



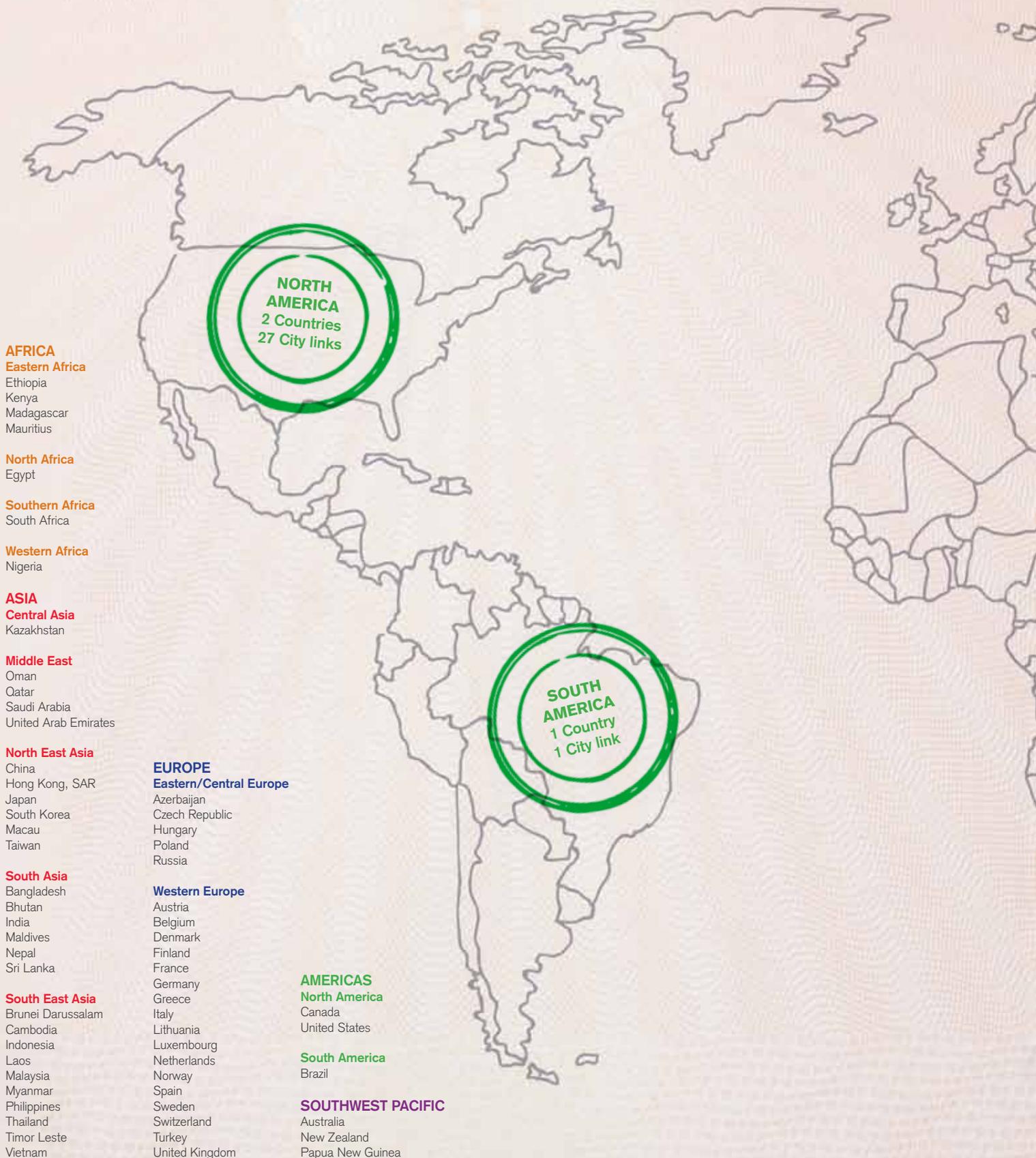
# Business & Operations Review





# Global Connectivity

## Country & City Links (as at 31 March 2013)





**EUROPE**  
22 Countries  
66 City links

**CENTRAL ASIA  
+ MIDDLE EAST**  
5 Countries  
9 City links

**SOUTH ASIA**  
6 Countries  
17 City links

**NORTH EAST ASIA**  
6 Countries  
39 City links

**SOUTH EAST ASIA**  
10 Countries  
47 City links

**SINGAPORE**

**AFRICA**  
7 Countries  
11 City links

**SOUTHWEST PACIFIC**  
3 Countries  
40 City links

Changi Airport is the seventh busiest international airport in the world. As at 31 March 2013, Changi serves more than 100 airlines operating over 6,500 weekly scheduled flights connecting Singapore to over

**250**  
cities in about 60 countries and territories worldwide.

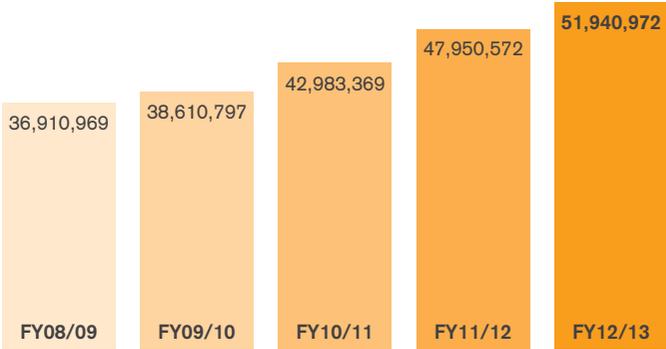
# Air Traffic Statistics

By year



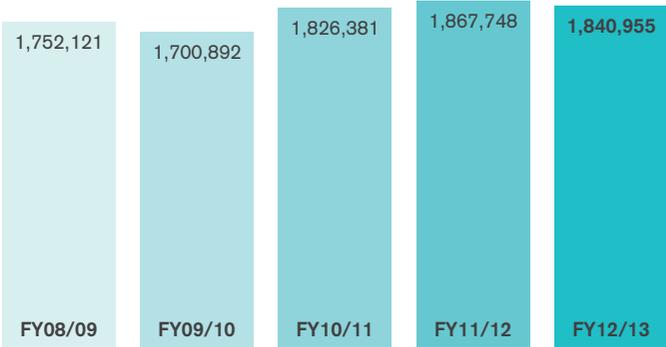
## PASSENGER MOVEMENTS

NO. OF PASSENGER MOVEMENTS



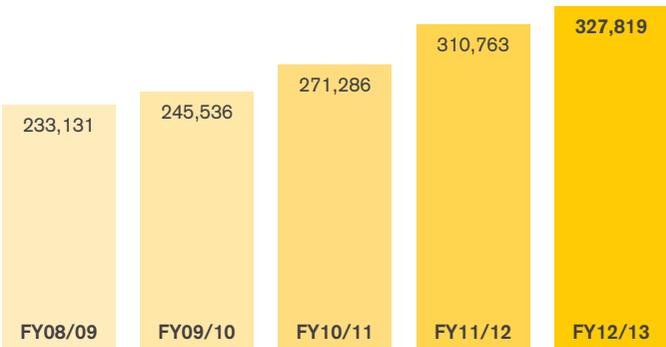
## AIR FREIGHT MOVEMENTS

TONNES OF AIR FREIGHT



## COMMERCIAL AIRCRAFT MOVEMENTS

NO. OF COMMERCIAL AIRCRAFT MOVEMENTS



# Air Traffic Statistics

## By month

### PASSENGER MOVEMENTS

NO. OF PASSENGER MOVEMENTS



### AIR FREIGHT MOVEMENTS

TONNES OF AIR FREIGHT



### COMMERCIAL AIRCRAFT MOVEMENTS

NO. OF COMMERCIAL AIRCRAFT MOVEMENTS



# The Changi Air Hub

It was a milestone year in FY12/13 for Changi Airport, which welcomed an unprecedented 52 million passengers – a significant leap from the eight million passengers registered in 1981, the year Changi Airport opened.

Now a renowned air hub serving over 100 airlines linking Singapore to some 250 cities across 60 countries, Changi Airport sees more than 6,500 flight take-offs and landings every week. As one of the world's busiest international air hub, Changi continues to strive to expand its network and connectivity, to offer the best flight options to the discerning world traveller.

## CROSSING THE 50 MILLION MARK

Barely two years after it set the record of 40 million passenger movements, Changi Airport achieved yet another milestone when it registered a new all-time high of 52 million passenger movements for FY12/13.

Representing an 8.3% increase in passenger traffic over the previous year, the increase was underpinned by steady travel demand to and from Southeast Asia, Northeast Asia and South Asia. Indonesia remained the top country market for Changi Airport, while there was double-digit growth for Thailand, Japan and China, accentuating Changi's position as a key hub in the Asia-Pacific region.

In tandem, aircraft movements grew 5.5% to register a total of 328,000 flights for the year, or a growth of about 300 scheduled flights each week. While a significant proportion of this growth was contributed by flights within Asia-Pacific, Changi Airport also added services to long-haul markets such as Europe.

During the year, Changi Airport welcomed five new airlines to Singapore – AirAsia Philippines, Drukair, Mandala Airlines, Scoot and Shenzhen Airlines. The introduction of Drukair's direct service from Bhutan to Singapore not only established direct air links between the two countries, it also made possible a same-day arrival for travellers from Singapore. Singapore is just one of five countries to be linked to the Himalayan nation by air.

Back home, Singapore Airlines launched Scoot, its much-awaited low-cost arm focused on medium-haul routes. Further north, the commencement of services by Shenzhen Airlines at Changi Airport has provided more options for those heading for China via the airline's extensive network in the south and east regions of China.

In terms of connectivity, Changi Airport expanded its network of passenger city links by adding six new points – Taiyuan (China), Gold Coast (Australia), Kota Bharu (Malaysia), Paro (Bhutan), Visakhapatnam (India) and Iloilo (Philippines). Of these, the launch of direct services by SilkAir to Visakhapatnam brought Changi's connectivity to India to 12 cities, strengthening its position as the

**01.** Her Royal Highness Princess Chimi Yangzom Wangchuck, the eldest princess from the Bhutanese Royal Family, graced the ceremony celebrating Drukair's direct service between Singapore and Bhutan.

