

ACI World AIRPORT DEVELOPMENT NEWS

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Editor & Publisher: Martin Lamprecht martin@mombergerairport.info Founding Editor & Publisher: Manfred Momberger

Contents

Focus on EUROPE.....	1
Other Regions	5
Green Airports.....	8

Focus on EUROPE

GREAT BRITAIN

The Aberdeen, Glasgow and Southampton airports have been sold by owners Heathrow Airport Holdings Ltd (HAH) in a GBP 1 billion deal to a 50:50 partnership between Ferrovial, through its subsidiary Ferrovial Aeropuertos, and Macquarie European Infrastructure Fund 4 (MEIF4). The three airports will now be owned by a consortium formed by the two units and will be managed locally. The sale is expected to be completed no later than January 2015. Ferrovial already part-owns London-Heathrow Airport, and holds a 25% stake in HAH, which was previously known as BAA. The deal means HAH will now operate only its flagship London hub. Iñigo Meirás, CEO, Ferrovial, explains: "As a long-standing investor in the U.K., we are aware of the importance of these airports for the population in their surrounding areas. The transaction proves how valuable these assets are for Ferrovial. We are committed to improve these facilities and their services looking to a better passenger experience in order to grant access to further domestic and international destinations." Edward Beckley, European head of Macquarie Infrastructure & Real Assets, the manager of MEIF4, says his firm is looking forward to working with the airports over the long-term and enhance the passenger experience for the communities they serve." **Sir Peter Mason, Chairman of Thames Water and former CEO of AMEC plc, will be appointed as Chairman of the group on completion of the deal.** -- HAH had previously operated seven airports but an inquiry by the Competition Commission ordered it to be broken up. By the time of the ruling it had already sold London-Gatwick, before later disposing of Edinburgh and announcing the sale of London-Stansted in 2013.

As expected, **the U.K. Airports Commission has decided against short-listing an inner Thames estuary (ITE) airport scheme for further consideration as London's new airport.** The Commission is "not persuaded that a very large airport in the Thames Estuary is the right answer to London's and the U.K.'s connectivity needs" and has concluded that "the proposal for a new ITE airport has substantial disadvantages that collectively outweigh its potential benefits. Cumulative obstacles to delivery, high costs, and uncertainties in relation to its economic and strategic benefits contribute to an assessment that an ITE airport proposal does not represent a credible option for short-listing. And ... if U.K. carbon emissions are to be kept within the overall cap, concentrating a very high number of flights in one location could limit the scope for growth elsewhere and hence reduce the overall diversity of the U.K. airports system."

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FRANCE

Paris-CDG Airport is getting an express train to run non-stop into the city centre in just 20 minutes, but the 32-km line is not expected to open until 2023. The Charles de Gaulle Express has been an on-and-off project for almost the past decade – but the **French government says it is now committed to the EUR 1.7 billion project** intended to alleviate overcrowding on the airport's local RER rapid commuter lines. A steering research company looking into its feasibility has been set up. Airport operator Aéroports de Paris and Réseau Ferré de France (RFF, owner and manager of the French railway infrastructure network) will be brought together by the company and will determine the details and viability of the line. Augustin de Romanet, Chairman & CEO of Aéroports de Paris, called the non-stop rail link a 'priority project' for the competitiveness of the airport and said: "I welcome the commitment of the Government and the personal commitment of [Transport Minister] Frédéric Cuvillier which will allow the CDG Express project to enter a new study phase, giving this non-stop link every chance of seeing the light of day."

An estimated 8 million passengers used the suburban train to shuttle between CDG Airport and downtown Paris in 2013. Construction on the first 8 km of track needed to join up to the existing rail network will begin in 2017, with the CDG Express terminating at Gare de l'Est (Paris East) station. The project may be partially funded by a EUR 1 surcharge on all tickets for flights into and out of CDG Airport. -- A one-way ticket on the CDG Express is projected to cost EUR 24, compared with under EUR 10 for the suburban train.

