEAN (Association of Southeast Asian Nations) Growth Area (BIMP-EAGA)**, particularly between the Philippines and Malaysia's easternmost state, Sabah. In the second priority list, the priority is on the improvement of the General Santos International Airport, the biggest among the proposed projects with a budgetary requirement of PHP 2 billion. MinDA, in its proposal, pointed out that the airport "is categorized as an international airport, but seriously lacks facilities to meet the standards of international aviation. Other airports in the list include the modernization of existing facilities in Cotabato City and Sanga-sanga in Tawi-Tawi, and construction of a new Zamboanga City International Airport. -- The Government is set to bid out the development of five regional airports under the public-private partnership programme, including two in Mindanao, Laguindingan International Airport in the north of the island and the Francisco Bangoy International Airport in Davao City.

INDONESIA

The Ministry of Transportation has budgeted IDR 71 trillion (USD 5.4 billion) to develop airports around Indonesia over the next five years. Targeting to open an annual average of 15 new airports, these airports will be located in natural disaster hazard areas, remote destinations, and bordering cities and towns. There are also plans to upgrade existing airports and extend runways. Speaking at the opening of Garuda Indonesia Travel Fair in Jakarta, Director General of Air Transportation, Suprasetyo, said: "The number of Indonesian air passengers between 2010 and 2014 totalled 335 million with an average annual growth of 15%. This is considered moderate compared to the potential size of the market. The lack of infrastructure has been identified as the hampering factor." In 2015 alone, the Government is allotting IDR 11 trillion (USD 845 million) for at least eleven airport development projects in hazard areas such as Sabang and Nias in the southern parts of Sumatra, East Nusa Tenggara, and Papua. Suprasetyo added that the Government is working on more Government-to-Government (G2G) agreements to improve accessibility with regional and international destinations, and would open 217 pioneering routes in 28 provinces in 2015.

State-owned airport operator PT Angkasa Pura II (AP II) has secured a loan of IDR 1.5 trillion (USD 115 million) from the Indonesian Export Financing Agency (LPEI) to finance airport development projects to keep pace with the growth of the country's airline industry.

The agreement was signed on 1 April 2015 by AP II President Director Budi Karya Sumadi and Ngalm Sawega, Executive of the financing agency, also known as Indonesia Eximbank. AP II, which manages 13 airports in the western part of the country, is currently in the process of conducting a terminal expansion project at the country's busiest airport Soekarno-Hatta in Jakarta. The future third terminal will have a capacity of 25 million passengers annually. Following its completion, the company will upgrade the first and second terminals such that each terminal can accommodate 18 million passengers every year. The airport is only designed to accommodate 22 million passengers annually, yet it catered to around 62 million passengers in 2013.

According to Budi, the company was also planning on beginning a construction project that would increase the runway capacity of Soekarno-Hatta from the current 72 flights per hour to 86 flights per

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hour. In addition, the company is currently developing a train station and an integrated building consisting of commercial areas, parking areas, offices and hotels, all located near the airport. AP II needs a total of IDR 26 trillion between 2007 and 2020 to develop the country's busiest airport. The firm plans, over the course of two years, to raise IDR 6 trillion from the bond market to help finance its projects. Bonds worth a total of IDR 2 trillion will be issued either in September or October 2015, according to Budi. AP II also plans to develop Kualanamu Airport (KNO) in North Sumatra into an aerotropolis by integrating the airport with Belawan Port, Kuala Tanjung Port, and Batubara regency, in a bid to spur the province's economic growth. AP II, along with state-owned Angkasa Pura I, was previously criticized by Transportation Minister Ignasius Jonan for failing to comply with the standards set by the Government.

