

ACI World AIRPORT DEVELOPMENT NEWS

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Focus on The Americas

CANADA

The Greater Toronto Airports Authority (GTAA) reported its financial and operating results for the fiscal year ended 31 December 2015. Passenger volumes grew by 6.4% during 2015 over 2014, reflecting both the economic strength of the Greater Toronto Region, and the role of Toronto-Pearson as Canada’s largest airport and North America’s second busiest airport in terms of international passengers. **“Toronto-Pearson served 41 million passengers in 2015, showing that there is continued demand for air travel in southern Ontario.** We have also seen continued growth in our role as a hub – more people are connecting through Toronto-Pearson as part of their global travels,” said Howard Eng, President & CEO of the GTAA. “These higher passenger volumes show the need for increased support from government agency resourcing and technology to ensure a seamless airport experience.”

As a global hub airport, Toronto-Pearson has a robust network offering direct flights to 144 international and 30 Canadian cities. During 2015, passenger activity in the international sector (which includes U.S. trans-border) increased by 7.7%, and domestic sector activity increased by 4.4%, over the prior year. For the twelve months ended 31 December 2015, the GTAA reported total revenues of CAD 1.2 billion, compared with CAD 1.15 billion in 2014. The continued growth in revenues was a reflection of large passenger growth over the last two years and the strong performance from the non-aeronautical commercial business. During 2015, there were 21 new retail stores, restaurants, and service openings, including twelve in Terminal 1 and nine in Terminal 3, which includes seven new openings in the newly renovated and reopened Pier A.

Total operating expenses in 2015 were CAD 776.9 million, a CAD 45.1 million increase when compared with 2014. During 2015, the GTAA continued to invest in preventative maintenance, additional airport security, and improving the customer experience. Additional initial set-up costs were incurred when the GTAA took over the de-icing operations in July 2015 from a third-party service provider.

Earnings before interest and financing costs were CAD 423.7 million and CAD 421.8 million in 2015 and 2014, respectively. After accounting for interest and financing costs, the GTAA recorded net income of CAD 65.9 million in 2015 versus a net loss of CAD 59.6 million in 2014. By excluding a one-time charge of CAD 102.3 million recorded in 2014 related to the GTAA’s purchase and cancellation of CAD 399.3 million face value of its outstanding debt, the GTAA generated net income of CAD 42.7 million in 2014. Net income is reinvested in the airport for new initiatives to improve operations and customer service, to fund capital projects, or to repay existing debt. -- The GTAA is the operator of Toronto-Pearson International Airport.

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Vancouver International Airport (YVR), which handled more than 20 million passengers in 2015, was named 'Best Airport in North America' for an unprecedented seventh consecutive year at the Skytrax World Airport Awards in Cologne, Germany. YVR is the first airport in the world to win seven years in a row, breaking the record for consecutive Skytrax awards which are based on 13.2 million passenger surveys conducted in 555 airports around the world. The survey measures 39 airport travel experience elements, including check-in to security and border clearance processes, comfort, efficiency, signage, transport availability, passenger amenities, and staff friendliness. This is the world's largest independent airport customer satisfaction survey. The Skytrax World Airport Awards are considered the global benchmark of aviation excellence.

"This is an incredible achievement! Being named the best airport in North America for seven years in a row is a testament to the dedication and hard work of all those in the YVR family," said Craig Richmond, President & CEO, Vancouver Airport Authority. "I extend a heartfelt 'thank you' to those who voted for us and huge congratulations to our community, passengers, partners and the 24,000 people who work and volunteer at YVR; you all contribute to our shared success." **YVR was also placed third for 'Best Staff Service in North America'.**

The Fairmont Vancouver Airport Hotel was voted Best Airport Hotel in North America. -- Fifty-six airlines serve YVR, connecting people and businesses to more than 118 non-stop destinations worldwide.

U.S.A.

The Chicago-O'Hare Aviation Department is currently working on a long-term capital plan worth USD 1.3 billion to build a new runway and add a major gate expansion. This includes 'The Girdle', a runway around the terminals and moving it further out west to provide more space for real-estate development and other terminal enhancements. **A shortage of gates at O'Hare has long been blamed for some of the longest flight delays among big-city airports.** The former Mayor Richard M. Daley's original O'Hare modernization plan would have added more gates to existing terminals and a new western terminal with 50 gates - which never happened, in part, because United and American did not want competition from other airlines. Soon after being appointed in 2015, Aviation Commissioner Ginger Evans declared gate expansion a top priority to accommodate increased capacity created by new runways already built as part of a USD 10 billion expansion. The runway deal removed an old diagonal runway and taxiway system that was blocking development on O'Hare's north side, paving the way for different layouts for concourses and construction of new terminals. Evans has called the new land pivotal to convincing United and American to stop fearing competition and start embracing it. The City can now put on the table plans to let the two flagship carriers add gates to their existing facilities. -- As a short-term measure, five new gates will be added, hopefully the first of many.

