Connecting the world today & tomorrow
Strategic Plan 2020

Dubai Airports
Connecting the World
# Foreword

Dubai International Terminal 3 Arrivals

## History

- Dubai Airports: the story so far
- Dubai Duty Free
- A world class model
- Sector value

## Future growth

- Emirates expansion
- flydubai growth
- Industry leading growth
- Strategic Plan 2020
- Conclusion
Dubai’s aviation sector is more than the sum of its parts, together the key players – Dubai Airports, Dubai Duty Free, Emirates and flydubai – have combined to create a global aviation phenomenon.

The emergence of Dubai as a leading global aviation centre is the result of a carefully constructed and well-executed model that effectively harnesses the emirate’s geocentric location and entrepreneurial spirit. It is a model that features a liberal regulatory climate, a tax-free business environment, a customer-centric focus that provides value for money, and close coordination and collaboration within the sector.

The results have been nothing short of impressive. Dubai’s aviation sector has seen tremendous growth in a short time frame. Over the past five years alone, passenger numbers at Dubai International have virtually doubled from 24.8 million in 2005 to 47.2 million in 2010. The airport now ranks fourth globally for international passenger and cargo traffic. Emirates’ passenger numbers have increased six-fold over the course of a decade, making it the largest airline in the world in terms of international revenue passenger kilometres. Dubai Duty Free has become the biggest single airport retail operation in the world, with revenues of US$1.27 billion (AED4.6bn) in 2010. And flydubai is the world’s fastest growing start-up airline, emerging as a force to be reckoned with among low-cost carriers in the region.

However, while we can reflect on past accomplishments with pride, it is clear that our future holds even greater promise. The combination of rallying tourism, Dubai’s proximity to the emerging economies of India and China, and the emirates’ established role as a trading hub linking economies in the Far East, Europe, Africa and North America, is together expected to drive growth and further elevate Dubai’s status as a global centre for trade, tourism and commerce.

In fact, projections for growth are staggering. By 2020 some 98.5 million passengers and over four million tonnes of air freight will pass through our airports. The fleets and networks of Emirates and flydubai will grow considerably to accommodate traffic and capture market share. Similarly, our infrastructure must expand to enable this growth and facilitate the trade, tourism and commerce that in turn will support the prosperity of Dubai. This is what our Strategic Plan 2020 sets out to achieve.
Much like the city that it calls home, Dubai’s aviation industry has a proud past characterised by stunning innovation and breathtaking growth. Vision and entrepreneurial spirit have propelled Dubai’s development from a small oasis in the desert to a thriving metropolis with a cosmopolitan population and a reputation for innovation and quality. Equally impressive has been the development of the emirate’s thriving aviation industry and its airport, which has evolved from a small airstrip mainly serving as a refuelling stop for a few airlines in 1960 to a global gateway for 150 airlines that is ranked among the world’s top hubs.

The history of aviation in Dubai dates back to 1937 when the first Imperial Airways flying boat landed on the Dubai Creek. In the early years Dubai served as a transit point between Europe and Asia. Some 22 years later the spark that ignited 50 years of growth occurred when the then visionary ruler of Dubai, the late Sheikh Rashid Bin Saeed Al Maktoum, ordered the construction of Dubai International, which comprised an 1800-metre airstrip of compacted sand, an apron, a fire station and a small terminal building.

From conception to completion, the construction of the airport was fast-moving. After a groundbreaking ceremony in 1959, the airport was officially inaugurated, heralding in a new era for aviation in Dubai.

Starting with annual traffic of a few thousand passengers during its first year of operation, Dubai International reached one million passengers in 1974, with the five million passenger mark achieved 16 years later in 1990. Passenger traffic surpassed 10 million in 1999, largely enabled by a series of expansion and refurbishment projects – including the construction of a second terminal (Terminal 2), two asphalted runways, a new air traffic control tower, an extended terminal building and major equipment upgrade, all of which were carried out to accommodate the robust traffic growth.