GERMANY

On 17 September 2014, Fraport AG presented the results of expert studies by two independent institutes on Frankfurt Airport's passenger growth up to 2030. Both institutes forecast that passenger volumes at the FRA hub will rise to between 68 million and 73 million by the year 2021. Thus, the airport's current terminal capacity of 64 million passengers per year will be exceeded by 2021. Fraport's Executive Board Chairman Dr Stefan Schulte said: "Society's need for mobility continues to grow – and thus the number of people choosing to travel by airplane. Both of the independent expert studies – which validate our existing internal capacity planning – clearly show that construction of Terminal 3 is urgently needed. Only with Terminal 3 will we be able to continue offering our customers the quality and service that they rightly expect from a leading international airport like Frankfurt. Residents and businesses in our region should also be able to expect this."

The analyses of Intraplan and MKmetric confirm the findings of internal assessments carried out by Fraport AG on FRA's future passenger growth. The MKmetric institute expects that passenger traffic will rise to 68.2 million by 2021 and might reach 75.7 million by 2025. Intraplan's forecasts indicate that passenger figures will rise to 72.9 million and 78.0 million, respectively, for the same years. The analyses of the two institutes are confirmed by the long-term traffic forecast of the German Ministry of Transport and Digital Infrastructure, according to which air passenger figures in Germany will rise by 2.5% annually until the year 2030. In another study commissioned by Fraport AG, the consulting firm NACO (Netherlands Airport Consultants) concludes that additional terminal capacity will be required to ensure smooth operations at FRA, once passenger numbers have reached the 64 million mark. Passenger volumes of up to 68 million and more – as forecast by the institutes for the year 2021 – would have a massive impact on airport operations and thus impair the overall quality and competitiveness of Frankfurt Airport.

At times, FRA is already reaching capacity limits for check-in facilities at peak traffic periods during the summer holidays. This situation is similar for security, passport and custom control channels. Schulte explained: "Without construction of a third terminal, increasing numbers of large aircraft – which primarily serve intercontinental routes – will have to be handled at remote parking positions away from the terminals. This is contrary to German as well as European quality standards. Consequently, aircraft congestion and waiting times on the taxiways would reach unacceptable levels."

Fraport also examined various alternatives to the new Terminal 3 for creating additional terminal capacity and aircraft docking positions. The results of these assessments clearly show

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that all examined alternatives are far from being viable or suitable to meet future requirements. Either the alternatives are not compliant with existing zoning laws or they are not feasible for technical reasons, while other alternatives would require unrealistic demolition of existing buildings or place a further strain on already heavy traffic loads in the northern part of the airport – or they would simply not provide any significant capacity gains.

This detailed examination leads to the conclusion that there is no way to get around building the new Terminal 3. "Inaugurating Terminal 3 only in 2021 already means that we will have to temporarily accept reductions in service quality. If passengers and staff have to endure this, then it should only be for a short period," stressed Schulte. In this context, he also underlined that the German federal state of Hesse – with its globally leading aviation hub – has a legitimate right to possess a cutting-edge, innovative and sustainable Terminal 3. The new terminal would also represent an architectural landmark and serve as a showcase for optimum passenger services and quality.

Regarding **the next steps to be taken**, Dr Schulte added that "Fraport has verified the capacity requirements of Terminal 3 in a well-founded and comprehensive manner. We have made all of this documentation available to the Hesse state government. We look forward to having discussions on the results at any time." In addition, Fraport has issued the main results of the independent institutes via the Internet. Fraport AG estimates construction costs for the new Terminal 3 – including all ancillary infrastructure measures such as access roads and parking lots – to range between EUR 2.5 billion and 3 billion.

SPAIN

The Government will sell a 21% stake in state-owned airports operator AENA to Corporación Financiera Alba, Ferrovial, and British investment fund TCI. The decision was announced at a press conference by Public Works Minister Ana Pastor where she argued that the presence of private investors 'will strengthen the management', ensuring the future sustainability of the Spanish airport network. The State will retain a controlling 51% stake in Aena, according to Pastor. **Enaire will be the name of the part-privatized airport operator**, when 28% of the shares will be sold on the stock exchange later in November 2014.