Atlanta Airport has released a computer animation of a 20-year capital plan worth USD 6 billion, with nearly USD 1 billion to be spent in 2017 alone for a parking deck construction next to the Georgia International Convention Center, a USD 393 million Concourse T extension with five new gates, terminal modernization, and preparations for a new USD 307 million, ten-gate Concourse G expected to be complete in 2018. "With the new capital plan, our long-term success is assured. Like the City of Atlanta, the state of our airport is ascendant," said Atlanta Mayor Kasim Reed, who joined ATL General Manager Miguel Southwell to reveal renderings and animations of substantial improvements planned for the domestic terminal's atrium and exterior with increased use of natural light at ticketing and check-in areas. **The project, called 'ATLNext', includes a USD 943 million sixth runway to be finished by 2034, a new concourse, new parking structures, a new 400-room hotel, a cargo concourse, and large canopies over traffic lanes and sidewalks to allow passengers to walk to their cars from the terminal without being exposed to the elements.** The project's funding comes from a number of fees related to the airport, a partnership with Delta Air Lines and other carriers, and revenue from parking and concessions. "We have had tremendous growth over the last year, and with our new capital plan, the next 20 years are only going to be more impressive," Southwell said. "Not

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only will these projects be transformational for the airport, but they will enable the needed expansion to accommodate the growing demand we have at Hartsfield-Jackson."

New York's LaGuardia Airport (LGA) will get a USD 4 billion overhaul project, approved on 24 March 2016 by the Port Authority Board.

"Our plan will fundamentally transform LaGuardia – replacing what is now an outdated and poorly designed complex with the world-class airport New York has always deserved," Governor Andrew Cuomo said in a statement. "This represents a major milestone for the project – the first of many – and I look forward to seeing construction begin later this year." The plan was originally introduced by Cuomo and U.S. Vice President Joe Biden in July 2015, when they drew attention to many travellers' frustrations with the airport. After much deliberation, Port Authority officials unanimously approved the USD 4 billion 'modernization'. However, the Wall Street Journal reported that the price tag for the revamp is more likely to be around USD 5.3 billion, a figure hotly disputed by the Port Authority who says that its own direct contribution to construction of the new terminal and supporting infrastructure remains the same with no increase at all. Basically, the LaGuardia project is a plan to tear down Terminal B and start again from scratch. The new central terminal will connect to the other two, eliminating the airport's problem of 'disconnected terminals'. The entire airport will also shift about 600 ft to make more room for taxis and new parking. There will be an AirTrain mass transit connection to the No. 7 train at Mets-Willets Point.

Two-thirds of the project will be funded by the LaGuardia Gateway Partners - a private-sector party who will build, operate and maintain the revamped airport. Construction is set to begin later in 2016 and to be completed by 2021, with some sections accessible by 2019.

MEXICO

The first step in the construction of Mexico City's new international airport has been taken and infrastructure work is scheduled to be completed by 2018 to allow the handling of 68 million passengers annually by 2020. The Mexico City Airport Group (GACM), the State-owned agency in charge of the project, said that the design phase was completed in 2015, and during 2016 the removal of debris would be taken care of, along with relocation of wildlife and vegetation, the building of a perimeter fence and access roads, and installation of a provisional rainwater drainage systems in the former Texcoco lake in Mexico State, where the airport will be built. "The total length of the perimeter fence and road is about 30 km, the fence being a highly resistant concrete structure two meters wide and wide and one meter high", stated Engineer Silverio Reyes on this subject. Early works include the building of 48 km of temporary roads that allow the mobilization of construction machinery. The works also imply the levelling of the terrain that will allow to start cementing Runway 2. GACM expects that 90% of the land where the new airport is to be located will be levelled by the end of 2016.

These works, among others, were tendered in 2015, while a tender for the permanent drainage infrastructure at the site is expected to take place in the second quarter of 2016. Drainage for the new airport is expected to be one of the most critical and challenging construction aspects. The project site, located in Texcoco municipality in the northeast of the city, has historically been used as a buffer zone where rainfall was directed in order to ease the strain on Mexico City's drainage systems. Drainage and water infrastructure works are needed to prevent the risk of flooding and are expected to require some MXN 16.4 billion.

