

# ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information [www.mombergerairport.info](http://www.mombergerairport.info)  
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## Focus on Southeast Asia

### INDIA

**After more than a decade-long delay, Maharashtra’s Chief Minister Devendra Fadnavis declared Purandar in Pune’s southern periphery as the site for the proposed 2,400-hectare international greenfield airport for the city,** ending all speculations on the site for the airport. The confusion over the site has finally ended with the Chief Minister declaring in Pune that the Airport Authority of India (AAI) has also given an “in-principle approval for the proposed site”. Pune’s new international airport is to be built on a public-private partnership (PPP) model with an obstacle limitation survey (OLS) expected to begin in a few months. Maharashtra Airport Development Company Ltd (MADCL) said that tenders would be floated within a month to select a consultant for the study. After this, a master plan would be drawn for the project and sent to the Union Government for approval. While the total cost of the future airport cannot be guessed at this point, it is expected to cost more than INR 150 billion. Apart from the airport terminal, several infrastructure facilities need to be developed. Under the OLS, authorities study and list details like overhead electricity lines, high-rise buildings in the area, and wildlife habitats at the airport site. The ground-level obstacle survey, expected to cost nearly INR 5 - 6 million, will be carried out in the area in November 2016. MADCL, the agency which will be developing the airport, has stated that a Hyderabad-based agency has been selected for the survey. Before it is carried out, there will be a continuous dialogue with the villagers as they are resisting an airport in the area. “The villagers have to understand that it will not be a forceful acquisition and they need not worry, and the entire process will be carried out by taking them into confidence,” said MADCL Vice Chairman Vishwas Patil. The villagers are still protesting against the project and stopping any vehicle with a Government of India stamp.

Public-private partnership involves a funding model for a public infrastructure project which is funded and operated through a partnership of the Government and one or more private-sector companies. It involves a contract between a public-sector authority and a private party. -- The PPP model for airports was started in India a decade ago in Delhi and Mumbai. Currently, Nagpur, Hyderabad, Bengaluru, and Kochi also have private airports. Reports have suggested that the Airports Authority of India was contemplating a partial PPP model for the Ahmedabad and Jaipur airports as well. Two airports in Andhra Pradesh are also slated to be built on the PPP model.

**The Maharashtra government plans to develop at least 21 small airports in a phased manner as part of its 'Make In Maharashtra' campaign within four years** so that commercial air services can be started, said Maharashtra Finance Minister Sudhir Mungantiwar in Mumbai recently. Speaking to reporters, he said that a meeting to take stock of the functioning of all 28 airports in the state, including the biggest commercially operated airport in Mumbai, Pune, Nagpur, and Aurangabad, was held at the Mantralaya, adding, Chandrapur would also get a greenfield airport in the coming years because it has a

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953-m airstrip that cannot be extended because a nearby thermal power chimney is 272 m high. He said that the state has decided to develop Yeotmal as a textile hub and that city would be included in the first phase of airport development. Another greenfield airport at Sindhudurg, with an airstrip of 3,170 metres is under consideration and it will be developed by the MADC on a public-private partnership model, Mungantiwar said. The MADC is also developing an airport with a 2,500 m to 3,200 m runway at Shirdi, while the City & Industrial Development Corporation (CIDCO) of Maharashtra Ltd will develop the Navi Mumbai International Airport with a 3,700-m runway on the PPP model. The start of commercial operations for the new airport has now been pushed to May 2020.

"To boost our 'Make In Maharashtra' project, we have decided to connect industrial cities and district headquarters with air services. To achieve our target, airstrips at some small airports would be required to be extended to at least 1,500 m, in order to ensure that small aircraft can land there," he said. Juhu Airport in Mumbai, as well as airstrips in Akola, Yeotmal, Amravati, Dhule, Kolhapur, and Ratnagiri have less than 1,500 m of runway length, and these airstrips will be developed in a time-bound manner. Juhu, which could be a reliever in the Mumbai region, is at present used for helicopter operations. AAI has appointed a consultant to study the feasibility of using the runway for non-scheduled flights. Since runway extension from one side is not possible due to land constraints, various other options, including extending the runway into the sea, are being explored.