VIETNAM

The initial public offering of the state-owned Airports Corporation of Vietnam (ACV) is expected to occur during the second quarter of 2015. The State plans to maintain 75% ownership of the company, which has an estimated value of roughly VND 38 trillion (USD 1.74 billion). The ACV currently operates 22 international and domestic airports across Vietnam. The measure is aimed to raise funds for the Long Thanh International Airport, where construction is scheduled to start in 2015 some 40 km northeast of Ho Chi Minh City, according to Minister of Transport Dinh La Thang. The airport will require around \$5.6 billion to complete the first stage of its development project by 2020 -- around 53% of which will come from the state budget and official development assistance (ODA) loans. The new airport is expected to receive 25 million passengers by 2020 and double that by 2030. The ACV, which was established in 2012 as a merger between three airport corporations in the north, central, and south, now manages 24 member companies. Last year two of its members, namely the Southern Airports Services Company and Saigon Ground Services, held IPOs. The company reported a turnover of more than \$394.56 million last year, a year-on-year increase of 0.86 percent, and \$57.8 million in pretax profits.

MALAYSIA

According to Chief Minister Lim Guan Eng, **now is the right time for Penang International Airport to expand.** Lim said in terms of location and opportunity, the airport was superior and more popular as compared with those in other places. "There is an increasing usage at the airport. Passenger movements grew from 5.5 million in 2013 to 6 million last year. Are we not going to try to expand our existing advantage rather than spend money starting from zero?" he asked. Lim said talks of cargo flights from Penang Airport to Kuala Lumpur International falling by 10% every year were not accurate. "New and existing logistics companies would not come and expand in Penang unless there was an increased volume to transport," he said. The region's manufacturing industry has expanded by double digits in 2014. "To say the air cargo has dropped, I don't know whether they are talking in terms of volume or value. I think that is a strong distinction. Value must have increased or else there won't be logistics companies expanding and opening up in Penang," he said.

Malaysia Airports Holdings Bhd (MAHB) plans to begin expansion of Langkawi International Airport in 2016 after it was voted the best airport in Asia Pacific in the under 2 million passengers per year category for the second year running. MAHB Managing Director Datuk Badlisham Ghazali said the airport has surpassed its handling capacity of 1.5 million and the plan to upgrade its facilities has been included in the 11th Malaysia Plan. The upgrading project would be carried out in phases beginning with the expansion of the terminal halls. However, Badlisham did not reveal the cost of the upgrading works. He also said 2.2 million passengers arrived at Langkawi Airport in 2014 and the bullish trend was expected to continue based on the number of tourist arrivals. "Besides attracting tourists, we believe Langkawi will be more than capable of hosting international events once the upgrading project is completed," he said. – The airport is located at Padang Matsirat on the duty-free island and is about 25 minutes away from the town centre.

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THAILAND

The Transport Ministry and the Royal Thai Navy are expected to enter a co-operative agreement soon for the capacity expansion of the Navy-owned U-Tapao Rayong-Pattaya International Airport. The project is aimed at easing traffic loads and boosting tourism in the region. According to Transport Minister Prajin Juntong, once the Memorandum of Understanding (MoU) is signed, two panels, chaired by Transport Permanent Secretary Soithip Traisuth, will be set up to overlook the progress of work. The capacity expansion at UTP would be carried out in three phases with the first phase involving construction of a new terminal able to accommodate another 3 million passengers annually instead of the current 800,000 passengers. The second phase, to be carried out between 2018 and 2020, will see infrastructure development to accommodate up to 5 million passengers annually. The third phase, starting in 2020, will comprise construction of a second runway of 2,700 m. -- The project also involves building a new Navy-controlled airport in Rayong province.

CHINA

The head of the Civil Aviation Administration of China, Li Jiaxiang, said recently that, by 2030, he would like to see a general-purpose aviation airport in each of China's 2,800 counties as this would improve their infrastructure and economies. The remark at an event held by the Aviation Industry Corporation of China on 11 March 2015 raised questions about the source of funding for airport expansion and whether the proposed plan would attract private investment. Li did not offer any details but gave only an outline of his vision for aviation development in China. To facilitate the plan, the CAAC began in 2014 to give local aviation bodies the authority to oversee the development of general-purpose airports, incorporating facilities for specialized services such as agriculture, construction, photography, surveying, observation and patrol, and search & rescue. Experts in the aviation industry said barriers have been lowered for the development plan and that the challenges ahead include airspace restrictions and a shortage of funds. It costs up to CNY 2 - 3 billion (USD 322.8 - 484.2 million) on average to build a general-purpose airport. Li said that the CAAC has been studying ways to facilitate the development of such airports through regulation, locating funding, and creating favourable government policies. In 2013, China began offering subsidies to businesses that operate general-purpose airports. In 2014, the CAA spent a total of CNY 210 million (USD 33.9 million) in subsidies to 79 such businesses, with five of the operators receiving more than CNY 10 million (USD 1.6 million) each.

