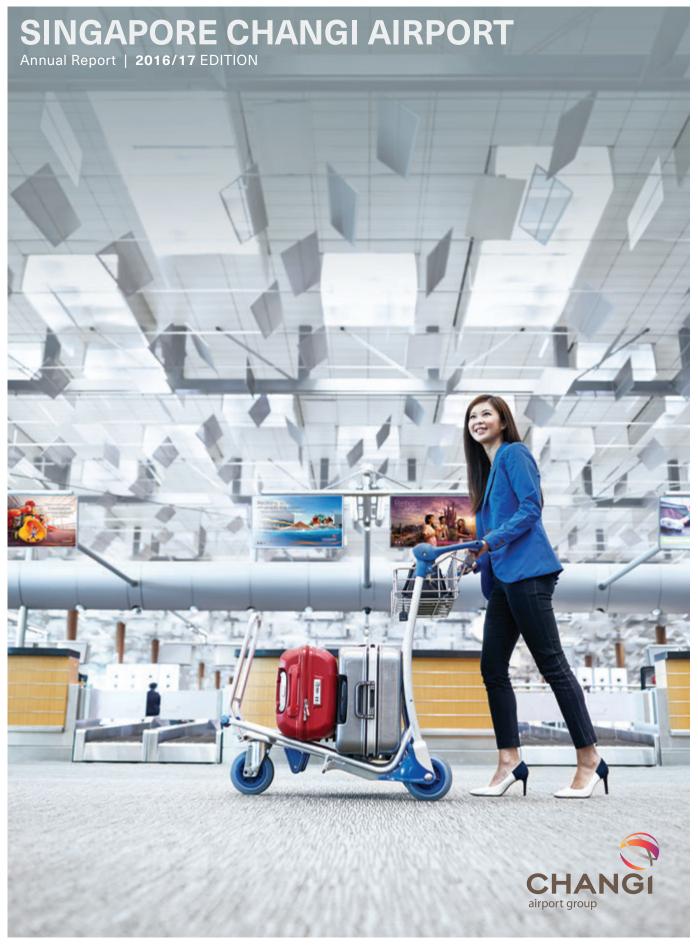
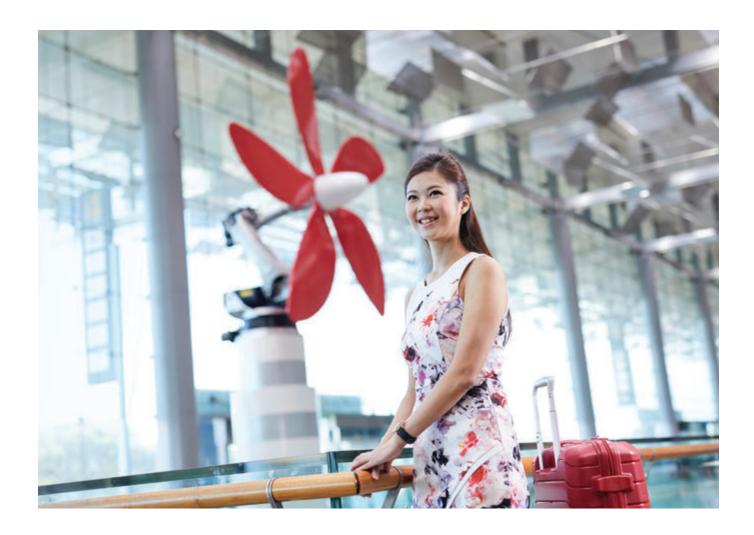
## DESTINATION





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### DESTINATION CHANGI AIRPORT

Changi Airport is a part of our travels as much as it is a destination – a special place for our passengers, where the world meets. A retail haven for all who visit, where a new era awaits each and every person. A place where our people call home, touching lives and making a difference each day.

Connecting people since its maiden flight took off 36 years ago, Changi continues to grow steadily. It is today a major global air hub welcoming almost 60 million passengers a year, with some 100 airlines linking a network of over 380 cities worldwide. Changi Airport is now the world's sixth busiest airport for international traffic, handling 7,000 flights weekly, or one every 90 seconds.

Even as Changi journeys to greater heights, its commitment to service – to put passengers at the heart of everything – remains steadfast. The Changi Experience anchors the airport's service culture and philosophy. Innovation takes centre stage, driving service excellence to the next level to create positively surprising experiences for all who pass through its doors.

Changi is now at a pivotal moment in its transformation journey. Terminal 4 will be unveiled to the world soon, showcasing it as a terminal like no other. Construction of Jewel Changi Airport is also taking shape, even as development of Changi East, including Terminal 5, makes good progress. Changi will ride the momentum of growth with these nextgeneration building blocks, as it seeks to transform itself into a destination of choice for travellers worldwide.





# SPECIAL PLACE







From the thrill and excitement before departure, to the joy of reunions at arrival, Changi Airport continues to hold a special place in the hearts of the many who have come through our welcoming doors. At Changi, every detail is carefully thought through to delight and surprise our passengers and visitors, as more memories await to be made.

# where the WOOTICE



# meets

More than just the gateway to Singapore, Changi Airport is today Asia's leading air hub – the sixth busiest airport in the world for international traffic. Serving close to 60 million passengers a year, Changi connects you to over 380 cities in more than 80 countries around the globe. These numbers are set to grow, as we remain committed to tap on new growth opportunities with our airline partners to strengthen Changi's connectivity, bringing the world even closer to you.





At Changi Airport, we indulge our passengers in more ways than one. Home to over 360 retail stores and 140 dining outlets, Changi is every traveller's delight. We continually strive to stay ahead of evolving consumer trends to bring only the most exciting and rewarding offers to you – whether it is a contemporary whiskey bar, a double-storey fashion boutique, an innovative pop-up male grooming club, or Changi's first celebrity chef restaurant – making Changi one of the world's best airports to shop and dine at.

# INA HAVEN

# Anew era era awaits

Changi Airport stands at a pivotal moment in its journey of transformation. With Terminal 4 opening for operations soon, we are ready to write the next chapter in the Changi story. Growth in the Changi family will continue soon after with Jewel Changi Airport, followed by Changi East, including Terminal 5. Not just infrastructure projects, these new developments will usher in the dynamism and innovation that will position Changi Airport for new heights both as an air hub, and as a destination in itself.











Our most prized asset, our people, remain the defining factor behind Changi Airport's continued success. As we take the airport to its next level of excellence, we will continue to invest, nurture and develop our talent pool in a vibrant and conducive working environment that they are proud to call their second home. By strengthening our team culture that embodies the Changi spirit of innovation and excellence, we strive to build an organisation that will become a great place to work in.

# With









Our









People









# makinga



# difference

Our aspiration to touch the lives of people extends beyond the passengers we serve. As an advocate for social and environmental responsibility, we are committed to make meaningful contributions to our country, from championing green causes to supporting our youth. Through our community programmes that enrich the lives of disadvantaged youth, we aim to motivate, inspire and groom the next generation of Singaporeans in their prime – poised to take on the world.







### **MISSION**

To be the world's leading airport company, growing a safe, secure and vibrant air hub in Singapore and enhancing the communities we serve worldwide.

### **VISION**

### Exceptional People, Connecting Lives

We aspire to build a company where ordinary people achieve exceptional results. Working together as a team, we bring great ideas to life and achieve exceptional results beyond our individual capabilities. Customers are our inspiration. From the youngest child to the largest corporation, we understand that what we provide connects people in ways that will enhance their lives.

### **VALUES**

We value our **PEOPLE** 



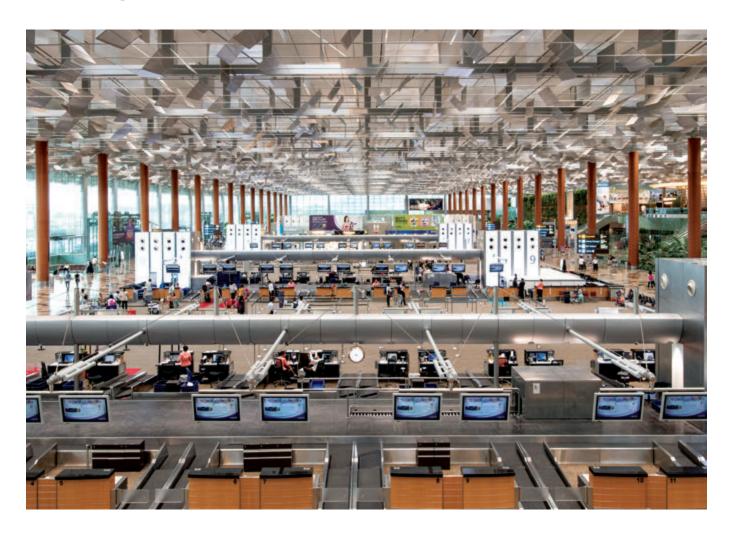
We are the best in our BUSINESS

We are committed to our CUSTOMERS



We succeed with our **PARTNERS** 

## CORPORATE PROFILE



Changi Airport Group (Singapore)
Pte Ltd (CAG) was formed on
16 June 2009 and the corporatisation
of Changi Airport followed on
1 July 2009. As the airport company
managing and developing Changi
Airport, CAG undertakes key functions
focussing on airport operations and
management, air hub development,
commercial activities and airport
emergency services.

Over the past three decades, CAG - previously part of the Civil Aviation Authority of Singapore has successfully established Changi Airport as the world's most awarded airport. With more than 540 accolades under its belt, Changi has come a long way since its humble beginnings in 1981, when Terminal 1 first opened. One of the world's busiest international airports today, Changi Airport is a major air hub in Asia. It handled close to 60 million passenger movements in FY2016/17, serving about 100 airlines flying to more than 380 cities worldwide. With 76,000 square metres of commercial space across its three terminals, Changi Airport is also one of Singapore's best places for shopping and dining. Increasingly, the airport has become a favourite haunt for Singapore residents, especially families.

To grow its overseas business, CAG invests in and manages foreign airports through its subsidiary Changi Airports International (CAI). CAI's objective is to build a quality portfolio of airport investments worldwide with strong markets and significant development potential. Its key business activities include investments in airports, as well as the provision of consultancy and airport management services. Today, CAI's presence covers major economies including China, India, the Middle East, Russia and South America.

At Changi Airport, there is immense pride in providing impeccable service and unrivalled capabilities to deliver the iconic Changi Experience. More than just a model of functionality, the Changi Experience is about connecting passengers and engaging them, in ways that enhance their lives. Every journey through Changi Airport is an opportunity to bring people together and to help them realise their aspirations.

# CHAIRMAN & CEO MESSAGE



Financial year 2016/17 was marked by a more positive market environment for the aviation industry, with many airlines restructuring and reengineering their businesses. Low fuel prices further helped the industry grow faster than the global economy.

Against this backdrop, Changi Airport performed well with passenger movements hitting a record of 59.4 million, representing a growth of 4.6%. The airport also enjoyed a 5.0% growth in concession sales, achieving an all-time high of \$\$2.4 billion. At the same time, we made good progress on our development projects.

We continued to enhance the Changi Experience during the year and our efforts were recognised with 25 Best Airport Awards during the year, from various travel organisations and publications around the globe. This includes winning the widely-followed Skytrax World's Best Airport for the fifth year in a row.

### Growing a world-class air hub

Building flight connectivity continues to be central to the growth of Changi Airport, and on a broader scale, the economy of Singapore. Much effort and resources are thus invested in growing our network of airlines and destinations each year. This year, four new scheduled passenger and freighter airlines joined our family of airline partners. Together with eight new city links and new non-stop services to San Francisco, Changi's global network now sees over 100 airlines connecting Singapore to some 380 cities in more than 80 countries around the world.

Passenger traffic growth was registered across all regions, with Northeast Asia, Southeast Asia and South Asia contributing 88% of this growth. Amongst Changi Airport's top 10 country markets, China registered the highest growth rate of 14% during the year.

CAG continues to work proactively with our partners to grow air traffic

demand and enhance our network. For example, CAG, Singapore Airlines and Singapore Tourism Board announced a three-year, \$\$34m partnership to promote travel to Singapore. CAG also forged a partnership with Mauritius which resulted in more flights to Singapore.

Changi Airport handled close to two million tonnes of cargo last year, representing a 7.0% growth over the previous year. DHL Express opened its South Asia Hub in October 2016 and more recently, Changi became the first airport in Asia Pacific to establish a community of cargo players to undergo the International Air Transport Association's (IATA) Center of Excellence for Independent Validators on Pharmaceutical Handling (CEIV Pharma) certification. These developments help Changi position itself as a major pharmaceutical hub in the region as well as be well-placed to benefit from the global boom in e-commerce.

### Innovating the airport experience

Recognising the importance of continuous innovation to maintain Changi Airport's competitive edge, CAG launched the Living Lab Programme which will serve as a platform for CAG and the airport community to create, test and demonstrate new technological solutions. We hope to use this initiative to partner companies and start-ups to capture emerging solutions to

enhance our productivity, efficiency and passenger experience at Changi Airport.

The momentum for Fast and Seamless Travel (FAST) gathered speed in the last year, with FAST now available for 70% of all departing flights. The success of FAST has allowed us to free up two entire rows of counters in each of Terminal 2 (T2) and Terminal 3 (T3). Work on the Central FAST Zone in Terminal 1 (T1) is on schedule to be completed by end-2017, further improving productivity and helping to alleviate manpower challenges.

### **Reinvigorating Changi retail**

Despite the rapidly growing popularity and reach of online retail, retail sales at Changi Airport kept pace with passenger growth. We signed 84 new leases and welcomed 28 new brands making their Changi debut. Amongst these were first-in-Singapore concepts like Hello Kitty Orchid Garden Café and new-to-Changi brands such as Ermenegildo Zegna, Saint Laurent Paris and The Kitchen by Wolfgang Puck.

With the focus on experiential retail concepts, Changi welcomed the opening of the second DFS Wines & Spirits Duplex store at T2 that boasts three unique in-store concepts – the Wine Reserve, the Cigar Room and The Whiskey House. This store sits elegantly along the newly created Luxury Street that now allows passengers to shop in a lush environment.



Changi Airport performed well with passenger movements hitting a record of 59.4 million, representing a growth of 4.6%. The airport also enjoyed a 5.0% growth in concession sales, achieving an all-time high of S\$2.4 billion. At the same time, we made good progress on our development projects.



The steady growth in passenger movements and concession sales at Changi Airport put CAG in good stead for the near term. However, volatility and uncertainty in the global macro economic and political environment are here to stay. Adding to this, digitisation will inevitably change our customers' behaviour and expectations. Thus, the right strategy and planning will be needed to guide out way forward, while our people will have to remain adaptive and flexible as the business environment changes.

To keep the shopping experience fresh and exciting, we supported Changi-First global product launches by brands like Shisheido, Martell, Miu Miu and Guerlain. We also introduced the Changi Gift Card to provide passengers another avenue to gift their loved ones the Changi retail experience, while opening a new channel to support our concessions and to spur sales.

iShopChangi and Changi Rewards, our e-commerce and loyalty programmes respectively, had an outstanding year of growth. The former saw sales grow by 67% while sales from Changi Rewards members increased 22% year-on-year.

### **Enabling our people**

Last year was a transformational one for CAG. To provide our employees with a more productive environment, we embraced technology to allow them the flexibility to be connected from different spaces within the office, or even via their mobile phones while on the go. An example of this is In.Touch, an app designed internally to facilitate employee sharing and engagement.

We also overhauled our office space at T2 to create a conducive and collaborative working environment in its place. The new office has received many positive reviews by employees and quests alike.

The year was especially gratifying as our efforts to engage and empower our staff community, even as we continue to grow at a rapid pace, were recognised by both Randstad and Hays with the Most Attractive

Employer and the Employer of Choice awards respectively.

To ensure that we deliver a consistent Changi Experience across the entire passenger journey, we continued to engage our over 200 airport partners. The One Gracious Changi campaign and a learning trip to Japan were among the highlights of our efforts. The staff canteen in T2 was renovated and it is now modern, bright, and well ventilated, providing healthy and affordable meal options.

### Investing through Changi Airports International (CAI)

Our wholly-owned subsidiary, CAI, had a very busy year growing its portfolio as well as helping its investee airport, Tom Jobim International Airport in Rio de Janeiro, prepare for the 2016 Olympic Games. For this historic event, a new 100,000-squaremetre concourse with 26 new gates served by aerobridges was inaugurated in May 2016, increasing the airport capacity by 88% to 37.5 million passengers per annum (mppa). The commercial area was tripled to offer passengers more F&B choices, and all facilities were refreshed for an enhanced customer experience.

The transformation was completed in record time and the airport successfully handled a record 85,000 departing passengers a day during the Olympic Games, twice the number on normal days. Travellers and media described the airport experience as "seamless, magical and unforgettable". The airport also registered record sales from its retail stores and restaurants during the period.

In preparing for the Games, CAI worked closely with the airport operator, RIOgaleão, to achieve ISO 9001 international certification for quality management. The airport also became the only one in Latin America certified by IATA to handle pharmaceutical products.

To grow its portfolio, CAI, as part of a consortium, completed the acquisition of Vladivastok International Airport in February 2017 – its fifth airport in Russia. The airport currently has a network of over 40 destinations and annual passenger traffic of some two million, growing 8.9% in 2016. The consortium sees the potential of this airport to serve about five million passengers in the medium term.