Operating at full capacity and experiencing unrelenting growth, Dubai International welcomed the turn of the century with a major addition to its infrastructure in the form of Sheikh Rashid Terminal, also known as Concourse 1 in April 2000. This more than doubled the airport’s annual capacity from 10 million to 23 million passengers. Continued growth, spurred on by Dubai’s economic boom and the network expansion of Emirates, soon caught up with capacity when the airport surpassed 20 million passengers in 2004. A mere three years later that total ballooned by another 14 million to top 34 million passengers. To accommodate the rapid expansion, on October 14th 2008, Dubai Airports turned heads globally with the flawless opening of the world’s single largest terminal building, Dubai International Emirates Terminal 3. Built for the exclusive use of Dubai’s flagship carrier Emirates, Terminal 3 boosted the airport’s capacity to 60 million passengers.
Looking back

1937  Aviation introduced with the first Imperial Airways flying boat, using the Dubai Creek

1960  Dubai Airport opened and was capable of handling aircraft up to the size of a DC-3

1970  The 70s witnessed many developments, starting with a new three-storey terminal building, control tower, additional taxiways and lengthening of the runway

1983  Dubai Duty Free begins operations at Dubai International with a turnover of US$20 million (AED73.4m) in its inaugural year

1984  The second runway opens

1998  Terminal 2 opens boosting capacity by two million passengers per year

2000  Sheikh Rashid Terminal, also known as Terminal 1, opens increasing the airport’s capacity from 10 million to 23 million passengers

2007  Department of Civil Aviation is restructured leading to the formation of Dubai Airports – responsible for the development and management of Dubai’s airports and Dubai Civil Aviation Authority – the local aviation policy entity

2008  The world’s largest terminal - Emirates Terminal 3 – opens flawlessly. It expands Dubai International’s capacity to 60 million passengers

2009  Dubai International becomes the world’s fastest growing airport among the top 50 major hubs. Work begins on Concourse 3 and Terminal 2 undergoes major refurbishment for the launch of flydubai

2010  Dubai Airports opens the first phase of Dubai World Central for cargo operations on June 27

50 years of incredible growth
In the half-century since its opening, Dubai International has welcomed over 402 million passengers and has sustained an impressive average annual growth rate of 15.5%. During the same period the airport has handled over 3.87 million aircraft movements at an average annual growth rate of 12.4%. The rapid expansion of airfreight traffic has been equally remarkable, with total freight volumes moved between 1977 and August 2010 exceeding 17.9 million tonnes at an annual average growth rate of 14.3%.

“Aviation is fundamental to the ongoing prosperity and economic expansion of Dubai. My job is to make sure that the airport infrastructure grows to ensure there are no constraints. We’re proactively continuing to expand at Dubai International and Dubai World Central to ensure we can accommodate the massive influx of aircraft and traffic expected to inundate both airports over the next 10 to 20 years.”

Paul Griffiths
CEO Dubai Airports
Total passengers from 1960 up to August 30, 2010: 402,289,721
Average annual growth in passenger traffic over 50 years: 15.5%
Total aircraft movements: 3,873,132
Average annual growth in aircraft movements: 12.4%
Total cargo from 1977 to July 31, 2010: 17,906,199
Average annual growth in cargo since 1977: 14.3%

Dubai International:
50 years of growth

Dubai Airports:
Today

3,400 total employees
47.2m annual passengers
2.27m tonnes cargo
329,000 movements
220 scheduled destinations
150 airlines
220 cargo airlines
4,200 movements / year

Source: Dubai Airports 2010 actual figures (DWC figures 2011 forecast)
Dubai Duty Free’s meteoric rise on the global aviation stage parallels that of its home base – Dubai International. Since its creation in 1983, Dubai Duty Free has established itself as the biggest single airport retail operation in the world in terms of turnover, with sales of US$1.27 billion (AED4.6bn) and 14% growth in 2010.

Furthermore, 2010 saw an increase in consumer spending across all categories, with December setting a new monthly sales record with turnover reaching US$136 million (AED499.5m) – 13% higher than the previous monthly record set in December 2009. Dubai Duty Free, as a single operator, now accounts for 3.3% of global duty free and travel retail sales (which includes airports, airlines, ferries and other shops) and 5.5% of the airport duty free business.

Dubai Duty Free sells to around 50% of all passengers, while the average spend per departing customer is around US$46 (AED169). Some 20.5 million sales transactions were recorded at Dubai Duty Free in 2010 – an 11% increase year-on-year. Increases were seen across all Dubai Duty Free retail areas, with Terminal 3 sales increasing by 20% overall, including an 11% increase in arrivals sales. Terminal 2 sales also rose by an impressive 24%; a revamp of the retail operation in Terminal 2 is planned for 2012.