As reported in the Spanish newspaper *El Pais* and on the *Reuters* website, the deal is part of a partial sale of the world's largest airports operator in terms of passengers, handling more than 187.4 million travellers in 2013. It will see Corporación Financiera Alba take an 8% stake, while Ferrovial and TCI will each take a 6.5% stake, and all will get one seat on the 15-member board. **Spain also plans a public share offering for another 28% in AENA, meaning eventually a 49% stake will end up privately owned, valuing the operator at up to EUR 5 billion.** In July 2014, AENA had appointed the banks Santander, BBVA, Bank of America Merrill Lynch, Goldman Sachs, and Morgan Stanley to run a process to sell just under half the company. The aim of the sale was to make the company more efficient and attract more tourist flights. The sale is expected to net about EUR 2.2 billion, while the company's debt is about EUR 11.5 billion. -- **AENA owns 46 airports in Spain and also has international interests**, such as a stake in London-Luton Airport, but just 13 of the Spanish airports were profitable in 2013, including Madrid, Barcelona and tourist destinations such as Palma de Mallorca, Ibiza, and Tenerife. The gateway operator made a profit of EUR 597 million in 2013, after huge cost reductions, including staff cuts and benefiting from airport tax increases, up from a EUR 215 million loss in 2011.

GREECE

Chinese, French, German, and Spanish firms are all reportedly vying to build an EUR 800 million airport on the Greek island of Crete. The development is one of a number of projects earmarked by Greece as it recovers from recession. Government ministers have re-launched the tender for Kastelli Airport in May 2014, after plans to build the terminal were ditched at the height of its economic debt crisis in 2011. The Government hopes that the new gateway and planned road infrastructure projects will help kick-start the still struggling economy. The airport is expected to be completed by 2019 and would handle about 7 million passengers annually. If built, it would become

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Greece's second-busiest airport after Athens for international traffic. It would replace Crete's ageing Heraklion Airport, which is said to be bursting at the seams with its capacity stretched to the limit. The winning company will reportedly have a 35-year concession on the airport, and companies are expected to submit their bids on 11 November 2014, although it is unclear when a winner will be announced. Names of the firms who have bid for the project have yet to be revealed, but according to reports, one possible bidder is China's State Construction Engineering Corporation.

CZECH REPUBLIC

Although Prague Airport is one of the largest air hubs in Central and Eastern Europe, it will no longer be able to satisfy the needs of its clients and compete with other important players in the region without further development. At peak times, its current runway system is already saturated. **Therefore, construction of a parallel runway appears to be an optimal solution** for the ever growing demand for capacity. Despite the joint efforts of Prague Airport, Air Traffic Control of the Czech Republic, Civil Aviation Authority, and pilots of CSA and Travel Service that managed through additional constructions and procedural changes to increase the hourly capacity by 30% (from 34 movements to 46, with the option to increase it to the maximum of 48 movements), the existing runway system has already reached its operational maximum. The prime benefit of a parallel runway is that it will enable further growth of civil aviation in the Czech Republic and bring it at least to the standard in similarly developed European countries such as Austria, Belgium, Denmark, Norway, or Finland. Air transport in the Czech Republic is still at one of the lowest levels in Europe by the number of inhabitants. This is why all forecasts prepared by international institutions such as Eurocontrol, ICAO, or IATA predict an above-average growth in the future. Since 1963, when the current airport runway system was launched, the number of take-offs and landings has more than quadrupled. While at the beginning of the 1960s, Prague Airport annually serviced 1 million passengers with 45,000 aircraft movements, by 2008 the reported number was 12.63 million passengers with 179,000 aircraft movements.

Two runways are currently used at Prague Airport: the main runway (RWY 06/24, lengthened in 1982 to 3,715 m) and a side runway (RWY 12/30, 3,250 m). However, any further development of the airport will only be possible if growth can be managed from a capacity point of view. The only option for further growth of the largest Czech airport is a new parallel runway. Two independently operated parallel runways fully satisfy the ever growing capacity demand for at least a few decades to come. All currently existing aircraft with a wingspan of up to 80 m would be able to use the new runway (the current runways comply with international regulations for aircraft with a maximum wingspan of 65 m). The A380 has made three landings in Prague to test the airport's infrastructure. Under the present conditions, such flights could delay others. Therefore, the airport is making preparations to upgrade its facilities to accommodate large aircraft such as the Airbus A380 and the Boeing 777. The plans include building an apron for an estimated CZK 150 million to handle such aircraft.