**GMR Airports Ltd has formed the special purpose vehicle (SPV) - GMR Goa International Airport Ltd (GMRGIAL) - for developing the international greenfield airport at Mopa in North Goa.** The SPV will raise the funds, design, construct and run the project. The State government will sign the concession agreement with the newly formed GMRGIAL, which will give the company the right to operate the business for 40 years, extensible for another 20 years. According to Government sources, the SPV will have six months to raise the funds for the construction. The State has invited expression of interest for the appointment of a statutory auditor for GMRGIAL. The State government will select five chartered accountant firms and submit their names to the SPV, which will then hire one of the firms. On 20 September 2016, GMR Airports Ltd had given its acceptance to the letter of award issued by the State government for construction of the greenfield airport at Mopa. While the project is likely to cost over INR 45 billion, the first phase is estimated at INR 31 billion, including cost escalations. The airport will be completed in four phases with work on the first phase likely to start in January 2017 and expected to be completed by 2020. During the first phase, the airport will handle 4.4 million passenger annually. At present, Goa's international airport at Dabolim handles 5.5 million passengers per year. Work on the second phase will start once 80% of passenger traffic is reached. The airport, which will cover a total area of over 81 million m<sup>2</sup>, will be built on a design, build, finance, operate and transfer (DBFOT) basis. **Other bidders for the Mopa project have included Airports Authority of India, Essel Infra Projetc, GVK Airport Developers as well as Hiranandani-led Voluptas Developers.** Essel Infra Projects Ltd quoted 27% revenue-share, Airports Authority of India 32.31%, while the GMR Airports Ltd quoted 36.99% revenue share, meaning that the Government will annually receive a roughly 37% share of the related gross revenue. The contractor will be given the land initially for 40 years, and the ownership will remain with the State government. Thereafter, there will be another round of bidding to run the airport for the next 20 years. -- The GMR Group owns and operates 'Indira Gandhi International Airport' in New Delhi and has also built 'Rajiv Gandhi International Airport' in Hyderabad. GMR Infrastructure in partnership with Megawide Construction Corporation is also developing Mactan Cebu International Airport (MCIA) in Philippines. In October 2016, GMR Airports Ltd bid for a EUR 550 million greenfield airport project on the Greek island of Crete.

## SRI LANKA

**The Government has agreed that Mattala Airport and the Port of Hambantota will be operated by a public-private partnership (PPP) together with Chinese companies,** Prime Minister Ranil Wickremesinghe said. He was speaking as the Chief Guest at the Institution of Engineers of Sri Lanka in mid-October 2016. The sale proceeds accruing to Sri Lanka's official reserves from the Port

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of Hambantota will be over USD 1 billion. "In addition, progress has also been made towards completing a PPP with another Chinese company for Mattala Airport. As a result, a further amount will be added to the country's official reserves. These two transactions constitute non-debt creating FDI inflows which will help increase official reserves significantly. Such reserves would have a more favourable impact on stabilizing the exchange and interest rates than building up reserves using borrowed sources. Prime Minister Wickremesinghe said the time was right for Sri Lanka to undertake a myriad development projects to leapfrog from a middle-income to a high-income country, as economic power shifts to Asia, and South Asia in particular. The Prime Minister insisted that the country must make maximum advantage of a 'once in a lifetime opportunity' to develop. The development is not really about industrializing, but going into a knowledge-based economy and promoting innovation, he said.

**The Airport Authority of India (AAI) is carrying out a feasibility study on Palaly Airport to assess its suitability as a regional airport.** Palaly is now a Sri Lanka Air Force (SLAF)-run facility and is used for military and domestic civilian flights. India has already supported the development of Palaly Airport, providing financial assistance for the reconstruction of about 1,000 m of the existing 2,300-m runway. This was done in 2010 on an agreement between the former Mahinda Rajapaksa government and India. The AAI's feasibility report on Palaly is expected to be submitted to the Sri Lankan Government soon. -- If Palaly was to be developed as a regional airport, it would then come under the Sri Lankan CAA while the Airport Aviation Services Ltd would carry out airport operation.