Terminal 3, which opened in October 2008, accounts for almost 60% of Dubai Duty Free’s total sales. The average value per transaction is also 43% higher in Terminal 3 than in Terminal 1 and the aim is to increase penetration in both departures and arrivals.

Once passenger operations commence at Dubai World Central, Dubai Duty Free’s retail offer in the passenger terminal will be on par with the facilities at Dubai International with a full range of merchandise presented in an extremely attractive and convenient shopping environment. In total, Dubai Duty Free’s retail area will cover 2,250 sqm and be supported by a further 1,150 sqm of support facilities. At present, Dubai Duty Free operates 15,000 sqm of retail space at Dubai International across the three terminals and, with the opening in 2012 of Concourse 3, it will have a further 8,000 sqm. Dubai Duty Free is set to capitalise on additional terminal expansion and reconfiguration laid out in Dubai Airports’ ten-year strategic plan.

Dubai Duty Free’s strategy is to increase both sales volume and spend per departing and arriving passenger. The penetration level for departing passengers, which currently stands at around 50%, is set to rise by offering the latest products and ensuring those products are visible, accessible and sold with a high level of service by competent and motivated staff. These measures, combined with passenger traffic growth and expanded facilities, are sure to drive further record-setting revenues.

Dubai Duty Free Today

**US$1.27 billion**

2010 revenue up 4% over 2009

**60,000**

transactions per day

**19,100 sqm**

of retail space

**36,000 sqm**

distribution centre

**197,000**

products

**3,872**

staff from 44 different nations

Looking back

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>Founded with 91 staff. Turnover of US$20 million (AED73.4m)</td>
</tr>
<tr>
<td>1995</td>
<td>Built own tennis stadium for ATP</td>
</tr>
<tr>
<td>1998</td>
<td>Retail area opened at Terminal 2</td>
</tr>
<tr>
<td>2000</td>
<td>New retail area at Concourse 1</td>
</tr>
<tr>
<td>2002</td>
<td>Turnover of AED1 billion (US$272m) 5th largest duty free operation</td>
</tr>
<tr>
<td>2008</td>
<td>Retail area opened at Concourse 2</td>
</tr>
<tr>
<td>2009</td>
<td>Becomes largest duty free retailer in the world with revenues of over US$1 billion (AED3.7bn)</td>
</tr>
</tbody>
</table>

“We are continuing to improve the quality and effectiveness of our existing operation while keeping an eye firmly on the growth plans ahead. I think that with the size of operation in the future, the prospect of us remaining the single largest airport retailer in the world is very good.”

Colm McLoughlin
Dubai Duty Free Managing Director
Dubai clearly recognises that aviation is not only an important driver of growth in its own right, but that it underpins growth in other key sectors.

Dubai has a wealth of assets and conditions that combine to make it a world-class tourist and business destination. These include political and economic stability, an extensive foreign trade network, state of the art telecommunications, a tax-free environment and top-notch infrastructure.

It is no wonder then that aviation is at the heart of Dubai’s economic strategy. The government of Dubai clearly recognises that aviation is not only an important driver of growth in its own right, but that it underpins growth in other key sectors. A liberalised aviation policy, supportive government and a coordinated approach means that Dubai Airports is able to react quickly to the marketplace and make swift decisions on major infrastructure investment that take full advantage of its geocentric location.

Aviation has benefited from a clear economic strategy that recognises the importance of the connectivity it brings. Decision-making is typically collaborative and decisions can be made quickly because of constructive relationships among senior individuals throughout the aviation sector, related commercial enterprises and government departments, all fostered by frequent contact. As a result, Dubai’s aviation sector has benefited from a collaborative approach to investment that has helped Dubai Airports and Emirates expand efficiently together, supporting each other’s growth.

Dubai’s aviation sector also benefits from its liberal open skies policy and the emirates’ strategic location within eight hours flying time of most major destinations and two-thirds of the world’s population. These factors, along with the provision of top-flight infrastructure, have attracted over 150 airlines that provide service to 220 destinations around the world, and that directly connect Dubai to 55 cities of more than 10 million inhabitants. As a result, according to IATA, the UAE is the most connected country in the world, in no small part due to Dubai’s thriving aviation sector.