Mexico is planning to launch more tenders for the new airport in September and October 2016, Communications Minister Gerardo Ruiz Esparza has said. The tenders will be to build the terminal and runways, to install radar systems, and carry out electrical work, among others. -- The planned airport has been called the most advanced in the world, and will be the first in Latin America with simultaneous traffic flow to and from more than one runway, and the world's first airport outside the U.S. to handle three traffic flows simultaneously.

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The Federal Government and the government of the Federal District of Mexico City have been holding talks to decide what to do with the land and infrastructure currently used by Mexico City's international airport (AICM) after operations begin at the new airport in 2020.

AICM occupies around 710 hectares, twice the size of New York's Central Park, and the land is worth around MXN 36 billion (USD 2 billion), according to press reports. The Transport & Communications Ministry (SCT) and the Ministry of Agrarian & Urban Development (Sedatu) are carrying out technical and social studies to find the best use of the land, SCT said in a release. The AICM will continue operating for the next five years, and by 2021 or 2022, the authorities will be able to start the process of converting the land. The Mexico City authorities insist that as soon as the current airport is closed, an urban development project for the AICM land should start. -- In 2015, traffic at the airport reached 38.4 million passengers, 11.9% more than in 2014.

Grupo Aeroportuario del Centro Norte S.A.B. de C.V., better known as OMA, operates, maintains, and develops 13 airports in the central and northern regions of Mexico. The company, based in Apodaca, offers a multitude of aeronautical and non-aeronautical services to its customers, designed to diversify its revenue streams. OMA has announced that it will invest MXN 4.44 billion (USD 258 million) in the 2016 - 2020 period in its 13 airports under its master development plan.

As of 31 December 2014, OMA had over MXN 2.67 billion in cash on hand, with an additional MXN 530 million in other current assets. Current liabilities total MXN 882 million, which is down nearly 30% from the previous year. This brings OMA's current ratio to 3.62, giving the company plenty of breathing room to pay down its debt while simultaneously pursuing aggressive expansion efforts. In comparison, Grupo Aeroportuario del Pacifico S.A.B. de C.V, a close competitor of OMA, has a current ratio of 0.72. -- Developments in Mexico may be slow and choppy, but as a neighbour of the United States, it is likely to continue to progress over time. With economic development comes an evolution and expansion of transport systems of a country. **Mexico is currently home to 1,714 airports to support its population of 122 million.** In comparison, the United States has roughly 13,513 airports and a population of 319 million. This translates into Mexico having one airport for every 71,178 people while the U.S. has one for every 23,606 people. **Mexico currently has a decent number of operating airports, but there is certainly room for the development of more in the future.** OMA currently only operates 13 airports in Mexico, but as the opportunity for expansion presents itself, OMA will be in a position to capitalize.

COSTA RICA

Aeris Holdings, the operator of San José's 'Juan Santamaria International Airport' (SJO), has completed a USD 127 million refinancing of a loan to double the airport's capacity. In 2011, the Overseas Private Investment Corporation (OPIC) and the Inter-American Development Bank supplied USD 100 million in restructuring funds to enlarge the main terminal, rebuild a taxiway, and provide additional baggage-claim and security facilities. In March 2016, OPIC announced that Aeris had repaid its USD 55 million share of the loan early and in full after issuing debt in the capital markets. "Early repayment itself is not all that common. But I think the most important indicator of success in the OPIC development model is the strength of the underlying business plan, which in turn allows us to make a profit for the U.S. Treasury," said an OPIC spokesman. Aeris privately issued USD 127 million in senior secured notes in November 2015, with a fixed rate coupon of 7.25%. The bond has a tenor of ten years and an eight-year average life. The notes have a four-year principle payment grace period and will amortize over the remaining six years of the term.

Aeris, a subsidiary of Houston-based HAS Development Corporation, is contracted to operate the airport under licence from the Costa Rican government until 2026. Revenues from fees and tariffs are divided 64.8% to Aeris and 35.2% to the Government. Moody's assigned a Ba2 rating to Aeris, which reflects the relatively short time remaining under the contract and the demands of a large capital investment programme. Although SJO is one of the busiest airports in Central America, the issue was only just

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subscribed. The airport handles over 80% of the country's tourists, as many of them are international travellers, their revenue provides a natural hedge against downturns in the domestic economy. Since 2002, compound passenger growth has stood at 4.9% a year. With the completed works, **the airport will have the capacity for 9 million passengers a year by 2026**. In 2011, the airport was named the third best in Latin America by Airports Council International.

PANAMA

Panama City's Tocumen International Airport (PTY) plans to open its new 20-gate state-of-the-art south terminal (Terminal 2, designed by Sir Norman Foster) in 2017 and considers adding a new parallel runway between 2022 and 2024 to complement its existing 8,500-ft and 10,500-ft runways and ensure that its already congested airfield is able to keep up with demand in the mid to long-term. The airport's master plan also calls for a new 2.6-km, four-lane access road and a new ATC tower to ensure that controllers can view the third runway. A future third passenger terminal is also planned.