**The Government has made a policy decision to transform domestic airports run by the Sri Lanka Air Force (SLAF) for civilian operations but the Batticaloa facility, which was recently re-furnished at a cost of LKR 1 billion, is still under military control.** On 15 May 2016, the Cabinet decided to hand over the SLAF base at Batticaloa for civilian operations to the Civil Aviation Authority (CAA). Following this decision, a gazette notification was issued dated 1 July stating that Batticaloa Airport had been handed over to the CAA with effect from 31 May 2016. But the Air Force continues to control the airport and all invitations for the re-opening were sent by the SLAF with the CAA, owners of the airport, among the invitees. Work at the airport was accelerated with a view to opening it prior to the start of the UNWTO Conference on Tourism in Passikudah in July 2016, Air Force spokesman Group Captain Chandima Alwis told the press. Asked whether they would hand over the airport to the CAA, he said he was unaware of any such move and that the SLAF would continue to operate the airport. But he pointed out that the airport was reconstructed to suit civilian operations and that Air Force personnel will man the new terminal building opened in July 2016. However, he admitted that though ICAO standards have been met, the facility needs to obtain clearance from the CAA for civilian operations.

**The much awaited USD 500 million Stage 2 development of Colombo's 'Bandaranaike International Airport' will get under way soon and is expected to be completed by end-2017.** The tender for 'Package B – Remote Apron and Taxiways' will be announced shortly in the print media. The airport will be partially closed for about six hours daily from January 2017 for urgent runway repairs. SriLankan Airlines CEO Suren Ratwatte said that they have been informed of this development, which will create a major problem for SriLankan since 30% of their aircraft land and take off during the closure time. Under the airport's development project, capacity will be enhanced by a further 9 million passengers annually; on completion, the handling capacity will be increased to 15 million passengers annually.

**The scope of the project consists of building a new multi-level terminal (Terminal 2) with a floor area of 180,000 m<sup>2</sup>, where arrivals and departures are separated vertically.** It consists of two pier buildings, Pier 2 and Pier 3. The new terminal will be designed for barrier-free access with many environmentally friendly initiatives. Concessionary loan agreements for this development were signed between Airport & Aviation Services (Sri Lanka) Ltd and the Japan International Co-operation Agency (JICA) for the funding of Stage 2.

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Colombo Airport has a handling capacity of 6 million passengers annually but handled 8.5 million passengers in 2015. Package B – Remote Apron and Taxiways comprises an apron area of 210,000 m<sup>2</sup> and 17,000 m<sup>2</sup> of taxiways. The existing apron has 25 parking stands which include eight contact positions and 17 remote positions. Additional 23 aircraft parking positions will be developed under BIADP II-2, which includes 16 contact gates. On completion of the project, the airport will have 48 parking stands in total of which 24 are contact positions and 24 remote positions. These parking positions will be provided with fuel hydrant points by the Ceylon Petroleum Corporation.

## MALDIVES

**Construction firm Saudi Binladin Group has secured a contract to construct a new passenger terminal at the Maldives International Airport which is being built at a cost of USD 800 million.** Binladin will lead the construction of the new terminal on a 78,000-m<sup>2</sup> area of reclaimed land in the southwest of the airport island, with 12 jetties and six aero-bridges. The Government is seeking funding for its ambitious project from the China Exim Bank, the Kuwait Fund, Abu Dhabi Fund, and the Saudi Fund for Development, according to an official statement. -- It is the first contract in Maldives for the Middle East's largest construction firm, which Saudi Arabia had barred from bidding for new state contracts after one of its cranes fell on Mecca's Grand Mosque during a storm in September 2015, killing 107 people. This ban has since been lifted.

## BANGLADESH

**The Civil Aviation Authority of Bangladesh (CAAB) is going to appoint soon a consultant for the proposed 'Khan Jahan Ali Airport' in Bagerhat.** The airport would be built in Fayla under Rampal Upazila in Bagerhat district, some 20 km south of Khulna City. Recently, the CAAB floated an Expression of Interest in this regard and has already shortlisted seven firms. It is a priority project of the present government that would cost around BDT 5.447 billion. The project is being undertaken by the Government in order to increase access to the nearby Mongla Export Processing Zone (EPZ), Mongla Economic Zone, Mongla Port, and Rampal power plant as well as provide access to local tourism attractions. The project of 'Khan Jahan Ali Airport' was approved on 5 May 2015 at an Executive Committee of the National Economic Council (ECNEC) meeting and its completion is scheduled for June 2018. The CAAB has already handed over BDT 43 million for acquiring land.