“Dubai has a model that recognises aviation’s strategic importance and promotes growth in the sector. It starts with an open skies policy, competitive rates and a tax-free environment that together has attracted over 150 airlines to Dubai and extends to strategic investments in top-flight aviation infrastructure that promote high service standards and sustain rapid growth. This combined with our geocentric location, which can effectively connect any two major cities in the world, will drive further expansion and continued benefits to consumers across the globe.”

HH Sheikh Ahmed Bin Saeed Al Maktoum
President of Dubai Civil Aviation Authority, Chairman of Dubai Airports and Chairman and Chief Executive of Emirates Airline and Group
The emergence of a global hub

Over 2/3 of the world’s population lives within 8 hours flight from Dubai

1/3 lives within 4 hours

“The hub network centred at Dubai now provides faster connections between a constantly growing number of cities worldwide, creating more convenient and affordable links to a growing percentage of the world’s population”

Paul Griffiths
CEO Dubai Airports
As a direct result of Dubai’s aviation model, the sector already makes a substantial contribution to the emirate’s economy, according to an exhaustive study conducted by leading global research firm Oxford Economics. The research calculates Dubai’s aviation sector supports 125,000 jobs in the emirate including 58,000 direct jobs that contribute US$6.2 billion (AED22.7bn) to Dubai’s GDP, 43,000 indirect jobs that generate US$3.5 billion (AED12.8bn) through its purchases of goods and services from local businesses and a further 23,900 jobs that contribute US$2.0 billion (AED7.3bn) through the spending of those directly and indirectly employed in the sector.

The study also quantifies the wider catalytic benefits. As the overwhelming majority of foreign visitors who travel to Dubai arrive by air, Oxford calculates their spending supports nearly 134,000 jobs and contributes US$7.9 billion (AED29bn) to Dubai’s GDP. Other businesses, such as logistics, financial services and professional services which derive significant benefit from the connections created between cities and markets, contribute an additional US$2.5 billion (AED9.2bn) to Dubai’s GDP.

In total aviation supports over 250,000 jobs and contributes over US$22 billion (AED80.8bn) which represents around 19% of total employment in Dubai, and 28% of Dubai’s GDP, according to the report.

Not only is the success of Dubai’s aviation sector good for Dubai’s economy, it also benefits the global economy. It promotes global tourism. It creates connections between cities and countries. These connections represent an important infrastructure asset that benefits passengers and businesses from many countries. It promotes strong competition, ensuring passenger efficient, high quality air services. Further, spending by air travellers flying with Emirates makes an important contribution to many economies. For example, tourism benefits contribute over US$1.0 billion (AED3.7bn) to GDP for both Australia and India while connectivity benefits total US$1.4 billion (AED5.1bn) for China and US$800 million (AED2.9bn) each for the UK and the US.

Aviation’s importance to Dubai is expected to continue to grow over the next decade. On the basis of these strengths and the forecasts for passenger growth from Boeing and Airbus, Oxford Economics expects the economic contribution of Dubai’s aviation sector to rise to 32% of Dubai’s GDP and about 22% of its employment by 2020.

### Sector Value

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<th>Category</th>
<th>Jobs</th>
<th>GDP (US$ billion)</th>
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<tr>
<td>Economic Footprint</td>
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<tr>
<td>(1a) Direct</td>
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</tr>
<tr>
<td>(1b) Indirect</td>
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<tr>
<td>(1c) Induced</td>
<td>23.9</td>
<td></td>
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<tr>
<td>Catalytic Benefit</td>
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<tr>
<td>(2a) Tourism</td>
<td>133.9</td>
<td></td>
</tr>
<tr>
<td>(2b) Connectivity</td>
<td>133.9</td>
<td></td>
</tr>
<tr>
<td>Total Employment</td>
<td>259.0 (19%)</td>
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</tr>
<tr>
<td>Total Contribution</td>
<td>22.1 (28%)</td>
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### Contribution to GDP (US$ billion) 2010

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Contribution</th>
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<tr>
<td>(1) Economic Footprint</td>
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<tr>
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<tr>
<td>(1c) Induced</td>
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<tr>
<td>(2) Catalytic Benefit</td>
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<tr>
<td>(2a) Tourism</td>
<td>7.9</td>
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<tr>
<td>(2b) Connectivity</td>
<td>2.5</td>
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<tr>
<td>Total Contribution</td>
<td>22.1 (28%)</td>
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Future growth

Double-digit growth has been the norm at Dubai International. Over the past 50 years, passenger traffic has increased at an average annual growth rate of 15.5%. More recently during the economic downturn in 2009, while other airports saw traffic decline, Dubai Airports saw international passenger numbers increase by 9.1% demonstrating the resilience of Dubai’s aviation sector in challenging market conditions.