**02.** Scoot launched its services in June 2012, with Sydney as its first destination.



In a holiday mood?  
Scoot off from Changi Airport.

CHANGI  
airport singapore



Tiger's Nest Monastery  
Himalayan Mountains  
Bhutan

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airline of bhutan

CHANGI  
airport singapore

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SICHUAN AIRLINES

每日成都双流国际机场直飞香港有两趟航班从樟宜机场飞往南宁，  
在中国广西，南“绿城”之称的南宁拥有30年，在现代化的同时，还拥有美丽的  
文化遗产生动及独特的自然美景。南宁一游，再让您的旅程丰富多彩。 定了机票多留意  
官网及 [www.sichuanair.com](http://www.sichuanair.com) 或拨打中国服务热线400 9073。

The Perfect Balance of Serenity and Technology.  
Changi Airport Welcomes the Japan Airlines Boeing 787 Dreamliner.

JAPAN AIRLINES

CHANGI AIRPORT

Changi Airport is pleased to bring you Singapore's latest Boeing 787 Dreamliner experience with Japan.  
This aerobically aircraft is a pinnacle of advanced technology. With state lighting that glows from the jet to  
to the sky like strands of sunlight and an extra spacious cabin with a lot larger windows, Dreamliner will bring  
from Japan Airlines Boeing 787 Dreamliner experience starts from 14 October and will be progressively added  
Japan Airlines' main daily service to Kuala Lumpur and daily service to Kota Bharu. Visit [www.jal.com](http://www.jal.com) for more.

Some of CAG's marketing efforts to celebrate new routes and airlines at Changi Airport during the year.

# The Changi Air Hub

most connected Southeast Asian airport to South Asia. Likewise, with Scoot's commencement of direct services to Gold Coast, Changi Airport is now linked to seven cities in Australia, serving as a key gateway from Southeast Asia to the Southwest Pacific region. Scoot also launched new direct services to Tianjin, Qingdao and Shenyang, which makes it easier for passengers to travel between Singapore and these cities.

## PARTNERING FOR A COMMON GOAL

During the year, Changi Airport Group (CAG) continued to build awareness of newer destinations and routes served at Changi Airport. These activities were undertaken in collaboration with airlines, travel trade and tourism authorities through various marketing initiatives in the local and overseas markets. Through these close partnerships, CAG hopes to create new opportunities for growth, both for Changi Airport as well as its partners.

CAG rolled out its free-to-download Weekend Escapades mobile app. Featuring easy-to-digest, bite-sized information on the sights, sounds and activities in 30 cities of 11 neighbouring countries, the app aims to provide inspiration to Singapore residents on the less-trodden destinations within a five-hour flight radius of Singapore for a weekend getaway.

With the increasing trend of passengers making their own flight reservations on different carriers on one itinerary, CAG, in partnership with SATS, rolled out a facilitated transfer service, Changi Connects, for passengers travelling on low-cost carriers, saving connecting passengers the hassle of passing

through immigration, and collecting their checked baggage for re-check-in. Through this enhanced service, transferring passengers enjoy a truly seamless journey when travelling through Changi Airport. This innovative service is currently offered through Scoot and Tigerair, with discussions on-going to bring this to more passengers travelling on other airlines.

## BUILDING A RESILIENT AIR CARGO HUB

With the economic uncertainties in the Euro zone, coupled with a slowdown in the United States and China, global airfreight volumes declined by 1.9% in 2012. As an international air cargo hub, Changi Airport was similarly affected and it closed the year with 1.8 million tonnes of airfreight handled, a 1.4% decline compared to the previous financial year.

Even under the challenging external economic conditions, Changi Airport added two new cargo city links to its network – Almaty in Kazakhstan and Dammam in Saudi Arabia – bringing Changi's total number of freighter city links to 58.

To reduce its risk to external factors and build resilience in the cargo business, CAG has been actively developing niche cargo segments such as pharmaceuticals, perishables and express cargo as part of its diversification strategy. For instance, it has been actively marketing SATS Coolport@Changi, an on-airport facility where temperature-sensitive cargo can be handled with minimum risk of exposure. This facility, coupled with CAG's marketing efforts, has contributed to a 3.7% and 6.3% growth in perishables and pharmaceuticals volumes respectively.

01. Changi Airport handled 1.8 million tonnes of air freight in FY12/13.



CAG also welcomed the opening of FedEx Express' South Pacific Regional Hub within Singapore's Air Cargo Express Hub area. Operational in October 2012, the 2.6 hectare integrated facility serves the Singapore market and is a trans-shipment point for the express player's Asia-Pacific shipments in and out of Australia, New Zealand, and Southeast Asian markets. The centre's ability to sort up to 12,000 packages in an hour doubles its previous throughput, boosting Changi's express cargo handling capability.

To further support the cargo industry, which has faced headwinds due to persistently high fuel prices and declining airfreight demand worldwide, CAG extended its support for the sector by pledging an additional S\$17 million cargo support package for FY13/14. The new package included increased freighter landing rebates, up from 20% to 50% for the period from 1 April to 31 December 2013, which would be adjusted to 30% for the first quarter of 2014. The support package also provided partnership funding support for new cargo initiatives undertaken with CAG, as well as an extension of 20% rental rebates for cargo tenants leasing CAG cargo facilities at the CAC.

#### DEVELOPING THE BUSINESS AVIATION SECTOR

Over the past few years, business aviation in Singapore has grown significantly, with aircraft movements achieving a compounded annual growth rate of about 18.0% from 2008 to 2012. For FY12/13 however, the growth trend has tapered, in light of the weaker global economic climate that has impacted the business aviation sector as well. The longer term outlook for this market however remains largely positive in view of steady aircraft sales forecast for the coming years and Singapore's continued efforts to enhance its attractiveness as a tourist destination and MICE (meetings, incentives, conventions and exhibitions) venue of choice.

As part of CAG's strategic plan to strengthen Singapore's position as the premier aerospace hub in the region, Seletar Airport – also operated by CAG – and its surroundings are being developed into the Seletar Aerospace Park (SAP) under a multi-year upgrading plan that commenced in 2008. Following the extension of the airport's runway in September 2011 and the establishment of a new control tower and fire station in January 2012, the focus has turned to infrastructure upgrading works at the East apron area, including constructing new taxiways and parking stands. In early 2013, 21 additional parking bays were completed and operationalised, bringing the total number of parking stands at Seletar Airport to 58.

Beside airport infrastructure upgrades, significant effort has also gone into policy reviews to improve Seletar Airport's economic model. A key policy change implemented in October 2012 was the revision of Seletar Airport's landing and parking charges, to better reflect the economic costs of operating the airport.

In the coming year, users can expect exciting developments that will further strengthen Seletar Airport's capabilities, including the addition of a new Instrument Landing System that will facilitate airport operations even in low visibility and poor weather conditions,

as well as building a Ground Run-Up Enclosure (GRE) at the East (North) apron area. Both of these are expected to be completed by end-2014. The GRE will support the requirements of the maintenance, repair and overhaul (MRO) companies operating at the SAP for conducting aircraft engine run-ups, while mitigating the noise impact to surrounding tenants as a result of such activities.

In addition, Seletar's Airport Emergency Service (AES) incident response capabilities will be further enhanced with the building of a new AES fire training ground by end-2014 to hone the proficiency level of the airport fire-fighting and rescue team.

With these enhanced capabilities and infrastructure, Seletar Airport is well-poised to support the growth of Singapore's business aviation and MRO sectors, and at the same time tap the opportunities arising from growing air travel demand in Asia.

02. Changi Connects – a new facilitated transfer service provided by CAG.



# The Changi Experience

For over 30 years, passengers and visitors have lauded the exceptional airport experience at Changi Airport. Consistently delivering this experience, defined by the Changi Service DNA – personalised, stress-free and positively surprising – remains a focus for Changi Airport Group (CAG). World-class airport facilities, efficient operations and excellent service will continue to be the cornerstones of Changi's success.

An affirmation of the commitment and efforts of the entire airport community, Changi Airport received a total of 28 Best Airport awards for the year. Changi was also named the World's Best Airport by Skytrax in April 2013 – one of the most coveted awards in the aviation industry. This was the fourth time that Changi has achieved this honour. *Business Traveller* also bestowed on Changi the Best Airport in the World award for the 25th time consecutively, an unprecedented achievement in the magazine's awards history. Changi Airport has received more than 430 awards since it welcomed its first travellers in 1981.

## MILESTONES IN CHANGI'S HISTORY

### Closure of Budget Terminal

Changi Airport bade goodbye to an integral part of Singapore's aviation history on 25 September 2012 when the Budget Terminal (BT) closed its doors after handling some 18 million passenger movements and 150,000 flight movements since 2006.

The terminal was demolished to make way for a bigger passenger terminal, Terminal 4, so as to cater to the continued growth of air traffic at Changi Airport and to strengthen Singapore's air hub status.

Airlines that operated at the BT – Berjaya Air, Cebu Pacific, Firefly, Mandala Airlines, South East Asian Airlines and Tiger Airways – moved to Terminal 2. Prior to the move, various enhancements were made to the facilities at Terminal 2 to ensure that passengers continue to enjoy high service levels. For instance, more automated immigration gantries were installed in the Departure and Arrival Immigration areas. Taxi waiting areas in the Arrival Hall were expanded, with additional taxi bays constructed to accommodate the higher number of arriving passengers.

CAG also worked closely with its airline partners, ground handlers and service staff to prepare them for the move. This included training conducted for airport staff to ensure that they were ready to operate in Terminal 2. A reassignment of check-in counters for existing carriers in Terminal 2 was implemented to accommodate

the new airlines. In addition, CAG also engaged key partners such as the Immigration & Checkpoints Authority, Singapore Customs and Certis CISCO to ensure that there was adequate manpower on-the-ground during peak hours.

### Fresh new look for Terminal 1

Opened in 1981, Terminal 1 is the oldest of Changi's family of terminals. With the upgrading of Terminal 2 completed in 2006 and the opening of Terminal 3 in 2008, Terminal 1 underwent its biggest upgrading in 2008, so that passengers continue to enjoy the same high quality experience across all of Changi's terminals.