**Economic activities in the southern part of the country is growing rapidly** and the Mongla EPZ could be vibrant as different countries are interested to invest there. Moreover, the Government has undertaken a coal-based power plant project considering a huge demand for power. Also, the Sundarbans mangrove forests is an attractive place for tourists, especially for foreigners who very often visit the Sundarbans by helicopter.

## MYANMAR

Because Yangon International Airport, the country's busiest, has far surpassed its annual capacity, **a new state-of-the-art project - Hanthawaddy International Airport – is slated for development in the Bago region. It will be ready for construction once the country receives the USD 706 million loan pledged by the Japanese government.** The feasibility report and final report have been completed, but Japan's overseas development aid loan has yet to be granted. The whole project is a very expensive investment which cannot proceed without the loan. A framework agreement to facilitate Official Development Aid (ODA) loans for the Hanthawaddy Airport Development was only signed in late January 2016. **The ODA loan will be used for building the runways, the control tower, and others infrastructure and purchase navigation aids.** The Hanthawaddy International Airport is expected to cost USD 1.44 billion. Myanmar has been trying to build the airport for two decades, but delays have plagued the project which is being criticized because of its distance from Yangon. The city already has an international airport, where two terminals are under construction that will easily be able to handle air passenger traffic.

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**The new airport is set to become operational in 2022, four years later than the original plan.** Transport systems linking the airport with Yangon must also be constructed, prompting the Japan International Co-operation Agency to survey the situation to gauge whether it can offer help in this area through fresh ODA funds.

**Two government committees have been formed for the Hanthawaddy Airport project.** The steering committee is chaired by the Union Minister for Transport & Communication, while the Deputy Minister chairs the negotiation committee. The committees are expected to meet with the Yongnam-CAPE JGC Consortium to sign a framework agreement by the end of 2016.

**A consortium of JGC Corporation, Yongnam Holdings, and Changi Airports International won a tender to build and run the airport in October 2014** after the original winner – a joint venture headed by South Korea's Incheon International Airport Corporation – and the Government fell out over details in the project proposal. JGC holds the biggest interest of 55% in the consortium. Yongnam and Changi Airports International hold 25% and 20%, respectively. It is estimated that the construction agreement will have a 30-year contract with a possible extension of ten years. -- The international airport will have an initial capacity to handle 12 million passengers a year. The 9,000-acre site was a Japanese army airport during World War II. Once finished, it will take over from Yangon International Airport as the country's major international entry point. Blueprints for the airport were first introduced in the 1990s, but it was not until 2013 that the project moved forward. The new airport is intended to accommodate a surge in foreign visitors to Myanmar - one of Southeast Asia's biggest attractions for foreign investors - as it makes the transition to democracy after years of junta rule.

## THAILAND

**Airports of Thailand (AoT) expects to call bidding to upgrade Bangkok's Suvarnabhumi Airport under its third phase of development in 2017, with the aim of relieving overcrowding with a new passenger terminal and a third runway.** The move follows Phase 2 of the airport's expansion in which projects are being auctioned as authorities race against time to cope with the soaring number of air travellers, AoT President Nitinai Sirismatthakarn said. Currently, authorities are working on two fronts to pave the way for Phase 3 of the development project. They are preparing Environmental Impact Assessment (EIA) and Environmental and Health Impact Assessment (EHIA) reports, required by law, as well as drafting the terms of reference to hire designers for the new facilities. The latter task is expected to be completed first, allowing the AoT to start the bidding within one and two months of its completion, Mr Nitinai said, adding that the AoT should be ready to call bids in the fourth quarter of 2017 or no later than the first quarter of 2018. Under Phase 3 of the project, worth THB 54.6 billion, THB 34.6 billion, will be spent on **a new terminal which will bolster the airport's capacity to serve 90 million passengers a year.**

**The single-terminal airport, which has been open for more than a decade, was originally designed for 45 million people.** With the growing number of passengers, the AoT decided to carry out Phase 2 of the expansion which aimed to accommodate 60 million people. However, this capacity soon proved to be not enough. Another important part of the plan's third phase is a new runway, which would cost about THB 20 billion. At present, the AoT is expediting the bidding for all projects in the second phase of development, which requires a THB 50.3 billion investment.