With an annual traffic of more than 13 million passengers, Tocumen is already the busiest transfer hub in the region, calling itself appropriately 'Hub of the Americas'. Its route network serves more U.S. cities than any other airport in the region and 80 direct destinations are offered by 23 passenger airlines and 15 cargo carriers.

The desire to upgrade Tocumen's key aviation infrastructure will see it invest USD 1.4 billion on Terminal 2, airfield enhancements, new cargo buildings, and the refurbishment of some existing facilities over the next four years.

The new 85,000-m² terminal will be located 200 m south of the existing passenger complex and raise Tocumen's capacity to more than 20 million annual passengers. Despite the short distance between the terminals, a new automated peplemover (APM) system is expected to connect them as passengers will face a potential 1.6-km walk from the northern end of the existing terminal to the southern tip of T2. Other features of the new terminal include 60 customs and immigration desks and a baggage-handling system capable of processing 6,500 bags per hour. T2 will increase the number of gates at Tocumen to 54, rising to 68 when 14 remote stands are included. New taxiways and rapid-exit taxiways are also being added to improve Tocumen's airfield efficiency as the existing two runways are located at an angle which can mean that - during peak periods - it sometimes takes aircraft 20 minutes to reach the gate after landing or the runway from the gate when taking off.

Another major project is the Airport City, first mooted in 2004 and now about to be revived as at least three companies are interested in the project. A hotel, convention centre, and a hospital were formerly discussed for a 325-hectare site bought from the University of Panama. Instead of letting private developers take the initiative, the airport company is the driving force behind the development of the Airport City project.

DUTCH CARIBBEAN

Curaçao Airport Partners (CAP) has announced an 'extensive' terminal expansion project slated for completion in 2018. The project will include added space in waiting areas, along with more shops and food & beverage areas, among other additions. The project is slated to begin in the second quarter of 2016. Curaçao Airport Partners says the project will increase the airport's capacity to at least 2.5 million passengers (from its current annual load of 1.8 million), and will "efficiently accommodate the anticipated demand by the airlines for new air service capacity." The project will also add a new boarding bridge capable of accommodating Airbus A380 aircraft, along with a new arrivals corridor and more commercial space. The project will also increase the airport's commercial space to accommodate a series of expanded amenities, including new retail and food & beverage options. "CAP is very pleased to actively promote the continued development of aviation in Curaçao, and to make the proposed investment, because we foresee a continued growth in passenger traffic, and we are confident in the future of Curaçao as a tourism destination and regional economic centre," the organization said in a statement.

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Curaçao has been working to boost its tourism arrivals, particularly in the United States, something that got a significant push with the launch of JetBlue service to the island in late 2014. In 2015, JetBlue added a third weekly flight from New York and American Airlines launched a weekly service from Charlotte. The airport also recently completed more than USD 10 million in renovations to its facilities that included the addition of air conditioning to the check-in hall and screening area, upgrades of the runway, a new arrivals corridor to improve passenger flow and reduce aircraft turn-around time, improve connectivity, introduce a new Curaçao Airport app, and develop a 'Jet Centre Curaçao' designed to enhance passengers' experience upon arrival and departure. In its 2014 – 2018 Strategic Master Plan, Curaçao Airport Holding (CAH) has prioritized the upgrade of the airport's service level and passenger capacity. CAP will invest two thirds of the total budget expansion, i.e. USD 25 million, and CAH will invest the other third (USD 14 million). A CAH statement said: "It is our firm belief that Curaçao International Airport should play a central role in positioning Curaçao as an international powerhouse between Europe and the Americas."

BRAZIL

The Aviation Department has approved an investment volume of BRL 7.1 billion (USD 1.94 billion) **for the duration of the concessions at four part-privatized airports**, i.e. BRL 2.8 billion at Salvador (Luís Eduardo Magalhães Airport); BRL 1.8 billion at Fortaleza (Pinto Martins Airport); BRL 1.7 billion in Porto Alegre (Salgado Filho Airport); and BRL 918 million in Florianópolis (Hercílio Luz Airport). The investment funds are for 25 years at Porto Alegre and 30 years at the other airports. Infraero will have no equity interest in these concessions. The main construction works to be carried out at the four airports include expansion of runways and taxiways, new passenger and cargo terminals and the expansion of existing ones, rehabilitation of apron areas and other facilities. To increase the commitment of the participating concessionaire groups, these will be required to advance 25% of the grant value from the time the contract is signed.