Developed with the thematic concept of a 'Tropical City', the upgraded Terminal 1 now sports a fresh and rejuvenated look with luscious landscaping that befits its status as Changi's Grand Dame. The upgrading works took place over 38 months at a cost of S\$500 million.

With the aim of improving the airport experience for passengers, improvements were made to both the façade and terminal facilities. The terminal's interior design and finishes were refurbished and passenger flow improved at key areas such as the Departure Check-in Hall, Departure Transit Mall and Arrival Hall. A total of 22,000 sqm of space was added to the terminal building, bringing the total floor space of Terminal 1 to 308,000 sqm. This has resulted in greater spatial comfort for passengers with wider thoroughfares, additional facilities and increased retail and F&B offerings.

There were many challenges faced by Changi Airport Group (CAG) while upgrading works were in progress. As Terminal 1 remained operational throughout the upgrading period, works had to be done in phases to keep inconvenience to a minimum. Hoardings were insulated and works with high noise levels could only proceed during off-peak hours and at night. The project took about 1.5 million man-hours with work going on round the clock to ensure that the upgrading works progressed smoothly. There were about 385 workers at the height of construction.



A more vibrant look for the newly rejuvenated Terminal 1 – the grand dame of Changi Airport.

# The Changi Experience

01



Taking pride of place in Terminal 1's Departure Check-in Hall is *Kinetic Rain*, the world's largest kinetic art sculpture. Specially commissioned for Changi Airport, *Kinetic Rain* has enthralled many passengers and visitors with its mesmerising dance since the unveiling in July 2012. Made up of a total of 1,216 bronze droplets, *Kinetic Rain* comes as a pair, installed several metres apart from each other and visible from many areas in the Departure Check-in Hall.

Since the completion of the refurbishment, CAG has received many compliments about Terminal 1's fresh makeover, with considerable improvement in monthly passenger survey scores given to the terminal.

## IMPROVING OPERATIONAL EFFICIENCIES

Amidst Singapore's tight labour situation, it is increasingly a challenge to recruit good staff for Changi Airport. In 2013, CAG established a Productivity Council to pursue initiatives to boost productivity levels and improve efficiency standards within the airport community.

### Towards self-service

One of the major projects undertaken by CAG during the year was the successful migration of the Common Use Terminal Equipment

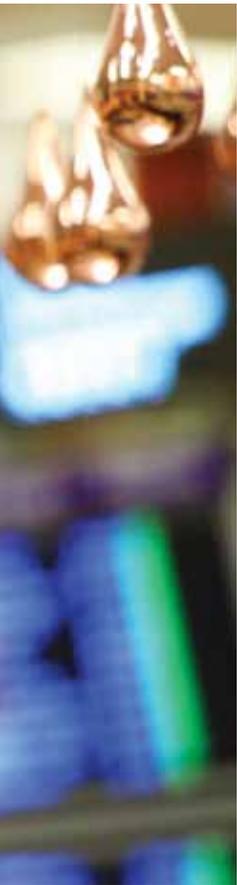
(CUTE) system for check-in, transfer and boarding operations at Changi Airport.

In partnership with SITA, a leading player in the air transport industry, and with the support of airline and ground handling partners, the smooth migration to an enhanced platform has seen more than 450 check-in counters and 111 boarding gates at Changi equipped with the CUTE system.

The new platform supports both agent-assisted and self-service passenger processing, including the automatic verification of passengers' paper and mobile bar-coded boarding passes to better facilitate the flow of passengers through airport security. The new CUTE partnership has also bundled in self-service initiatives to entice and encourage airlines to adopt self-service measures in the near future at Changi Airport, thereby achieving better efficiency and productivity gains.

### ONE CHANGI

To boost productivity through the innovative use of technology, CAG developed ONE CHANGI, a new centralised platform designed to facilitate collaboration and information sharing with CAG's tenants and airport partners. In addition to consolidating



02

03

**01.** A most welcoming sight – Kinetic Rain at Terminal 1's Departure Hall, the world's largest kinetic art sculpture.

**02.** Self-service check-in counters at Terminal 3.

**03.** Our award-winning Instant Feedback System.

feedback and enquiries from the public across all customer touchpoints, the platform tracks and monitors the responsiveness of CAG's own operations divisions, tenants and partners in their communications with customers.

ONE CHANGI provides the means for the whole Changi Airport community to work closely together to respond to its customers as "one Changi" despite the presence of more than 200 partners and agencies at the airport. Concurrently, the platform also ensures that productivity and quality of services are managed at a consistently high level.

At the heart of ONE CHANGI is the SWIFT, or Service Workforce Instant Feedback Transformation, solution. It comprises two components – the Instant Feedback System (IFS) and e-Inspection.

Through the IFS, CAG is now able to gather real-time feedback from customers and provide corrective actions efficiently. The IFS is deployed at key touchpoints such as information desks, retail outlets and essential facilities such as washrooms. Through an interactive screen, passengers and airport users can rate their service experience and the feedback is channelled immediately to the supervisor.

Leveraging the information tabulated from the system, good performers can be commended while those who need improvement would be sent for re-training or even counselling, thus increasing the level of service quality throughout Changi.

At Changi's retail outlets, the feedback gathered measures customer satisfaction in areas such as customer service, product knowledge of staff, waiting times, product range and price. The data collected allows the retail tenant to adjust its business strategy to better serve customers.

Today, the IFS is deployed at over 660 locations across Changi Airport's terminals. Since its implementation in 2011, the volume of feedback received throughout the entire airport has increased by more than 5,000 times. Today, Changi receives more than 1.5 million feedback every month, with close to 90% of these positive.

e-Inspection, the second component of SWIFT, enables timely responses to facility faults within all terminals through real-time inspections and service recovery by service teams. The system also enhances the productivity and service recovery of frontline staff such as washroom attendants, estate management officers and other service personnel with more streamlined work and processes.

# The Changi Experience

With the use of SWIFT application, deployment of cleaners is now better optimised at higher efficiency. This initiative has seen an improvement in productivity and a reduction in headcount of about 5%. The automation of inspection processes and digitisation of reports have also seen a reduction in the amount of paper used, resulting in higher savings achieved across all terminals.

With ONE CHANGI solution, and in particular SWIFT, all 32,000 members of the airport community can respond to feedback and service disruption in an expeditious manner. This ensures that the quality of the Changi Experience for passengers and customers continues to be maintained at high levels consistently.

CAG's winning innovation has been recognised with a hat trick of IT awards, including the prestigious 2012 National Infocomm Awards for the most innovative use of technology in the private sector.

## **SWEET service delivery**

Aimed at improving service delivery amongst the airport community, a mobile application for iPads has been developed to equip service staff with ready information at their finger tips, providing them with an essential tool to access real-time operational data that will improve the service quality rendered to passengers and airport visitors on the terminal ground.

Known as Service Workforce Empowerment & Experience Transformation (SWEET), the mobile application provides service staff with content that includes latest flight information, resource planning, operational reports and even a 'chat' function, allowing real-time discussion amongst staff in the dynamic operating environment of Changi Airport.

## **THE DIGITAL CHANGI EXPERIENCE**

The successful launch of the original iChangi mobile app in 2010 has proven hugely popular among Changi's passengers and visitors, with more than 1.3 million downloads and an average of more than 1.5 million uses every month. The steady increase in usage shows that iChangi is becoming one of the must-have apps in Singapore.

The success of the iChangi mobile app, and the desire to meet the needs of a technologically-savvy audience, spurred the development of the iChangi HD app for the iPad. Launched in October 2012, the iChangi HD app offers users a suite of enhanced functions with improved visual quality.

Similar to its mobile equivalent, the iChangi HD app provides users with real-time access to flight information, terminal maps and information about Changi's retail outlets and F&B eateries. Through the app's push notification functionality, passengers will also be kept updated about real-time flight information while on-the-go.

Understanding how unfamiliarity can add to stress levels for travellers, iChangi HD's enhanced interactive maps help to ensure a smooth and hassle-free travel experience for passengers as

they navigate around the airport with ease. Airport visitors will also find the app useful as it also comes with information about travel deals, retail and dining promotions. The app also offers high-quality 360-degree visuals of popular facilities and attractions at Changi Airport, providing passengers and airport visitors with a gamut of choices on things to do. The application has, to date, been downloaded more than 50,000 times.

## **NEVER A DULL MOMENT AT CHANGI**

Beyond the state-of-the-art airport facilities and efficient service at Changi Airport, the multitude of events and activities continue to charm passengers and visitors, enhancing the lively airport experience.

## **Multicultural festivities galore**

The wildly popular Angry Birds theme made a comeback to Changi last December. Based on the Angry Birds Space theme, Changi Airport was transformed into an outer space playground during the Christmas period, with all three terminals fully decked out in cheerful space-inspired festive decorations.

A giant Angry Birds spacecraft measuring 13 metres long and three storeys high took centre stage at the Terminal 3 Departure Hall. It "took off" daily with an interesting display of interactive lighting and sound effects. There was even an astronaut who emerged from the top of the spacecraft every hour! With special Angry Birds space-augmented reality markers located onsite, many visitors had their photos taken by professional event photographers, and created their own Angry Birds e-greeting Christmas cards.

There were also plenty of fun-filled activities for children. Terminal 3 Departure Check-in Row 11 was transformed into an Angry Birds Space Lounge that featured four different play areas for children aged three to 12 years old. Over at Terminal 3 Basement 2, families also participated in Christmas workshops, and tried their hand at creating Angry Birds Space memorabilia as a souvenir of their visit to Changi.

Local festivals such as Lunar New Year, Hari Raya Aidilfitri and Deepavali were also celebrated at Changi Airport with colourful horticultural displays. These have proven hugely popular among photo enthusiasts through the years, and have continued to add a touch of surprise, enhancing the overall airport experience for all passengers and visitors.

## **SERVICE EXCELLENCE**

A hallmark of the Changi Experience, service excellence continues to be at the core of every service interaction performed by the 32,000-strong airport community.