**The second-phase expansion of Suvarnabhumi Airport was launched** in a ceremony at the site by Prime Minister Prayut Chan-o-cha **on 14 September 2016, with construction to begin in February 2017.** New facilities in this phase include the expansion of the eastern side of the original terminal and the carpark building as well as construction of an aerobridge link to the airport's southern part. The AoT is also preparing to call bidding to install an Automatic People Mover at the airport with an estimated cost of THB 2.8 billion, which would ease transport within the airport as it would carry passengers between the old and new terminals. In another development, the AoT is ready for a new round of checks by ICAO which will start the Universal Security Audit Programme (USAP) at airports in 2017.

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**IATA has warned that Bangkok's Suvarnabhumi Airport is a safety risk, with 'serious' overcrowding soon to become a critical issue.** The aviation body added that the airport needs urgent expansion. Thailand is under pressure to improve its aviation standards after the U.S. Federal Aviation Administration downgraded its safety ratings in December 2015. "There are also safety concerns about the airport's tarmac, taxiways, and apron area because of soft spots," said IATA Director-General and CEO Tony Tyler. "Aircraft get stuck in the soft surface due to sub-standard materials," he said after returning from the Singapore Airshow. "Aircraft should be able to taxi freely and park freely without sinking in. This is a basic requirement."

Thailand's aviation sector accounts for an estimated two million jobs, according to IATA, and acts as the backbone of the kingdom's tourism industry - one of the few bright spots in an otherwise flagging economy. However, the aviation industry is under scrutiny after ICAO downgraded the country last June, giving it a red flag for missing a deadline to tackle safety concerns. A review by ICAO was likely to be delayed until early 2017 because it needed more time to improve the qualification of Thai auditors. Mr Tyler said the airport, which handles over 52 million passengers per year, had a significant regional and global role but needed to urgently expand its terminal capacity. "It was designed to handle 45 million passengers annually, but it exceeds that today, and traffic is still growing at an annual 10% rate. Overcrowding is a serious issue that will become critical quickly," Mr Tyler said.

Airports of Thailand said it was aware of the problems flagged by IATA and had readied several measures to expand capacity and improve runways by using concrete. The plans are awaiting Government approval. "We have prepared short- to medium-term, as well as long-term plans to solve the problems," said Mr Sirote Duangratana, General Manager of Suvarnabhumi Airport.

## MALAYSIA

**AirAsia Bhd aims to make Langkawi International Airport its sixth international hub in Malaysia after Kuala Lumpur, Penang, Johor, Sabah, and Sarawak.** Chief Executive Officer Aireen Omar said Langkawi offers huge potential for growth following the launch of the Langkawi to Guangzhou, China route early in 2016. "We are looking to introduce more flights to and from Langkawi by next year and make the airport our new international hub for AirAsia. Right now, we are relying on our aircraft from Kuala Lumpur to build the connectivity to Langkawi, but by next year, we hope to have a couple of aircraft based there. Usually, when we build a hub, it will make economic sense to put a minimum of two aircraft there," she said on the sidelines of the World Tourism Conference 2016.

**On Penang International Airport, Aireen said** the airport always reaches full capacity during festive seasons. "Our parking bays and terminals are very congested during festive seasons and **I have suggested to the authorities to expand the current airport or build another dedicated low-cost terminal to cater to the demand of the tourism industry.** Ideally, we would like to see a dedicated low-cost terminal in Penang where we can easily build on that connectivity to link with our current destinations," she said. -- The low-cost carrier has over 275 routes across 23 countries and flies to over 117 destinations, including 85 routes unique to AirAsia.

## SINGAPORE

**Changi Airport's Terminal 4 construction is set to be completed by year end 2016.** New roads and bridges have been constructed, along with a 68 m high control tower. More than two years since construction started, a multi-storey carpark just in front of T4, an outdoor holding area for taxis, and a bus terminus are also nearing completion. **The official opening of T4 is slated for the second half of 2017.** The next phase of works will involve the testing of airport systems and equipment as well as operational readiness trials. Unlike the other three terminals, T4 will see a massive rollout of self-service and automated options for check-in, bag tagging, immigration clearance, and aircraft boarding. Passengers will be subject to centralized screening instead of being screened at the gate holdrooms just before boarding - the system in place at the other terminals.