HUNGARY

The Government has not given up its plans to renegotiate the terms of a contract for private companies to operate Budapest Airport. Germany's Hochtief Airport GmbH controls a 49.67% stake in the airport company, while four other foreign investors control the rest under a deal first signed in 2007. Hochtief lifted its stake in 2011. -- Prime Minister Viktor Orban's government aims to boost state influence in key sectors of the economy, such as in banking or energy. His ruling Fidesz party won a second term with a comfortable majority and certainly will continue this policy. A previous Hungarian government sold a 75% stake in Budapest Airport to British airports operator BAA in December 2005 for HUF 464.5 billion (USD 2.09 billion). The airport has changed hands several times since

SWEDEN

Swedish airport group Swedavia has announced plans to invest SEK 13 billion (USD 2.01 billion) in improvements for Stockholm-Arlanda Airport. The 30-year plan has been split into two phases and aims to increase the airport's capacity and efficiency. The first phase, which will last ten

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years, covers the development of Terminal 5, including a new pier designed to handle larger aircraft for long-haul destinations, expanded security areas, and additional commercial space. Swedavia estimates an initial investment of SEK 7 billion (USD 1.08 billion) will be made for the first development stage, which will also include additional parking spaces close to the terminal and a new environmentally sustainable operations area. The inauguration of the airport's new Terminal 2 in 2013 was the first step towards long-term development at Arlanda.

The capital improvement programme follows sharp increases in passenger numbers, with over a million more travellers recorded at Arlanda in 2013 alone. Today, close to 21 million passengers travel through the airport and by 2040 the number is expected to rise to nearly 35 million, an increase of just over 2% per year.

"Stockholm Arlanda Airport plays a key role in enabling Sweden to realise opportunities for national and international exchanges. With this investment, we are enhancing not just the airport's competitiveness but also the potential for continued growth in Sweden," said CEO of Swedavia, Torborg Chetkovich. The area near the airport will also undergo changes with new and modern office buildings constructed nearby to create a dynamic cityscape. The plan follows the inauguration of Clarion Hotel Arlanda Airport in December 2012. The next step will be the establishment of Sky City Office One, a 15,000-m² office building located next to the airport. "Developing long-term sustainable solutions will be integral to the future Stockholm-Arlanda Airport. This will enhance our attractiveness and is also important since the area around the airport will employ an estimated 50,000 people by the end of the period," said Kjell-Åke Westin, Arlanda's Airport Director.

LATVIA

The Air Transport Research Society (ATRS), having compared the financial data of 200 airports, found Riga International the most competitive airport in Europe in terms of costs and tariff structure per passenger. In the lowest tariff nomination, the winner was **Luxemburg Airport.**

"This is a scientifically obtained testimony of the fact that over the years we have followed a targeted and growth-oriented airport development strategy. It has resulted in quadrupled passenger traffic and beneficial business environment for the airlines operating at the airport," said Aldis Murnieks, Chairman of the Board of Riga International. It should be noted that the ATRS has conducted this annual survey since the year 2002, and Riga Airport has received this prestigious award for the first time. -- The survey compares the results of 69 European, 78 North American and 53 Asian airports. In order to identify the world's most efficient and competitive airports, a comparative analysis of the financial data and pricing policies of the airports included in the survey is performed. -- The airport performance awards also went to the international airports of Copenhagen (Denmark), Athens (Greece), and Keflavik (Iceland).

Other Regions

U.S.A.

A ground-breaking ceremony was held on 16 September 2014 for the Los Angeles International Airport's Terminal 1 Modernization Project which will see a USD 508 million remodelling of the Southwest Airlines terminals. T1, which also houses Southwest's subsidiary AirTran Airways, was built in 1984 and has 15 gates. The remodel includes a new 12-lane security screening checkpoint, 24 new dining and retail options, a fully automated checked-baggage inspection and sortation system, refurbished arrival/baggage claim area, and new lounge-style gate seating areas, replacement of the passenger boarding bridges, renovations to airline support office space, modernized aircraft parking/apron pavement and hydrant fueling system, improvements to the building façade, and relocation of the main terminal entrances to the west end of the building to ease traffic congestion. Also included is a reconfiguration of the street access to the terminal, which has experienced some of the worst traffic congestion at LAX, particularly during peak travel times.