CAI was also recently named the winning bidder by Saudi Arabia's aviation authority for a 20-year concession at King Abdulaziz International Airport (KAIA) in Jeddah. Under the terms of the concession, the group will manage and operate the new KAIA when it is completed in 2018.

### Delivering a sustainable financial performance

With increases in both aeronautical and non-aeronautical revenue, the Group's operating revenue grew by 6.5% to S\$2.3 billion in FY2016/17.

Low fuel prices encouraged airlines to expand their networks and helped to drive passenger traffic. The increase in traffic, together with the expiry of rebates given to airlines, contributed to the higher aeronautical revenue.

Despite the softer retail market, Changi Airport managed to grow concession sales by deepening relationships with customers through innovative retail concepts, our loyalty programme and intensive joint marketing and promotions with our tenants. Our efforts resulted in a 5.0% growth in airport concession and rental income to cross S\$1.1 billion.

The Group's operating expenses increased 9.1% to \$\$1.4 billion. The increase was largely due to higher CAAS charges and higher services and security-related expenses.

In FY2016/17, the Group provided for impairment loss of S\$110 million. This was largely due to the deterioration of Brazil's economy, which affected the performance of RIOgaleão airport.

For the year, the Group's EBIDTA closed at \$\$1.2 billion, an increase of 3.5%. However, Net Profit after Tax declined by 16.2% to \$\$657 million after taking into account the impact of the impairment. Shareholders' equity rose by \$\$450 million to \$\$7.0 billion. A sinking fund reserve of \$\$90 million was apportioned out of CAG's retained earnings to be set aside for the Changi East development project.

### **Building for the future**

Whilst ensuring that day-to-day operations are seamless and positively surprising, CAG continues to build for the future, transforming Changi Airport to meet the future needs of passengers.

The construction of the 225,000-square-metre Terminal 4 (T4) was completed in late 2016 within a time frame of just three years. Operational readiness trials have been conducted since October 2016. These have enabled us to not only ensure that the systems work well, but also to understand how passengers navigate the new terminal, including interacting with initiatives such as FAST which may be less familiar to them.

All available commercial space at T4 has been leased, with a quarter of the retail and dining outlets new to Changi Airport. Members of the public were invited to visit the T4 Open House in August 2017 for a preview of the terminal's offerings, and we look forward to commencing operations in the last quarter of 2017.

The construction of Jewel Changi Airport (Jewel) – the new iconic lifestyle destination sitting in the heart of the airport – is progressing well and the superstructure is now visible from the other terminal buildings. This 10-storey complex and its façade of over 9,600 glass panels will house a 40-metre-tall waterfall, 100,000 shrubs, 2,500 trees and over 300 retail and F&B outlets. It is shaping up nicely to be an icon at Changi Airport, and is set to open in 2019.

Further on the horizon lies the development of Changi East. Works on setting up a three-runway system and the design work for various tunnel systems are already underway, with a tender called for the provision of Master Building consultancy services for the development of Terminal 5 (T5). A separate tender has also been called to appoint a Master Civil Consultant for the design of infrastructure outside of the T5 buildings. This will be CAG's most ambitious and complex project yet, with coordination among multiple agencies in both the public and private sectors critical to its smooth progress. Once built, T5 will increase Changi Airport's handling capacity to 135 mppa. The project will also encompass a ground transport hub, which is a complicated project on its own.

### **Looking ahead**

The steady growth in passenger movements and concession sales at Changi Airport put CAG in good stead for the near term. However, volatility and uncertainty in the global macro economic and political environment are here to stay. Adding to this, digitisation will inevitably change our customers' behaviour and expectations. Thus, the right strategy

and planning will be needed to guide our way forward, while our people will have to remain adaptive and flexible as the business environment changes.

The results we achieved in FY2016/17 would not have been possible without the commitment, diligence and teamwork of the management and staff of CAG, our airline and airport partners, the Civil Aviation Authority of Singapore, the Ministry of Transport, and other government agencies.

We would like to thank Ms Lim Soo Hoon and Mr Derrick Wan, who have retired from the Board. We are particularly grateful for their service and guidance over the past few years. We welcome Mr Lim Zhi Jian who joined the Board in October 2016, and Mrs Tan Ching Yee and Mr Tan Gee Paw who joined in May 2017.

We thank our fellow Board Directors for their strong support and good counsel, and express our appreciation to all who have helped us achieve these heights. We look forward to deepening our relationships as we embark on the next chapter together, as One Changi.

Liew Mun Leong

Chairman

de.

**Lee Seow Hiang**Chief Executive Officer









# BOARD OF DIRECTORS









- 1. LIEW Mun Leong Chairman
- **2. LEE Seow Hiang** Chief Executive Officer
- 3. TAN Ching Yee
- 4. Dilhan Pillay SANDRASEGARA
- 5. Richard Rokmat MAGNUS
- 6. TAN Gee Paw
- 7. Eric ANG Teik Lim
- 8. Miguel KO Kai Kwun
- 9. Danny TEOH Leong Kay
- **10.** Michael George William BARCLAY
- 11. Professor TAN Kong Yam
- **12. LIM Zhi Jian**Alternate Director to Tan Ching Yee









### **LIEW Mun Leong**

Chairman

Mr Liew is the Chairman of CAG. He was appointed to the Board on 16 June 2009.

Mr Liew was the founding Group President and CEO of CapitaLand Limited. He is currently the Chairman of Surbana Jurong Private Limited. Mr Liew sits on the boards of Singapore Exchange, Singapore China Foundation and the Chinese Development Assistance Council. He also chairs the Management Advisory Board of NUS Business School and Temasek Foundation Nurtures CLG Ltd.

Mr Liew is the Provost's Chair Professor (Practice) (pro bono) in NUS Business School, Faculty of Engineering and the Lee Kuan Yew School of Public Policy.

He was elected the President of International Organisation for Standardisation (ISO) for the term 1997 to 1998.

With over 45 years of experience in the construction and real estate industries both locally and overseas, Mr Liew has been involved in several Singapore's public sector projects, including the development of Changi Airport from the beginning in 1975. For his exceptional contributions, Mr Liew was awarded the Meritorious Service Medal by the President of Singapore in 2011. In 2016, Mr Liew was conferred France's National Order of the Legion of Honour (Ordre national de la Légion d'honneur), with the rank of Knight.

Mr Liew graduated from the University of Singapore with a degree in Civil Engineering and is a registered professional civil engineer. He has published four books, entitled *Building People: Sunday Emails from a CEO, Volumes 1–3* and *Building People: Sunday Emails From a Chairman, Volume 4*.

### **LEE Seow Hiang**

Chief Executive Officer

Mr Lee is the CEO of CAG. He was appointed to the Board as Executive Director on 16 June 2009.

Mr Lee is concurrently Deputy Chairman of Changi Airports International Pte Ltd, Non-Executive Independent Director of SMRT Corporation Limited since 19 January 2011, Board Member on the Airports Council International (ACI) World Governing Board and First Vice President of the ACI Asia-Pacific Regional Board.

Prior to the corporatisation of CAG, Mr Lee was Deputy Director-General (Operations) of the Civil Aviation Authority of Singapore. From 2005 to 2008, he was the Principal Private Secretary to Minister Mentor Lee Kuan Yew in the Prime Minister's Office. From 1989 to 2005, Mr Lee held various appointments in the Republic of Singapore Air Force (RSAF) and the Ministry of Defence, with his last appointment being Deputy Head of Air Operations in HQ RSAF. His last military appointment was Deputy Head of Air Operations in HQ RSAF.

Mr Lee was awarded the SAF (Overseas)/President's Scholarship in 1989 and the SAF Postgraduate Scholarship (General Development) in 2002. He holds a Bachelor of Arts (Honours) from the University of Cambridge, UK, and a Master of Business Administration from the Massachusetts Institute of Technology, USA.

### **TAN Ching Yee**

Mrs Tan is a Non-Executive Director of CAG and was appointed to the Board on 1 May 2017.

Mrs Tan is the Permanent Secretary of the Ministry of Finance, Singapore. She also holds the appointment of Permanent Secretary (Special Duties), Prime Minister's Office. She assumed these posts on 1 May 2016. She is Chairman of the Inland Revenue Authority of Singapore, and a Board member of the National Research Foundation.

She was previously Permanent Secretary at the Ministry of Health and the Ministry of Education. Before that, she was the Chief Executive of the then Infocomm Development Authority, Singapore, and also Deputy Secretary (Infocomm and Media Development) at the former Ministry of Information, Communications and the Arts. Prior to these roles, she had worked at the Ministry of Education and Ministry of Trade and Industry.

Mrs Tan read Economics at Cambridge University and obtained her Masters of Science in Management from the Graduate School of Business, Stanford University.

### **Dilhan Pillay SANDRASEGARA**

Mr Sandrasegara is a Non-Executive Director of CAG and was appointed to the Board on 15 January 2010.

He is the President, Joint Head of the Enterprise Development Group and Investment Group, and Head, Americas, of Temasek International Pte Ltd. Prior to joining Temasek, Mr Sandrasegara was the Managing Partner of WongPartnership LLP.

Mr Sandrasegara currently also serves on the boards of the Singapore Management University, Singapore Institute of Legal Education, National Research Foundation, Singapore Innovate and certain subsidiaries of Temasek Holdings. He is also a member of the Future Economy Council and the Financial Centre Advisory Panel of the Monetary Authority of Singapore.

He graduated from the National University of Singapore with a Bachelor of Laws and obtained a Master of Law from the University of Cambridge.

### **Richard Rokmat MAGNUS**

Mr Magnus is a Non-Executive Director of Changi Airport Group and was appointed to the Board on 23 July 2010.

Mr Magnus is currently Chairman of the Public Transport Council, Public Guardian Board, Political Films Advisory Committee, Bioethics Advisory Committee, Ministry of Home Affairs' Remote Gambling Act Appeals Advisory Panel and Member of the Public Service Commission and the Ministry of Home Affairs' Independent Review Panel. In the private sector, Mr Magnus serves on the boards of Temasek Foundation Cares CLG Limited, CapitaLand Mall

Trust Management Ltd, Singapore Consortium Investment Management Limited, and is Chairman of the Management Board of Human Capital (Singapore) Pte Ltd. He was the Founding Chairman of the Casino Regulatory Authority. He is also Singapore's First Representative to the ASEAN Inter-Governmental Commission on Human Rights, an Expert Member on UNESCO's International Bioethics Committee, as well as an alumnus of the National Agenda Council of the World Economic Forum.

Mr Magnus is a retired (now termed Chief) District Judge. He was awarded the Meritorious Service Medal for his exceptional public service and awarded the Outstanding Volunteer award by the Ministry of Social and Family Development, and the Public Service Star by the State in 2015.

Mr Magnus graduated from National University of Singapore with a Masters of Laws. He is also an alumnus of the Harvard Business School and the John F Kennedy School of Government.

### **TAN Gee Paw**

Mr Tan is a Non-Executive Director of CAG and was appointed to the Board on 1 May 2017.

Mr Tan previously served as Chairman of the Public Utilities Board (PUB), Singapore's national water agency from 1 April 2001 until his retirement on 31 March 2017. Mr Tan is a member of a number of government committees. He is Chairman of Nominating Committee, Lee Kuan Yew Water Prize, Singapore International Water Week. He is the Adjunct Professor, Dean's Office, Faculty of Engineering, National University of Singapore, Previous appointments held by Mr Tan were Principal of Ngee Ann Polytechnic, and Permanent Secretary of the then Ministry of the Environment. He is currently a member of CAG's Executive Committee on Airport Development

and a Director of Surbana Jurong Private Limited.

Mr Tan graduated with First Class Honours in Bachelor of Engineering (Civil) from the University of Malaya in 1967, and a Master of Science in Systems Engineering from the University of Singapore (NUS) in 1971. He was conferred an Honorary Degree of Doctor of Science from the University of Westminster, UK in 1993, and an Honorary Doctorate in Engineering from Sheffield University, UK in 1995. In 2013, he was conferred an Honorary Degree of Doctor of Engineering by the Nanyang Technological University.

Mr Tan received the Public Administration Medal (Silver) in 1978 and a Special Award (Gold Medal) for Clean River Commemoration in 1987. He also received the Medal of Commendation at the NTUC May Day Award in 2005, the President's Award for the Environment in 2007 and the President's Science and Technology Medal in 2015. Mr Tan was conferred the Meritorious Service Medal in 2001 for his work as Permanent Secretary of the then Ministry of the Environment and the Distinguished Service Order in 2010 for his work as Chairman of PUB. In 2011, Mr Tan was conferred the Distinguished Engineering Alumni Award by NUS, and the NUS Society Distinguished and Outstanding Member Award by NUS in 2014. He was elected an Honorary Fellow of the Institution of Engineers, Singapore and awarded the Lifetime Engineering Achievement Award in 2015. Mr Tan was also elected as a Fellow of the Academy of Engineering, Singapore in 2012.

### **Eric ANG Teik Lim**

Mr Ang is a Non-Executive Director of CAG and was appointed to the Board on 18 November 2009.

Mr Ang is a career DBS banker with 39 years of banking experience and until

31 May 2014, was responsible for the capital markets business. He is now a Senior Executive Advisor at DBS Bank and is principally responsible for business origination and high level relationship building for the bank.

His current directorships include Hwang Capital (Malaysia) Berhad, Sembcorp Marine Ltd, Raffles Medical Group, Surbana Jurong Pte Ltd, DBS Foundation Ltd and NetLink NBN Management Pte Ltd. He is also the Co-Chairman of the SGX Disciplinary Committee.

Mr Ang graduated from the University of Singapore with a Bachelor of Business Administration (Honours) degree.

### Miguel KO Kai Kwun

Mr Ko is a Non-Executive Director of CAG and was appointed to the Board on 7 September 2009.

Mr Ko is currently the Executive Director and Group CEO of Ascendas-Singbridge. Mr Ko is also the Chairman of Ascendas Hospitality Fund Management Pte Ltd/Ascendas Hospitality Trust Management Pte Ltd and Deputy Chairman of Ascendas Funds Management (S) Ltd. Previously, Mr Ko was Chairman and President of Starwood Hotels & Resorts, Asia Pacific Division. Prior to his appointment, Mr Ko was Deputy Chairman and CEO of CDL Hotels International.

Widely recognised for his knowledge and insight of business and culture in the Asia Pacific tourism industry, Mr Ko was voted Regional Hotel Chief of the Year (2007 and 2008) by the readers of Travel Weekly. He was named Visionary Leader of the Year and a recipient of the Global Awards at the World Travel Mart (2007) in London, and honoured with the Lifetime Achievement Award 2012 at the China Hotel Investment Conference in Shanghai.

Mr Ko has a Bachelor in Business Administration in Economics from the University of Massachusetts and a Masters in Business Administration from Suffolk University. He is also a non-participating Certified Public Accountant by the State Board of Accountancy in New Hampshire, USA.

### **Danny TEOH Leong Kay**

Mr Teoh is a Non-Executive Director of CAG and was appointed to the Board on 23 July 2010.

Mr Teoh is a Board Member of Ascendas-Singbridge Pte Ltd, DBS Ltd, DBS Bank Holdings, DBS Bank (China) Ltd, DBS Foundation Ltd and Keppel Corporation Ltd.

Mr Teoh was Managing Partner of KPMG in Singapore until his retirement on 30 September 2010. During this time, he served as a member of KPMG's Asia-Pacific Board and the KPMG International Council and Board. He also held various other positions at KPMG, including Head of Audit & Risk Advisory Services (Singapore), Head of Risk Advisory Services (Asia-Pacific) and Head of Financial Services (Singapore).

Mr Teoh qualified as a Chartered Accountant in the UK in 1981 and is a member of the Institute of Chartered Accountants of England and Wales. He is currently a fellow of the Institute of Chartered Accountants Singapore. In his current appointment as an independent Director of various boards, he also serves as the Chairman of the Audit Committee and Board Risk Committee.

### **Michael George William BARCLAY**

Mr Barclay is a Non-Executive Director of CAG and was appointed to the Board on 16 June 2009.

Mr Barclay is the Group CEO of Mandai Park Holdings (MPH). Mike oversees both Mandai Park Development, the entity set up to drive the rejuvenation of Mandai into an integrated wildlife and nature precinct, and Wildlife Reserves Singapore, the operator of four awardwinning attractions – Jurong Bird Park, Night Safari, River Safari and Singapore Zoo.

Prior to joining Mandai Park Holdings, Mr Barclay was CEO of Sentosa Development Corporation for seven years. This followed on from stints as Regional Vice President Asia for the International Air Transport Association and Chief Executive of SIIkAir. Mr Barclay began his career with Singapore Airlines, holding various portfolios in Singapore, Germany, Switzerland, Belgium and the UK.

Mr Barclay has a Master of Science degree in Transport Planning & Engineering from the University of Leeds and has completed the Advanced Management Program at Harvard Business School.

### **Professor TAN Kong Yam**

Professor Tan is a Non-Executive Director of CAG and was appointed to the Board on 30 January 2015.

Professor Tan is presently Professor of Economics at the Nanyang Technological University and Co-Director of the Asia Competitiveness Institute at the Lee Kuan Yew School of Public Policy at the National University of Singapore. He is also Deputy Chairman of APS Asset Management (China) and sits on the boards of Surbana-Jurong, Ascendas-Singbridge and CapitaRetail China Trust Management.