Construction of a new airport in Bo'ao on the southernmost tropical island province of Hainan began on 19 March 2015. The new airport is expected to be operational before the 2017 Bo'ao Forum for Asia (BFA) Annual Conference that brings together state leaders, government officials, businessmen and academics from across Asia. The airport is located in Qionghai city, about 15 km from the BFA conference centre. The airport project, approved in 2011, is expected to cost CNY 1.13 billion (USD 184 million) and is designed to handle 4,950 flights, or 480,000 passengers and 1,440 tonnes of cargo annually.

Chengdu, the largest city in southwest China and capital of Sichuan province, has received regulatory approval to build a CNY 69.3 billion greenfield airport in what is the country's second major airport investment in less than a year. The new Chengdu gateway will reportedly have three runways, capable of handling 40 million passengers upon its completion in 2025. Chengdu's existing Shuangliu Airport, built in 1938, is the fifth busiest in the country and serves as a hub for domestic destinations for carriers such as Air China, AirAsia X, and Korean Air among others. Passenger traffic at the Shuangliu facility increased 12.8% to over 37 million in 2014, more than doubling the volume of 13.9 million in 2005, but it is expected it could reach its designed capacity of 40 million as early as next year.

Beijing Capital International Airport (BCIA) saw 86.128 million passengers in 2014, an increase of 2.9% year on year. BCIA was listed as the second busiest airport by passenger numbers in the world for its fifth consecutive year, behind Atlanta's Hartsfield-Jackson International Airport in the

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United States. International passenger traffic hit 20.73 million at BCIA in 2014, recording 4.6% growth compared with 2013. The cargo volume increased 0.2% to 1.85 million tonnes, and a total 582,000 flights were handled (+2.5%). To meet Beijing's rising demand for air transportation and ease the BCIA's burden, the new airport at Daxing in southern Beijing started construction at the end of 2014 and will take about five years to complete.

Airports in China are focusing their IT investments on improving the passenger experience and introducing new self-service options, including bag-tag printing, self-boarding and self-bagdrop. This increased attention to the customer experience has also seen the airports embrace new media with 100% of them investing in passenger services via social media and mobile services by 2017, according to the recently released SITA/ACI Airport IT Trends Survey. The research results represent the views of the top 20 airports in China which serve more than 60% of all Chinese airline passengers. May Zhou, Vice President, SITA China said: "The extensive airport expansion and passenger growth, currently being experienced in China, are major challenges. Airports however are stepping up to these challenges and investing in IT to improve the passenger experience." The survey shows that **the massive growth in passenger numbers in China - up 9.7% in 2013 to 745 million - is leading to further investments in self-service to help improve performance and speed of passenger handling throughout the airports.** More than half (53%) of airports consider passenger processing as the most important priority for IT investment. In total, 65% of airports in China are investing in major self-service programs and a further 29% are running pilots. Investments in common-use self-service kiosks continue, with 35% planning to use them for check-in, while 35% plan to install them for other uses. Nearly two-thirds (65%) of China's airports are implementing bag-tag printing. Another area of significant development is self-boarding, which 35% of airports have implemented, up from 8% in 2013. Behind the airports' investment into new media is a strong desire to develop more personalized customer service through direct interaction, and China's airports are succeeding here. More than half (53%) rate their social media investments as performing well, or above expectations, for customer loyalty. In particular, airports are using mobile and social media to communicate with passengers in times of disruption. By the end of 2017, 94% of airports in China will have implemented real-time notification via social media and mobile services. Some 85% of Chinese airports surveyed said their total IT expenditures would either increase or stay the same in 2014. Much of this spend will be on infrastructure to support airport development in anticipation of future passenger growth. More than half (54%) are investing in IT for airport terminal expansions, 50% for new terminals, and 44% for refurbishments.