To minimize teething problems, extensive tests will be conducted in the remaining days of 2016. There are plans for more than 50 trials, including live flights, ahead of the T4 opening. This is more than double

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the number of trials for T3, which opened in 2008. Built to handle up to 16 million passengers a year, T4 as well as expansion works at T1 will increase Changi's total capacity to 85 million passengers. Cathay Pacific and budget airline AirAsia were the first two carriers to announce plans to move to the new terminal. **The extensive use of automation and technology is a key attraction for AirAsia. This will not only benefit customers but also help the airline cut operating costs by as much as 40%**, with less reliance on manpower. While there will be no Skytrain linking T4 to the other terminals, those with connecting flights will be moved to a transfer lounge where they will be bussed to T2. They can take a Skytrain to T1 and T3 from there.

**Plans to build a new terminal at Singapore's Seletar Airport were unveiled on 20 October 2016, part of a redevelopment of the airport that began in 2008.** Scheduled for completion by end-2018, the new, two-storey terminal will have a gross floor area of 9,500 m<sup>2</sup>, of which 500 m<sup>2</sup> will be dedicated to serving business aviation passengers. The terminal will be able to handle around 700,000 passenger movements per year, significantly larger than the current terminal, which handled about 26,700 passenger movements in 2015. This will support the relocation of scheduled turboprop flights from Changi Airport to Seletar, a former Royal Air Force base.

Passenger operations will take place on the ground floor, with the departure area having four check-in counters, four immigration counters, two security screening stations, and a gate holdroom which can seat close to 200 passengers. The departure area also has a café. Passengers travelling on chartered business and private jets will be allocated a private drop-off area, dedicated check-in, immigration and security screening areas, and a lounge. The terminal will also have three aircraft parking stands, supplemented by another 60 in the rest of the airport. Daniel Ng, Director (Aviation Industry) of the Civil Aviation Authority of Singapore, said: "The expansion will accommodate the growth of our air traffic and optimize operational resources. **The new passenger terminal building will also complement operations at Changi Airport and allow for more capacity.**"

Mr See Seng Wan, General Manager of Seletar Airport, said: "We have made good progress with the redevelopment of Seletar Airport in recent years. We have chosen a greenfield location at the east for several key reasons." While a better airfield layout will enable the runway to accommodate more flight movements, the new terminal will be much nearer to the control tower and fire station, allowing faster response by the ground operations teams.

**Japan's Takenaka Corporation will undertake construction of the new terminal**, with a contract valued at around SGD 50 million (USD 35.9 million). The company has been involved in various construction and upgrading works at Changi Airport, including the on-going development of Terminal 4 as well as the upgrading of Terminals 1 and 2 in the past. -- Seletar Airport has seen several enhancements since 2008 including the lengthening of its runway, construction of a new control tower and fire station, a doubling of the number of parking stands, additional taxiways and upgraded aircraft parking aprons.

## INDONESIA

**The State-owned airport operator PT Angkasa Pura II (AP II) aims to complete construction of the newly opened Terminal 3 Ultimate at Jakarta's 'Soekarno-Hatta International Airport' by March 2017 to serve all international flights.** The terminal officially started operating on 9 August 2016, serving national flag carrier Garuda Indonesia's domestic flights. However, 60% of the facilities were still in the development phase to reach the standard of international airports, AP II President Commissioner Rhenald Kasali said. "We aim for all construction, including the airport railway, to finish by March 2017, so we can move all international flights by then," Rhenald told the press. AP II is developing an automated peplemover to connect Terminals 1, 2 and 3 in the country's main airport as well as finishing in 2017 construction of a 37.6-km airport railway to connect the airport with Manggarai Station in Central Jakarta. AP II has also started to equip Terminal 3 Ultimate with commercial areas, including restaurants, ATM centres, gift shops, and bookstores. Furthermore, **AP II also plans to connect the existing Terminal 3 to the newly built Terminal 3 Ultimate, to complete the international flights terminal that would serve as a major gateway for tourism.** Stretching

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2,400 m in width, the new terminal is expected to serve as the answer to rising passenger and air traffic density at the Soekarno-Hatta and Halim Perdanakusuma international airports in East Jakarta, as well as to propel economic development in the country, Rhenald added.

**Work to upgrade a runway at Soekarno-Hatta International Airport will be completed by January 2018.** The construction project will cost State-owned airport operator Angkasa Pura II about IDR 250 billion. According to AP II, the upgrading is aimed at reinforcing the airport's North runway to allow widebody aircraft like the Boeing B.777 to carry their maximum load. Construction started in October 2016 and is expected to be completed in 15 months. The airport operates two parallel runways - North and South - each about 3,600 m long and 60 m wide. The airport's terminals currently serve more than 50 airlines, both domestic and foreign carriers.