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The money for the project comes from airport fees, rather than through tax money from Los Angeles residents. When completed, the passenger's journey from curb to aircraft boarding bridge will be transformed and designed to provide a more efficient and exciting travel experience. By reorganizing the interior uses of the building and shifting the ticketing lobby and main entrances to the west, passenger drop off and pick up areas are anticipated to improve, and congestion in front of Terminal 1 will be reduced.

Construction on T1 is expected to be completed in 2018 and will be phased to minimize inconvenience to customers, employees, and guests. "The Terminal 1 improvement project will bring a better passenger experience and 1,500 construction jobs to LAX," said Los Angeles Mayor Eric Garcetti. "As part of our USD 7 billion investment in LAX, we're remodelling every terminal and creating 40,000 jobs, because Los Angeles deserves a world-class airport." -- Southwest Airlines serves 25 cities from LAX and is the airport's eighth busiest airline with 117 daily departures. The terminal will remain open during construction.

CHILE

The Nuevo Pudahuel consortium, which includes Aéroports de Paris and Vinci Airports from France, is one of 13 groups that have submitted bids in the USD 635 million tender to operate and expand Santiago's 'Arturo Merino Benítez Airport'. Together, the two French firms and their respective subsidiaries currently operate 60 airports around the world. Santiago would be a vital asset in their networks. Jacques Follain, the COO of Aéroports de Paris Management, said: "Santiago will be a regional hub... It's an access door to Latin America from Europe, the United States, and Asia in the future. We can make Santiago play a key role once the project is finalized." He added the company would step up safety and tighten co-ordination between airlines, the airport operator, and authorities. The tender is the first big infrastructure project that will be awarded by President Michelle Bachelet's administration. Technical and economic proposals are due on 18 November 2014, with bids to be reviewed on 18 December. The concession will be awarded in the first quarter of 2015 and the winner would take over the airport's operations for 20 years once the current concession ends on 30 September 2015. The project involves building a 200,000-m² terminal with two wings exclusively for international flights and another two alternating between international and domestic flights, and the upgrading of the existing terminal facilities. The expanded airport is designed to handle 29 million passengers by 2030 and 50 million by 2045. Santiago's passenger traffic grew 8% in 2013 to a record 15.3 million. – Vinci Construction has been active in Chile for the past 30 years.

PHILIPPINES

The Government intends to bid out shortly the first batch of bundled operation, maintenance and development of six airports under a single public-private partnership (PPP) project. The six airports to be bundled are Laguindingan, Panglao, Puerto Princesa, Davao, Bacolod, and Iloilo, PPP Centre Executive Director Cosette Canilao told reporters during the recent Philippine Investment Forum in Makati City. The target date for issuing the invitation to pre-qualify to bid for the six bundled airports is December 2014 or January 2015. The National Economic Development Authority (NEDA) approved the development, operations, and maintenance of the Laguindingan and Panglao airports in June 2013 while those of Puerto Princesa, Davao, Bacolod, and Iloilo were approved in October 2014. The undertaking of private partners involves the expansion, operation and maintenance of the airports, as well as provide additional facilities and other necessary improvements to enhance passenger safety, security, access, and the efficiency of passenger and cargo movement. The concession period is 30 to 35 years.

The reason for bundling the six airports into one PPP project has been suggested by investors, Canilao said. The bundled PPP project could be offered in two tranches, e.g. three + three, or four + two. 'Francisco Bangoy International' in Davao City is the busiest airport in Mindanao. Iloilo International in Cabatuan is the only airport serving the entire province, while Bacolod-Silay International Airport serves the general area of Bacolod City, Negros Occidental. Once completed, the Laguindingan Airport will replace Cagayan de Oro (Lumbia) Airport, which served the catchment area of Northern

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Mindanao. The new Bohol and Puerto Princesa airports will improve access to two of the top tourist destinations in the Philippines.