From 1984 to 1988, Professor Tan was the assistant director on exchange rate policy at the Monetary Authority of Singapore and assistant to the late Dr Goh Keng Swee, the former Deputy Prime Minister of Singapore, who had been invited by Mr Deng Xiaoping to advise China on economic

development strategy. From June 2002 to June 2005, he was a senior economist at the World Bank office in Beijing, In 2004, he was a member of the World Bank expert group on the 11th five-year plan (2006 to 2010) for the State Council in China. The expert group provided analysis and policy recommendations to the Chinese government. Prior to that, he was the chief economist of the Singapore government at the Ministry of Trade and Industry (1999 to 2002) and head of the Department of Strategy and Policy at the NUS Business School. He has also worked at the Hoover Institution at Stanford University and World Bank in Washington.

Professor Tan is a graduate of Princeton University with a Bachelor of Arts (Honours) and has a PhD in Economics from Stanford University

### LIM Zhi Jian

Mr Lim is the Alternate Director to Mrs Tan Ching Yee and was appointed to the Board on 1 May 2017.

He is Director (Reserves and Investment) at the Ministry of Finance. Prior to joining the Ministry of Finance in June 2016, he held appointments in the Ministry of Manpower and the Monetary Authority of Singapore. In the Ministry of Manpower, he was the Deputy Director of the Foreign Workforce Policy Department. In the Monetary Authority of Singapore (MAS), he held the positions of the Deputy Director of the Strategic Planning Office and Senior Policy Analyst of the Prudential Policy Department.

Mr Lim was awarded the Overseas Scholarship by MAS and graduated from Carnegie Mellon University with a double major in Computer Engineering and Economics. He also holds a Masters in International Policy from Stanford University and a Master in Public Administration Edward S. Mason Program from the Harvard Kennedy School.

### EXECUTIVE MANAGEMENT TEAM

### **CHANGI AIRPORT GROUP**

- **1. LEE Seow Hiang**Chief Executive Officer
- 2. TAN Lye Teck
  Executive Vice President,
  Airport Management
- 3. YAM Kum Weng
  Executive Vice President,
  Airport Development &
  Advisor, Air Hub Development
- **4. FOO Sek Min**Advisor to CEO
- **5. LIM Peck Hoon**Executive Vice President,
  Commercial
- **6. NG Lai Leng**Chief Financial Officer &
  Executive Vice President,
  Corporate
- 7. FONG Kok Wai

  Executive Vice President,
  Engineering & Development

### CHANGI AIRPORTS INTERNATIONAL

**8. LIM Liang Song**Chief Executive Officer

















### MANAGEMENT TEAM

### CHANGI AIRPORT GROUP

### **CHOY Da Wen**

Senior Vice President, Changi East Programme Management Office

### **CHUNG Choon San**

Project Director, Changi East Construction

### **Jayson GOH**

Managing Director, Airport Operations Management

### **HUNG Jean**

Chief Executive Officer, Jewel Changi Airport Development

### **KOH Miaw Ling**

Senior Vice President, T5 Building

### **KOH Ming Sue**

Managing Director,
Master Planning & Development

### **LECK Siew Leng**

Senior Vice President, Internal Audit

### **Audrey LEE**

Senior Vice President, Economic Affairs

### **Steve LEE**

Senior Vice President, Corporate IT & Technology/ Chief Information Officer

### **LEONG How Yin**

Project Director, Changi East Planning, Design & Construction

### **LEONG Kok Hoong**

Senior Vice President, Development Contracts & Cost Control

### **Albert LIM**

Senior Vice President, Passenger Experience

### **LIM Ching Kiat**

Managing Director, Air Hub Development

### **LIM Wee Ping**

Senior Vice President, Corporate Strategy & Business Development

### **LING Ming Koon**

Senior Vice President, T1 Expansion Programme Management Office

### Jessie LOONG

Senior Vice President, Legal / Company Secretary

### **Matthew NGAN**

Senior Vice President, Mechanical & Electrical

### **ONG Chee Chiau**

Senior Vice President, Changi East T5 Planning

### **ONG Sim Lian**

Senior Vice President, Design Management

### **Cletus PACKIAM**

Chief,

Airport Emergency Service

### Leslie PAKIANATHAN

Project Director,
Tunnel Construction Management

### **TAN Boon Seng**

Project Director, Project Control

### **Ivan TAN**

Senior Vice President, Corporate & Marketing Communications

### **Justina TAN**

Managing Director, People

### **TAN Kok Siong**

Project Director, Changi East Construction

### **TENG Hwee Onn**

Senior Vice President, Engineering Management & Systems Planning

### **TEO Chew Hoon**

Senior Vice President, Airside Concessions

### **WEN Dazhi**

Senior Vice President, Tunnel Design Management

### **Ivy WONG**

Senior Vice President, Finance Strategy & Transformation

### **YEO Kia Thye**

Managing Director, Airport Operations Planning & Airside

### CHANGI AIRPORTS INTERNATIONAL

(Members of Changi Airports International's Management Committee)

### **CHAN Mew Yoong**

Director & Head, Human Resources

### **Eugene GAN**

Managing Director, Asset Management

### **Peter LEE**

Managing Director, Changi Airport Planners & Engineers

### **LOW Beng Lan**

Chief Financial Officer

### NG Kuan Luen

Director & Head, Risk Management

### **SEE Ngee Muoy**

Managing Director, Legal & Compliance

### **James THONG**

Managing Director, Consultancy

### **ACCOLADES**



MONTH	CATEGORY OF AWARDS	NO. OF TIMES	PUBLICATION/ORGANISATION		
Mar	Airport of the Year above 20 Million Passengers	2	Air Transport News		
	World's Best Airport 2017	8	Skytrax		
Feb	Best Airport	12	DestinAsian		
	Top Worldwide Airport	15	Wanderlust		
Jan	Deficiency - Free	36	International Federation of Air Line Pilots' Associations (IFALPA)		

MONTH	CATEGORY OF AWARDS	NO. OF TIMES	PUBLICATION/ORGANISATION	
Dec	Best Overall Airport in the World	2	Global Traveler	
	World's Leading Airport	11	World Travel Awards	
	Favourite Airport	6	Condé Nast, Traveller, India	
Nov	Best Airport (World)	5	Travel + Leisure, India and South Asia	
	Best Airport in the World	12	Business Traveller, China	
Oct	Best Airport	2	Future Travel Experience	
	Top International Airport	9	Condé Nast Traveler, US	
	Asia's Leading Airport	13	World Travel Awards	
	Best Airport in the World	29	Business Traveller, UK	
Sep	Travel Hall of Fame	14	TTG Asia	
	Best Airport in the World	24	Business Traveller, Asia Pacific	
Δ.	Best Airport Worldwide	8	Smart Travel Asia	
Aug	Best Airport	2	International Traveller	
Jul	Best International Airport in the World	4	Travel + Leisure	
	Best Business Airport	23	Business Traveller, Germany	
May	Best Airport in the World	10	UltraTravel Magazine	
	Airport Authority in Asia/Pacific with the Most Supportive Approach to Travel Retail	16	Duty Free News International & Travel Retailer International	
Apr	Best Airport in the World	1	eDreams.com	
	Best Airport in the World	13	Business Traveller, Middle East	
	Airport Authority with the Most Supportive Approach to Travel Retail	8	Duty Free News International & Travel Retailer International	



### FINANCIAL HIGHLIGHTS

	FY12/13	FY13/14	FY14/15	FY15/16	FY16/17
Profit & Loss (S\$'mil)					
Total revenue	1,911	2,106	2,150	2,164	2,305
Total expenses	1,149	1,185	1,255	1,284	1,401
EBITDA	1,045	1,187	1,171	1,167	1,208
Profit after tax	751*	896*	782	784	657
Financial Position (S\$'mil)					
Assets	5,880	6,684	7,564	8,460	9,260
Liabilities	768	937	1,441	1,874	2,223
Equity	5,112	5,747	6,123	6,586	7,037
Financial Ratios					
EBITDA margin	54.7%	56.3%	54.5%	53.9%	52.4%
NPAT margin	39.3%	42.5%	36.4%	36.2%	28.5%
Return on assets	13.6%	14.3%	11.0%	9.8%	7.4%
Return on equity	15.8%	16.5%	13.2%	12.3%	9.6%

<sup>\*</sup> NPAT included one-off gains of S\$78 million and S\$111 million for FY12/13 and FY13/14 respectively.

### THE YEAR IN REVIEW

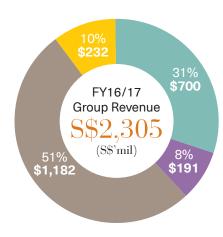
Changi Airport recorded strong growth in passenger movements of 4.6% to reach 59.4 million passenger movements, placing it as the sixth busiest airport in the world for international traffic. Indonesia continued to rank as Changi Airport's largest country market, followed by Malaysia, China, Thailand and Australia. The uplift in passenger traffic was in part due to subdued oil prices which fuelled airlines' network expansion and in part supported by CAG's continuous joint marketing efforts with airlines to drive traffic through Changi Airport. In FY2016/17, Changi Airport launched eight new city links and new non-stop flights to San Francisco with United Airlines and Singapore Airlines. During the year, Changi Airport also welcomed four new airlines.

Operating revenue in FY2016/17 grew by 6.5% to reach S\$2.3 billion. Both aeronautical revenue and nonaeronautical revenue registered growth compared to the previous financial year. The growth in aeronautical revenue was driven primarily by the increase in passenger traffic as well as the expiry of rebates given to airlines. Notably, the increase in non-aeronautical revenue was underpinned by strong concession sales, which hit a record high of S\$2.4 billion (a year-on-year increase of 5.0%). Despite the soft retail market, CAG managed to help its tenants grow sales through effective marketing and promotions, innovative retail concepts, and also deeper engagement with customers through the Changi Rewards loyalty programme.

On the cost front, operating expenses grew 9.1% year-on-year to S\$1.4 billion. Higher charges from the Civil Aviation Authority of Singapore (CAAS), and a one-off S\$15 million reversal in airport security charges last year were two key contributors for the higher operating expenses.

Overall, the Group achieved earnings before interest, tax, depreciation and amortisation (EBITDA) of S\$1.2 billion in FY2016/17, an increase of 3.5% from last year. Net profit after tax closed at S\$657 million representing a 16.2% decline from last year due to provision for impairment in overseas airport investments amounting to S\$110 million.

### **Operating Revenue**



- Airport services
- Security services
- Airport concessions and rental income
- Others

The Group's operating revenue grew 6.5% to S\$2.3 billion, underpinned by strong passenger growth and higher airport concession revenue. The growth in passenger movements of 4.6% from 56.7 million to 59.4 million, was boosted by higher traffic to and from Southeast Asia and South Asia, which registered growth of 5.3% and 7.3% respectively. The addition of four new airlines and eight new city links enhanced Changi Airport's connectivity and strengthened Singapore's position as the leading air hub in the region, connecting Singapore to some 380

cities in more than 80 countries around the world. Aircraft movements grew by 3.2% to reach 362,246 movements in FY2016/17.

Revenue from airport services increased by 11.6% from S\$627 million to S\$700 million due mainly to higher passenger traffic. In addition, certain financial assistance given to airport partners in the last two financial years to tide them over a difficult operating environment expired during the year. Notwithstanding the expiry of these rebates, CAG, through the Changi Airport Growth initiative, continues to incentivise our airport partners to drive more traffic and enhance connectivity at Changi Airport. Revenue from security services also increased 4.7% in tandem with passenger traffic growth.

The Group achieved strong growth in airport concession and rental income of 5.0% year-on-year crossing S\$1.1 billion. The growth in concession revenue was supported by a 5.0% increase in concession sales to reach a record high of S\$2.4 billion in FY2016/17. This placed Changi Airport as one of the top three airports in the world for concession sales.

Despite the soft retail market, CAG managed to help tenants grow sales by deepening engagement with customers through in-airport activities and the Changi Rewards loyalty programme. To add value to concession partners in this digital age, the iChangi mobile app was enhanced to incorporate Changi Rewards and iShopChangi, the airport's online shopping portal. During the year, iShopChangi expanded its product range by 60%, growing its sales by more than 70%. The Changi Rewards membership base also increased, with sales from members growing by 22% year-on-year.

New and refreshed retail offerings also helped to boost retail sales. During the year, DFS launched its second Wines & Spirits duplex store at Changi Airport with a seven-week Whiskey Festival to showcase different whiskey brands. The new duplex offers customers an interactive and engaging shopping experience, allowing them to sample and explore DFS' broad assortment of wines and spirits

CAG's anchor retail campaigns, "Be a Changi Millionaire" and the annual year-end festive celebrations were also well-received and helped to drive footfall and concession sales. The strong performance from Changi Airport's non-aeronautical revenue enables CAG to subsidise and keep aeronautical charges competitive.

### **Operating Expenses**



- Maintenance of land, buildings and equipment
- Depreciation
- Government charges and CAAS services
- Services, security and other related expenses
- Employee compensation

The Group's operating expenses increased by 9.1% to S\$1.4 billion in FY2016/17. The increase mainly came from CAAS charges, and services and security-related expenses. The increase

in CAAS charges contributed to more than 40% (or \$\$50 million) of the increase in operating expenses due in part to the cessation of rebates.

The increase in services, security and other related expenses was in part due to a one-off S\$15 million reversal in airport security charges last year and in part due to annual contract escalation for manpower-intensive contracts pertaining especially to security manning services. Aside from investing in security-related services, CAG continued to work closely with partners in the airport community to drive a stronger service culture and guide the service teams in their interactions with customers at all touch-points.

CAG's subsidiary, Changi Recommends, expanded its services and footprint in the region, contributing to an increase in operating expenses in FY2016/17. Whether passengers are heading overseas or visiting Singapore, Changi Recommends offers services and products that help passengers travel better. These include rental of Wi-fi routers, sale of local and overseas SIM cards to allow travellers to stay connected, sale of tourist attraction tickets and hotel bookings.

Operating expenses also increased with the stepping up of Changi East project activities, which saw the engagement of more professional services to support the development of the project.

### **EBITDA/Profit After Tax**

The Group achieved an EBITDA of S\$1.2 billion, representing a 3.5% increase from the previous year.

In FY2016/17, the Group provided impairment loss of S\$110 million for its overseas airport investments. This was largely due to the deterioration of Brazil's economy, which affected the performance of RIOgaleão airport. Taking into account this impairment, the Group's NPAT declined by 16.2%, to S\$657 million.

### **Strong Financial Position**

The Group's shareholder's equity improved by S\$450 million to reach S\$7.0 billion with a strong asset base of S\$9.3 billion.

Total assets increased S\$799 million to S\$9.3 billion. The increase comprised mainly investments in development projects as we embarked on capacity building. The major components of total assets were property, plant and equipment (of S\$5.1 billion) and cash and cash equivalents (of S\$2.7 billion). The surplus cash has been earmarked for the funding of on-going development projects.

An interim sinking fund was created last year to set aside funding for the Changi East development project. The contribution to this sinking fund in FY2016/17 was \$\$90 million, bringing the cumulative amount in this fund to \$\$176 million.

### **Capital Expenditure**

The Group's strong financial position strengthens its ability to invest in capital expenditure to upkeep and enhance the airport's facilities as well as fund several significant development projects (which include T4, Jewel, T1 Expansion and the three-runway system) to meet long-term capacity needs and enable Changi Airport to stay ahead of global competition.

CAG has made good progress on the major development projects.
Construction work for T4 has been completed, operational readiness trials are ongoing and the terminal is slated to open in late 2017.
Structural works for the Jewel development, comprising five storeys above ground and five basement storeys – housing about 300 shops and F&B outlets – have been completed. It is scheduled for opening in early 2019. The three-runway system is on track for completion in the first half of the 2020s.

### CORPORATE GOVERNANCE

The Board and Management of CAG are deeply committed to our Company's central core value – integrity – which is at the heart of all we do. We strive to meet and maintain the highest standards of corporate governance, professionalism and integrity to build a company which stakeholders can be proud of. To thrive and to operate a sustainable business over the long term, and to uphold and protect the Company's brand and reputation, CAG strongly believes that it has to be accountable to its immediate business and regulatory environment, as well as to the global community.

CAG has a Code of Conduct, which sets out the principles, policies and standards of conduct that it expects of all employees in their day-to-day activities and in the decisions they make. The Company has implemented a whistle-blowing framework to prevent, detect and deter unethical or illegal conduct, while protecting whistle-blowers from retaliation.

### THE BOARD OF DIRECTORS

 CAG's Board of Directors is our highest decision-making body, which oversees the Company's long-term strategies and provides management guidance for continuing and steady growth, while protecting the interests of stakeholders.