CHINA – Hong Kong

Li Jiaxiang, the mainland's civil aviation chief, said that Beijing fully supports construction of a third runway at Hong Kong International Airport, to be built on 650 hectares of land reclaimed from the sea. Li gave the project the stamp of approval when Hong Kong's Transport Secretary Anthony Cheung Bing-leung visited him. Hong Kong and Macao Affairs Office Deputy Director Zhou Bo also told Cheung he supported the controversial third runway. This implies that Beijing will back Hong Kong for the rights to use Shenzhen airspace - one of the issues lawmakers and concerned parties used to block funding for the runway. Cheung visited Li and other Civil Aviation Administration of China officials in Beijing before paying a visit to the Hong Kong and Macao Affairs Office. "Li said he fully supported Hong Kong to continue to consolidate and enhance its status as an international aviation hub and also expressed full support for the network plan for the third runway," Cheung said. "In the process, we both agreed to address the needs for the common development of each airport in the region."

The next step will be setting up a tripartite working group made up of CAAC, Hong Kong's Civil Aviation Department, and Civil Aviation Authority of Macau to co-operate and enact measures set out under the 2007 Pearl River Delta airspace management plan. Cheung said it is hoped the airports in the region - Hong Kong International, Guangzhou-Baiyun, Shenzhen-Bao'an, Macau International, and Zhuhai-Jinwan - can push for airspace co-operation in the Delta in a pragmatic manner. "There is a need for further development by these airports because air traffic in the PRD region

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is growing rapidly and all airports are facing a strong demand and need for further development. "To better utilize the airspace in the PRD, the key is improving management and co-ordination, and that definitely needs the full co-operation of several airports and relevant government departments." At present, the airport's two runways can handle 67 aircraft movements per hour. A third runway would see that capacity increase to 102. Under the Airport Authority's plan, a three-runway system would handle up to 100 million passengers and about 9 million tonnes of cargo per year by 2030. The Authority's three-runway system was given the green light by the Executive Council on 17 March 2015. It could be completed by 2023 if construction begins in 2016. Departing passengers will be charged HKD 180 from that year and airlines a further 15% more to help fund the runway.

SOUTH KOREA

According to the 2014 World Airport Traffic Data by Airport Council International, **Incheon International Airport (ICN) posted the highest growth rate of international passengers at 10.1%** from 2013 among the world's major airports serving no less than 40 million international passengers a year. As a result, the airport moved to the 8th place, one notch up from the previous year in the international passenger category, surpassing Bangkok's Suvarnabhumi International. Although international passengers at ICN totalled a mere 20.55 million in 2002 immediately following its inauguration, the figures increased by 6.7% on an annual average reaching 40.79 million passengers in 2013 - a level double the initial passenger count. The 2014 total grew to 45.51 million (+9.7%). Of these, international passengers accounted for 44.9 million, a 10.1% increase from the previous year. Furthermore, among the 28 major airports around the world that served more than 40 million passengers (international + domestic) in 2014, ICN posted a total passenger growth rate of 9.7%, second only to Istanbul's Ataturk Airport (10.6%). As the average growth rate of the 28 major airports was only 3.5%, Incheon's growth was threefold the average of these airports.

"By completing Phase 3 of the expansion project, including construction of the second Passenger Terminal in a timely manner by 2017 in response to the continued rise in passenger volume, we will build a platform from which to join the league of global hub airports," said CEO of Incheon International Airport Corporation (IIAC), Park Wan-su. In addition, Incheon Airport will grow to be the world's best both in terms of facilities and operational knowhow by reforming its systems, bolstering up equipment and resources, and adopting smart airport operation practices actively employing cutting-edge IT technologies," he added.