INDONESIA

The Government has earmarked IDR 6.2 trillion (USD 507.36 million) to finance construction of several new airports and improvements to existing airports in cities across the country in 2015. "Five major commercial airports will begin construction in 2015, namely Kertajati International Airport in West Java, Anambas and Tambelan airports in Riau Islands, Siau Airport in North Sulawesi, and Tebelian Airport in West Kalimantan," according to Bambang Tjahjono, Director of Airports at the Transportation Ministry. In total, the Ministry plans to build 21 new airports across the country, including non-commercial ones, in the next few years. "We will also renovate 103 existing airports next year with a budget of IDR 3.3 trillion," Bambang said, adding that 29 of them would be upgraded to international airports. He also mentioned that around 60% of the funds would be channelled for airport construction in the eastern part of the country. "The remaining amount will be used to build airports in border areas and regions prone to natural disasters," Bambang added. Santoso Eddy Wibowo, Secretary-General and Acting Director of Air Transportation at the Ministry, mentioned that the funds would go more toward the finishing processes of airport construction. Earlier, State-Owned Enterprises Minister Dahlan Iskan had said that the Government would not limit the development of new airports in regions across the country despite the fact that seven out of 13 airports under the management of state-owned airport operator PT Angkasa Pura (AP) II, which focuses its services on the western part of the country, were still suffering losses. The seven airports are Depati Amir in Pangkal Pinang, Kuala Namu in Medan, Minangkabau in Padang, Raja Haji Fisabilillah in Tanjung Pinang, Sultan Iskandar Muda in Aceh, Sultan Mahmud Badaruddin II in Palembang and Sultan Thaha in Jambi.

THAILAND

The military government has approved a THB 62 billion (USD 1.9 billion) expansion plan to improve services at Bangkok's Suvarnabhumi Airport. Transport Minister Air Chief Marshal Prajin Juntong made the announcement on 4 October 2014 and also told reporters that there were plans to build an additional third runway worth THB 19 billion (USD 583 million). He added: "The second-phase expansion of Suvarnabhumi airport will have to be done quickly to meet increasing numbers of tourists." - The airport served around 50 million passengers in 2013, exceeding its intended capacity of 45 million passengers a year. The second development phase is expected to be completed in 2017 and will take the airport's capacity up to 60 million passengers per year.

INDIA

Sixteen infrastructure development companies from Malaysia, China, Germany, South Korea, and India have shown interest in building the International Greenfield Airport at Mopa in North Goa. On 4 November 2014, twelve of these firms, including Essel Infra Mumbai, Air Asia Pvt Ltd, Vemb/Malaysia, Incheon Airport/Korea, Darin Airport/Korea, Indian Ocean Maritime India Pvt Ltd, Tata Realty, IRB-Infrastructural Developers Ltd, GMR-Airports, GVK Mumbai and IL&FS Transportation Network Ltd-Mumbai attended the pre-bid meeting. The bidders were given a presentation by the State Government on the master plan and overview of the project. Goa's Chief Minister Manohar Parrikar was present at the pre-bid meeting and answered all queries raised by the companies, like the Government's seriousness on the project. The State Government will shortlist those companies which score 70% and above in the technical qualification stage and may relax the score to 60% to get at least six bidders. -- On 3 October 2014, the State Government had issued a global request for qualification (RFQ) for the development of a Greenfield international airport at Mopa on design, build, finance, operate and transfer basis. The Government already has acquired 8.2 million m² of land for the Mopa airport project.

Green Airports

Oslo Gardemoen Airport in Norway will become the world's first hub to receive regular deliveries of bio-fuel. It is also the first time that sustainable bio jet fuel will be used in the hydrant system of the airport. "We are proud to take on the task of bringing greener aviation one important step forward," said Avinor CEO, Dag Falk-Petersen, about the agreement signed with Statoil Aviation. The plan is to start delivering biofuel in March 2015, and that Statoil Aviation will deliver 2.5 million l of sustainable bio-fuel to the tank facility at Oslo Airport in the first 12 months. This corresponds to approximately 3,000 flights between Oslo and Bergen with a 50% bio-fuel mix. While the initial bio-fuel deliveries will probably come from used cooking oil, major players in the Norwegian power and forestry industries are now exploring the possibility of forest-based large-scale production of bio-fuel for aviation use in the future. "This is a good start towards developing a market for aviation bio-fuel. The fact that Avinor is contributing to making Oslo Airport the first hub in the world where all airlines have the opportunity to use bio-fuel illustrates that a green change is possible. At the same time, it's important that the authorities step up with policy instruments that promote greater use of bio-fuel in aviation," said head of the environmental foundation ZERO, Marius Holm.