Market projections and macro-economic conditions strongly suggest that this huge growth will continue for the foreseeable future. Passenger and cargo traffic growth is set to continue at an impressive rate driven by continued market liberalisation and dramatic GDP growth in emerging markets, which will lead to increasing wealth and mobility through most of Dubai’s immediate catchment area. This supports the expectation that local traffic growth will continue to outstrip the industry-wide projections of organisations such as Boeing, Airbus and IATA.

According to Airbus’ 2009-2029 Global Market Forecast, air traffic will double in the next 15 years. Further, the report calculates emerging markets are set to generate the lion’s share of that growth. China, India, the Middle East, Asia, Africa, CIS, Eastern Europe and Latin America are projected to see annual revenue passenger kilometre (RPM) growth of 6.1% per annum for the next 20 years. More mature markets in North America, Europe, Australasia and Japan are projected to see 3.7% average annual RPM expansion. That in turn has and will continue to precipitate aircraft orders to serve the growing demand.

In the Middle East, governments’ supportive approach to aviation as a key driver of economic diversification and social development has led to significant investment in long range aircraft and infrastructure to exploit the Middle East’s geocentric location to tap into emerging markets. New low cost airlines have created more affordable travel for an increasingly mobile population.

Fleet Growth

In response to these leading indicators Airbus estimates aircraft demand will average 1,300 per year globally. Dubai’s two largest airlines, Emirates and flydubai, have already placed significant aircraft orders to meet the expected demand.

Emirates expansion

Operating with a fleet of 153 modern, wide-bodied aircraft, and with 200 aircraft on order Emirates is a catalyst for future growth.

Emirates’ strategy is to continue to progressively grow as a high quality and profitable global carrier connecting six continents through its efficient hub in Dubai, while maintaining a young, eco-efficient and modern fleet.

Emirates enjoys a close and highly effective relationship with Dubai Airports, aided significantly by Emirates’ Chairman and Chief Executive Sheikh Ahmed bin Saeed Al Maktoum who is also the Chairman of Dubai Airports. Accordingly, infrastructure expansion plans are the result of close stakeholder collaboration. Terminal 3 is a recent example of the benefits of that relationship.

Emirates has a very specific long-term strategic plan to grow and expand its business. With many major airports worldwide operating at maximum capacity due to constraints on expansion, the A380 is key to Emirates’
plans to meet increasing passenger demand. With a total of 90 A380 aircraft ordered, it is set to become the world’s largest A380 operator. The Boeing 777, of which Emirates is the largest operator worldwide, also forms the backbone of its fleet, and have been configured to provide maximum flexibility for effective route deployment.

Emirates is known for entering markets not previously served by large international carriers. That, combined with Dubai’s growing attractiveness as a tourism and business destination in its own right, is sure to support the continued growth of one of the world’s most profitable airlines.

**flydubai growth**

Flydubai is yet another growth engine. It was set up by the Government of Dubai in March 2008, with operations beginning on 1 June 2009. flydubai quickly established itself as Dubai’s second largest airline.

Flydubai offers a value-for-money product at an extremely competitive price. It has aimed to expand both its fleet and network as quickly as possible to offer more choice and attract more passengers, and is the world’s fastest growing start-up airline. It now serves 36 destinations across the GCC, Middle East, Africa, Subcontinent, former CIS nations and the fringes of Europe. Throughout 2010, flydubai added 17 new destinations to its network. It currently operates a fleet of 16 Boeing 737-800 NG aircraft and this number is set to grow in the months and years ahead with 34 more on order.

**Other airlines**

The Open Skies policy in Dubai stimulates demand and promotes the opportunity for other airlines to benefit from and contribute to the city’s growth and success.