The BRL 2 billion renovation and expansion works at Rio de Janeiro's 'Antonio Carlos Jobim International Airport', also known as Galeão, are progressing well, according to the consortium in charge. All works are scheduled for completion by 30 April 2016, well ahead of the 2016 Olympic Summer Games in August 2016, when an estimated 1.5 million additional passengers will pass through the airport. "We will have a number of new shops, new restaurants, the whole infrastructure renewed, mainly in Terminal 2 and a new pier that will have a lot of comfort, with 26 new and air-conditioned boarding bridges. We will also have elevators with capacities for 25 passengers, the only ones in Brazilian airports. We will be proud of Galeão," Luiz Rocha, President of the RioGaleão consortium, revealed.

A new pier, called Pier Sul, is being built 600 m on moving walkways away from Terminal 1. It will increase the capacity of the airport by thirty flights per day. Additionally, 280,000 m² will be added to the airfield. Terminal 1, which is the oldest, will be brought up to standards of T2 and the new pier with the on-going renovations. **Galeão will also become the first airport in Brazil to accommodate the Airbus A380.** With all works completed, the terminal area of the airport will be 416,000 m² with 27 new elevators, fifteen added escalators and fourteen moving walkways. Also sixty new restaurants and shops will have opened and another 68 free Wi-Fi stations with access for sixty minutes will be added. According to Rocha, a new security system with cameras will also be implemented to ensure safety before and during the Olympics.

The airport consortium is composed of Odebrecht TransPort, Singapore's Changi Airport, and Infraero. The first two companies have a combined 51% stake in the consortium, while the Brazilian government-owned Infraero owns the remaining 49%. The RioGaleão consortium won the concession of the airport at Galeão's privatization auction in November 2013. The concession will last for 25 years from April 2014, when the concession-holder signed the contract. The consortium promised an overall investment of BRL 5 billion (USD 1.36 billion) over the course of the contract.

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CHILE

'Arturo Merino Benítez Airport' in Santiago de Chile served 17,251,406 passengers in 2015, being the second busiest airport after Lisbon (20.1 million) managed by Vinci Airports to date. The purpose of the concession won by the Nuevo Pudahuel consortium (Aéroports de Paris, Vinci Airports, and Astaldi) is to support the expansion of Santiago Airport, where traffic grew at an annual average of 9% over 20 years, in line with the growth of the Chilean economy. In a country that attracts large numbers of people and lends itself to air transport, Santiago Airport holds a strategic position, accounting for 60% of the country's domestic air traffic and 98% of its international traffic. The extension programme, designed to boost the airport's capacity to 30 million passengers, covers construction of a new international terminal and refurbishment of the current facility, which will become the domestic terminal. The Group's winning bid offered detailed phasing and prospects for further expansion of both traffic and non-aeronautical activity. "Our bid probably won because it was backed by in-depth analysis showing very substantial potential for activity growth," says Vinci Airports' Project Manager Astrid Tran Ba Huy.

Vinci will apply its integrated construction-concession model to the project. "This project epitomizes the Group's ability to combine construction and concession capabilities," says Pierre Coppey, Chairman of Vinci Concessions and Chief Operating Officer of Vinci.

Santiago is Vinci's largest building project outside France to date. It will be completed on a very tight schedule (less than one year to finalize the design, 48 months to carry out the construction work), but the Group is experienced in working together on this type of project. The excellent fit between Vinci's expertise and that of its partners ADP (for concession and airport operations) and Astaldi (for construction) is a further strength ensuring the project's success. The project will use BIM (Building Information Modelling) to facilitate integrated operation. BIM is a key tool combining technologies and working methods based on shared information and transparency. In a multicultural context, BIM gives the various project participants access to the same level of information and it updates and pools the models daily.

PERU

Construction of the second runway at Lima's 'Jorge Chavez International Airport' will cost USD 1.2 billion, the President of the Lima Convention & Visitors Bureau, Carlos Canales, has announced. "Works to build this new runway shall begin on 1 January 2018," he said. Electrical and sanitary systems must be relocated before the construction starts. This will entail an estimated investment of USD 250 million. Water, waste, gas and telephony pipes or ducts across the potential construction area are part of those systems, National Chamber of Tourism (Canatur) Chairman Jorge Jochamowitz informed and urged the Peruvian State to take immediate actions to ensure construction works start right away; otherwise Jorge Chavez would lose its status as a hub airport in South America.

ECUADOR

Colombia's engineering firm Grupo Odinsa S.A. has acquired a 45.5% stake in Quiport, the concession company Corporación Quiport S.A. operating Quito's 'Mariscal Sucre International Airport'. Odinsa acquired its stake from Canadian construction firm Aecon Group Inc., which developed the airport as part of a 50:50 joint venture with Brazilian conglomerate Andrade Gutierrez Constructores. The transaction will generate approximately USD 195 million for Aecon following transaction costs and cash taxes. UBS Investment Bank served as exclusive financial advisor to Aecon on the transaction.