### **Composition and Balance**

- The Board, headed by non-executive Chairman, Mr Liew Mun Leong, comprises 11 Directors, of whom only the CEO, Mr Lee Seow Hiang, is an executive Director. The majority of our Board members are independent. Our Directors are individuals with broad and diverse expertise and experience, both domestically and internationally.
- 3. The Board Directors of CAG are:

Mr Liew Mun Leong - Chairman Mr Lee Seow Hiang - CEO Mrs Tan Ching Yee

Mr Lim Zhi Jian

(Alternate Director to Mrs Tan Ching Yee)

Mr Michael George William Barclay

Mr Miguel Ko Kai Kwun

Mr Eric Ang Teik Lim

Mr Dilhan Pillay Sandrasegara

Mr Danny Teoh Leong Kay

Mr Richard R. Magnus

Professor Tan Yong Kam

Mr Tan Gee Paw

The profiles of the Directors can be found on pages 20 to 23 in this annual report. Changi Airports International (CAI), a wholly-owned subsidiary, has a separate Board of Directors.

- 4. The roles of the Chairman and the CEO are separate and distinct. The Chairman leads the Board and facilitates effective and comprehensive Board discussions and decision-making on strategic issues, while the CEO has full executive responsibility for the management of the Company's businesses and implementation of the Group's strategies and policies.
- 5. Six committees have been formed to assist the Board in the detailed consideration of various matters. These are the Executive Committee (EXCO), Executive Resource and Compensation Committee (ERCC), Audit Committee (AC), Tenders Committee (TC), Executive Committee on Airport Development (ECAD) and Operational Risk and Safety Committee (ORSC). Each committee is governed by its own terms of reference, which sets out the scope of the committee's duties and responsibilities. Ad-hoc committees are also formed to review specific issues from time to time.
- 6. The Board meets at least four times a year to review CAG's business performance and financial results, and to approve the annual budget.

### **Access to Information**

7. Prior to each Board Meeting and when necessary, the Board is provided with pertinent information – including updates on the Company's operating and financial key performance indicators, legislative, industry and other significant developments relating to the Group – which enables the Board to make informed and sound decisions. The Board has full access to the Senior Management team and the Company Secretary. Should the Directors require independent professional advice on matters relating to the businesses or issues affecting their duties, the Company will, at its expense, arrange for the appointment of relevant professional advisors.

### **CAPITAL & INVESTMENTS**

1. The members of the EXCO are:

Mr Liew Mun Leong - Chairman Mrs Tan Ching Yee Mr Eric Ang Teik Lim Mr Richard R. Magnus Mr Lee Seow Hiang

2. The EXCO reviews and recommends to the Board financing and investment strategies of the Company and approves significant investments by the Company and CAI. The EXCO also approves treasury matters such as the acceptance of banking and credit facilities, granting of corporate guarantees, debt capital market issuance, opening of bank accounts as well as hedging

policies. EXCO also sets the financial limits for operations, procurement and treasury of the company.

### **EXECUTIVE RESOURCE AND COMPENSATION**

 The ERCC comprises the following non-executive Directors:

> Mr Liew Mun Leong - Chairman Mr Eric Ang Teik Lim Mr Miguel Ko Kai Kwun

- 2. The ERCC supports and advises the Board on remuneration matters, leadership succession and development. The roles of the ERCC include:
  - a. reviewing and approving the policy for determining executive remuneration, including the remuneration packages, service contract terms and benefits programme for key management executives;
  - approving the appointment of key management executives, overseeing their development and reviewing succession plans to ensure a strong pipeline of talent to enable the continued success of the Company; and
  - c. recommending the remuneration framework, including Directors' fees for non-executive Directors.

### **ACCOUNTABILITY AND AUDIT**

### **Accountability**

 Management provides all members of the Board with reports on operating and financial information and key performance indicators on a quarterly basis and as the Board may require from time to time, to enable the Board to make balanced and informed assessments of the Company's performance, position and prospects.

### **Audit Matters**

2. The AC comprises the following non-executive Directors:

Mr Danny Teoh Leong Kay - Chairman Mrs Tan Ching Yee Mr Eric Ang Teik Lim

3. The primary role of the AC is to assist the Board to review the adequacy of CAG's internal control systems in ensuring that the financial records have been properly maintained and its financial statements give a true and fair view of the Company's performance and position. In addition, the AC is also responsible to review the effectiveness of financial, compliance and risk management framework, as well as the robustness of the reporting processes. The AC also reviews the adequacy of mechanisms put in place for CAG's employees, partners, suppliers and contractors to raise concerns in confidence, the procedures for independent investigation of the matters reported and ensures appropriate follow-up, investigation and resolution.

- 4. During the year, the AC performed an independent review of the financial statements of the Company. In the process, the AC reviewed the key areas of management judgment applied for adequate disclosure, critical accounting policies and any significant changes that would have a material impact on the financial statements.
- 5. Annually, the AC reviews and approves the audit plans of the internal auditors to ensure the adequacy of the audit scope in reviewing CAG's significant internal controls. Besides reviewing the adequacy of the internal audit function in terms of its resources, competency and standing within the organisation, the AC is also updated on the training received by the internal audit team to ensure that its staff continually updates their technical and auditing skills. The AC also reviews the reports of the external and internal auditors on the effectiveness of actions taken by Management on the auditors' recommendations and observations.
- 6. The AC reviews and approves the external auditor's audit plan for the year. Prior to making recommendations to the Board on the external auditor's appointment or reappointment, the AC reviews the external auditor's independence, objectivity and quality of work based on guidelines established by the Accounting and Corporate Regulatory Authority and through discussions with the external auditors. In line with best practice, the external audit partner is rotated every five years. The AC also reviews the non-audit fees awarded to the external auditors to ensure that the non-audit services performed by them would not affect their independence.
- 7. The AC meets with the internal and/or external auditors three times during the year. At least one of these meetings is conducted without the presence of Management, where the auditors may raise issues encountered in the course of their work directly to the AC.

### **INTERNAL CONTROLS**

 The Board and Management of the Company are fully committed to maintaining a robust system of internal controls, procedures and risk management to safeguard our shareholder's interests and the Group's assets.
 The Board delegates its oversight responsibilities for internal controls, and financial and strategic (business) risk management to the AC, which ensures effectiveness and adequacy of the system of internal controls in the Company, while the ORSC assists the Board in reviewing the operational and safety risk management systems put in place by Management.

- The internal controls established by CAG are supported by systems, processes and people. There are three elements to the internal controls:
  - a. business governance and policies to provide direction and guidance on financial, operational, information technology and compliance matters;
  - the management and assurance frameworks such as the enterprise risk management and fraud risk management processes. These processes include the conflict of interest declarations by employees under the Code of Conduct to establish expectations of employees' business conduct and the Whistleblowing Policy; and
  - c. independent assurance provided by the internal and external auditors.
- 3. CAG's internal and external auditors review the key internal controls of the Company for material non-compliance or failures in internal controls and recommend areas of improvements. AC reviews the effectiveness of the action taken by Management on the recommendations made.
- 4. The AC also reviews the effectiveness of the enterprise risk management framework and the risk management processes put in place to manage financial and strategic (business) risks while meeting business objectives.
- 5. A separate committee, the Tenders Committee (TC), evaluates and approves tenders for goods and services exceeding S\$50 million, with the exception of those related to new development projects and major redevelopment projects at Changi Airport, which come under the purview of the ECAD. The TC is chaired by a non-executive Director and comprises the following Directors:

Mr Michael George William Barclay - Chairman Mr Richard R. Magnus Mr Lee Seow Hiang

### **Internal Audit**

6. The role of the internal auditors is to assist the AC to ensure that the Company maintains a sound system

of internal controls. Internal Audit (IA) conducts regular audits of high risk areas, and undertakes investigations as directed by the AC. It comprises suitably qualified and experienced staff, headed by the Senior Vice President, Internal Audit (SVP, IA). SVP, IA reports functionally to the Chairman of the AC, and administratively to the CEO. To ensure the independence of the IA function, the IA team has unrestricted access to the AC.

- 7. IA adopts a risk-based approach in its audit work, focusing on key internal controls, including financial, operational and compliance controls. Internal audit practices are also guided by the International Standards for the Professional Practice of Internal Auditing set by the Institute of Internal Auditors.
- 8. Audits are carried out on all significant business units and processes in the Company. The annual audit plan is developed in consultation with, but independent of, Management and is approved by the AC. IA's report on findings and recommendations are submitted to the AC with copies extended to the CEO and relevant senior management officers, and a summary of key findings and recommendations discussed at the AC meetings. IA also tracks and reports to the AC on the implementation status of actions agreed by Management, so as to ensure timely and adequate closure of audit findings.

### AIRPORT DEVELOPMENT

 The ECAD currently comprises four directors and six non-voting external members, who have been coopted to provide advice and expertise in relation to the development projects. The four directors are:

> Mr Liew Mun Leong – Chairman Mr Tan Gee Paw Mr Lim Zhi Jian Mr Lee Seow Hiang

- 2. The ECAD oversees new development and major redevelopment projects at Changi Airport. The roles of the ECAD include:
  - a. reviewing and approving collaborations, selection of consultants, architects and other professional advisors, design concepts, aesthetic element proposals and other proposals related to development projects at Changi Airport; and
  - b. reviewing and approving tenders for goods and services exceeding S\$50 million related to the development projects at Changi Airport.

## ENTERPRISE RISK MANAGEMENT

1. CAG is fully committed in implementing a robust Enterprise Risk Management (ERM) framework, which include the following areas:

Policy: Risk strategy, objectives, scope and

thresholds;

People: Risk governance structure, objectives,

and competencies;

Methods: Risk identification, analysis, evaluation,

treatment, and monitoring;

Enablers: Risk matrix, thresholds, and registers.

- There is a clear definition of roles, responsibilities and accountability in the implementation of risk management in CAG. Both current and emerging risks are thoroughly identified, examined, and aggregated to the enterprise level.
- The scope of CAG's risk types cover operational and safety, regulatory, financial, strategic and key project management risks arising from T4, Jewel, T1 Expansion, and Changi East developments.
- 4. Each key developmental project has a dedicated risk manager, whose role is to identify and aggregate the project's current and emerging risks which impact timelines, costs, quality and safety, and to report the project's top risks and mitigation measures to the CAG Risk Committee, through the ERM division.

### **Risk Governance**

- The CAG Risk Committee, supported by the ERM division, leads the Company's efforts in developing and strengthening its risk management processes and framework.
- 6. Both the Board and Management are responsible for managing risks. The ORSC assists the Board in exercising this role by reviewing CAG's operational and safety risks, while the AC assists the Board by reviewing CAG's Financial and Strategic risks.
- 7. The ORSC comprises two Directors. The two directors are:

Mr Michael George William Barclay - Chairman Mr Richard R. Magnus

An external member (not being a director) may be co-opted as and when necessary to provide expertise in the areas reviewed.

8. Reporting to both the AC and ORSC, the Risk Committee is chaired by the CEO and comprises Senior Management members, who meet regularly to review CAG's key risks and provide directions to strengthen the implementation of ERM in CAG.

### **Risk Awareness Culture**

 At CAG, every employee and everyone working in the airport community is a valued manager of risks. Therefore, the Risk Committee, through the ERM unit, continues with its engagement efforts through inter-divisional risk workshops and meetings with risk owners.

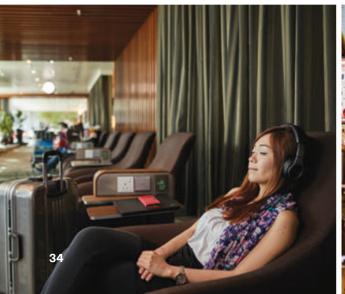
## BUSINESS & OPERATIONS REVIEW

























## GLOBAL CONNECTIVITY



#### AMERICAS

North America Canada United States

South America

Brazil

#### ASIA

Central Asia

Uzbekistan Turkmenistan

Middle East

Bahrain Egypt

Oman Qatar

Saudi Arabia United Arab Emirates

#### Northeast Asia

China

Hong Kong, SAR

Japan Macau, SAR

South Korea Taiwan

#### South Asia

Bangladesh Bhutan India Maldives

Nepal Sri Lanka

#### Southeast Asia

Brunei Darussalam Cambodia Indonesia Laos

Malaysia Myanmar Philippines

Thailand Timor Leste Vietnam

#### EUROPE

#### Eastern/ Central Europe

Albania
Azerbaijan
Bulgaria
Croatia
Czech Republic
Hungary
Poland
Russia
Slovenia
Ukraine

Turkey



Western Europe

Austria Belgium Denmark Estonia Finland France Germany Greece Italy Lithuania Luxembourg Netherlands

Norway

Portugal Spain Sweden Switzerland United Kingdom

**AFRICA Eastern Africa** 

Ethiopia Kenya Mauritius Rwanda Tanzania Uganda

**Southern Africa** South Africa

Western Africa Burkina Faso Cote d'Ivoire Ghana

Republic of Congo Senegal

**SOUTHWEST PACIFIC** 

Australia Cook Islands

New Zealand Norfolk Island Papua New Guinea

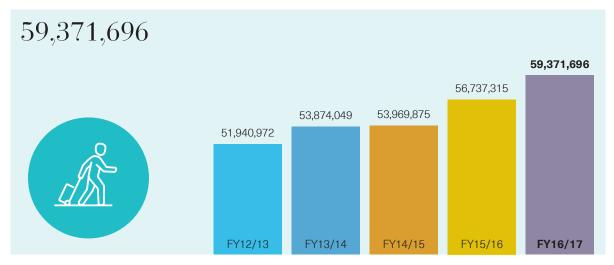
Samoa

Solomon Islands Tonga Vanuatu

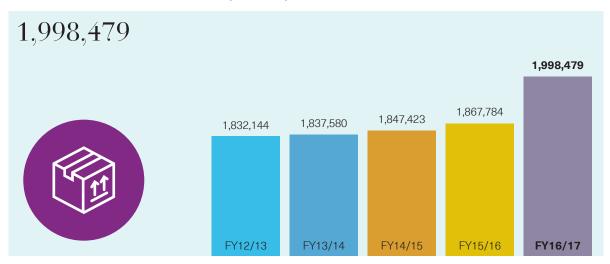
Figures include both physical and codeshare links (As of 31 March 2017)

# AIR TRAFFIC STATISTICS

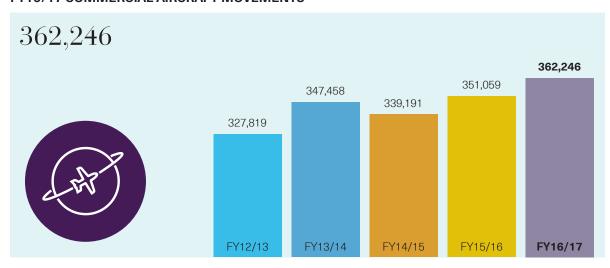
#### **FY16/17 PASSENGER MOVEMENTS**



#### **FY16/17 AIRFREIGHT MOVEMENTS (TONNES)**



#### **FY16/17 COMMERCIAL AIRCRAFT MOVEMENTS**



# @CHANGIAIRPORT ON INSTAGRAM



# A PREMIER AVIATION HUB

In FY2016/17, global travel demand continued to grow with lower oil prices offering airlines some respite in a highly competitive environment. Changi Airport captured a fair share of this global growth, with 59.4 million passengers passing through its doors during the year – a 4.6% increase. This was the highest number of passenger movements achieved in a financial year since the airport's opening in 1981.

Changi Airport maintained its position as the world's sixth busiest airport for international traffic, with aircraft movements rising 3.2% to reach 362,246 flights. Traffic to all regions saw positive growth, with the Southeast Asia and South Asia regions seeing an increase of 5.3% and 7.3% in passenger movements respectively.

The emerging Africa region also saw strong double-digit growth of more than 22%.

During the year, Changi Airport welcomed four new airlines – Fiji Airways, K-Mile Air, Silk Way West Airlines and US Bangla Airlines.
Fiji Airways forged deep partnerships with Jetstar Group and Jet Airways during its first year of operations at Changi, providing its passengers with convenient and seamless connections between Nadi and more than 20 destinations in Southeast Asia, North Asia and India, via the Changi air hub.

Eight new city links were established from Singapore to Australia (Canberra), China (Urumqi), Fiji (Nadi), Germany (Düsseldorf), India (Amritsar and Jaipur), Japan (Sapporo) and New Zealand (Wellington). Changi Airport also made good progress in the development of its long-haul routes with the introduction of Singapore Airlines' (SIA) services to Düsseldorf, as well as the launch of non-stop flights to San Francisco by SIA and United Airlines.

### **Strong growth in Asia and emerging markets**

Among Changi's top country markets, Indonesia retained its top spot, followed by Malaysia, China, Thailand and Australia. China in particular showed robust growth of 14%, overtaking Thailand and Australia to become the airport's third largest source market. Changi's top five routes by passenger movements remained unchanged with Jakarta leading the list followed by Kuala Lumpur, Bangkok, Hong Kong and Manila.



Fiji Airways is one of four new airlines which joined the Changi family in the past year.







West Air's city link to Urumqi is an added boost in cultivating the aviation market between Singapore and the cities under China's One Belt, One Road plan.

Following the launch of direct services by Air Mauritius to Singapore in March 2016, Changi saw a strong five-fold increase in passenger traffic between the two countries. This also boosted traffic between Singapore and the African continent, which was the fastest growing region for Changi Airport for the year.

In FY2016/17, 5.8 million passengers travelled between Singapore and China – contributing to almost 10% of Changi Airport's total passenger movements. Traffic growth was largely fuelled by strong travel demand to Singapore, as well as additional capacity injection on routes such as Guangzhou, Shenzhen, Fuzhou and Nanjing. Guangzhou in particular saw growth of more than 20% year-on-year.