Over 150 other airlines serving 220 destinations currently operate to Dubai accounting for approximately 50% of the movements and 35% of the passengers. Growth over recent years has comfortably exceeded global averages, and this trend is expected to continue. The markets forecasted for the greatest growth over the next 10 years are the Americas averaging 17% annual growth, and Europe, Middle East and Africa with an expected 9% annual growth.

**Future growth**

**flydubai fleet**

16 aircraft in fleet
34 on order

**17% annual growth**

Americas

**9% annual growth**

Europe, Middle East and Africa

Due to strong growth of Emirates and flydubai, demand in Dubai significantly exceeds industry wide projections.

**Total passenger demand**

Due to strong growth of Emirates and flydubai, demand in Dubai significantly exceeds industry wide projections.

**Total passenger forecast — Industry projection**

Compound annual growth rate (CAGR) for Dubai vs industry projected growth rates from Boeing and Airbus.

**Source:** Dubai Airports, Industry websites
Together with expected expansion of services operated by the 150 airlines that fly into Dubai, Dubai Airports forecasts a cumulative annual growth rate of 7.2%. This is a much stronger rate than the industry average forecast of around 5% from sources such as Boeing and Airbus. Furthermore, based on the past 25 years of data, Dubai Airports fully expects those additional seats to be filled and forecasts passenger numbers to more than double from the 47.2 million that passed through Dubai International in 2010 to 98.5 million by the end of the decade. Similarly, bolstered by expanded trade and commerce, airfreight volumes will almost double from the 2.2 million tonnes recorded in 2010 to 4.1 million tonnes in 2020 based on a 6.7% annual growth rate. Whilst much of the growth is driven by additional hold capacity in the passenger fleet, the forecast also suggests a significant increase in freighter capacity.

Infrastructure Expansion

Accordingly, the world’s most significant airline and airport expansion programme is currently taking place in Dubai. Infrastructure enhancement is underway to increase capacity from 60 million to 75 million with the opening of Concourse 3 at the end of 2012. In addition, Phase 1 of Dubai World Central (DWC) opened in June 2010 for cargo operations. Although DWC is the long-term solution to Dubai’s aviation needs, adequate capacity to house Emirates’ considerable operation is not expected to be in place until at least the mid-point of the next decade. Accordingly, and until such time that DWC is adequately developed, Dubai International must expand to accommodate fleet expansion and traffic growth and retain the network efficiency established by its main hub carriers.

"The past 50 years have been nothing short of remarkable and the future holds even greater promise as we build our infrastructure to support the impressive expansion of Emirates, flydubai and other airlines and ascend the ranks of global aviation hubs.”

Paul Griffiths
CEO Dubai Airports

7.2%
annual growth rate outstripping industry forecast growth rate of Boeing and Airbus

75 million
Concourse 3 opens at the end of 2012 to increase capacity from 60m to 75m
Aggressive expansion of airspace, airfield, stands and terminal area at Dubai International

SP 2020, Dubai Airports’ ten-year masterplan, outlines aggressive expansion plans for airspace, airfield, stands and terminal areas at Dubai International. The plan takes into account the need to minimise constraints on growth by delivering timely capacity, while improving service levels and generating strong cash flow to maximise capital investment. Further, it effectively balances the need for facility development, process improvement and demand management to ensure optimal utilisation of facilities and maximum return on investment. It is also designed to reinforce Dubai’s hub status and ensure a smooth transition to Dubai World Central in the long term.

Expansion in the air

Dubai Airports aims to identify and deliver the additional runway and airspace capacity required to facilitate airline growth plans. Airspace optimisation plans centre around the alignment of ground based and airborne strategies, using movement forecasts developed by Dubai Airports to better balance demand and capacity. Through the use of internationally recognised modelling tools that simulate gate, taxiway, runway and terminal airspace activity, Dubai Airports has been able to refine capacity forecasts in order to build a roadmap for development and the deployment of technology and procedural enhancements to meet these forecasts.

Within the local airport environment, the focus is on optimising runway capacity, increasing consistency and predictability, and implementing efficient systems and processes in order to accommodate and manage growth. Beyond the vicinity of the airport itself, Dubai Airports is engaging national and regional civil aviation authorities and air navigation service providers to ensure that air routes are decongested, bottlenecks are reduced and latent airspace capacity is unlocked. Next generation technology such as performance based navigation and dynamic airspace management will be deployed over the coming years to harness the capabilities of modern fleets such as Emirates and flydubai and increase airspace capacity.