Teri McKibbin, President & CEO, Aecon Group, said: "We are very pleased to have finalized the sale of our interest in the Mariscal Sucre International Airport project and thank all of our partners for their collaborative efforts. This landmark public-private partnership is of particular pride for Aecon and illustrates our successful work on large-scale, turnkey projects." Victor Manuel Cruz Vega, President of Odinsa, said: "Investing in Mariscal Sucre Airport allows us to position ourselves as an operator of airport concessions in Latin America, which is directly aligned with our strategy. In this way, we will implement

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our experience gained from Bogotá's El Dorado Airport in a market with very positive prospects for the future."

COLOMBIA

A major programme of infrastructure development is planned for the Colombian island of San Andrés. The National Planning Department (DNP) intends to spend USD 720 million into infrastructure development projects on San Andres between 2016 and 2020. This represents a 22% increase over the 2011-2014 budget for the island. Development projects include the upgrade of Avenida Circunvalar. The budget will include investment into new cycle facilities, public transport, and **developing 'Gustavo Rojas Pinilla International Airport' (ADZ).**

Construction work has started on the terminal expansion project at Bogotá's El Dorado International Airport. The project will grow the terminal from approximately 172,800 m² to 239,100 m², an increase of 38%, optimizing connection and baggage claim times and offering vital spaces for the operation of airlines and third parties. Phase 1: construction of a total of 66,100 m² in addition to the terminal's infrastructure and 78,000 m² of apron space. The new areas will hold 6 additional parking positions at the North Terminal (International) and 2 additional stands at the South Terminal (Domestic). Phases 2 and 3 will be focused on the North Terminal and are expected to start during the second half of the year.

OPAIN S.A., a consortium of local companies responsible for operating, upgrading and expanding the airport, will implement the project in four phases. The expansion will cost approximately USD 230,000 and will take two years to complete. The first project phase involves the demolition of the old control tower and construction of an apron with six parking positions. The second stage involves construction of about 66,100 m² of terminal space and 78,000 m² of aircraft parking stands. Andres Ortega, CEO for OPAIN, said: "The start of these works is confirmation of the momentum of the country's aviation industry and the excellent results that the consortium has had both in the construction and in the operation of this terminal. Likewise, it demonstrates OPAIN's commitment to improving and optimizing El Dorado Airport, which now has as its mission to become the best airport in Latin America for excellence in customer service." -- The works will offer the flexibility and design outlined in the current Aerocivil Master Plan. OPAIN expects minimum impact to normal airport operation as the majority of work is carried out in external areas of the current terminal.

Other Regions

INDIA

India is planning to invest over USD 120 billion in the development of the airport infrastructure and aviation navigation services over the next decade, with the civil aviation sector poised for fast growth, said President Pranab Mukherjee while inaugurating the India Aviation 2016 exhibition. The sector is poised for a faster and sustainable growth with the development of 100 smart cities, new economic corridors, and more than 50 new airports and the expansion of existing ones. "The deeper air penetration to smaller cities; better connectivity to the north-eastern part of India; and higher disposable incomes of the middle class of India is expected to further propel the growth of Indian civil aviation industry," he said. Mukherjee noted that India registered a growth of 14% in the civil aviation sector during the last decade. Foreign Direct Investment (FDI) in air transport during the last 15 years touched the mark of USD 570 million, which made India to be a favourite destination for foreign investors in the civil aviation sector. The government has allowed FDI through the automatic route to the tune of 100% in greenfield airports, helicopter services and seaplanes, maintenance and repair organizations, and flight training institutes. He also pointed out that 49% FDI is allowed through the automatic route for domestic scheduled passenger airlines and ground-handling services.

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SRI LANKA

A concessionary loan agreement for JPY 45,428 million (USD 405 million) was signed between the Airport & Aviation Services Ltd and Japan International Co-operation Agency (JICA) for building a new multi-level terminal (T2) at Colombo's 'Bandaranaike International Airport'.