## **Airport Service Awards**

As a major feature of CAG's quality service management programme, the Changi Airport Service Awards were introduced in 1994 and have remained an important platform to recognise individuals and teams for their dedication and commitment towards outstanding service every year. To reward and motivate

exemplary members within the airport community, CAG hosts this annual awards ceremony to pay tribute to airport staff with exceptional service acts.

The 2013 ceremony, held on 26 February, was graced by Transport Minister Lui Tuck Yew, who presented a total of 21 Changi Airport Service awards to outstanding frontline personnel in five categories – Changi Airport Service Personality of the Year, Outstanding Service Staff, Outstanding Service Team, Outstanding Custodial Staff and a new category, Service Partner of the Year.

The inaugural Service Partner of the Year award was presented to the Immigration & Checkpoints Authority (ICA) Airport Command.

The agency received one of the highest number of compliments across all airport partners, with much focus in its efforts to motivate its officers and to provide tourists and local residents with exemplary service.

A firm believer in the importance of building a strong service culture at Changi, CAG has established a wide range of training programmes, awards and incentives initiatives to equip and encourage the continuous delivery of quality service at Changi. All of these serve to ensure that the tens of millions of passengers who pass through the airport every year will continue to enjoy the first-class Changi Experience.



**01.** Airport frontline staff utilising SWEET to ensure a first class experience for passengers.



**02.** The iChangi HD application promises to improve the airport experience for Changi's passengers and visitors with enhanced features.

**03.** A giant Angry Bird spacecraft took centre stage at the Terminal 3 Departure Hall, for Christmas 2012.

# World-Class Retail

The retail business at Changi Airport has always been of strategic importance to Changi Airport Group (CAG) – both as a key revenue stream, as well as a critical part of the airport experience. Throughout the year, CAG continued to refresh the retail mix to rejuvenate the shopping experience, introduce new brands, advance the levels of customer service and organise even more exciting events and activities for shoppers. Believing that success is achieved along with partners, CAG worked to strengthen its partnership with concession tenants, striving to make Changi Airport the ideal business destination for tenants to operate in.

It was another record year for Changi Airport's retail operations in FY12/13. Concession sales for the year grew by more than 10% to over S\$1.9 billion, an all-time high, strengthening Changi Airport's position as among the top four airports in the world in terms of annual retail sales turnover. This was the third consecutive year of sustained healthy growth after the global recession in 2009.

The strong sales growth was supported by robust growth in passenger traffic, which saw a year-on-year increase of 8.3%. In addition, enhanced retail and dining offers as well as a series of exciting shopping promotions and events also helped increase footfall to the airport and boost spending.

## A SHOPPING DESTINATION FOR THE WORLD

Changi Airport offers a wide spectrum of retail and dining offerings at different price points to cater to the needs and demands of all passengers and visitors. To keep shopping at Changi fresh and exciting, CAG continued to pursue new brands, as well as exclusive and first-launched products. More than ten brands were added to the transit malls, including an M&M's concept store, Luvenus gold jewellery outlet, TWG Tea boutique and Loro Piana's finest cashmere and wool apparels. Food connoisseurs were not forgotten with new F&B openings such as Green Market Express, BriccoCafe and The Connoisseur Concerto (tcc).

When the Budget Terminal was closed in September and its airlines were relocated to Terminal 2, the retail mix at the terminal was reviewed to cater to the increase in passenger numbers and the change in travellers' profile, with more emphasis given to full-meal concepts such as Chinta Manis, Macau Express and Delifrance. On the retail front, mass market favourites such as Charles & Keith, a local women's fashion brand, was also added.

Airport visitors who are not flying find delight shopping and dining in the public areas of Changi Airport as well. The revamp of Terminal 3 Level 3, completed in July 2012, saw the introduction of two anchor retail tenants, The Planet Traveller, the world's largest lifestyle travel store, and Electronics Hub @ T3. The terminal now houses a kids' indoor playground, entertainment and gaming arcades, a video store,

**01.** With more than 120 F&B outlets, passengers can indulge in a myriad of cuisines, like authentic Italian food at BriccoCafé at Terminal 1 Departure/Transit Mall.

**02.** Luvenus – a 24-hour gold concept store located at Terminal 2 Departure/Transit Mall retails a wide selection of gold jewellery, coins and bars.





TWG Tea boutique at Terminal 2 Departure/Transit Mall offers a collection of tea from virtually every tea producing country in the world.

# World-Class Retail

01



a foot and back massage service outlet, a travel agency, as well as a good range of F&B offerings, leaving airport visitors and passengers spoil for choice.

A slew of new brands also marked their footprints at Changi Airport during the year, including iSound (electronics and accessories), Vignette (high-end fashionable eyewear), La Famille (apparel and accessories for parents and children), Sophisca (candies), Umeya (snacks and tidbits), Gelateria Italia (ice-cream), Gong Cha (tea and beverage), and Central Thai restaurant.

Besides creating the best retail experience for shoppers and diners at Changi Airport, CAG also strives to take its world-class visitor experience beyond the airport. During the year, CAG introduced 'Changi Recommends'. These tourist booths in the airport's arrival halls offer exclusive deals for the best signature experiences of Singapore. The deals, which are carefully handpicked, include visits to must-see attractions such as Universal Studios Singapore, Singapore Zoo, Night Safari, and the Singapore Flyer.

Today, Changi Airport has more than 350 retail stores and 120 F&B outlets across its three terminals to serve passengers and visitors from across the globe.

## A WORLD-CLASS TRAVEL RETAIL EXPERIENCE

During the year, CAG built on the success of past shopping initiatives and promotional events, with focus placed on injecting vitality and excitement for shoppers. Such innovative and exciting promotions help create buzz and value for shoppers, yet at the same

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time raise global awareness and interest in Changi as a leading travel retail destination.

CAG's two anchor promotions during the year, the 'Be a Changi Millionaire' lucky draw and Angry Birds Space-themed Christmas promotion received overwhelming response and participation from visitors. Aside from the thrill of possibly becoming a millionaire overnight, the third run of the 'Be a Changi Millionaire' promotion saw shoppers enjoying the additional excitement of winning instant prizes such as cash vouchers and travel accessories. Since its debut in 2010, 'Be a Changi Millionaire' has gained much traction, receiving a record 2.1 million participating entries in 2012, supporting concession sales which saw stronger sales growth during the promotion period.

Changi Airport's 2012 year-end festive shopping promotion gave shoppers the opportunity to redeem Angry Birds Space plush toys with a minimum spend at the airport. The promotion enjoyed great success, with more than 310,000 plush toys redeemed over a two-month period. More than 35,000 participants, comprising both children and adults, also participated in the Angry Birds Space Life-size Catapult Game Station, which distributed creative memorabilia of Angry Birds Space characters, including 3-D models, clocks and tote bags that visitors brought home as souvenirs. An activities zone, complete with workshops and fringe activities, was also set up at Terminal 3.

Events and activities were organised during the school holiday periods, to create more awareness of destinations connected to Changi Airport such as South Africa, Russia and Bhutan.

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- 01. The Planet Traveller – the world's largest lifestyle travel store at Terminal 3.
- 02. The Electronics Hub @ T3 offers a comprehensive range of digital gadgets and electronics.
- 03. Gelateria Italia outlet at Basement 2 of Terminal 3 has a mouth-watering spread of delicious flavours of gelato, sorbets and sherbets.
- 04. Mr Peh Hock Peng – the grand winner of 'Be a Changi Millionaire' 2012 Grand Draw.
- 05. 'Changi Recommends' tourist booths in the airport's arrival halls offers exclusive deals for the best experience in Singapore.

Through exhibitions and activities, airport visitors were able to catch a glimpse of each destination's top attractions such as viewing displays of South Africa's safari, ice-skate in a 'Moscow Red Square' rink or trying their hands at archery, Bhutan's national sport.

Changi Rewards, the airport's shopping loyalty programme, received a brand new look on its members' portal, featuring exclusive discounts, attractive monthly deals, news on the latest happenings at the airport and monthly contests. The programme continued its strong growth and recorded a strong membership increase of 40% and sales per active member growth of 20%.

Visitors to Changi Airport get to enjoy 7% GST savings on their purchases at almost all retail outlets all year round, even when they

are not travelling. The popular 'Save 2 x 7% GST on Shopping' promotion at Changi's public areas was brought back for a third run in the third quarter of 2012, proving again to be a hit among shoppers. This promotion reinforced the value proposition of shopping at Changi by offering an additional 7% savings on top of the GST absorbed prices.

#### FUTURE GROWTH

The travel and retail landscape is fast-changing and CAG needs to be nimble to stay ahead. Terminal 4 is under construction and planning for a multi-use complex at Terminal 1, Project Jewel, is also underway. These two projects will expand Changi Airport's capacity and are developed to meet future growth of the Changi air hub.

# World-Class Retail



When the new Terminal 4 is completed in 2017, the terminal will house a wider range of and more retail offerings, and passengers can expect a retail experience comparable to the three main terminals. Project Jewel will also offer passengers and visitors a wider range of travel-related services and facilities, exciting attractions, as well as attractive retail and lifestyle offerings.

## **STRONG SUPPORT FOR CONCESSIONAIRES**

CAG believes in succeeding with its partners, and a strong relationship with tenants is vital to the growth of the airport. To work with the concessionaires more closely, CAG rolled out an electronic Tenant Portal which allows CAG to share regularly airport information and upcoming initiatives electronically. At the same time, the Tenant Portal allows concessionaires to gain access to real time information – such as scores from customer satisfaction surveys and ratings from the Instant Feedback System – so as to better monitor their own service performance for continuous improvement. Concessionaires can also access information on leasing, marketing events and airport initiatives in the pipeline to identify suitable opportunities to work together with CAG in boosting sales.

The portal also includes Outlet Inspection and Electronic Application for Renovation Permit (e-Renovation) functions, enabling CAG's operational processes to be more streamlined and enhance productivity among all stakeholders. For instance,

concessionaires can report an outlet's operational issues through the portal, which is then channeled to the relevant divisions in CAG for investigation. Through the e-Renovation portal, concessionaires can track the status of their renovation permit application on a real time basis, as well as save on the time and cost of submitting multiple hard copies.