Besides West Air's new service to Urumqi, Changi Airport also saw the resumption of direct flights to Wuxi with Tigerair's four weekly services launched in April 2016. Tigerair and Scoot further enhanced Changi's connectivity to China by launching non-stop services to Zhengzhou and Shenyang respectively, providing greater convenience and more travel options to passengers.

With these developments, Changi is now connected to 32 Chinese cities and offers more than 76,000 weekly one-way seats to China – a year-onyear growth of 19%.

#### **Growing new traffic segments**

By embarking on various partnerships with airlines, travel agents and tourism boards to promote travel via Changi to destinations beyond Singapore, CAG worked to grow new passenger segments to pursue sustainable traffic growth.

CAG also continued to cultivate traffic in the Meetings, Incentives, Conventions and Exhibitions (MICE) segment and to provide customised experiences for large MICE groups going beyond Singapore. Under the Singapore MICE Advantage Programme, CAG renewed its partnership with SIA and the Singapore Tourism Board (STB), as well as two new partners - JetQuay and Uber - to enhance Singapore's offerings by delivering a holistic Singapore experience. This programme focuses on attracting conventions and exhibitions occurring in the next five years to Singapore.

Through the In Singapore Incentives & Rewards (INSPIRE) programme, CAG worked with STB and various attractions to target high-yield meetings and incentive groups from key source markets such as China, Europe as well as North America.

Fly-cruise is also another emerging high-value segment for Singapore, with 16% growth in cruise passenger throughput registered in 2016. To develop this segment, CAG has been partnering STB and various cruise brands to bring fly-cruise passengers to Singapore. In March 2017, CAG entered into a second tripartite partnership with Royal Caribbean International and STB, which is expected to bring



The Singapore-homeported Ovation of the Seas, is one of three ships under Royal Caribbean International that will sail and bring fly-cruise passengers to Singapore. (Photo: Royal Caribbean International)







In-market campaigns such as this promote Changi Airport as the preferred hub from which travellers can explore the region.

in 45,000 fly-cruise passengers annually. The first partnership, which commenced in 2015, is expected to bring in around 195,000 passengers to Singapore over a three-year period.

During the year, CAG also enhanced trade partners' efforts in travel fairs - particularly in Indonesia which resonated with Indonesian consumers. Passengers welcomed additional incentives given out at these fairs such as Changi Airport shopping and dining vouchers. As part of a two-year Memorandum of Cooperation signed with STB, the joint marketing funds supported six travel fairs organised during the year. These projects contributed to the healthy growth in passenger traffic between Indonesia and Singapore, while deepening CAG's working relationship with trade partners.

For achieving success in marketing Changi Airport as a desired air hub, CAG was named the overall winner of the World Routes Marketing Awards 2016. The awards are voted for by airlines and hence are highly regarded in the aviation industry.

#### **Promoting Singapore in key markets**

Changi Airport continued in efforts to engage consumers in four source markets (Australia, China, India and Indonesia) with the business objectives of inspiring travel, increasing spend per passenger and building brand advocacy. Partnerships with key travel agents, travel and lifestyle platforms and key influencers were forged to reach consumers where they typically visit to research and book their trips. To encourage travellers from Australia and China to travel beyond Singapore to new destinations, CAG developed interesting video content, tapping on the influence of social media celebrities and key opinion leaders to reach out



Changi Airport supports airlines through regular in-airport destination marketing events to bring updates on the latest travel hotspots to the public.



to the target audience. The strategy proved effective, with heightened engagement and increased recall of Changi Airport's offerings registered.

Email databases grew exponentially in the key markets to support direct marketing efforts, generating strong customer leads for CAG's travel and retail partners.

Social media marketing efforts in these markets were tailored to their native language or leveraged trending topics to further augment engagement. For example, geo-targeted posts in Bahasa Indonesia were served to Facebook fans in Indonesia, while a social media campaign was launched in conjunction with Diwali to encourage fans in India to travel to Singapore. These activities resonated well with the respective markets, resulting in increased reach and enhanced brand equity. Through editorial content and tactical campaigns on WeChat, an ubiquitous messaging app in China, Changi Airport has not only grown its fan base, but also increased retail spend at the airport during peak travel seasons.

### Boosting Changi's air cargo capabilities

Changi Airport handled close to two million tonnes of cargo in FY2016/17 – a 7.0% increase and a new high in the airport's history. Improvements in its cargo flows were seen across the board, especially for cargo segments such as e-commerce, perishables and pharmaceuticals.

With the robust growth of e-commerce in recent years, Changi saw key investments by its strategic partners to harness the region's e-commerce potential. For instance, DHL Express launched its fullyautomated South Asia Hub at Changi Airfreight Centre, which tripled DHL's cargo handling capacity to 628 tonnes per day during the peak processing window, and increased its parcel-sorting speed by six-fold to 24,000 shipments and documents per hour. SATS also opened its 6,000-square-metre eCommerce AirHub, which tripled its mail sorting and processing capabilities.

Changi continues to anchor its status as a trusted hub for pharmaceutical handling. In October 2016, CAG joined Pharma. Aero, an organisation comprising stakeholders of the air cargo supply chain from around the world, dedicated to achieving excellence in end-to-end air transportation for pharma cargo.

Changi also became the first airport in the Asia Pacific region to form an airport community to achieve certification as an IATA Center of Excellence for Independent Validators on Pharmaceutical Handling (IATA CEIV Pharma), allowing pharmaceutical products to be handled with the highest standards at Changi.

For its efforts, CAG was awarded Asia Pacific Airport of the Year 2016 (Customers' Choice) by Payload Asia for the third consecutive year and Cargo Airport of the Year 2016 (over 1 million tonnes) by Air Cargo News. These achievements are a testament to Changi Airport being a key air cargo hub in the region.



Changi Airport is the first airport in Asia to join pharmaceutical-focused organisation Pharma. Aero as a strategic member.



### A "WOW" CHANGI EXPERIENCE





Adorable Pikachu dancing to choreographed music at the first-ever Pikachu parade at Changi Airport.

Driven by the desire to deliver a personalised, stress-free and positively surprising experience for passengers at Changi Airport, exciting projects and initiatives were rolled out in the year to wow passengers, while ensuring that operations continued to run efficiently.

As an affirmation of CAG's efforts, Changi Airport received 25 Best Airport awards in FY2016/17. These include the World's Best Airport award by Skytrax for the fifth consecutive year, and the Best Airport in the World award from Business Traveller for the 29<sup>th</sup> year running. As it stands, Changi Airport has received over 530 awards to date.

#### **Festive cheer**

The year-end holidays are a special time of the year when travellers

around the world are in a joyful and festive mood. To add to the season's festive cheer, Changi decided to ride on the global interest in Pokémon by picking the well-loved pocket monsters as the mascots for Changi's festive celebrations at the end of 2016.

On 18 November 2016, the first-ever Pikachu parade in Singapore saw star-struck fans gather at Changi Airport to catch a glimpse of the cute Pokémon. A contingent of 10 Pikachu delighted fans with an energetic and super *kawaii* dance number, followed by a single-file march across the length of T3's Departure Hall which provided fans with plenty of opportunities to catch the yellow critters in live action.

By the end of the festive celebration, over 100,000 airport visitors had been

treated to the various *Pokémon@ Changi* activities. These included a multi-sensory light show with music and dancing trees amidst snowfall, photo opportunities with Pokémon characters and the seven-metre-tall Pikachu balloon sculpture that took centre stage in T3's Departure Hall.

Festivities are never complete without toys. Fans and shoppers redeemed over 260,000 Pokémon plush toys in nine limited edition designs over the entire campaign period. The extravaganza eventually reached over 25 million social media users, and was covered by over 170 local and international media titles.

The Pokémon@Changi event enhanced the joyous ambience in the terminals and brought delight to passengers and visitors during the year-end festive period. The well-received event reinforced Changi's proposition as a destination on its own, and a transit hub of choice among travellers in the region.

#### **Enchanting memories**

Changi also strives to create memories for the public and passengers through its unique and colourful horticulture displays during the year's various festivals and major events. For example, during Deepavali, peacock topiaries measuring four to six metres were created using cut flowers, potted orchids and bromeliads, providing a visual feast for visitors. More than 200,000 visitors saw the displays, and more than 35,000 positive feedback was generated on-ground as well as on various social media channels.

Similarly, larger-than-life lanterns were created for the airport's landscape displays to celebrate the Mid-Autumn Festival. Inspired by colourful cellophane lanterns that children carry and Chinese folklore of the magical carp and the Jade Rabbit on the moon, the displays provided interesting photo opportunities to both locals and foreigners alike. The explanation panels put up at the display areas also gave visitors a background of the festival and the display items. More than 153,000 people visited the installations, with over 19,000 positive feedback received on-ground as well as through social media.

In addition to horticulture displays, to enchant passengers the moment they step into Changi Airport and to create a distinctive Changi identity, a signature scent – Orchid Tea fragrance – was specially designed for use in Changi's terminals.

Inspired by the gardens in Changi Airport, the light floral fragrance was designed to be subtle, yet unique and identifiable. Comprising notes of orchid, damask rose, ylangylang, geranium, mint, citrus, South American yerba mate, white flowers and other spices giving an Asian twist, the scent is currently diffused at selected locations in the airport.

Through the Orchid Tea fragrance, CAG aims to enhance the airport experience by forging lasting positive emotions in passengers as they associate this unique fragrance with travelling through Changi.

#### **Fast and Seamless Travel (FAST)**

In the course of the year, Changi continued to develop FAST initiatives for the convenience of passengers and to reap productivity savings. FAST comprises a suite of self-service initiatives at four key passenger touch points – check-in, bag drop, immigration clearance and boarding. Since the inception of self-service check-in in 2014, it has gained traction with both passengers and airlines, and the airport has seen an increase in the adoption rate by passengers. Besides improving passenger experience and increasing

throughput, the implementation of FAST also enables airlines to reap manpower and cost savings.

In tandem with the expansion works at T1, a new Central FAST zone was introduced in the terminal. This major initiative transformed the layout of the existing check-in rows in the central section of T1 into a dedicated zone where passengers can check in at automated check-in kiosks and drop off their bags at the bag drop machines.

Currently, Jetstar Group and Qantas are two major carriers using the Central FAST zone at T1. Both airlines, as well as their ground handling agents, have embraced this new concept, enabling them to handle higher passenger traffic efficiently. To enhance passenger experience, the FAST zone also boasts a refreshing look and feel, offering greater space and comfort for passengers. With this, passengers can now opt for self-service and have better control over their travel journeys, including the option to check-in earlier.

To encourage more passengers to use the self-service initiatives, the automated check-in kiosk has also been redesigned to make them more ergonomic and pleasing to the eye. In the process of designing the kiosk, every detail such as the kiosk height and screen tilt angle was carefully considered in consultation with airline partners and ground staff. The user



Wowing passengers with impressive peacock topiary displays at T2 during Deepavali.





New automated check-in kiosks at T1's central FAST zone offer self-service convenience to passengers.



interface was also tweaked to make it more intuitive for passengers' use. The design was eventually shortlisted for the Singapore President's Design Award 2016.

At the same time, to prepare for the roll-out of FAST in T4, which will be the first terminal at Changi Airport to feature the entire suite of self-service options, 'live' trials were carried out on the new automated bag-drop machines, now equipped with facial recognition technology for automated identity verification. Cathay Pacific and AirAsia Group, which will be moving to T4, have been providing FAST travel options to their passengers at T1 since February 2017. Conducted as part of the T4 Operational Readiness & Airport Transfer (ORAT) programme, these trials were designed to familiarise both passengers and staff with the new FAST systems and processes before the airlines start operations in T4.

#### **Automation for more convenience**

With the automated check-in and self bag drop options, passengers can now check in even before their airline's manual counters open. To facilitate early check-in by passengers using T1, Changi Airport has installed a new automated Early Baggage Storage system (EBS) which can accept check-in luggage up to 72 hours before flight time. When the flight time draws near, the system automatically retrieves and dispatches the luggage to the baggage track, where the luggage will then be loaded onto the aircraft. Commencing operations in February 2017, the EBS can store about 1,000 pieces of luggage at any point in time.

To provide more transport booking options for arriving passengers, Changi Airport also introduced the Ground Transport Concierge self-service booking system in the Arrival Halls in all three terminals in December 2016. Previously administered as a counter service during fixed hours, this service to book large and limousine taxis as well as city shuttle bus rides has been automated to provide passengers with convenient round-the-clock service. These transport options complement the metered taxis available at each terminal, as well as buses and the MRT trains in getting passengers quickly and efficiently to their destinations.

### **ONE** GRACIOUS CHANGI





CAG staff and airport partners giving an energetic start to the ONE Gracious Changi campaign with their cheers and encouragement.

As CAG continues to roll out enhancements to increase the efficiency of airport operations, its fundamentals continue to be underpinned by a strong service-oriented mindset. Every day, some 50,000 staff across more than 200 agencies work hand-in-hand at Changi Airport to deliver a consistent Changi Experience for passengers.

From September to November 2016, CAG brought back the popular ONE Gracious Changi campaign. Into its second run this year, the campaign, helmed by ONE Changi Leaders, focused on four Gracious Acts:

- i) Return your tray before going away;
- ii) Give up your seat to those in need;
- iii) Push the trolley away and keep a clear walkway and
- iv) Bin there, done that.

Gracious Ambassadors from various airport partner agencies came together to walk the ground to encourage gracious acts among the airport community.

To deepen engagement efforts within the ONE Changi community, 22 ONE Changi Leaders and Enablers from 13 different organisations went on a learning trip to Tokyo in November 2016 and immersed themselves in Omotenashi the spirit of Japanese hospitality. During the trip, delegates attended a Japanese culture and service master class and also had the opportunity to visit world-class organisations in different industries and airports. The trip offered delegates a chance to learn more about new service insights, and also created a platform for the ONE Changi stakeholders to bond, explore and collaborate on new opportunities.

### RETAIL REVOLUTION





Matthew Fergusson-Stewart, Asia Pacific Brand Ambassador for Glenfiddich (extreme left) and Randall Tan, Brand Advocate for The Macallan (extreme right) offer whiskey sampling to visitors at the Whiskey Festival 2016, held at The Whiskey House.

In a dynamic airport retail landscape where consumer trends and expectations continually evolve, innovation and experience remain key pillars of Changi Airport's retail strategy, driving many of the airport's new developments and activations.

Along with its record passenger traffic during the year, Changi Airport's yearly concession sales grew 5.0% to hit another new high of S\$2.4 billion, cementing its position among the top three airports in the world for retail sales.

#### An elevated retail experience

Shoppers who travelled through Changi Airport in the year were surprised and delighted in more ways than one.

In July 2016, DFS and CAG celebrated the opening of the airport's second

Wines & Spirits duplex store at T2's Departure Transit Hall with the first ever Whiskey Festival. Sixteen whiskey brands brought the seven-week festival to life with quest appearances from brand ambassadors, special master classes and food pairing sessions, delighting travellers and whiskey lovers from all over the world. The store, which boasts seven branded boutiques and three unique in-store concepts - the Wine Reserve, the Cigar Room and The Whiskey House - offers over 900 products for complimentary tasting. It includes the largest assortment of single malt whiskies offered by any travel retailer in the region.

The duplex store was just one of a repertoire of new and exciting launches in FY2016/17. To continually inject freshness on its commercial floor plate of 76,000 square metres, Changi Airport introduced close to 40 new brands across its three terminals in both the public and transit areas.

Stepping up its luxury fashion game, the airport welcomed the contemporary The Fashion Gallery at T2's Departure Transit Hall, with its new store-in-store concept featuring more than 30 brands. They include many firsts and exclusives such as Alexander McQueen, Balenciaga and Kenzo. With a unique 30-metre digital façade at its store front, the high-tech boutique has certainly livened up Changi's shopping street at T2.

Seeing an increase in demand for delicatessen and souvenir food concepts, Changi also expanded its offerings in this category with the introduction of brands such as Taste Singapore and Asia Favourites.





Shoppers are spoilt for choice at the multi-label luxury store The Fashion Gallery.

Including the soon-to-be-opened T4, Changi Airport will have over 400 retail and service stores as well as 140 F&B outlets to cater to the needs of its international passengers.

#### A gastronomic journey

The dining scene at the airport also saw many tasteful injections from the best of Singapore and international gourmet names.

Kickstarting FY2016/17, the opening of Singapore's first Hello Kitty Orchid Garden Café in May 2016 drew hundreds of airport visitors to T3. Delighting diners with its lovely wholesome fare oozing the signature Hello Kitty flair, the restaurant is halal-certified, and open 24 hours.

In the transit areas, The Kitchen by Wolfgang Puck, Changi's first celebrity chef restaurant, presents travellers with an extensive menu of dishes curated by the Michelin-star chef, including some developed exclusively for Changi. New concepts such as the oriental LeNu Noodle Bar, the modern The World is Flat by Tanuki Raw and Teahouse by Soup Restaurant also arrived at Changi for the first time, offering even more options to foodies.

On top of new offerings, passengers will find an array of food concepts that has been carefully curated to suit varying dietary needs and preferences, from halal and vegetarian options to kid-friendly meals. Time-starved travellers can also grab 15-minute quick meals from selected restaurants and eateries located in all three terminals.