Incheon International Airport has won the highest scores in two categories of the Airport Service Quality (ASQ) survey, an annual passenger satisfaction survey organized by the Airports Council International (ACI). The results of the ASQ survey were collected from face-to-face interviews with 550,000 international passengers at airports around the world during 2014. Having recorded the highest scores in the categories of 'Best Airport in Asia-Pacific' and 'Best Airport over 40 million passengers', ICN has maintained its reputation of being the best airport by region as well as by size for ten consecutive years. The outcome by size is especially meaningful in that it is the result of fierce competition against leading airports in the new category of more than 40 million passengers, namely Changi Airport of Singapore and Beijing Capital International Airport.

In winning the ASQ award, IIAC President & CEO Park Wan-su commented: "Incheon Airport started small as an airport in Northeast Asia no one took notice of, but achieved big with the miraculous record of being named the world's leading service airport for ten years in a row. I am humbled and thankful for the efforts and contribution of the 40,000 Incheon Airport employees."

The ASQ Award ceremony took place on 28 April 2015, during the ACI Asia-Pacific Regional Assembly, Conference & Exhibition in Jordan. Incheon Airport became No.1 for ASQ in 2005, only four years after its opening in 2001 and maintained the lead for many years, becoming the top Republic of Korea brand. In 2011, it was the first airport to be recognized as a member of the 'Roll of Excellence' programme, which is the accolade for the most outstanding airport that upgraded the service level of airports around the world. The airport's remarkable achievement was possible by close co-operation of various stakeholders:

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40,000 employees and 900 institutions built an organic collaboration and communication system toward a common goal of the world's best service, creating synergy by sharing information, experience, and know-how. To respond to the increasing passenger demand and gain the competitive edge in terminal size and facilities, **ICN will complete its third-phase construction by 2017, including the second passenger terminal for 18 million annual passengers with cutting-edge technologies as well as ecological and cultural elements.** With the completion of the third-phase construction, ICN will have the foundation for a global mega-hub airport, with its annual passenger capacity having increased from the current level to 62 million.

JAPAN

Tokyo-Narita Airport opened a third terminal for the exclusive use of low-cost carriers on 8 April 2015 in its competition with rival Haneda Airport, which is closer to the centre of Tokyo.

Haneda has created a stronger presence by increasing its slots, in particular for international flights. Narita trails in attracting LCCs compared to other airports, such as Kansai Airport, but it plans to emphasize the ease of transferring from Terminal 3 to domestic flights. The ceiling of Terminal 3 has been left exposed to give a wide open feeling and reduce facility charges for LCC passengers. Colour-coded lanes in the three-storey main building and a two-storey satellite, linked with a bridge, make it easy for passengers to find the arrival and departure areas. With 450 seats, the second-level food court is the largest at any airport in Japan. For now, five airlines, including Japan Airlines-affiliated Jetstar Japan, use the terminal, linking Narita with 19 domestic and international cities. Narita expects the number of passengers who use the terminal to increase to 5.5 million this fiscal year.

For Terminal 3, the Narita Airport operator is to collect JPY 1,020 per passenger for use of the facility and JPY 520 for security services from international passengers. The charges are about 40% lower than those for Terminals 1 and 2. Narita International Airport Corp. President Makoto Natsume is targeting LCCs as a major buttress in operating the airport. At present, 14 LCCs fly to Narita Airport after Tigerair Taiwan launched flights between Narita and Taipei. LCCs now account for 24.1% of all passenger airline seats for scheduled flights in summer 2015, a sharp rise from 9.5% from the winter of 2012. As part of its efforts to further attract LCC operators, Narita has introduced free landing fees for LCCs for one year on condition that they operate flights to cities that have no direct flights from the airport. -- Kansai Airport and Naha Airport opened terminals exclusively for LCCs in 2012, so Narita Airport needs to make up for the delay. Compared with Haneda, Narita in Chiba Prefecture is at a disadvantage because it is much further from the centre of Tokyo. Passengers using Terminal 3 should arrive with time to spare as it takes about 15 minutes on foot to reach Terminal 2, which is connected to a railway station. The airport plans to operate a shuttle bus service between the two terminals to assist aged passengers. Take-off and landing slots are strictly limited between 11 p.m. to 6 a.m. at Narita Airport, which LCCs are not happy with, as they try to cut ticket prices by offering early-morning and late-night flights.