After completion of the project in 2020, the airport will be able to handle 15 million passengers annually and ease air traffic movements. The airport handled 8.5 million passengers in 2015, exceeding its capacity of 6 million passengers per year. The airport receives 28 airlines serving some 45 destinations, and experiences congestion during peak hours thus causing hardship to passengers and airliners. The new terminal will have an approximate floor area of 180,000 m², where arrivals and departures are separated vertically, consisting of two pier buildings. An additional finger pier will be constructed to the west of the existing one. The building will feature 96 additional check-in counters, 8 baggage claim belts, 7 baggage make-up carousels, 16 contact boarding gates with 28 passenger boarding bridges, and 6 bus gates. "The new terminal would be designed for the provision of barrier-free access with many environmentally-friendly initiatives," JICA said in a statement. "A new remote apron shall consist of 23 aircraft parking stands, airfield roads, and three stub taxiways. The scope also includes capacity enhancement of the incinerator, water treatment plant and sewerage treatment plant.

Bandaranaike International Airport Development Project (Phase 2) (II) was welcomed by the Joint Declaration on Comprehensive Partnership between Japan and Sri Lanka, announced during Prime Minister Wickremesinghe's visit to Japan. The detail designs of the airport have been completed by utilizing part of the previously signed loan amounting to JPY 28,969 million (USD 258 million). Altogether, JICA financing for the expansion of Bandaranaike Airport is JPY 74,397 million (USD 663 million). **The Project would be developed based on the concept of Eco-Airport with Japanese advanced technology and know-how.** The concept includes rain water harvesting for the landscaping works and recycled water from the sewerage treatment plant for flushing of toilets, photovoltaic power generation, solar energy harvesting, LED lighting, energy-efficient glazing, etc.

Japanese technology is to be used for constructing this landmark terminal building which will become the international gateway to Sri Lanka. In order to promote technology transfer and economic co-operation between Sri Lanka and Japan, **JICA's loan is provided under the Special Terms for Economic Partnership, with 0.1% interest p.a. and a 40-year repayment period.** The loan agreement for the Bandaranaike International Airport Development Project (Phase 2) (II) is JICA's 45th loan package to Sri Lanka. It was signed on 24 March 2016 by Eng. S.S. Ediriweera, Chairman, K V P Ranjith De Silva, Vice Chairman of Airport & Aviation Services (Sri Lanka) Ltd and Hidetoshi Irigaki, Vice President of JICA. JICA is the executing agency for Official Development Assistance from the Government of Japan, and is one of the largest contributors for development assistance in Sri Lanka. Japan has been providing financial and technical assistance since 1954 and is one of the biggest donor to Sri Lanka.

MALDIVES

The Government has started a controversial USD 800 million expansion of the country's main airport by a Chinese company, a move likely to irritate the country's neighbour India.

President Abdulla Yameen has inaugurated construction work in a ceremony on 6 April 2016 in the capital Male. "The President stated that with the expansion, the airport would become the economic backbone of the Maldives and that this would be the main gateway of modern-day development," a Government statement said. China's Beijing Urban Construction Group (BUCG) was awarded the contract during President Xi Jinping's visit to the strategically located Indian Ocean islands in September 2014. Two years earlier, the Maldives had cancelled a contract to run the airport concluded with the Indian infrastructure firm GMR which was given the airport under a privatization scheme. The move sparked fury from New Delhi which threatened to cut off aid to the country, amid concerns the upmarket holiday destination was tilting towards India's rival China.

The Maldives government, which says MLE Airport will not be privatized again, claims that the expansion is needed to accommodate increasing tourist numbers to the preferred

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international honeymoon destination. The expansion means the Airbus A380 will be able to land at the airport which will also be able to handle 7.5 million passengers a year. It comes despite on-going political turmoil in the Maldives which has impaired its reputation as a peaceful tourist paradise. Yameen has faced international criticism over the jailing of dissidents and political opponents, including former president and now opposition leader Mohamed Nasheed.

HONG KONG

Hong Kong International Airport officially opened its Midfield Concourse (MFC) on 31 March 2016. The MFC is an important development project that will help HKIA meet increasing traffic demand in the medium term, as the airport is working towards completing a three-runway system. Located to the west of Terminal 1, between HKIA's two existing runways, the 105,000-m², five-storey concourse provides 20 parking positions and increases the ratio of passengers boarding and disembarking aircraft using boarding bridges, enhancing the overall airport experience. A joint venture between Arup and Mott MacDonald had provided multidisciplinary design and construction support to the MFC project.

Passengers can reach the MFC by an extension of the Automated Peoplemover system from Terminal 1. In addition to new retail and food & beverage outlets, the facility was designed with environmental sustainability in mind. Other amenities at the MFC include deck chairs placed along the glass façade, newly designed seats equipped with power sockets, and free Wi-Fi and internet-enabled computer stations. The MFC also features more than 35 environmentally friendly technologies, including North-facing skylights, low-energy lighting systems, solar shading and high-performance façade glazing. The façade maximizes natural light and can regulate indoor temperature. -- Capable of handling nearly 230 flights every day, the new concourse is expected to increase the airport's passenger handling capacity by 10 million per year. HKIA, connecting Hong Kong to about 190 cities in Mainland China and overseas, is the most important transport infrastructure maintaining Hong Kong's external connections, as well as an engine for the city's economic growth., the concourse also features various ancillary facilities, including newly designed seats with power sockets, deck chairs along the glass facade, as well as free Wi-Fi connections and internet-enabled computer stations.