#### Popping good times

FY2016/17 saw a record number of innovative pop-up activations launched at Changi Airport, where seven brands chose Changi as the launch pad to unveil their latest coveted products.

In December 2016, a unique Male Grooming Club, the brainchild of

Philips Shavers and L'Oréal Paris Men Expert, was unveiled at T3's Departure Transit Hall to the surprise of many male travellers, who were treated to complimentary pre-flight pampering such as a clean shave and a relaxing massage.

Changi also saw the first-in-the-world launches of products in its most popular categories of Cosmetics & Perfumes and Wines & Spirits, including Shiseido's Rouge Rouge collection and the Martell Cordon Bleu Extra. On top of supporting partners in boosting brand exposure and footprint beyond the traditional shop fronts, these experiential engagements served to enhance shoppers' journeys through Changi Airport into memorable ones of exploration and discovery.

#### **Rewarding shoppers and diners**

Changi Airport continued to take its two annual anchor retail promotions, *Be a Changi Millionaire* and the year-end festive celebrations, to new heights.

Into its seventh run last year, the 2016 edition of the Changi Millionaire campaign produced eight finalists from six countries for the Grand Draw event held before a live audience at T3 in January 2017. After one hour of heart-stopping action, Indonesian Ade Iskandar Roni was crowned an instant millionaire, netting him S\$1 million. All it took to land the lucky man his



Singapore's first Hello Kitty Orchid Garden Café is a must-visit for Hello Kitty fans and foodies alike.







Male travellers get pampered at the Male Grooming Club, an innovative pop-up barbershop at T3.





Jakarta-based Ade Iskandar Roni beat seven other finalists to emerge as the Grand Draw winner of the 2016 Be a Changi Millionaire shopping promotion.

million-dollar windfall was an adidas t-shirt that cost \$\$51.40 – the lowest-priced purchase of the eight finalists, and also just a little more than the minimum spend of \$\$50 required to participate in the Millionaire Draw!

Towards the end of 2016, Changi Airport was transformed into the lair for the popular pocket monsters that took the world by storm. The *Pokémon@Changi* year-end celebrations brought delight not only to passengers and visitors, but aspiring Pokémon trainers from Singapore and overseas. The festive shopping promotion was launched with a song and dance item at the T3 Departure Hall featuring 10 adorable Pikachu, delighting fans who thronged the terminal. As with previous year-end celebrations, visitors and travellers could also bring home themed collectibles – this time up to nine Pokémon plush toys, of which five were made available for

pre-order purchase on iShopChangi, Changi Airport's online shopping portal. At the close of the promotion, more than 260,000 plush toys had been redeemed.

In addition to the two anchor campaigns, Changi also brought laughter to families and children during the June school holiday break when the fun-loving pals of the Hi-5 cast, from the popular Australian childrens programme came to visit as part of Changi's regular destinationthemed events. Packed with exciting activities for young explorers, the month-long G'Day Australia event inspired travel and at the same time, reinforced Changi Airport as a destination for families. The Changi Loves Kids programme was also launched in the public areas over the Children's Day long weekend in October. The slew of rewarding initiatives rolled out ranged from a new reading corner and workshops organised for both children and parents, to free meals, goodie packs and other sweet treats for the little ones.

Changi also ramped up its landside retail offerings with first-in-class entertainment and exciting new experiences. To kickstart its Take the World with You campaign, a nanoblock pop-up museum made its global debut in T3 in March 2017, showcasing close to 250 intricate designs across six themed experiential zones. An estimated 100,000 of these micro-sized building blocks were used to achieve this massive scale. Throughout the purchase-withpurchase promotion that took place from March to May 2017, over 26,000 Changi-exclusive nanoblock sets in six designs featuring world famous landmarks such as the Colosseum and the Sydney Harbour Bridge were redeemed.

To further augment the core value proposition of shopping at Changi, the well-loved 2xGST shopping campaign that presents airport shoppers great savings also returned with a twist. Executed in a new flash sale format in two bursts last year, the tactical promotion attracted overwhelming response and increased footfall to the airport, which contributed to a significant spike in retail sales.





The cast of Hi-5 delighted families with a fun and energetic performance as part of the G'Day Australia event held during the June school holidays.

To increase mindshare of Changi's commercial offerings among its key country markets, CAG also ran targeted country marketing campaigns. For the year, travellers from China, who made up Changi Airport's third largest country market in terms of passenger traffic, remained the top spenders at Changi. To continue driving traffic and encouraging spending, key shopping promotions were rolled out through the popular WeChat and Weibo channels during China's Golden Week and Chinese New Year festivals. Changi also partnered Chinese airlines and Alipay

to further engage Chinese passengers on their shopping and dining journey through the airport.

#### **Going digital**

In this day and age of digitalisation with its huge impact on retail, it is vital for Changi to adapt to the emerging trends and evolving expectations of today's well-connected travellers to stay on top of the business. With service at the core of its DNA, Changi Airport has embarked on several key digital developments in recent years to better engage and serve its customers.

On the e-commerce front, iShopChangi, Changi's online shopping portal, continues to gain traction with customers. In the past year, iShopChangi expanded its range by 60%, introducing four new product categories including the curated LoveSG collection that features uniquely Singaporean souvenirs which make great gifting options. Today, iShopChangi offers over 8,000 products across 500 brands. Online sales and order volumes rose by over 70% during FY2016/17.

Both iShopChangi and Changi Rewards, Changi's loyalty programme, were also integrated into the iChangi mobile app, making it a one-stop portal which increases convenience and enhances customer experience.

With this, the Changi Rewards programme has also gone digital. Members can now earn and redeem points through their e-Cards. They can also redeem Changi Rewards e-vouchers through the app and store them for their next purchase at Changi.

Shoppers looking for the perfect gift need not look further with the introduction of the Changi Gift Card. Launched in November 2016, this is the first time a stored value card has been made available for sale to the public at Changi Airport. Available in three uniquely Changi designs, the gift card can be loaded with any value between \$\$20 and \$\$990, in denominations of \$\$10.



Presenting the collectible Changi Gift Card that features the iconic Solari Board at the T2 Departure Hall. The gift card comes in two other unique designs.



# OPTIMISING SPACE FOR COMMERCIAL GROWTH

CAG manages the tenancies of over 1,600 rentable premises within Changi Airport, both in the passenger terminal buildings and the Changi Airfreight Centre. The upcoming T4 has over 8,000 square metres of leasable space, consisting of over 100 units of offices, airport lounges and stores. To prepare the terminal for operational readiness, CAG worked closely with airlines and other aviation partners in the allocation of premises to ensure that their space needs are fully met.

Within the terminals, CAG continued to pay close attention to refining the various passenger touch points, such as airline lounges. The DBS Asia Treasures Lounge in T2 was given a facelift to commemorate the lounge's 10<sup>th</sup> anniversary at Changi Airport.

revamped lounge officially reopened in December 2016, boasting a classy yet modern look and feel.

Outside of Changi's main terminal buildings, CAG manages more than 60 long-term land leases to private developers such as maintenance, repair and operations companies, ground handlers, cargo and logistics companies as well as commercial entities.

Over the past two years, CAG supported Crowne Plaza Changi Airport's expansion plans through the lease of a land plot adjacent to the hotel for an extension project. Adopting enhanced technology, the hotel extension works were completed with over 15% time savings and 40% manpower savings. There was

also minimal disturbance caused to hotel guests. The 10-storey extension opened in August 2016, adding another 240 rooms catered for business travellers. The new rooms will overlook Jewel when the latter is completed in 2019. The extension successfully increased the hotel's capacity by 75%, bringing the total number of rooms to over 550.

For its relentless pursuit to offer the best to its guests, Crowne Plaza Changi Airport won the Skytrax World's Best Airport Hotel award for the third consecutive year in 2017. The timely addition of the hotel extension to the slew of airport offerings supports the growth of Changi Airport and meets the demand from the rising number of passengers, reinforcing Changi's position as a premier air hub.



Crowne Plaza Changi Airport's 10-storey extension increased the hotel's capacity by 75%.



# ENHANCING AIRSIDE OPERATIONS

Although away from travellers' eyes, the airside is where the pulse of the airport is. It is where aircraft take off and touch down, where cargo pass through daily, and where airport workers work round the clock to ensure that all safety conditions are met and airport operations run as scheduled.

#### **Airfield optimisation**

With air traffic volume at Changi Airport increasing steadily over the years and the airport operating on a two-runway system, it is imperative for it to optimise runway operations to reduce the impact of airfield congestion, which can result in flight delays. Preparations hence began for a strategic solution – the Airport Collaborative Decision Making (ACDM) framework in September 2013.

Together with the Civil Aviation Authority of Singapore and supported by hub carriers SIA Group and groundhandlers SATS and dnata, CAG led a critical process change on the ground – resulting in airlines and groundhandlers submitting their best prediction of when departing flights would be ready for pushback. With the sharing of this information, the departure sequence of flights can be optimised and the time aircraft spent queuing to depart is minimised.

The ACDM, among the first in Asia, was rolled out in October 2016. Since then, the average departure on-time performance of flights at Changi has improved, with the average taxi time during the morning peak period reduced by 1.5 minutes per flight. This represents over 5,000 kilogrammes of fuel saved a day, or \$\$1.3 million a year for airlines. Close to 16,000 kilogrammes of carbon dioxide emissions are also cut per day.

Furthermore, for the year 2016, Changi's overall flight punctuality was ranked second in Asia and eighth in the world among international airports with more than 20 million departing seats per annum by OAG Punctuality League, an international annual ranking of on-time performance for airlines and airports.

#### New equipment for fire safety

New firefighting and fire protection equipment were procured to enhance the operational readiness of Changi Airport's Airport Emergency Service. The new equipment included two off-road water wading vehicles, and a mobile lighting unit for Seletar Airport. The former allows response to aircraft emergencies in difficult terrains such as low level water bodies and muddy grounds. The latter provides strong lighting capabilities of up to 330,000 lumens for rescue work during night time operations. It also serves as an equipment carrier containing water rescue equipment, as well as a Passenger Emergency Management System to assist passengers in disembarkation from a plane disabled on the runway. Other equipment procured to boost Changi's fire coverage capabilities included airport foam tenders, emergency air stairs,

and a High Reach Extendable Turret, which is capable of piercing through aircraft skin to enable fire fighting inside an aircraft using foam or water. This would extend the survivable time of aircraft occupants in an aircraft fire.

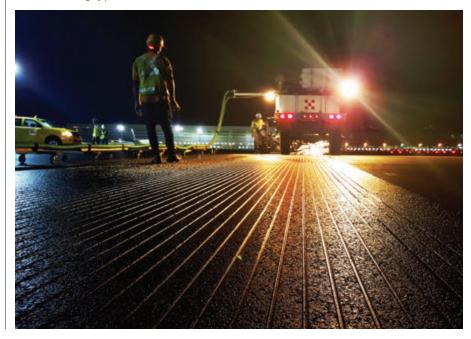
To meet future airfield capacity demand, the Changi Fire Sub-station 3 was relocated to a new site – the West Satellite Fire Station. The new station was built with the capacity to scale up resources and manpower to meet the challenges of a future expanded aerodrome. Construction and fitting out of the new station was completed in March 2017.

#### **Expanded infrastructure**

In the course of the year, Changi Airport added five new aircraft stands, three in the South Apron and two in the East Cargo Apron. Another four aircraft stands at T1 and T2 were converted into Multiple Aircraft Receiving Stands, where they can accommodate either one wide body aircraft or two narrow body ones.



Trapezoidal grooving was added to the newly resurfaced Runway 1 to enhance aircraft tyre grip and lower the risk of skidding by planes.







The inaugural Safe Tractor Driving Competition aims to inculcate safe driving practices to Changi Airport's airside drivers in a fun and engaging way.

Of existing aircraft stands, seven due for replacement were demolished and reconstructed using the recycled concrete aggregates (RCA) that were obtained during the demolition of the aircraft parking stand pavement. Completed in August 2016, six of the new stands were constructed with 40% RCA while the remaining was constructed with 50% RCA. The adoption of recycling construction waste enhances Changi Airport's commitment to environmental responsibility, in addition to providing substantial cost savings in the long-term.

Elsewhere in the airfield, the resurfacing of Changi's two runways was completed during the year. Of the two, Runway 1 sports a new trapezoidal grooving – the first of its kind outside the United States – to improve water dispersion during wet weather. This enhances aircraft tyre grip on the runway, lowering the risk of skidding by planes.

On a larger scale, the construction of Changi Airport's new T4, including its

new Ramp Tower, was completed in December 2016. Just before that, work started on the new Seletar Airport Terminal Building in October.

#### **Airport safety**

For the 35<sup>th</sup> consecutive year, the Changi aerodrome received a deficiency-free rating from the International Federation of Air Line Pilots' Associations (IFALPA).

To inculcate a stronger safety culture, CAG launched the Airport Safety Awards in August 2016. A new long-term initiative targeted at the airport communities across both Changi and Seletar Airports, it recognises safety efforts of individuals as well as teams involved in airport operations and developmental projects at both the landside and airside. During the year, 74 individual and team recipients from 22 airport agencies were recognised at three award ceremonies.

In a further bid to promote safety in Changi's airside, a first-of-its-kind

safety initiative in the form of a Safe Tractor Driving Competition was held in October 2016. The three-day circuit-based competition provided a novel and highly engaging platform to drive home key safe driving practices to the over 150 tractor drivers who participated in the competition.

On a day-to-day basis, to encourage active hazard reporting by the airport community, CAG introduced an iFeedback module in its operations app for the airport service workforce. Enabled for reporting through mobile phones, iFeedback has enhanced Changi Airport's Safety Management System by providing all members of the airport community with an easy means to highlight safety hazards for immediate action. The module has been very well received, with a 130% increase in safety feedback received from airport partners such as ground handling companies, airlines and contractors. This has helped to build a healthy safety reporting culture among airport staff.

### **Emergency preparedness and security**

During the year, CAG also continued to enhance its emergency preparedness and rescue capabilities through three emergency drills – two simulated aircraft crashes on land and a chemical, biological and radiological attack in the transit area of Changi Airport.

The three exercises held at Seletar and Changi Airports were full exercises involving more than 400 operational personnel, including participants from partner agencies such as the Ministry of Health, the Singapore Police Force, the Singapore Civil Defence Force, airlines and ground handling agents. The exercises allowed CAG to practise and refine on-ground coordination and response as well as recovery procedures with partner agencies, in the event of an emergency.

In tandem with CAG's constant review to enhance the security screening process at Changi, live trials using Computed-Tomography technology were conducted for pre-board screening from April to July 2016 at T3. This advanced X-ray imaging technology improves on the limitations of conventional X-ray screening and is capable of detecting explosives. Identified for use in T4, this technology allows for complex electronics, such as laptops, to be kept in bags during the screening process. This translates into more convenience to passengers, as well as a higher throughput at pre-board screening at T4, which operates on a centralised screening model. Changi Airport is one of the first few airports in the world to have a first-hand trial of this new technology.

#### **Boosting productivity**

Taken together, savings amounting to some S\$4.1 million were reaped when CAG rolled out new initiatives with contractor partners to arrest cost escalation in the area of airside grass maintenance. The initiatives included the introduction of a new grass-cutting machine which can trim and collect the cut grass at the same time, halving the manpower required for this task. Another initiative was the re-turfing of pockets of plant areas within the airside into pavements, cutting down manpower required for maintenance.





Codenamed 'Exercise Bobcat', the land rescue exercise allows Changi Airport and its partners to hone their emergency preparedness systems and procedures.



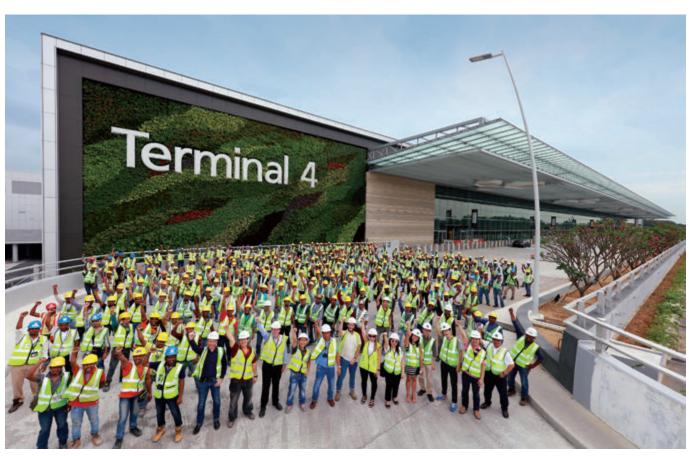


Delta Café located at the apron area at T2 brings greater convenience to the airside community with its hot meals and snacks.

With staff being an important asset to Changi Airport, close attention was also paid to efforts to enhance the well-being of airside staff. Delta Café was opened in October 2016 in the apron area at T2 to bring greater convenience to the airside community. As staff no longer have to spend time at security checkpoints to get to the airport's public areas for their meals, the time saved translates into a more relaxed meal time for airside staff.

Besides providing additional food options, the café also sports a cheery and comfortable interior, and comes with free Wi-fi and TV for staff's enjoyment. The café has won praises from many airside staff as a chill-out corner. Moving forward, CAG is looking into adding more of such similar amenities to other parts of Changi Airport's airside, to enhance the working environment.