As part of CAG's technology and productivity innovations, a new generation Point-of-Sales system was also developed to improve the cashiering process and efficiency in Changi Airport. The new system, which has been rolled out progressively from March 2013, has enhanced product promotions, and also inventory management. It will be fully integrated to support the Changi Rewards programme, and thus offer loyal shoppers a more seamless experience in enjoying their member benefits.

Besides developing collaborative partnerships and enhancing productivity through providing innovative solutions, CAG is also committed to extend full marketing and publicity support to its retail partners to drive footfall and sales. Such marketing and publicity efforts range from providing on-ground promotional signage to innovative publicity strategies via social media and digital platforms such as Facebook, Twitter, electronic direct mailers and websites, to drive traffic to shops and dining outlets.



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01. Retail and dining outlets at Basement 2 of Terminal 3.

02. Changi Airport organised the 'Fascinating Russia' exhibition at Terminal 3 Departure Hall during the school holidays in March 2013.

## RENTABLE PROPERTIES

CAG leases over 1,500 non-concession rentable premises in the Passenger Terminal Buildings (PTB) and Changi Airfreight Centre (CAC) as well as manages over 60 long-term land leases in Changi Airport.

While the airport experienced a relatively fruitful year, there were some challenging moments as well. Some PTB tenants rationalised and downsized their sizeable rented premises whilst air cargo occupancy plateaued due to dampened air cargo volumes passing through Changi Airport, amidst the economic uncertainty in many parts of the world.

CAG managed to replace occupancy of some of these PTB premises through early and active engagement with other potential tenants within the airport community. Some of these engagements involved a sizeable increase in space by existing tenants or potential new take-up of premises, which would accrue benefits to CAG in subsequent years. As part of the yearly review and benchmarking of rental rates in Changi Airport, CAG revised the rental of selected premises within the PTBs during the start of the financial year. This helped to uplift office rental revenue for the year.

To further drive revenue and increase occupancy in the CAC buildings, CAG tapped the air cargo agents' business networks

to reach out to the wider marketplace. The programme offered referral incentives to existing CAC tenants who successfully referred a non-existing prospective tenant to lease office premises in CAC. The programme proved to be successful, garnering a contracted rental contribution of S\$345,000 from successful referrals. Meanwhile, warehouse occupancy level remained relatively stable at close to 90% whilst the Megaplex warehouse premises continued to enjoy 100% occupancy.

On the land lease front, CAG was in active discussions with Maintenance, Repair and Overhaul players and government agencies regarding land parcels within Changi Airport to support the long-term growth of this industry in Singapore.

Changi Airport Fuel Hydrant Installation, the supplier of fuel to all aircraft at Changi Airport, also intensified the use of its existing land to expand its operations in Singapore. This increased CAG's rent revenue during the financial year. In total, aeronautical and non-aeronautical rental revenue rose 4.2%, compared to the same period last year, to reach an all-time high of S\$125 million. This revenue increase was made possible through a deliberate effort to engage the airport community early in assessing real estate needs and adopting more business-friendly dialogue. These engagements also promoted a stronger airport community spirit, marked by the celebration of festive holidays in the Cargo Agents Buildings, Megaplex and CAG-Air Freight Terminals.

# Safety & Security

As an airport trusted by crew and passengers alike, safety and security are of utmost importance at Changi Airport, with no room for compromise. As the operator of Changi and Seletar Airports, Changi Airport Group (CAG) plays an important role in keeping both airports safe and secure throughout their daily operations. Upholding strict safety and security standards in all aspects of operations within the airport community are CAG's Aerodrome Safety Unit, Airport Emergency Service and Aviation Security Unit.

## AERODROME SAFETY UNIT

The Aerodrome Safety Unit (ASU) works closely with the aerodrome safety regulator and operational divisions to ensure that safety is maintained at the highest level. The unit oversees the effective implementation of CAG's Safety Management System and ensures continued compliance with regulatory safety requirements at both Changi and Seletar Airports.

As the aerodrome operator, CAG is required to maintain proper certification. The regulator performs annual audits on both Changi and Seletar Airports, validating CAG's competency in safely maintaining and operating the aerodromes.

In preparation for the renewal of its aerodrome certificate, ASU worked with a consultant from the International Civil Aviation Organisation (ICAO) and conducted a comprehensive internal safety audit on operational divisions to ensure that their safety management capabilities remained robust.

In 2012, the International Federation of Air Line Pilots' Associations (IFALPA) once again rated Changi Airport deficiency-free, which means that Changi Airport holds the proud record of having received a deficiency-free rating every year since its opening in 1981. The attainment of the rating and Changi's remarkable 32-year achievement is affirmation of the airport's steadfast commitment to aviation safety through the provision of a safe and efficient airport environment.

Additionally, ASU completed a review of CAG's Safety Management System framework to strengthen the company's approach to safety and health at the workplace. As a result, a better and more co-ordinated risk management framework was implemented. The awareness of CAG's staff of workplace safety was heightened through briefings and training sessions organised by ASU.

ASU also plays a crucial role in inculcating a safety culture among the airport community. To continuously foster such a strong culture within CAG and the wider airport community, ASU conducted safety briefings and disseminated safety messages, through posters, newsletters and bulletins to staff of CAG and airport partners.





Airport emergency officers during training using the new aircraft rescue and fire fighting vehicles.

# Safety & Security



01. Screening by Certis CISCO's security officer at Departure Immigration (Photo courtesy of Certis CISCO Security Pte Ltd)

## AIRPORT EMERGENCY SERVICE

CAG's Airport Emergency Service (AES) is a highly trained specialist unit that is positioned to provide fast-action rescue and fire protection for Changi and Seletar Airports, as well as at the Republic of Singapore Air Force's airbases, in line with international aviation standards. AES is also responsible for overseeing of fire safety procedures and policies at both Changi and Seletar Airports.

During the year, AES began operations of a fleet of seven new Aircraft Rescue and Fire Fighting vehicles at Changi Airport. The unit also commissioned an Incident Command and Control Simulator which provides realistic and interactive simulations of emergency scenarios for the purpose of command training.

AES has also developed an internal digital system to ease labour-intensive work processes like fire safety inspection, incident reporting, logistic management and recording of its personnel fitness results. With the new system, data entry is now mobile-enabled with the use of tablet computers.

The unit continued to enhance its emergency preparedness and rescue capabilities with the successful staging of two drills – simulated aircraft crashes on land and at sea. Codenamed "Exercise Bear" and "Exercise Bobcat" respectively; they were Full Troop Deployment Exercises and were attended by more than 350 operational personnel, including senior management from CAG, the Civil Aviation Authority of Singapore (CAAS) and airline partners. The exercise validated CAG's crisis contingency plans and demonstrated AES' strong capability in coordinating rescue efforts involving both the airport community and mutual aid agencies.

On 12 March 2013, AES conducted an interactive fire safety seminar for the first time, which incorporated a terminal building

fire evacuation walk-through and a hands-on fire extinguisher training session at the Selarang fireground. AES proactively seeks to engage the airport community, educating them on fire safety and the importance of staying vigilant.

## AVIATION SECURITY UNIT

The Aviation Security (AvSec) Unit performs the key function of maintaining high standards of security management at Changi and Seletar Airports. It operationalises all airport security requirements and addresses security incidents, collaborating closely with agencies such as the Airport Police Division of the Singapore Police Force, Ministry of Home Affairs, Ministry of Transport, CAAS and security contractors.

Additionally, AvSec ensures that day-to-day security operations balance desired security outcomes with facilitation and operational needs. Strong aviation security is an important enabler for business operations that also provides a competitive advantage for airports like Changi. In the event of an emergency, AvSec also acts as a liaison between CAG's Crisis Management Group and the Singapore Police Force for ground operations and coordination.

As part of continuous efforts to improve security at Changi Airport, AvSec successfully spearheaded the launch of the integrated CCTV and Perimeter Intrusion Detection System in March 2012. As a result, the entire perimeter of the airport has become better protected, with any intrusion or suspicious activity swiftly detected with an accurate determination of the incident location. Changi Airport is the first airport in the world to utilise such sensor technology.

AvSec has also formulated a Quality Control (QC) framework to reflect CAG's strategic oversight and responsibility over its own security plans, maintenance of security equipment, systems and operations as well as security manpower contracts.

With the creation of an internal QC team, this framework also ensures that CAG fulfils its obligations as the designated Protected Area and Protected Places Authority for both the Changi and Seletar aerodromes. Taking a "whole-of-CAG" approach, the QC framework leverages various CAG resources in a collaborative manner to execute all the QC activities. More than 1,500 inspections and tests were conducted during the year, enabling AvSec to reduce security deficits and lapses.

CAG accomplished a proud milestone when it helped Singapore achieve zero findings in the second cycle of the ICAO Universal Security Audit Programme (USAP) in 2012. Focussing on the level of the State's oversight on the security regime and the various measures implemented at the airport, ICAO auditors were impressed by Changi Airport's robust and effective security regime. Besides achieving a marked improvement in the results from the last USAP audit in 2006, it was the best that ICAO had seen, confirming the competencies of AvSec in safeguarding the airport against threats and reflecting the cohesion between CAG and its partners.

# Future Changi

As the middle class in Asia continues to grow and demand for air travel rises, Changi Airport Group (CAG) must ensure that Changi Airport continues to be well-placed to cater to more passenger and aircraft movements in the decades ahead. To meet this objective, CAG has launched several initiatives to boost Changi's capacity and to strengthen its appeal as a major global aviation hub.

## PROJECT MANAGEMENT OFFICE FOR T4

In June 2012, CAG set up a dedicated Terminal 4 Project Management Office (T4 PMO) to oversee the planning and development of the terminal, expected to be operational in 2017.

Following a design competition from five consortia – comprising a good mix of local and international firms – submitting proposals, the award went to a consortium comprising SAA Architects Pte

Ltd, Benoy Ltd, AECOM Singapore Pte Ltd and Beca Carter Hollings & Ferner (SEA) Pte Ltd, which will pilot the overall design, architecture and construction of T4.

The T4 project team has been and will continue to engage stakeholders closely to develop new operational concepts and productivity enhancing initiatives that will make T4 even more efficient and cost-effective for airport users.



A double-volume Arrival Immigration Hall will welcome passengers at T4.