JAPAN

French **Vinci Group completed the acquisition of the Kansai and Osaka international airports on 1 April 2016 in a concession deal worth approximately USD 2.4 billion.** Vinci Airports, a subsidiary of Vinci Group, will take responsibility for operating the two airports for a concession period of 44 years. Vinci and Japanese financial services firm ORIX will each hold a 40% stake of the concession, with the remaining 20% belonging to a number of minority stakeholders. -- The acquisition means that Vinci's portfolio of 34 airports globally now serves more than 100 million passengers annually, making it one of the top five operators in the world.

Green Airports

London Heathrow Airport (LHR) in the UK has become the first airport to simultaneously hold four certifications to the Carbon Trust Standard. This follows years of work by Heathrow to reduce its carbon emissions, water use and waste output. The Carbon Trust Standard is a world-recognised independent certification awarded for real progress in environmental performance. These certifications cover Heathrow's ongoing work to reduce its impact across two years to the end of 2015. Heathrow is now the first in its sector, and the fifth organisation in the world, to receive the Standard for Supply Chain. Today, Heathrow's top 20 suppliers account for 76% of the total supply chain carbon emissions. In order to influence these and other suppliers, the airport has established forums like the Heathrow Sustainability Partnership to deliver practical solutions like the airport's Energy Code of Practice. Heathrow's work to reduce its carbon and water footprint and waste output earned the airport

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the remaining three certifications. Over the last two years, the airport has succeeded in replacing 70,000 lights across the airport with LED lamps; being the first airport to sign the Paris Pledge for Action following the Paris agreement on Climate Change; retiring the Terminal 1 together with its out-of-date toilet and pipe systems, which contributed to a 3.9% reduction in overall water use per passenger; and composting 1,800 t of food waste, which contributed to an overall 3.1% reduction in waste per passenger.

Airport operator Delhi International Airport Limited (DIAL) has increased the solar power generation capabilities of Indira Gandhi International Airport in New Delhi from 2.14 MW to 7.84 MW, allowing the airport to be largely run on green power. I Prabhakara Rao, CEO of DIAL, said: "At Delhi Airport we strongly believe that the collaborative approach is the key strategic element for combating climate change. As part of our extensive sustainability strategy, we have taken various efficiency measures at the airport. These include green initiatives such as LEED-NC Gold certification, solar power generation, successful registration on energy efficiency with the UNFCCC, Clean Development Mechanism, and water and waste management initiatives." DIAL now plans to increase the airport's solar power capabilities to 20 MW by 2020. The increase in its solar capabilities means that Indira Gandhi has become the first airport in the world to be registered under the Clean Development Mechanism (CDM) of the UN Framework Convention on Climate Change (UNFCCC).

Hong Kong Air Cargo Terminals Limited (Hactl) has received the Transport and Logistics Gold Award in the latest Hong Kong Awards for Environmental Excellence (HKAEE). In 2015 – the first year in which Hactl participated in the HKAEE awards - the company won the Silver Award. The HKAEE scheme acknowledges organisations which have adopted green management policies, and have benchmarked their commitments to best practices within their individual sectors. The awards are organised and presented by the Environmental Campaign Committee (ECC), following a thorough three-stage assessment process which includes site inspections and a final adjudication by a panel of judges. There are awards for each of 11 industrial sectors. Hactl's highly-detailed award submission focused on the dedication of its management to its environmental programme, and provided graphic illustrations of its many achievements in carbon and energy management, supported by independent audit results. The submission also highlighted Hactl's efforts to motivate its industry partners to take their own measures to protect the environment. -- The Environmental Campaign Committee (ECC) was established in 1990 to promote public awareness of environmental issues, and encourage the public to contribute actively towards a better environment.

Vilnius Airport in Lithuania has been awarded Airport Council International's (ACI) Level 1 Airport Carbon Accreditation (ACA) certificate in Mapping in recognition of its efforts to monitor its carbon footprint. Artūras Stankevičius, director of Vilnius Airport, said: "While preparing for the accreditation process we learned that the airport's exact carbon dioxide emission amounted to 3,486 t in 2014. This figure was a starting point for future operations, as we are planning to compare the data obtained every year and take all possible measures to control and reduce the carbon dioxide emissions to ensure that the environmental impact of Vilnius Airport is as small as possible."

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