### FUTURE-READY CHANGI





Airport staff and workers gather at the new terminal's façade to mark the completion of construction in December 2016.

#### **Terminal 4**

Changi Airport's new T4 reached an important milestone with the completion of the 225,000-square-metre passenger terminal building in December 2016. Construction was completed in under three years and involved over 4,000 workers at the peak. A clean safety record of over 26.1 million accident-free man hours was achieved by the main contractor, Takenaka Corporation.

T4's construction also involved the development of two multi-storey car parks providing 1,700 parking spaces, a two-storey taxi holding area, as well as three vehicular and pedestrian bridges spanning across Airport Boulevard to create new links to T4. Across Airport Boulevard, the south-end reservoir was also backfilled to build a new apron

with 26 new remote parking stands. A 68-metre-high ramp control tower has also been constructed to enhance air traffic controllers' management of aircraft movements at the apron adjacent to the terminal and at the south apron.

Inside T4, special attention was paid to the interior furnishing to evoke a warm and cosy boutique-design feel. Upon completion, the next phase for Operational Readiness and Airport Transfer trials involved the installation and intensive testing of key airport systems and processes to prepare the terminal for operational opening at the end of 2017. These include new Fast and Seamless Travel (FAST) self-service and automated options covering check-in, bag drop, immigration clearance and boarding. T4 will be

Changi's first terminal to introduce end-to-end self-service initiatives by automating processes at the departure touch points, leveraging cutting-edge technologies to enhance passenger experience and to improve manpower productivity.

A key feature of FAST is passenger identity validation using biometrics. The use of facial recognition technology allows for full automation, eliminating the need for manual verification and checks by airline and ground handling staff and security personnel. Efforts were focussed on integrating the complex airport and airlines systems, conducting process trials involving staff and public volunteers, as well as the airport and commercial partners operating at T4. As part of Changi Airport's internal outreach and community engagement

efforts, a roadshow was organised to offer the airport community a sneak peek of what T4 has to offer. In addition, Changi started a T4 Welcome Workshop specially designed for all T4 staff, which ran twice weekly, to familiarise staff with the new terminal's environment and work processes.

A unique feature in T4 is the eclectically curated art programme with the aim to inspire and entertain passengers and visitors. Working with local and international sculptors, three unique art works that embody the spirit of dynamism, originality and connection in aviation were installed in the terminal's departure and arrival halls. The centerpiece of T4 is Petalclouds, a kinetic art sculpture. Made up of six clouds suspended across 200 metres of the Central Galleria space, the majestic Petalclouds can be appreciated from multiple viewpoints in the terminal.

On the commercial front, tenancy for retail and F&B was fully secured for the more than 80 outlets over 16,000 square metres. T4 attracted many international and local operators, with over a quarter of the brands being new to Changi Airport. For the first time in Changi, two core duty-free categories - Wines & Spirits and Cosmetics & Perfumes by DFS and The Shilla Duty Free respectively – will operate in an integrated duty-free zone in the transit area. Passengers can shop and combine their duty-free purchases in a single check-out transaction, integrating their shopping experience while reaping greater convenience and time savings.

The year also saw two more airlines – Cebu Pacific and Spring Airlines – joining AirAsia Group, Cathay Pacific, Korean Air and Vietnam Airlines, to operate at T4. With a good mix of both full service and low-cost carriers, these airlines will collectively link T4 to over 20 destinations in the region, serving about eight million passengers movements per annum.

#### **Jewel Changi Airport**

Jewel is an architecturally distinct development that is located in the heart of the airport. When Jewel opens in early 2019, it will be an iconic lifestyle destination with an exciting array of leisure and retail options, integrated with aviation facilities.

Jewel's development will significantly augment Changi Airport's status as a leading air hub, drawing international travellers to Changi Airport and Singapore.

In the past year, the construction of Jewel has seen much progress. Piling and excavation, structural works for all five basement levels and superstructure works for all five aboveground levels have been completed. Major works currently underway include the installation of Jewel's glass and steel façade, which commenced in late 2016. Jewel's overall façade is intricately made up of more than 9,000 pieces of specially manufactured glass, close to 18,000 pieces of steel elements and over 6,000 steel nodes.

Jewel's roof façade is a contiguous grid shell that weighs approximately 4,200 tonnes, equivalent to seven A380 planes. The roof spans 24,900 square metres and is supported by a ring of 14 tree-like columns and a ring beam at the edge of the roof. This allows the five-storey Forest Valley, a lush garden filled with the largest indoor collection of plants in Singapore, and the Canopy Park, a 14,000-square-metre park on the building's top floor to be columnfree, offering visitors a truly elevated and memorable experience.

Work on the link bridges connecting Jewel to T2 and T3 have also begun,

starting with the hoisting and erection of column foundations.

Progress on Jewel's Forest Valley is also underway. Around 3,000 trees and palms have been successfully procured from countries such as Australia, Brazil, China, Malaysia, Thailand and the USA, for pre-growing at an offsite nursery. Embarking on the procurement and pre-growing in advance is critical to give the trees and palms enough time to acclimatise and be nurtured to the desired quality before transplantation into Jewel. Planting works are scheduled to begin in early 2018 once the façade of Jewel is completed.

#### **Terminal 1 Expansion**

T1 is being expanded to increase its handling capacity in the Departure and Arrival Halls. Phase 1 was completed in October 2016 when four new check-in rows became operational after being fitted with new check-in counters, baggage conveyors and carpets. In the Arrival Hall, revamped baggage claim belts which sport sleek interior design touches came into operation in April 2016 and January 2017 respectively.

As part of the installation of the new automated baggage handling system, the Baggage Sorting Area saw improvements made to its lighting, spot cooling and signage scheme. In November 2016, the Inter-Terminal



Jewel Changi Airport will feature world-class attractions and the world's tallest indoor waterfall.







To open in end-2018, the new Seletar Airport terminal will house enhanced facilities and amenities such as a dedicated driveway and check-in area for business aviation passengers.

Transfer Baggage System was operationalised, followed by the first Early Bag Storage system for T1 in February 2017.

#### **Changi East**

Changi's longer-term and larger-scale infrastructure project, Changi East, is progressing well. The 1,080-hectare site involves the development of the future T5, a three-runway system as well as aviation facilities, tunnel systems and other related infrastructure and transport links.

#### Three-runway system well underway

To support the operations of Changi's existing three terminals, T4 and the future T5, a third runway used by the military will be converted for joint civil-military use by September 2020. This runway is being extended to handle larger civilian aircraft and is on track for completion. Other projects under the three-runway programme include the upgrading of Runway 2 and the building of new supporting taxiways to connect the third runway to the rest of Changi Airport. The project is scheduled for completion around early-2020s.

### Zero disruption to aerodrome operations

Changi East also achieved good progress in site safety with onsite implementation of a safety supervision framework to prevent disruptions to aerodrome operations. With improved control measures

put in place, the Changi East project achieved a clean safety record. Changi East has also expanded and relocated its Command Centre to allow for simultaneous monitoring of several works packages with real-time safety supervision and incident response.

#### T5 development and design

To deepen stakeholder engagement, CAG organised regular forums with stakeholders to resolve complex issues and secure early endorsements for T5, from design decisions to the terminal's security regime.

In preparation for the appointment of the Master Building Consultant and Master Civil Consultant, CAG organised extensive marketing campaigns leading up to the tenders for the design and civil consultants in January and March 2017 respectively. Three consortia have been shortlisted to participate in the Master Building Consultant tender following an open pre-qualification exercise which closed in September 2016.

Separately, CAG also shortlisted four consortia to provide Master Civil Consultancy services, for the design of infrastructure at the landside and airside areas outside of the T5 buildings. These include taxiways, aircraft parking stands, roadways and drainage systems, as well as the connections for utilities such as power, water, gas and telecommunications to the T5 buildings.

#### **Seletar Airport**

A groundbreaking ceremony for a new Seletar Airport Terminal Building was held on 20 October 2016, marking a significant milestone in the progress of infrastructure development for Seletar Airport.

The new two-storey terminal which will house improved facilities and amenities, is designed to handle around 700,000 passenger movements a year. As part of the larger Seletar Aerospace Park, it will support the growth of air traffic and general aviation activities, and also enhance Seletar Airport's offering as a private and efficient business aviation gateway to Singapore.

When the new terminal opens in end-2018, operations at the current terminal on the western side will cease. To ensure optimisation of resources within the entire aviation system in Singapore, turboprop aircraft operations will also be shifted from Changi Airport to Seletar Airport.

To enhance runway safety at Seletar Airport, a new Runway Incursion Detection System will be installed at critical entry points to prevent unauthorised entry of aircraft and vehicles into the restricted zone. The system is designed to automatically trigger an alarm at the Seletar Control Tower should there be any incursion incident. Works are ongoing, and the project will complete within FY2017/18.

## EXPANDING INTERNATIONAL PRESENCE





Tom Jobim International Airport decked out during the 2016 Olympic Games.

#### **INTERNATIONAL PRESENCE**

Changi Airports International (CAI), a wholly-owned subsidiary of CAG, continues to develop its investments, and share its experience in operations and management with airports around the world. Its portfolio includes assets in Brazil, India and Russia, airport management projects in the Middle East and consultancy projects in China, Southeast Asia, Europe and beyond.

#### Brazi

Tom Jobim International Airport in Rio de Janeiro delivered a robust performance, with significant improvement in revenue during the year. CAI holds a 20.4% stake in the concession company.

To prepare Tom Jobim as the host airport of the 2016 Olympic Games, CAI transformed the infrastructure in record time. A new 100,000-square-metre concourse with 26 new gates served by aerobridges was inaugurated in May, increasing the airport capacity by close

to 90% from 20 million passengers per annum (mppa) to 37.5 mppa. The commercial space was tripled to offer passengers more F&B choices, and all facilities were refreshed for an enhanced customer experience.

Tom Jobim International Airport successfully hosted the 2016 Olympic Games, handling an unprecedented number of travellers during that period. The airport also registered record sales in its stores and restaurants. More than a tonne of Brazilian coffee and a tonne of chocolates were sold and the sale of Havaianas sandals jumped 260%. Its VIP lounges received a record number of 4,000 passengers during the Games period.

The airport was abuzz with live Samba performances, food carts serving local favourites, and Olympic-themed events that left travellers with fond memories of the airport and the city. Travellers and media sang praises of the efficient operations and festivities, describing the airport as seamless, magical and unforgettable.

In the year, the airport operator, RIOgaleão, achieved ISO 9001 international certification for quality management. The airport also became the only one in Latin America certified by the International Air Transport Association to handle pharmaceutical products. It also received honourable mention at the Airports Going Green International Conference.

#### India

Durgapur Aerotropolis is India's first private operational greenfield airport city. Located in West Bengal, it is developed by Bengal Aerotropolis Projects Limited in which CAI has a 36.7% stake.

Indian carrier Zoom Air recently launched a daily Delhi–Kolkata service via Durgapur from the city's Kazi Nazrul Islam Airport. Township development is making steady progress. Warehouse operator Spectrum Logistics and building materials manufacturer Ardex Endura started operations during the year. Two schools – India International School and Narayana School – opened enrolment and started their new terms in June 2017.

#### Russia

#### Krasnodar

CAI holds a 30% stake in a joint venture which owns four airports in Russia's Krasnodar region – Anapa, Gelendzhik, Krasnodar and Sochi – and their management company, Basel Aero.

Through CAI's close collaboration with Basel Aero, the airports witnessed steady passenger traffic growth, reaching the 10-million mark in FY2016/17. Traffic at Sochi in particular, rose 28.8% year-on-year. In 2016, the four airports handled approximately 10% of all passenger traffic and 3.5% of air cargo traffic in Russia.

Service quality remains the primary focus for all four airports. Operational improvements, such as new self

check-in counters and wayfinding systems, were put in place to uplift passenger experience. F&B options were also expanded to offer passengers with more choices.

The new 11,800-square-metre passenger terminal at Anapa International Airport is near completion. Once operational, the airport's total capacity will increase threefold to 1,100 passengers per hour. Plans to construct new terminal buildings at Gelendzhik and Krasnodar airports are on track.

For the third consecutive year, all four airports clinched Best Airport top spots in their respective traffic categories at Russia's National Aviation Infrastructure Show 2017. Sochi also received accolades at the Airports Council International's Airport Service Quality Awards 2016 for the second year running. It was named Best Airport in three categories – by region (Europe, over 2 mppa), and by size (2-5 mppa), and by size and region (Europe, 2-5 mppa).

#### Vladivostok

In February 2017, CAI and its partners acquired Vladivostok International Airport in Russia's Far East. CAI holds a one-third stake in the joint venture.

Vladivostok is a port city at the heart of Russia's maritime province. Its strategic location, at the cross-roads of Asia Pacific and Russia's Far East, makes it the ideal gateway between the two regions.

Plans are underway to strengthen the airport's air connectivity and to improve passenger experience. Leveraging its Open Skies status and traffic growth potential, the airport's current network of 40 destinations will be expanded to more Russian cities and international destinations in Japan, China, Vietnam and South Korea. The consortium's target is to achieve the airport's potential of 5 mppa in the long term.

#### **China**

CAI and Chongqing Airport Group signed a commercial joint venture agreement in January 2017 to boost the non-aeronautical businesses at Chongqing Jiangbei International Airport. The agreement is part of the Chongqing Connectivity Initiative between Singapore and Chongqing. CAI holds a 49% stake in the joint venture.

The airport, strategically located along the Silk Road Economic Belt in Western China, is a major aviation hub for airlines.

The collaboration will focus on the enhancement of the airport's retail landscape by introducing experiential concepts as well as refreshing product categories and brands to meet the shopping and dining preferences of passengers, while creating a sense of place. In the long run, the joint venture hopes to create a pro-business environment for airport partners to continue attracting best-in-class tenants.

As a leading airport operator, CAI continues to share its expertise and best practices through a series of training programmes specially designed for Chinese airports and airlines, in conjunction with the China-Singapore Airport Management Academy and Singapore Aviation Academy.

#### Saudi Arabia

#### Dammam

CAI is in its eighth year of partnership with the General Authority of Civil Aviation in Saudi Arabia to manage and operate King Fahd International Airport (KFIA) in Dammam. The airport recently launched the Kingdom's very first City Terminal, offering the convenience of checking in at the city centre, 24 hours ahead of flight time.

The focus on offering passengers first-rate service forms the cornerstone of KFIA's transformation. The airport injected new capacity, revamped processes, and leveraged technology to enhance airport operations. This included almost doubling the number of immigration counters, installing new e-gates and dedicated lanes for priority boarding, and introducing a second ground handler to promote competition for service improvement. It is also planning to replace all passenger loading bridges in 18 months, and increasing the number of aircraft parking bays by 25%.

Having established a successful airline marketing and passenger development programme, air traffic growth has remained strong and continued to surpass that of its competitor. Non-aeronautic revenue grew 8% year-on-year, attributed to the revamped retail and F&B offerings.

#### Jeddah

CAI was named the winning bidder for King Abdulaziz International Airport (KAIA) in Jeddah. Under the 20-year concession, the group will manage and operate the new KAIA when it is completed in 2018. KAIA is the busiest airport in Saudi Arabia and is the gateway to Mecca.



Artist impression showing aerial view of King Abdulaziz International Airport.



### AN EMPLOYER OF CHOICE





CAG's People Team receives the Employer of Choice award at the HRM Awards 2017 for building a strong and attractive employer brand.

#### AN EMPLOYER OF CHOICE

In February 2017, CAG was named by Hays, a specialist recruitment firm, as the Employer of Choice at the HRM Awards 2017. This reaffirmed the company's efforts to build a strong and attractive employer brand. The award was based on a range of criteria, including the senior management's commitment to human capital, staff retention rates and talent management initiatives, as well as employee welfare initiatives like work-life balance, corporate culture and workplace harmony.

To secure top young talent, CAG continued to engage potential

scholars to join its Bonded Scholarship Programme. In the same year, the CAG scholarship was ranked the most attractive bonded scholarship in the BrightSparks Scholarship and Education Survey - an annual study on scholarships, higher education and career preferences among potential scholarship applicants in Singapore.

#### A new People Team

United by a common mission to serve CAG employees and shape the culture of the organisation, a new People Team was formed on 1 April 2016, by merging the former Corporate Development and International Relations division with the Human Resource division.

The new team structure comprises five key sections - People Services, People Rewards and Systems, People Development, People Experience, and Organisation Transformation.

The People Team aims to fulfill the "3 Rights" philosophy – the Right People with the Right Capabilities, Right Culture, and Right System and Processes – to strengthen its people services and build towards its Terminal H (Heartware) vision, so that CAG continues to be a choice company for its existing and potential employees.

#### A refreshed office environment

Enhancing Terminal H has always been one of CAG's key areas of focus in its employee engagement journey. One major milestone in FY2016/17 was the completion of the workplace transformation initiative for CAG's corporate offices. This initiative aimed to transform the way the organisation works as one CAG, and to achieve the concept of 'Home Away From Home'.