# Future Changi

## A PREVIEW OF T4

A terminal that will be built with passengers, airlines and airport staff in mind, T4 will have a planned capacity of 16 million passenger movements a year. The terminal – drawing from the full wealth of experience behind the building of Changi's other terminals – will be designed with the flexibility to meet the operational needs of both regional full-service and low-cost carriers, complete with passenger-friendly facilities such as aerobridges as well as attractive commercial offerings.

With close consultation with stakeholders and against the backdrop of increasing labour cost and manpower challenges, T4 will feature initiatives aimed at improving efficiency and manpower productivity. For instance, departure and arrival immigration control as well as pre-boarding security screening will be centralised for more efficient deployment of manpower and equipment.

In line with the trend of self-service options at airports around the world, provisions will be made for T4 to have more kiosks for self check-in, self bag-tagging and self bag-drops. The increasing use of these options will help airlines and ground handling agents reduce processing times and staffing requirement.

Baggage sortation at T4 will be fully automated to reduce reliance on scarce manpower. The baggage handling system will also be

equipped with ergonomic lifting aids to enable heavy and odd-sized bags to be handled with ease, even by older workers.

Construction of T4 will begin in the fourth quarter of 2013 and is expected to be ready in 2017.

## PROJECT JEWEL/TERMINAL 1 EXPANSION

Another major infrastructural development that will transform Changi Airport is the redevelopment of the car park fronting Terminal 1 (T1). On this three-hectare site, CAG envisages an iconic mixed-use complex to enhance Changi's offerings and strengthen its position as an international air hub.

Codenamed 'Project Jewel', the new mixed-use complex is envisaged to be a world-class, signature lifestyle destination that will strongly boost Singapore's tourism appeal. With easy access to the departure gates, the complex will offer aviation and travel-related facilities, a wide range of retail offerings, as well as unique leisure attractions.

Project Jewel will optimise limited land resource at Changi Airport. There will, for example, be a new multi-storey basement car park. As part of the redevelopment, T1's public areas will also be expanded to allow more space for aviation facilities such as the arrival hall, baggage claim areas and taxi bays.

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These enhancements will increase T1's passenger handling capacity to 24 million passenger movements per annum. When completed, Project Jewel, together with T4, will boost Changi Airport's handling capacity to 85 million passenger movements a year, to cater for Changi's growth into the next decade.

To be seamlessly connected to Terminals 1, 2 and 3, Project Jewel will serve as a node linking the terminals, improving inter-terminal connectivity. There are also plans for the complex to provide a central communal facility for the 32,000-strong airport community and new aviation facilities to support fly-cruise and fly-coach initiatives – important options to a rising number of inter-modal travellers,

Project Jewel is being designed to be architecturally iconic, with a stunning glass and steel façade that presents an impressive view of the complex – from both Airport Boulevard and the sky. A key feature of the complex being planned is a large scale, lush indoor garden, with a breathtaking waterfall. The design is being undertaken by a consortium of concept designers and architects led by Moshe Safdie of Safdie Architects and comprising Benoy and RSP.

### RAISING AIRFIELD CAPACITY

Concurrent with the development of T4, CAG also started major airfield works during the year to support the needs of airlines operating at Changi Airport.

A 38-hectare land plot south of Terminal 3 housing the airport nursery as well as a reservoir is being converted into an aircraft parking area with 17 narrow-body and nine wide-body remote aircraft parking stands. At the same time, an overhead vehicular bridge across Airport Boulevard will be constructed to enable buses and other airside vehicles to move from T4. When these new aircraft parking stands are completed in 2016, the total number of aircraft parking stands at Changi Airport would have increased by 24% to more than 180.

To increase the capacity of Changi's runways, the Civil Aviation Authority of Singapore (CAAS) has implemented several enhancement measures over the last year. These initiatives include the reduction of departure flight separation times, reconfiguring of flight routes and implementation of aircraft speed control for increased runway use efficiency.

In collaboration with NATS, the United Kingdom's air navigation service provider, CAAS commissioned a year-long study in 2012 to examine Changi's air traffic capacity potential and to identify



**01.** Project Jewel is an iconic mixed-use complex being planned at Changi Airport. It is envisaged to be a world-class lifestyle destination that will strongly boost Changi's attractiveness as an air hub.

**02.** Project Jewel is envisaged to be a must-visit Singapore attraction for tourists and a wonderful weekend destination for local residents.

# Future Changi

01



01. Several enhancement measures have been implemented to increase the capacity of the runways at Changi Airport.

measures that will increase runway and airspace throughput. Based on a projected air traffic growth of 5% per annum, the study found that Changi Airport will have sufficient capacity to meet anticipated growth for at least another five years.

In addition, CAG freed up runway capacity especially during peak periods by improving its runway inspection processes through the automation of checks for airfield lighting systems as well as investments in additional inspection resources. As a result, the time taken for runway inspections has been reduced by 45% and response time for removing any foreign objects found on the airfield has been significantly improved.

## NEW APRON AND CONTROL TOWER CCTV SYSTEM

An important aspect of aerodrome safety is the availability of cameras in the airfield to act as visual sensors for airport operators.

To that end, CAG completed a project to overhaul the Apron and Control Tower CCTV System, which commenced in 2010. Works included the conversion of the CCTV system from analogue-based to digital-based technology and increasing the overall CCTV coverage at critical areas such as runways, taxiways, aircraft parking stands, apron roadways and along Airport Boulevard. The new Airside CCTV System utilises a combination of technologies such as day and night cameras, and thermal-imaging cameras for surveillance coverage during the night and under bad weather conditions.

In addition, investments were made for the installation of a new CCTV monitoring system for individual aircraft parking stands, geographic information system and traffic counting system, all of which have enhanced situational awareness and operator productivity.

## BEYOND THIS DECADE

Led by Senior Minister of State for Finance and Transport Mrs Josephine Teo, a multi-agency C2036 steering Committee comprising Ministry of Transport, Ministry of Defence, Ministry of Finance, CAAS, Economic Development Board, Land Transport Authority, Singapore Tourism Board, Urban Redevelopment Authority and CAG, has come together to chart the development of the future airport site located east of Changi Airport. This area, known as Changi East, will house Changi's fifth terminal and third runway.

While the Committee expects to announce more details of Changi East by the end of 2013, CAG has commenced planning works to extend and convert the current military runway at the new site for civil aviation use, which in time will be the third runway.

CAG has ramped up manpower and staffing requirements in disciplines like master planning and engineering to start planning for the new Changi East development, which is expected to be operational in the next decade.

# International Presence

FY12/13 capped an eventful year for Changi Airport Group (CAG) on the international front as its wholly-owned subsidiary, Changi Airports International (CAI), made headway in overseas markets with notable consultancy and investment projects.

The year saw CAI involved in evaluating airport projects in Brazil and Europe. A deal was closed in Russia for an investment in four airports. The divestment of its stake in the holding company of two airports in Rome was accomplished in May 2013.

On the consultancy front, CAI remains active across the globe, including in Brazil, China, India, the Middle East and South East Asia.

## RUSSIA

In June 2012, CAI completed the acquisition of a 30% stake in Airports of the South (AOS), comprising a group of four airports in the South of Russia. Sberbank, Russia's largest bank, concurrently acquired a stake of 20% minus one share in the development. Prior to the transaction, AOS was wholly owned by Basic Element (Basel). Basel retains 50% stake plus one share in AOS.

CAI's priority is to help AOS develop Sochi Airport for the 2014 Winter Olympics. The project includes timely construction of outstanding facilities, proper capacity planning and preparation of other areas such as operations, equipment and staffing. Other priority areas include the reorganisation of key management staff, route development at Sochi and Krasnodar airports as well as the implementation of an Airport Service Quality system for Sochi airport.

## ITALY

In May 2013, CAI completely divested its investment in Milan-listed Gemina S.p.A. (Gemina), the holding company of Aeroporti di Roma S.p.A. (ADR), which operates Fiumicino Airport and Ciampino Airport in Rome. The divestment of Gemina was prompted by the imminent merger of Gemina with Atlantia S.p.A. (Atlantia), the largest toll road operator in Italy with operations in Brazil, Chile, Poland and India.

The merger would create one of Europe's largest motorway and airport groups with close to EUR11 billion in market capitalisation. The merger of Gemina and Atlantia would result in a significant dilution of CAI's stake and would expose CAI to a different

business sector involving toll roads. The divestment contributed an internal rate of return of 22% in SGD terms, with a cash gain of S\$126 million.

CAI began its investment in Gemina in 2010 as a strategic investor. It played an active role in the planning and development of Fiumicino Airport, Rome's main aviation gateway. A comprehensive airport master plan was developed in order to meet Rome's air traffic demand for the next three decades. These developments will provide capacity for more flights, enhance operational efficiency and improve passenger experience. It will also strengthen Fiumicino Airport's competitiveness as a premier airport and gateway in Europe.

Despite the divestment, CAI will continue to provide advisory services to develop and implement the Fiumicino Airport master plan over the next few years through a consultancy agreement. The advisory services will also cover operations, commercial and air traffic development.

## SAUDI ARABIA

CAI has completed the fourth year of its six-year management contract with King Fahd International Airport (KFIA) in Dammam, Saudi Arabia. In the last four years, through the route development strategies implemented by the CAI team, KFIA's traffic growth has increased on a compounded annual growth rate of 10%, about four times its historical growth rate. KFIA has also recaptured lost market share from its neighbouring airports.

CAI has also contributed significantly to the doubling of KFIA's non-aeronautical revenue since the management contract started in 2008. CAI's priority in the remaining two years of the management contract is to assist KFIA in its planned corporatisation.