Development of a performance based, predictable and cohesively managed, regional and local airspace network strategy that will promote cross-border cooperation and integrate the efforts of civil aviation authorities and air navigation service providers across the Middle East is key to the expansion of capacity in the airspace surrounding both Dubai International and Dubai World Central.
And on the ground

As airspace opens up, additional aircraft movements will need to be accommodated on the ground to ensure a smooth flow for arrivals and departures. On the airfield, that means the addition of new taxiways and rapid entry/exit points on Dubai International’s two runways. It also requires an increase in the number of stands needed to park and service aircraft. In total, SP2020 calls for a 60% increase in the number of stands by 2015.

Finally, the plan requires the construction of additional terminals and concourse areas. SP2020 calls for the creation of an additional 675,000 sqm of floor space – twice the footprint of London Heathrow Terminal 5. Highlighting this expansion, and separate from the construction of Concourse 3, is the expansion of Terminal 2 and the construction of Concourse 4. Additionally, Dubai Airports will bolster baggage systems across the airport to accommodate the additional load. Plans include the construction of a remote baggage facility designed to provide fast and accurate processing of high volumes of luggage. Coupled with this will be a high-speed baggage link that will feed the entire south side of the airfield and protect minimum connection times.

Construction will incorporate sustainable processes and building designs to limit impact on the environment. The expansion project will be phased in over the next five years and will be carried out in a fashion that does not impede additional traffic. At the same time it will protect minimum connection times, improve the percentage of flights that are accommodated on pier-serviced stands, increase passenger circulation space and boost passenger throughput through process and technology improvements. This efficiency, coupled with the overall growth in passenger numbers, will also boost commercial revenues, which can in turn be used to fund development. In order to balance demand with capacity, and in line with IATA slot coordination guidelines, cargo freighters will gradually be repositioned to Dubai World Central as will general aviation to make room for increased passenger traffic at Dubai International.

Cargo capacity will also be augmented with an additional 30,000 sqm expansion of the cargo mega terminal. This will cater for the additional hold cargo delivered by larger joint-production (passenger and cargo) aircraft flying into Dubai with greater frequency.

With additional facility enhancements and operational efficiencies contained in SP2020, Dubai International’s capacity will expand to 90 million passengers per year by 2018.
Long term development
During 2018–2023, with construction completed at Dubai International, the additional aeronautical and non-aeronautical revenue generated by the higher traffic flows will be used to fund further airport development at Dubai World Central. Construction of Phase 2 of DWC will escalate during this period with the initial iteration allowing for 80 million passengers per year to facilitate the eventual relocation of the Emirates hub. DWC will feature a modular design that can be expanded incrementally to accommodate growth for both Emirates and other airlines. Once fully completed, Dubai World Central will be the world’s largest airport with five runways and capacity for 160 million passengers and 12 million tonnes of cargo annually.

Conclusion
Since the first flying boat set down on the Dubai Creek over 60 years ago, aviation has evolved as a vital component of Dubai’s economy. The rapid emergence of Dubai as a leading global centre of aviation is no coincidence. It parallels the emirates’ equally impressive history of innovation, quality and growth and is the direct by-product of a supportive model that features liberal policies, a tax-free business environment and well-timed investment. It further utilises Dubai’s geocentric location, one that with today’s advanced aircraft technology can effectively connect any two points in the world and is ideally positioned on the doorstep of the two largest emerging economies.

The results to date are impressive. Following 50 years of double digit passenger traffic growth, Dubai is now home to the world’s largest single airport retailer, one of the largest and most profitable airlines on the planet and the world’s fourth busiest airport for international passenger and cargo traffic.

It is a vibrant sector whose already significant contributions to the local and surrounding economies are set to expand as the incredible growth continues. SP2020 is designed to capture, augment and deliver those benefits to consumers, airlines and the broader economy.
60% increase in number of stands from 144 to 230

Cargo growth from 2.2 million tonnes (2010) to 4.1 million tonnes by 2020

675,000 sqm of additional terminal space

Infrastructure development

- Concourse 3 (2012)
- Terminal 2 expansion (2013)
- Concourse 4 development (2015)
- Baggage Backbone
- DWC passenger terminal building arrivals (PTB) expansion (2018)

30,000 sqm additional cargo processing capacity