The New Kansai International Airport Company has shortlisted 20 bidders for the concession to operate Japan's fifth-busiest airport for 44 years.

They include Australia's Macquarie Capital Group, Singapore's Changi Airports International, and Global Infrastructure Management, which operates London-Gatwick Airport. Japanese financial services provider Orix, teamed up with Vinci Airports, and property developer Mitsubishi Estate are also among the bidders. The operating license to privatize New Kansai International (KIX) will be bundled with operating rights for the smaller Osaka-Itami Airport (ITM) nearby, which mainly handles domestic flights. Together, the two airports handle 32 million passengers annually. The concession is expected to fetch around JPY 2 trillion (USD 16.6 billion). The company will use the proceeds to repay JPY 1.2 trillion (USD 12 billion) of debt to the State. The auction is part of Prime Minister Shinzo Abe's plans to boost private-sector investment in Japan's infrastructure as the nation tries to reduce its debt, and the winner, expected to form a consortium, should be known sometime around June 2015 after a second round of bidding. This would be the first airport privatization deal in Japan, and others are expected to follow like the sale of the operating rights of Sendai Airport in

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northern Japan, the nation's 10th largest. Bidders for that auction include a consortium of Mitsubishi Estate and ANA, Japan's largest carrier.

While the search of an investor goes on, **Kansai Airport plans to spend about JPY 10 billion** (USD 97.6 million) **building Terminal 3** for the exclusive use of budget carriers. It would be located next to Terminal 2, which opened in October 2012 and currently is used exclusively by Peach Aviation, a discount Japanese airline.

Other Regions

GERMANY

About EUR 1.1 billion of additional public money will flow into the long-delayed BER Airport project to finish construction work and increase the liquidity of the airport operating firm Flughafen Berlin Brandenburg GmbH (FBB). The new injection increases the project costs to EUR 5.4 billion – more than twice the amount originally planned for the new airport. Since the BER has been designed for 27 million annual passengers, it will be too small on opening day sometime in 2017 since the two existing Berlin airports (Tegel and Schönefeld) already handled 28 million passengers in 2014 and were to be closed when the BER opens. To solve the capacity shortfall, two options are being discussed: Extending the BER before it opens or retaining Tegel Airport for overflow traffic after the BER opens. The FBB already had announced a new investment programme for Tegel Airport worth EUR 19 million. – At a recent Supervisory Board meeting, the members said goodbye to the airport head Hartmut Mehdorn after two years in the job. His successor Karsten Mühlenfeld, the former Rolls-Royce Deutschland Ltd & Co. KG manager, is scheduled to take over the role by June 2015 at the latest, after Mehdorn steps down.

GREAT BRITAIN

East Midlands Airport, opened in April 1965, celebrates its 50th anniversary with ambitious plans to double its annual passenger numbers and nearly triple the size of its cargo operations. The airport is a key driver of economic activity, which attracts investment and encourages businesses to locate in the area. Managing Director Andy Cliffe recognizes that the airport business is more competitive than ever and that EMA has to grow to keep its place in the sector. He says: "We want to grow to 10 million customers and our cargo to about one million tonnes of freight. If you consider that we have around 4.5 million customers at present and about 350,000 tonnes of freight, you can broadly see a doubling of passengers and a tripling of freight in the plans we have set out. It will take time and considerable investment but it's not wishful thinking, and we are seeing tangible things coming forward to fulfil that ambition." Cliffe thinks that East Midlands can especially score over its rivals in customer service. He says: "I think we can provide a great service here that will encourage customers to come back and want to use us again and again." -- In 2008, the airport made a commitment to be carbon neutral and achieved that in 2012 which is a source of pride for Cliffe, who is continuing to look at the impact of noise levels on the surrounding community.