## CONSULTING

On the consultancy front, CAI and its subsidiary, Changi Airport Planners and Engineers (CAPE), secured the following new contracts in FY12/13:

# International Presence



01. Sochi Airport in Russia.

02. Artist's impression of Fiumicino Airport, Rome.

03. King Fahd International Airport, Dammam Saudi Arabia.

04. Departure kerbside of Nanjing Airport, China.

05. CAI officers hosting a visit for overseas guests.

- Brazil – CAPE has been engaged to carry out the airport master planning and airport conceptual layout for the 500,000-hectare Brasilia Airport City project;
- China – CAI has secured three airport retail planning projects with airports in Nanjing, Yantai and Ningbo;
- India – Bengal Aerotropolis Projects Ltd has engaged CAI for a five-year management contract (2012-2017) to assist in the operation and management of Durgapur Airport;
- Russia – CAI entered into a seven-year Technical Service Agreement with Airports of the South to provide assistance in the lead-up to the 2014 Winter Olympics and in the areas of operations, commercial, service quality and route development;

- Training - Together with the Nanyang Technological University and the China-Singapore Airport Management Academy (a joint venture between CAI and Xiamen International Airport Group), CAI conducted an inaugural 'China Airports CEO' programme in Singapore.

## FUTURE PLANS

In the coming years, CAI's objective is to expand its presence in the high traffic growth markets of China, India, the Middle East, South East Asia, Latin America and Russia, through its involvement in existing investments, partnerships and consultancy projects. Moving forward, CAI will also focus on building new capabilities to strengthen its airport consultancy business.

# People Development

The success of any organisation is possible only because of its people – they are responsible for what truly makes Changi Airport great. As the manager and operator of an award-winning airport, Changi Airport Group (CAG) knows that a strong and committed team is a must for the way forward. Hence, as CAG develops as a company, employee engagement and development have become cornerstones of its people development blueprint, where staff members continuously upgrade their skill-sets, build camaraderie and nurture a sense of belonging and shared purpose.

## EMPLOYEE ENGAGEMENT

CAG conducted its first Employee Engagement Survey in 2012 to take stock of engagement levels within the organisation. The survey provided valuable feedback into specific areas of focus to build greater engagement both at the organisational level and within functional teams. Communications sessions to share the survey results and action plans also provided an opportunity to gain a further insight into issues that matter most to staff members.

To build even stronger bonds among colleagues, the CAG Family Day was held for staff and family members in February 2013. It was an evening of excitement and fun as the entire Universal Studios Singapore theme park at Resorts World Sentosa was reserved exclusively for CAG staff and their family members.

## STAFF DEVELOPMENT

A key thrust in CAG's efforts to forge ahead is the development of its leaders to steer their teams effectively to face the challenges of the business. To this end, CAG defined its leadership competencies – the CAG Leadership DNA – during the year. This forms the foundation for a structured two-year leadership milestone programme for all managers to enhance their staff management and leadership capabilities. The programme kicked off with a module on 'Performance Management' to coincide with the annual performance appraisal exercise for staff.

CAG continued to instill a learning culture as well. The second Learning Festival was held in October 2012. It was themed 'We are about Service', to emphasise the importance of providing good service. Two renowned trainers, Mr Ron Kaufman and Mr Rob Morton from Disney Institute, were invited as keynote speakers and shared their valuable experience with attendees.

As part of the Learning Festival, learning tours to several esteemed companies in Singapore, including OCBC Bank, Resorts World Sentosa and Singapore Airlines were organised. These sessions helped participants to understand how the companies value customer service through their staff and customer programmes.

They gained valuable insiders' perspectives of how service is brought to life at the companies visited.

## A SUPPORTIVE ENVIRONMENT

CAG's Bursary-cum-Families Onboard programme was held in March 2013. In addition to giving employees and their families an opportunity to gain deeper insights into the operations of CAG, the programme also gave family members a greater appreciation of the staff's work.

Participants had the opportunity to visit areas across Changi Airport not usually accessible to travellers. As part of the event, CAG also demonstrated care towards its employees by handing out a total of 68 bursary awards to their children.

In addition, the inaugural Annual Appreciation Awards was held on 6 November 2012 as a tribute to both CAG's long serving staff as well as winners of the inaugural CAG Core Values Award.

The Long Service Award recognises CAG staff for their commitment and dedication while the CAG Core Values Award acknowledges individuals who exemplify CAG's core values. From 240 nominations, a total of 19 award recipients were selected in three categories – Best Buddy, Most Supportive Supervisor and Open Category.

The supportive culture and work environment at CAG very likely contributed to a bumper 85 babies born to CAG staff in 2012. With about 1,400 staff, the newborn rate at CAG is estimated to be five times that of Singapore's working population. CAG will continue to promote work-life balance and ameliorate the challenges of raising children among its staff through family-friendly benefits and facilities at the workplace.

## SECURING THE FUTURE

To cater for the growth of CAG's businesses in the long term, attracting the best talent is essential. Through its scholarship and internship programmes, CAG is building a steady pipeline of talents for its future needs. Over 320 applications were received for the

# People Development

01



CAG Internship Programme and more than 1,100 applications were received for the CAG Undergraduate Scholarship. Reflecting the popularity of its scholarships, CAG was ranked third in the Top 20 Scholarship Providers of Choice 2012 survey by BrightSparks magazine.

During the year, CAG also partnered the local universities to invite students to consider a career with CAG. One initiative was the inaugural Students Engagement Session held in January 2013, during which CAG's CEO and senior management hosted students to dinner and a sharing session. The guests were then brought on an airport tour to showcase CAG's unique work environment and initiatives that make Changi the world's most awarded airport.

## EMPLOYEE ADVOCACY

The CAG Ambassadors Programme was introduced during the year. Some 56 managers from the various clusters and divisions were selected to be ambassadors for the company. These individuals each have stories to share about how working at CAG has developed them. The formal training they received has equipped them with skills to effectively communicate why CAG is an employer of choice in forums such as career fairs and on social media. These ambassadors continue to be involved in recruitment and school engagement activities.

02



01. Having fun at Universal Studios Singapore during CAG Family Day.

02. CAG's very own baby boom - Staff and their precious tots who were born in 2012.

# Corporate Responsibility

Changi Airport Group's (CAG) success is intertwined with its ability to address sustainability challenges in its environment and to fulfil its corporate responsibility towards future generations while enhancing the value of its business. Sound business practices, together with good corporate governance, are part of CAG's model to engage stakeholders and generate both economic and social capital for the company, its communities and the environment as a whole.

## PROTECTING THE ENVIRONMENT

Environmental issues are important to CAG. Reducing the environmental impact of aviation contributes to ensuring the continuity of the aviation industry and of operations at Changi Airport. CAG takes a broad perspective on environmental issues when it considers measures to reduce the impact of its operations.

The focus of CAG's environmental work encompasses improving energy efficiency, managing noise levels to lessen the impact on surrounding communities, increasing the percentage of waste recycling, reducing the amount of waste and water usage, and improving water resource management.

In May 2012, CAG successfully completed a carbon footprint study that measured the amount of greenhouse gas emissions resulting from Changi Airport's operations. Arising from the process, CAG achieved a Level 1 certification standard under the Airport Carbon Accreditation, administered by Airports Council International (ACI) to recognise efforts made by airports world-wide to manage and reduce their carbon emissions.

Changi Airport Terminal 3 was also awarded the Distinguished Achievement Platinum Award by ACI Asia-Pacific, in recognition of CAG's outstanding accomplishment in promoting best practices to minimise the environmental impact on Changi Airport's surroundings.

## SPREADING THE SUSTAINABILITY MESSAGE

As part of its sustainability programme, CAG showed its support for the annual Clean & Green Singapore initiative, raising employee awareness and encouraging active participation to spread the sustainability message. To reinforce the importance of reducing carbon emissions, CAG organised visits to Gardens by the Bay and the Science Centre's 'Climate Change' exhibition. Inspired by a popular Korean variety show, CAG staff also competed against one another in a 'Green Running Man' race, where participants raced around the office to complete missions which challenged their knowledge on carbon emissions issues.

For the fifth consecutive year, Changi Airport dimmed non-essential lights for 60 minutes across all three terminals on 23 March 2013 in support of Earth Hour. For the first time, a 'Green Bazaar' was also organised, where visitors could purchase environmentally-friendly products and pre-loved items. Supporting Earth Hour demonstrated CAG's commitment to play its part in managing global climate change. The corporate ethos of environmental sustainability has been, and continues to be infused through CAG's many green initiatives.

## REACHING OUT TO THE COMMUNITY

As companies evolve in the fast-paced and ever-changing business landscape, it has become increasingly important to integrate social responsibility into the corporate ethos. CAG launched the Changi Foundation in April 2012. Through the three key thrusts of Education, Skills Development and Community Service, CAG hopes to help youths in their journey of transformation from adolescence to adulthood by nurturing and developing them to become active contributors to society. The Changi Foundation is benefiting more than 800 youths from Assumption Pathway School, Children-At-Risk Empowerment Association (CARE) Singapore, NorthLight School and Students Care Service, as well as other youths through programmes with various charities.

When the Terminal 1 upgrading project was completed in July 2012, the Changi Airport Group-Howe Yoon Chong Book Prize was launched to honour the late Mr Howe Yoon Chong, who played a leading role in the development of Singapore Changi Airport. Book prizes were given out to 55 youths who had overcome the odds of disadvantaged backgrounds and qualified for admission to tertiary institutions. In addition, over 300 bursary awards were also given out to help secondary school teenagers complete formal education.

The Changi Foundation also provided funding for two full-time social workers from Students Care Service to support students at Assumption Pathway School for two years, an initiative that has received positive feedback from teachers and the students who have benefitted from the programme.

# Corporate Responsibility

01



02



**01.** Senior Minister of State for Finance and Transport, Mrs Josephine Teo joins CAG Chairman Mr Liew Mun Leong and CAG CEO Mr Lee Seow Hiang in presenting a S\$200,000 cheque to the four beneficiaries of the Changi Foundation.

**02.** Youths participated in a special Amazing Race to celebrate Changi Foundation's S\$360,000 contribution to The Straits Times School Pocket Money Fund.

## EXPERIENTIAL LEARNING

Recognising that many of its youth beneficiaries enter the workforce at a much early age, the Changi Foundation aims to equip them with skill sets that would prepare them for future employment. Through the Youth Passport Programme (YPP), CAG took the opportunity, during the year, to foster a strong spirit of mentorship among more than 160 young adults who discovered unique life experiences and learnt about the values of hard work and teamwork through job attachments with CAG staff.