To date, Statoil Aviation has entered into agreements with the Lufthansa Group (Lufthansa, SWISS, Austrian Airlines, Germanwings, Eurowings, and Brussels Airlines), SAS, and KLM for deliveries of bio-fuel at Oslo Airport. There are currently two firm industrial Norwegian initiatives for production of bio-fuel: Statkraft and Södra at Tofte in Hurum, and Viken Skog / Treklyngen at Follum in Hønefoss. Both projects are now looking into the possibility of producing both bio-diesel, which is needed in the heavy transport sector, and the bio-jet fuel needed in aviation. A single bio-fuel plant can produce enough bio-jet fuel and bio-diesel to reduce greenhouse gas emissions from Norwegian aviation by 10% to 15%.

Copenhagen Airport has set a goal for CO2 neutral growth, while it expands capacity over the next 25 years. In January 2014, the airport announced plans to double capacity of the existing terminal complex in a phased process. The first stage of expansion will see capacity increase to 30 million, which will be extended to 40 million in the later phases. "As an airport, we have a responsibility to the community we are part of, so we have set ourselves the goal that our growth up to 30 million passengers must be CO2 neutral. And it is our ambition to stick with that goal up to 40 million passengers. One of the objectives of making such a very long-term plan is also to be able to lay a basic plan for sustainability and energy efficiency," said Copenhagen Airport CEO, Thomas Woldbye. The airport said it would require "strong collaboration" with the 700 companies that currently operate at CPH in order to expand responsibly. As part of its green strategy, Copenhagen will reduce the amount of resources used by its partners in a bid to cut their total cost of operating at the airport and to benefit the environment. A recent study revealed the various sources of CO2 emissions and found that CO2 emissions totalled 306,482 tonnes in 2013, which was a year-on-year reduction of 1,500 tonnes. Overall, each passenger accounted for 12.7 kg of CO2 emissions in 2013, of which the airport was directly responsible for 1.3 kg. "We have a responsibility to improve the region's international accessibility and thereby create growth opportunities and jobs in the region as a whole. But we also have a responsibility to ensure that this growth happens in a responsible way in terms of the environment, society, and our financial performance," added Woldbye.

EUROCONTROL, Europe's organization for the safety of air navigation, has launched the collaborative environmental management (CEM) specification to control environmental impacts in and around airports. The specification calls for a collaborative approach by airport and airline operators, airport navigation service providers (ANSPs) and other stakeholders to reduce gaseous and noise emissions, as well as improve local air quality around airports. EUROCONTROL said: "This allows for a better identification of trade-offs between different environmental objectives, helping to resolve environmental and operational challenges based on informed decisions." The specification

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requires the airport operator to set up a CEM working arrangement with aircraft operators and air traffic service provider, in order to monitor key environmental parameters.

On the occasion of the release of the specification, Eurocontrol and Airports Control International (ACI) Europe have signed an agreement to work together. Under the agreement, ACI will endorse the CEM as its recommended practice to make it a standard in the industry. ACI Europe Director General, Olivier Jankovec, said: "Working with EUROCONTROL to develop collaborative environmental management has been very positive, and the result provides our members with a blueprint for an even more robust and transparent dialogue with their airlines and ANSPs aimed at identifying the best possible solutions to jointly address environmental impacts."

Five Asia-Pacific airports were honoured in Bali, Indonesia recently as they were presented with Airport Carbon Accreditation Certificates at the ACI Asia-Pacific Small and Emerging Airports Seminar. The five airports accredited at Level 1, Mapping under the Airport Carbon Accreditation Programme were: Soekarno-Hatta International Airport, Indonesia; Chiang Mai International Airport, Thailand; Don Mueang International Airport, Thailand; Hat Yai International Airport, Thailand; and Mae Fah Luang Chiang Rai International Airport, Thailand.

The programme now comprises 109 airports currently certified at one of the four available levels of certification including some of the best-known and renowned airport brands in the world. In Europe, 86 airports are accredited, of which 17 are carbon neutral, 21 in the Asia-Pacific region of ACI as well as one airport each from ACI Africa and ACI North America region.

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