EGYPT

The Board of the African Development Bank (AfDB) has approved a USD 140 million loan for the expansion of Sharm el-Sheikh International Airport. AfDB's contribution represents 21% of the total estimated cost of the USD 671 million project, which is co-financed with the Islamic Development Bank and the Government of Egypt. The project includes construction of a new terminal, runway and control tower within the confines of the existing airport and is to be implemented within 44 months. It is expected to provide additional capacity for 10 million passengers per year, bringing the airport's total passenger capacity to 18 million annually and its operations capacity to 68 aircraft movements per hour. Sharm el-Sheikh has been Egypt's fastest-growing facility and is Africa's third-busiest airport, with an average 10% annual growth in traffic over the past decade. The airport exceeded its annual passenger capacity in 2010 when it catered for 8.2 million travellers.

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At a recent Economic Development Conference in Sharm el-Sheikh in March 2015, **the Government launched a Strategic Development Strategy (SDS) entitled Egypt's Vision 2030**. The document cites tourism as a key strategic sector for investment, and one that promotes growth of medium-term investment and large-scale infrastructure. The Egypt 2030 strategy includes increasing infrastructure across Egypt and targeting high growth rates amounting to 6% during the first five years. Sharm el-Sheikh is one of Egypt's biggest tourist centres, where the airport helps to fill approximately 62,000 rooms in South Sinai out of 225,000 hotel rooms around Egypt, according to Ministry of Tourism statistics. South Sinai provided 45% of the total tourism income in 2014, when Egypt's tourism income amounted to USD 7.5 billion. Increasing the airport capacity will raise the number of charter air flights to South Sinai, in addition to increasing their passenger numbers, which, at the end, serves the occupancy rates of hotels.

Also in March, a high-level Egyptian delegation led by Prime Minister Ibrahim Mahlab visited the AfDB's Executive Directors and management in Abidjan, and sought the Bank's support to the Government's on-going economic reforms. It also asked the Bank to boost its ambitious development and investment programme.

SAUDI ARABIA

Operational testing started in April 2015 at 'Mohammad bin Abdulaziz International Airport' in the holy city of Madinah. The airport covers about 4 million m², including 153,000 m² for arrival and departure halls and 16 departure gates, and has a capacity to handle 8 million passengers annually. There will be 64 check-in counters, plus 24 self-service kiosks. During the Haj season, 16 additional self-service counters will be installed. The new airport is expected to be open to the public in time for the 2015 Umrah and Haj pilgrimages in September, when millions of Muslims will travel to Makkah and Madinah. -- **The Kingdom is building or upgrading 28 airports across the country as it modernizes and expands its air travel industry.** 'King Abdulaziz International Airport' in Jeddah, about 400 km south of Madinah and the Kingdom's busiest airport, also is undergoing a three-stage redevelopment to increase annual capacity from 13 million to 80 million passengers. Started in 2006, the project is not due for completion until 2035. The new expansion plan for Riyadh's 'King Khaled International Airport' aims at increasing its capacity from 12 million to 35 million passengers.

BANGLADESH

Construction work on 'Khan Jahan Ali Airport' (KHL) near Bagerhat, which remained stalled since 1996, will resume soon after the allotment of funds and will be completed in about three years. The work worth BDT 5.45 billion was stopped after land acquisition and earth filling for the construction of the airport despite having much importance for overall development of the south-western region, including speeding up Mongla port activities. Some 97.55 acres of land were acquired for the airport at Fayla in Rampal Upazila near the Khulna - Mongla highway. Bagerhat District administration handed over the land to the Civil Aviation Authority in 1996. Later, earth filling work was done spending BDT 110 million. The then Prime Minister Khaleda Zia laid the foundation stone of the airport on 27 January 1996, but there has been no progress since then. In 2001, when the BNP-Jamaat government came to power, earth-filling work started again and was later stopped for lack of funds. After visiting the site of the proposed airport, the then Civil Aviation & Tourism Minister Lt Col Faruq Khan engaged experts of Khulna University of Engineering & Technology to prepare the pre-feasibility study report on the project in 2012. Later, an expert team from Khulna University submitted the report to the Civil Aviation Authority, highlighting the importance of the airport and adding recommendation for constructing in two phases. Later, the Civil Aviation & Tourism Ministry sent their proposal to the Prime Minister's Office and the Prime Minister ordered construction of a bridge on a priority basis. Sources at the district administration said 150 hectares of additional land will be acquired for the project.