Renowned for its dedication to providing excellent customer service, CAG kick-started the "Be a Service Star" initiative, a two-day interactive workshop that covered fundamental service techniques and topics like how to manage interpersonal relationships. Youths were empowered with the confidence to make a difference, not just in their lives but in the community that they serve as well. These programmes are in line with CAG's vision of 'Connecting Lives', as it endeavours to connect with youths in ways that will enhance their lives.

## COMMUNITY INVESTMENT

As part of the YPP, youths are encouraged to give back to society in the form of community service projects, where they learn about service. In February 2013, CAG partnered youths from NorthLight School's food preparation course as well as Willing Hearts, a non-profit organisation that prepares and delivers free meals to the less fortunate. Together, they prepared meals and pineapple tarts, and delivered to more than 100 beneficiaries.

Rounding up CAG's corporate social responsibility (CSR) efforts for the year was the annual Changi Foundation Celebration Week, where activities like baking and ice-cream making workshops, and an exclusive behind-the-scenes tour of the catering kitchen of SATS Ltd, one of the three ground handling agents at Changi Airport, were organised for the youths. A 'Celebrate Our Youth' funfair marked the end of the week-long celebrations, where 15 CAG divisions set up stalls and collected more than S\$21,000 in receipts for the Changi Foundation.

To commemorate Changi Airport's milestone achievement of handling 50 million passenger movements in 2012, the Changi Foundation made a special S\$360,000 contribution to the Straits Times Pocket Money Fund (SPMF). The contribution will benefit 50 student beneficiaries of SPMF's newly launched post-secondary education fund, covering their daily financial needs over a five-year period.

Besides financial support, CAG encourages its staff to volunteer and reach out to youth beneficiaries. About 190 staff members took part in CSR activities during the year, many of whom were repeat volunteers as they found the programmes to be both meaningful and engaging. For Changi Foundation, CAG volunteers put in a total of 1,694 hours of community service to raise S\$46,000 in 2012.

As an active corporate citizen, CAG remains committed to supporting youth organisations in the local community. Through Changi Foundation donation boxes placed around Changi Airport's terminals, contributions amounting to more than S\$98,000 were received from July 2012 to March 2013. CAG matched the amount dollar-for-dollar and made donations to CARE Singapore to support its youth programme, and to three Institute of Technical Education's schemes to provide financial assistance to students from low-income families, giving them opportunities for overseas industrial attachments and student exchange programmes.

## FORGING INTERNATIONAL PARTNERSHIPS

In the spirit of continuous learning from the best in the aviation industry, CAG signed a Memorandum of Understanding with Tokyo's Narita International Airport in May 2012, at the sidelines of ACI's Asia-Pacific Regional Assembly and Conference held in Singapore. The partnership strengthened the bond between both parties, facilitated greater knowledge-sharing and presented the opportunity for the two major aviation hubs to cooperate on a deeper level outside of each other's growth markets.

Existing partnerships with Munich Airport and Beijing Capital International Airport also provided ideal platforms for CAG staff to learn best practices from the experience and expertise of their peers in Germany and China through staff exchange programmes that covered areas such as airport operations, commercial, engineering & master planning and passenger experience.

# Changi Online

Changi Airport's presence online seeks to replicate the Changi Experience for stakeholders, with a strong focus on community engagement and a commitment to complementing the high standard of customer service delivered in the terminals.

The *Fans of Changi* social media programme has grown in strength since it was launched in August 2009. Today, it runs on popular platforms such as Facebook, Twitter, Instagram and YouTube, enabling Changi Airport to build advocacy among its online audience.

Campaigns are strategically implemented to create a richer and more holistic online presence for the Changi brand. Fans are encouraged to share their experiences on these platforms, adding to the content generated by *Fans of Changi*. This has resulted in a buzzing online marketplace of stories, imagery and ideas.

## CONTENT AND ENGAGEMENT

The popularity of *Fans of Changi* has been reflected in the strong growth of the community and affirmed by the many positive responses to content on the various platforms. The Changi Airport Facebook page ([www.facebook.com/fansofchangi](http://www.facebook.com/fansofchangi)) has one of the highest fan numbers (181,517 as at 30 June) among the world's airports. Besides the fanbase, the engagement level with fans has also been most encouraging with individual posts attaining as many as 7,500 likes, 2,700 comments and 1,700 shares, underscoring the level of activity generated on the Changi Airport Facebook page.

Through a mix of photos, info-graphics, videos, status updates, announcements and questions-and-answer formats, *Fans of Changi* keeps an active conversation with travellers and aspiring travellers to heighten awareness of the Changi Experience and sustain interest in what the airport has to offer.

Changi Airport's developments and announcements such as the completion of the Terminal 1 upgrading, closure of the Budget Terminal, the crossing of the 50-million passenger movement milestone and the crowning of the fourth Changi Millionaire were also amplified through its social media platforms, augmenting the airport's media relations and marketing communications efforts.

## BUILDING ADVOCACY

During the year, *Fans of Changi* celebrated 100,000 fans on Facebook with a series of levitation photos, taken at various attractions around Changi Airport. The photos symbolise the joy of travelling through Changi Airport and how it aims to soar to greater heights to enhance the passenger experience even further.

Through on-ground social activities that included in-terminal events, Changi's social media advocates were given numerous opportunities to meet with the social media team and participate in events to increase their affinity with the airport they love.

Customised programmes were also developed for bloggers and plane spotters to allow them to indulge in their interests with a unique Changi twist. These outreach programmes have cultivated them to become our advocates, bringing them closer to Changi Airport.

Changi Airport's social media efforts were recognised at the inaugural The Moodies Awards organised by The Moodie Report in December 2012, with three nods including for "Best Use of Social Media" and "Best Facebook Page – Airports".

## ONLINE IN CHINA

In January 2013, Changi Airport made its first digital foray into China, with the launch of its presence on Sina Weibo, the most popular social media channel in China. This launch sets the stage for Changi Airport's expanded marketing outreach in China, among the airport's five largest passenger market.

Ever since the "Zhang Xiao Yi" 樟小宜 avatar – a word-play on Changi Airport's Chinese name – was launched on Sina Weibo as the voice of Changi Airport, the channel has acquired over 15,000 followers in six months.

As the demand for travel by the Chinese continues to grow in the years ahead, there are plans for Changi Airport to build a stronger online presence in China and to foster deeper connection with influencers and key opinion leaders in the social media space.



HIGHEST ENGAGEMENT

7,178

FACEBOOK FAN GROWTH

163%

from 52,504 fans to 137,986 fans

MOST COMMENTED POST

2,756

MOST SHARED POST

1,573

We're looking forward to welcoming SWISS in May. Meanwhile, here's a special fare (ex-SIN) that they're offering. Bookings can be done on SWISS' website or via travel agents in Singapore. Go on and SHARE this with your friends!



MOST LIKED POST

7,656

Mr Roslie Bin Abdul Bakar, a housekeeping supervisor at Terminal 3 handed in a pouch he found which contained a large sum of foreign currencies and two mobile phones. LIKE this to thank him for his honesty.



Twitter



Instagram



Youtube

TWITTER FOLLOWERS

+100%

from 3,500 to 7,000

INSTAGRAM FOLLOWERS

from 0 to 2,795

SUBSCRIBERS

325

VIEWS

369,441

SHARES

1,601

RESPONSE RATE

1 hour

HIGHEST ENGAGEMENT

336



To celebrate crossing of the 100,000 fans milestone, Changi partnered Levitation SG to produce a series of Levitation photos showing people hovering in mid-air at various locations in Changi Airport.

# Awards & Accolades

| MONTH          | AWARDS   | PUBLICATION / ORGANISATION                                   | NO OF TIMES |
|----------------|--|--|-------------|
| April 2012     | Best Airport in the World  | Business Traveller, Middle East                              | 9           |
| May 2012       | Best Airport in the World  | Ultratravel  | 6           |
|                | Best International Airport   | TravelWeekly China   | 5           |
|                | Airport Authority in Asia-Pacific with the most supportive Approach to Travel Retail | Duty Free News International & Travel Retailer International | 13          |
| Jun 2012       | Best Business Airport  | Business Traveller, Germany                                  | 19          |
|                | Best Airport - Asia  | Cargonews Asia   | 26          |
|                | Best Green Service Provider – Airport  | Cargonews Asia   | 3           |
| September 2012 | Best Airport in the World  | Condé Nast Traveller (UK)                                    | 7           |
|                | Best Airport in the World  | Business Traveller UK  | 25          |
|                | Best Airport in the World  | Business Traveller Asia-Pacific                              | 21          |
|                | Best Airport Worldwide   | Smart Travel Asia  | 4           |
|                | Airport of the Year  | Payload Asia   | 1           |



# Awards & Accolades

| MONTH         | AWARDS  | PUBLICATION / ORGANISATION                                       | NO OF TIMES |
|---------------|---|--|-------------|
| October 2012  | Travel Hall of Fame – Airport   | Travel Trade Gazette (Asia)                                      | 10          |
|               | Asia's Leading Airport  | World Travel Awards  | 9           |
|               | Long Haul Airport of the Year   | Selling Long Haul  | 9           |
| November 2012 | Best Airport in the World   | Premier Traveler   | 1           |
|               | Best Airport in the World   | Business Traveller, China  | 8           |
|               | Best Airport  | Condé Nast Traveller, India                                      | 2           |
|               | Best Foreign Airport  | Condé Nast Traveller, Russia                                     | 1           |
|               | Best International Airport  | Travelmedia.ie   | 2           |
| December 2012 | Best Airport Dining   | Global Traveler  | 3           |
|               | Best Airport in the World   | Business Traveler, US  | 20          |
|               | World's Leading Airport   | World Travel Awards  | 7           |
| January 2013  | Deficiency – Free   | International Federation of Airline Pilots Associations (IFALPA) | 32          |
|               | Top Worldwide Airport   | Wanderlust   | 11          |
| February 2013 | Best Airport in Asia-Pacific  | DestinAsian  | 8           |
|               | Best Airport by Size (over 40mil)                                       | Airport Council International                                    | 2           |
| March 2013    | Airport of the Year (Airports with over 20 million passengers per year) | LIMA 2013 ASEAN Commercial Aviation Awards                       | 1           |