**The Government has suggested that further airport expansion is required in Bali to handle rising passenger numbers.** Ngurah Rai International Airport in Denpasar only recently completed an IDR 3 trillion (USD 230 million) upgrade, but Transport Minister Budi Karya Sumadi has now called on airport's operator PT Angkasa Pura I to continue expanding the facility. "The growth in passenger numbers at Ngurah Rai International Airport has been very dynamic. In the space of the last few years, the number of passengers has increased 112%," the Minister was quoted by the Antara news agency. "Because of this, plans to increase the capacity of the passenger terminal must be planned in detail by Angkasa Pura I and quickly implemented." The Minister's comments were made during a visit to Bali's airport on 23 October 2016. -- The expansion of Bali's airport has been a long-running issue, with plans also including the development of a brand new airport in the north of the island to complement the crowded Denpasar hub in the south. It has been predicted that Ngurah Rai will reach full capacity by 2017.

**Sakae Corporate Advisory, Buleleng Regency and PT Baruna Indonesia have signed an MoU for the development and management of North Bali Airport, set to be located in Kubutambahan, Bali.** The airport will be developed in stages, with the signing signalling the kick-off of runway upgrades on the existing airport to accommodate larger aircraft. The first phase will then see the establishment of a transit hotel and a parking area for private jets, while the second stage will see the development of a ferry terminal and a seaport designed for cruise ships and private yachts. No further details are available, but Sakae Corporate Advisory is currently calling for investment in areas such as ground handling, operation and maintenance of supporting facilities, and infrastructure of the new airport.

**A new international airport is to open near Malang, the second largest city in East Java, with construction expected to begin in 2019.** Purboyo Airport, to be built in Srigonco village in the southern part of the city, requires at least 600 hectares of land. The airport is slated to replace Malang's current 'Abdulrachman Saleh Airport' (MLG) in Saptorenggo village, Pakis district, which is essentially an Air Force base that doubles as a commercial airport. The detailed engineering design and feasibility study are currently being drafted by the East Java provincial administration, with the drafting process expected to conclude in 2017 so that physical construction could begin in 2019. The Central Government has allocated IDR 4 billion (USD 294,000) for the project from the 2017 State budget. The head of East Java's transport agency, Wahid Wahyudi, confirmed the current drafting of the DED and feasibility study. So far, he said, the construction plans were still at the stage of co-ordination between the East Java provincial administration, the Malang administration, the Transport Ministry, and the Indonesian Navy. Currently, Purboyo lands, which stretch across 4,811 hectares, are used for the Marine Combat Training Centre.

# ACI World AIRPORT DEVELOPMENT NEWS

A service provided by ACI World in cooperation with Momberger Airport Information [www.mombergerairport.info](http://www.mombergerairport.info)  
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## Other Regions

### AUSTRALIA

**In Australia, Western Sydney Airport, to be located at Badgery's Creek, NSW, has come a step closer with the announcement by Minister for the Environment, Josh Frydenberg, of the conditions for the Stage 1 development.** Frydenberg said via a media release published that more than 40 strict environmental conditions have been put on the development. "With these conditions and the existing regulatory regime already in place, I am confident the first stage of this development can now proceed," Frydenberg said in his media release. He said that the Minister for Urban Infrastructure, Paul Fletcher, "will now be in a position to finalise the airport plan and authorise Stage 1 of the development" of Western Sydney Airport. The airport is due to be operational in the mid-2020s. However, Blue Mountains Mayor, Mark Greenhill, has condemned the government's approval of Western Sydney Airport. "The Blue Mountains and Western Sydney communities have no accurate information on the noise and other impacts of the flight paths - that is because there are no flight paths," Greenhill said. The fundamental concerns of the council and the community had been ignored, Greenhill said.