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Green Airports

Kuala Lumpur International Airport in Malaysia has achieved a Level 2 Reduction rating from the Airports Council International (ACI) under its Airport Carbon Accreditation programme.

According to the greenhouse gas (GHG) inventory and carbon management plan, the airport has reduced its carbon emissions by nearly 43%. The Airport Carbon Emission Reporting Tool (ACERT) was used to calculate the GHG emissions inventory. Datuk Badlisham Ghazali, Managing Director of Malaysia Airports, the airport operator, said: "One of the pillars in the company's strategies and objectives is sustainability. Therefore we consider this accreditation an important milestone in our pursuit for environmental excellence and a sustainable future."

Boston Logan International Airport, MA, plans to decrease its carbon emissions, energy consumption and invest millions to protect runways and terminals from rising sea levels as part of major efforts to combat climate change.

Under the plans, the airport aims for reduction in carbon emissions by 40% and energy consumption by 25% by 2020. It also plans to work on decreasing the amount of waste produced by passengers by 2% every year by 2030, bring down water usage by 1% annually for the next 10 years, and increase its recycling rate by 60% by the end of the decade. About USD 9 million will be spent in the next five years on flood doors and barriers, coastal management and portable pumps to save the airport from flooding during major storms. The airport will also spend on critical equipment and system upgrades to equip the airport to tackle storms. The CEO of the Massachusetts Port Authority that operates the airport, Thomas Glynn, was quoted as saying: "I think this is a full agenda. I think we have the wind at our back and a sense of momentum working on these issues." Since 2012, Logan has also doubled its use of solar panels, wind turbines and other renewable energy sources.

Los Angeles International Airport (LAX) has achieved LEED Gold certification for its new Tom Bradley International Terminal (TBIT).

This makes the 1,250,000-ft² facility the largest LEED Gold airport terminal in the US. Designed by Fentress Architects, TBIT is not only sustainable, it is the USA's most technologically advanced airport to date. The new terminal's interior architecture comprises seven large media features with more than 12,000 ft² of LED tiles and hundreds of LCD screens. The Bradley West project includes a 15-gate terminal and concourse, an international arrivals facility, passenger security checkpoints, an inline baggage screening system and more than 100,000ft² of concessions. Sustainability was a key focus of the Bradley West programme and all projects incorporate sustainable design features that promote energy efficiency while mitigating adverse environmental impacts. The new terminal is bright and airy, with abundant natural daylight and ventilation to minimize energy use. Low-E glass was used along the airside concourse to minimize heat gain, and lighting controls reduce energy use. Low-flow water fixtures have reduced water usage by 47.8% over baseline predictions. The building structure and finishes employed regional and recycled materials. Sustainable techniques used during construction included designating specific routes to and from the site for construction vehicles and recycling construction materials and demolition debris. Concrete mixers and other equipment were placed on site to reduce the number of trips made, and construction equipment was retrofitted with emission- and noise-reduction devices.

Publisher's note: The articles in this special report, compiled for **ACI World**, are edited samples from the biweekly **Momberger Airport Information** newsletter, published since 1973. The newsletter is an advertising-free, global airport news service that consists of 8 modules and allows subscribers to customize their own newsletter package. The items in this **ACI World** report represent only a small sample of the main module (Airport Development) of **Momberger Airport Information**. Additional modules that subscribers can select include: Airport Operations (OPS), Ground Support Equipment (GSE), Air Traffic Services (ATC), Consultant & Contractor (CON), Airport Information Technology (AIT) and Maintenance Base (MRO). An extensive Calendar of Events (CAL) is part of every subscription. For more information and to order an annual subscription, please visit www.mombergerairport.info