### UNITED KINGDOM

**Norman Foster has again hit out at the London Heathrow Airport (LHR) expansion plan, calling it a "short-term" solution to Britain's infrastructure needs.** Foster argued that his alternative 'Thames Hub' proposal could be connected to Europe with the High Speed 1 (HS1) rail line and link London directly to cities in the north of England. If it was used as a terminus for the planned High Speed 2 (HS2) rail link, he added, it could help relieve the pressure of freight on the roads. The UK's Airports Commission (AC), set up by the government four years ago, ruled out Foster's plans for an airport in the Thames estuary, saying it would be more expensive than the alternative options of a new runway at either Heathrow or Gatwick Airports. But Foster, who unveiled his estuary airport plans in 2011, said during his speech: "I accept that there is going to be a third runway. It's a band-aid solution. It is short-term. It's not thinking in terms of the wider issues of transportation. What is guaranteed is that when that third runway comes into action, Heathrow will again be at full capacity." He continued: "I would guarantee the absolute inevitability that one day Heathrow will no longer be sustainable in community terms, political terms - just on account of the sheer logistics. It cannot continue. There is only one way to go and that is out in the direction of the sea. Eventually Heathrow will no longer be fit for purpose." Foster compared the Thames estuary proposal to his successful Hong Kong International Airport, built on the largely man-made Chek Lap Kok Island to replace the closed Kai Tak Airport, whose expansion options were similarly limited.

### U.S.A.

**Fentress Architects recently presented the Greater Orlando Aviation Authority (GOAA) board with a proposed vision for the USD 1.8 billion Orlando International Airport (MCO) Terminal C project, Phase 1.** Board members provided feedback, then voted to approve the plans and looked at a potential timescale. The new south terminal at MCO will begin construction in Q1 2017 and is scheduled for completion in 2020. Plans were finalised following the presentation of conceptual drawings for a number of the terminal's features including Town Square and Palm Court. There will also be 'The Boulevard', which will connect the civic areas. The maximum capacity of the airport is currently 45 million passengers per year, but the extension should increase that to 55 million. Fentress' vision for Orlando's Terminal C comprises 2.7 million ft<sup>2</sup>, with 16 gates to accommodate narrowbody, widebody and 'super jumbo' aircraft for international and domestic flights. There will also be a baggage handling tote system and a six-storey 5,000-space expanded parking garage, with the design following the Sustainable Management Plan (SMP) for LEED Silver New Construction recognition.

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## Green Airports

### **The two busiest airports in Morocco, Marrakesh-Menara and Mohammed V International Airport in Casablanca, have enrolled in the global Airport Carbon Accreditation programme.**

The announcement came at a ceremony held during the recent 22nd Conference of the Parties (COP22) climate talks, which had been hosted by the country. Officials also provided an update on the number of carbon neutral airports worldwide. Zouhair Mohammed El Aoufir, CEO of the Moroccan Airports Authority (ONDA), the operator of the Marrakesh and Casablanca airports, said: "We are pleased to receive today this first level of accreditation, which validates ONDA's approach in the management of greenhouse gas emissions from the two biggest airports in Morocco. These airports represent 6.7% of the African continent's air traffic. With this voluntary action, we are committing to reducing the environmental impact of our activities." Niclas Svenningsen, who heads the Climate Neutral Now initiative at the UN Framework Convention on Climate Change (UNFCCC) Secretariat in Bonn, Germany, added: "We are very encouraged to see these two airports embark on a strategy to reduce their carbon emissions. Their proactivity underlines how better carbon management can gain ground here in Africa, in parallel to advancing in other parts of the world."

### **Brisbane Airport Corporation (BAC), the operator of Brisbane Airport in Queensland, Australia, has released its first sustainability report demonstrating its plans for operating the airport in a sustainable manner, without adverse environmental or community impacts.**

The FY 2016 Sustainability Report, developed under the Global Reporting Initiative (GRI) framework, highlights some of BAC's recent initiatives, including improved waste management practices and community engagement and philanthropy work. Julieanne Alroe, CEO of BAC, said: "BAC has always adopted a global perspective on sustainability which reaches well beyond risk and compliance. Instead our focus is on the responsible development of the airport in a way that meets the needs of present generations and is viewed with pride by future generations. Following the outcomes of the COP21 meeting in Paris on Climate Change in December 2015, we commenced developing our Climate Change Adaptation Plan with a focus on reducing energy consumption and carbon emissions. We take the risk and impacts of climate change seriously so implementing a long-term strategy to reduce the inevitable impacts and to future-proof the airport is of great importance."

**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](http://www.mombergerairport.info)