Through a phased renovation process, about 900 employees were moved into their new 'home' at T2, with a floor area equivalent to the size of 88 fiveroom HDB flats. Through careful space planning, the workplace capacity increased by 48%, and the number of meeting rooms and collaborative spaces was tripled. The new spaces and the closer proximity of work desks



Natural lighting and a cheerful ambience transform the CAG pantries into spaces for both work and play.





helped to promote a culture change by facilitating conducive opportunities for quick discussions and group work, thereby improving interaction and communication among staff.

In the transformation process, design principles that were adopted for Changi's passenger terminals, such as abundant greenery and the introduction of natural daylight, were integrated into CAG's workplace design. These efforts aim to recreate the CAG signature, build a sense of home, and realise the same ambience Changi delivers to its passengers in the new office environment.

Together with the workplace transformation initiative, CAG also improved its office mobility to enable its employees to work anywhere and on-the-go. The People Team worked with the Corporate IT division to introduce various systems, such as 'Quick Drop' - a convenient way to transfer files and information without having to use thumb drives - and 'Follow-Me Printing', whereby employees can print their documents from any printer in the office with just a tap of their staff pass. In this everchanging digital age, mobile mail has also been enabled for employees to access their email and work materials more conveniently on their smart phones.

After staff were comfortably settled in their 'homes', a survey conducted returned highly encouraging and positive feedback from employees. A large majority of respondents expressed that they were proud of the new workplace and felt that the workplace enhancements provided more opportunities for effective collaboration and bonding.

#### **Enhancing employee engagement**

During the year, CAG also ramped up on various initiatives to enhance the sense of community and engagement among its employees.

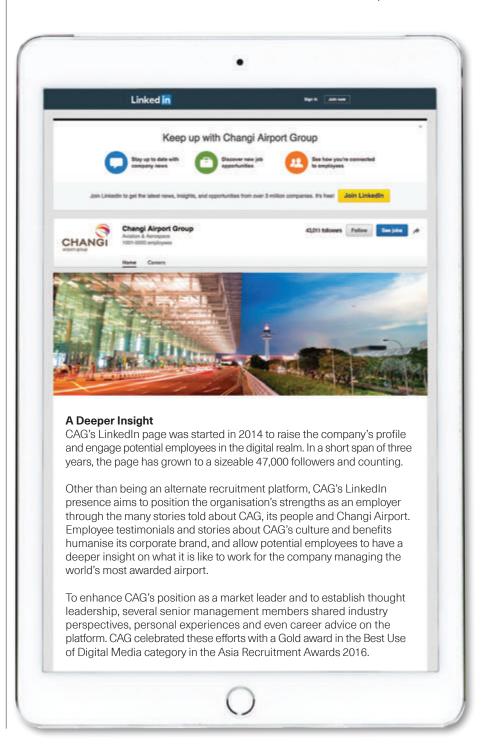
For example, the In.Touch mobile app, a sharing platform created for staff, featured a wider variety of content. This was done through the sharing of news and information about CAG or the airport, such as coverage of airport events like new airline routes and appreciation awards. Other updates served to provide more insights on

the work of Changi Airport staff, such as interviews with members of the airport community and introductions to lesser-known aspects of CAG and Changi's operations, like a guide to runway signage.

CAG's senior management team has also been very participative in such sharing, helping them further connect with staff and vice versa. For instance, the news of Changi Airport's 2017 Skytrax win was broken to CAG staff by CEO Mr Lee Seow Hiang on In.Touch, 'live' from the awards ceremony in Amsterdam.

Since its launch in August 2015, the app has gained good traction with CAG staff. More than 90% of them have downloaded the In.Touch app.

To enhance staff well-being and cultivate esprit de corps, CAG introduced Fun Fridays, a bi-monthly themed event where staff take a few moments off work to come together and enjoy each other's company through activities and refreshments. To promote healthy eating, physical fitness and mental well-being, the Healthy Habits initiative organised for staff nutrition talks, health awareness roadshows and workshops.



# GIVING **BACK**

Since its inception in 2012, Changi Foundation – CAG's philanthropic arm - has committed to making a difference to the lives of disadvantaged youths. Through the strong partnership with its main beneficiary, NorthLight School (NLS), and by supporting community programmes and providing education awards for less privileged students in tertiary institutions, Changi Foundation aims to develop these youths to their fullest potential and to prepare them for future employment. Believing in giving back to society, Changi Foundation is dedicated to helping disadvantaged youths become positive future contributors to the society.

Through core programmes such as the Youth Passport Programme, Interview Skills and Be a Service Star, students are given opportunities to learn about Changi Airport, pick-up valuable career skills, and check out possible jobs that they could consider in the future.

Other programmes such as *Numeracy Coaching* and *Reading* continue to support students in their academic development. At the weekly sessions, CAG staff volunteers tutor the students who are weaker in mathematics and reading. This not only helps the students to improve academically, it also allows volunteers to share positive values such as discipline and perseverance.

Meanwhile, another mainstay - the Saturday Night Lights programme saw a new development in September 2016 when it welcomed more than 20 new students from Assumption Pathway School (APS). Sponsored by Changi Foundation, the APS students have since been training together with their peers every Saturday night. This programme allows the students to develop their football skills as well as character through structured football training sessions and friendly matches. CAG staff volunteers, in their interactions with the students, help to create a stable and encouraging community environment for the





Swensen's branch manager mentoring an NSL student during a five-day job attachment.





Tired but fulfilled CAG volunteers after a rewarding friendly football match on a Saturday evening.

students to learn and grow outside an academic setting.

As a complement to the vocational training provided by NLS, the *Job Attachment Programme* developed for Year 3 NLS students saw the highest participation rate from 13 airport

partners and five CAG divisions during the year, up from four and two respectively when the programme was launched two years ago. Close to 60 students were exposed to working life at the airport and had access to a wealth of experience shared by their mentors.

The programme continued to garner positive reviews from partners who were impressed by the students' positive attitude and keenness to learn. At the end of the five-day programme, it was evident that the students had grown in confidence, buoyed by the supportive work environment that they were immersed in. A number of the airport partners have also gone on to work directly with NLS to offer Year 4 students placements for the school's two-month *Industrial Attachment Programme*.

Changi Foundation also strives to impact other youths by funding community-based character development programmes that are developed and organised by social service organisations. One example is a youth football league, where social workers directly involved in the running of each team combine football

with social work and intervention. Another example is a befriending and mentoring programme for youths with formerly incarcerated parents. Through Changi Foundation, CAG continues to give back to society, fully demonstrating its mission to enhance the communities that it serves in a meaningful and sustainable way.

Beyond supporting NLS, Changi Foundation teamed up with CAG's landside concessions team to collaborate in a public promotion for the sales launch of the Changi Gift Card during the year-end festive season last year. With every purchase of the gift card, Changi Foundation matched 5% of the sale proceeds as a donation to NLS's Student Assistance Fund. This fund subsidises common expenses such as uniform purchases, meal allowances, transportation and medical fees for students in need.

With this collaboration, the Changi Gift cards made November and December a rewarding season of giving.

Other than supporting NLS and its students, CAG has also been supporting the Institute of Technical Education (ITE) financially through the monetary collections from donation boxes placed at various spots within Changi Airport's terminals since 2013. At the end of the financial year, CAG donated to ITE a grand total of S\$605,400, the sum comprising collections from the donation boxes, and dollar-for-dollar matching by Changi Foundation. This funding assists ITE students through three programmes - Monthly Financial Assistance Scheme, Overseas Industrial Attachment Programme and Overseas Student Exchange Programme.



# SOCIALLY CONNECTED

Changi Airport's social media channels achieved new heights during the year. This was thanks to a series of 'viral' posts created by the team that elevated Changi Airport's brand in the social media space.

CAG continued to engage and enthuse its social media audiences not only with news of exciting developments at Changi but also with stories of travellers and staff at the airport, adding a softer and more personable dimension to the brand.

Changi's Facebook page ended the year as the world's most liked airport page with 1.93 million page likes – a jump of 39% compared to the previous year. The airport's Instagram following grew by 83%, to reach more than 107,000 followers. The number of followers on LinkedIn grew 30% as it continued to engage with business professionals and offered a glimpse into the company's culture, shaping the brand of CAG as an employer of choice. Changi's Twitter account grew by 18% to 60,300 followers.





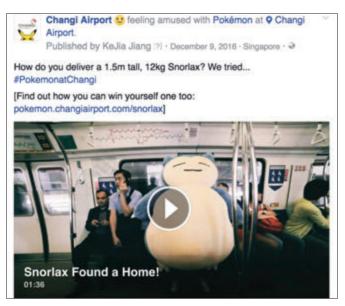
Announcing the arrival of Singapore's first Olympic gold medal, the Changi style.

#### Gone 'viral'

Even with a larger audience, Changi's social media efforts have kept engagement levels high and sentiments positive across all channels.

Trending topics like Joseph Schooling's Olympic Gold, the Paralympians' successes at the Paralympic Games, and Pokémon, gave the airport a chance to amplify its brand positively. With advanced planning, Schooling's impressive win was celebrated with an image of Changi's iconic flight information display board showing his newly set Olympic record, within 15 minutes of his successful swim, much to everyone's delight. Changi also took the opportunity to stream 'live' videos of Schooling's flight home being greeted by a water cannon salute and the welcome parade prepared for him when he landed in Singapore. Reaching 4.1 million unique social media users, these posts received more than 84,000 Facebook reactions and over 15,000 shares.

Changi's social media channels were also used to generate interest in its annual festive year-end campaign, *Pokémon@Changi*, resulting in an unprecedented turnout at the launch parade. A subsequent video of a life-sized Snorlax plush toy being delivered to its lucky winner went viral, resulting in 2.6 million organic views, further raising awareness of the event and the Changi Rewards campaign.





The video of Changi's delivery of a life-sized Snorlax plush toy on public transport to a lucky fun amused and entertained many.





Changi brought back the popular #2XGST savings promotion to fans' delight.

#### **Driving sales**

A close partnership with the landside concessions team presented opportunities for social media to drive awareness, footfall and sales to Changi's landside outlets. Using Facebook's tools for audience profiling and segmentation, the team was able to use social media marketing to appeal to targeted audiences about the 2XGST promotion. The end result was lower media costs, a higher number of transactions and stronger sales.

#### The softer side of Changi

Content pillars featuring travellers and staff allowed Changi to connect with audiences by sharing heartwarming stories of hellos (**#iamhome**) and goodbyes (**#nowboarding**), while **#FacesofChangi** showcased the airport community playing a part to make Changi the world's most awarded airport. In particular, a post about Certis Cisco officer Lee Min Wei caught the attention of many female fans in the region, with many expressing a desire to meet him in person.





With each picture painting a thousand words, **#iamhome** tugs at the heartstrings of homebound travellers and fans alike.





The good-looking Lee Min Wei makes up one of the most well-liked **#FacesofChangi**.

#### **Changi through different lenses**

Leveraging the artistic perspectives of Instagram users and people's passion for food, Changi's Instagram channel showcased the airport's landside dining options through a series of flat lays comprising 45 dishes forming a long table of food.





@ExploreSingapore shows off creative perspectives of Changi Airport in a takeover collaboration.

A collaboration with popular Instagram account @ExploreSingapore in a takeover allowed Changi to reach out and engage audiences beyond its current pool.

Instagram Stories, a new development from the platform, also presented new opportunities for Changi to present behind-the-scenes and ad-hoc glimpses into the workings of the airport, reaching out to younger social media users.

#### An award-winning social media programme

Changi's social media efforts received mention by many media channels and commendation by both audiences and publications. Changi Airport capped the year with four social media awards:



#### **GROUP FINANCIAL SUMMARY**

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The Group Financial Summary as set out on pages 67 to 76 contains only a summary of the information extracted from the Directors' Statement and the audited consolidated financial statements of Changi Airport Group (Singapore) Pte. Ltd. and its subsidiaries for the financial year ended 31 March 2017.

For a full understanding of the state of affairs of the Company and the Group as at 31 March 2017 and of the results of the Group for the financial year ended 31 March 2017, the Group Financial Summary should be read in conjunction with the audited consolidated financial statements and the audit report thereon, which can be obtained via the Company's website (http://www.changiairportgroup.com).

#### **DIRECTORS' STATEMENT**

#### FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

The directors present their statement to the member together with the audited financial statements of the Group for the financial year ended 31 March 2017 and the balance sheet of the Company as at 31 March 2017.

In the opinion of the directors,

- (a) the balance sheet of the Company and the consolidated financial statements of the Group as set out on pages 70 to 74 are drawn up so as to give a true and fair view of the financial position of the Company and of the Group as at 31 March 2017 and the financial performance, changes in equity and cash flows of the Group for the financial year covered by the consolidated financial statements; and
- (b) at the date of this statement, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they fall due.

#### **Directors**

The directors of the Company in office at the date of this statement are as follows:

Mr Liew Mun Leong Mr Eric Ang Teik Lim

Mr Michael George William Barclay

Mr Miguel Ko Kai Kwun Mr Richard R Magnus

Mr Dilhan Pillay Sandrasegara Mrs Tan Ching Yee

Mr Tan Gee Paw Mr Tan Kong Yam

Mr Danny Teoh Leong Kay

Mr Lim Zhi Jian (Alternate director to Mrs Tan Ching Yee)

(Appointed on 1 October 2016) Mr Lee Seow Hiang

#### Arrangements to enable directors to acquire shares and debentures

Neither at the end of nor at any time during the financial year was the Company a party to any arrangement whose object was to enable the directors of the Company to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate.

#### **Directors' interests in shares or debentures**

According to the register of directors' shareholdings, none of the directors holding office at the end of the financial year had any interest in the shares or debentures of the Company or its related corporations.

#### **Share options**

There were no options granted during the financial year to subscribe for unissued shares of the Company.

(Appointed on 1 May 2017)

(Appointed on 1 May 2017)

No shares have been issued during the financial year by virtue of the exercise of options to take up unissued shares of the Company.

There were no unissued shares of the Company under option at the end of the financial year.

#### Independent auditor

The independent auditor, PricewaterhouseCoopers LLP, has expressed its willingness to accept re-appointment.

On behalf of the Board of Directors

**Liew Mun Leong** 

Director

Lee Seow Hiang

Director

#### INDEPENDENT AUDITOR'S REPORT

TO THE MEMBER OF CHANGI AIRPORT GROUP (SINGAPORE) PTE. LTD.

#### **Report on the Audit of the Financial Statements**

#### **Our Opinion**

In our opinion, the accompanying consolidated financial statements of Changi Airport Group (Singapore) Pte. Ltd. (the "Company") and its subsidiaries (the "Group") and the balance sheet of the Company are properly drawn up in accordance with the provisions of the Companies Act, Chapter 50 (the "Act") and Financial Reporting Standards in Singapore ("FRSs") so as to give a true and fair view of the consolidated financial position of the Group and the financial position of the Company as at 31 March 2017 and of the consolidated financial performance, consolidated changes in equity and consolidated cash flows of the Group for the financial year ended on that date.

#### What we have audited

The financial statements of the Company and the Group comprise:

- the balance sheets of the Company and the Group as at 31 March 2017;
- the consolidated income statement of the Group for the year then ended;
- the consolidated statement of comprehensive income of the Group for the year then ended;
- the consolidated statement of changes in equity of the Group for the year then ended;
- the consolidated statement of cash flows of the Group for the year then ended; and
- the notes to the financial statements, including a summary of significant accounting policies.

#### **Basis for Opinion**

We conducted our audit in accordance with Singapore Standards on Auditing ("SSAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Independence

We are independent of the Group in accordance with the Accounting and Corporate Regulatory Authority Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities ("ACRA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code.

#### **Other Information**

Management is responsible for the other information. The other information refers to the Directors' Statement, but does not include the financial statements and our auditor's report thereon, which we obtained prior to the date of this auditor's report, and the other sections of the annual report ("Other Sections"), which are expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in respect of the work we have described above and performed on the Directors' Statement.

When we read the Other Sections, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate actions in accordance with SSAs.

#### Responsibilities of Management and Directors for the Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act and FRSs, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The directors' responsibilities include overseeing the Group's financial reporting process.

#### INDEPENDENT AUDITOR'S REPORT

#### TO THE MEMBER OF CHANGI AIRPORT GROUP (SINGAPORE) PTE. LTD.

#### Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design
  and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate
  to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than
  for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the
  override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate
  in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal
  control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

#### **Report on Other Legal and Regulatory Requirements**

In our opinion, the accounting and other records required by the Act to be kept by the Company and by those subsidiary corporations incorporated in Singapore of which we are the auditors, have been properly kept in accordance with the provisions of the Act.

PricewaterhouseCoopers LLP

ricewaterhouse Cooper UP

Public Accountants and Chartered Accountants Singapore, 9 June 2017

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#### **CONSOLIDATED INCOME STATEMENT**

#### FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

	Group		
	2017 \$'000	2016 \$'000	
Revenue	2,305,330	2,164,045	
Expenses  - Employee compensation  - Depreciation of property, plant and equipment  - Property tax  - Maintenance of land, buildings and equipment  - Services and security related expenses  - Annual ground rent and licence fees  - CAAS services  - Other operating expenses  Total	(228,908) (304,060) (63,090) (277,407) (195,845) (78,576) (179,119) (74,050) (1,401,055)	(220,944) (287,254) (60,931) (279,083) (167,807) (78,650) (129,283) (60,099) (1,284,051)	
Operating profit	904,275	879,994	
Other (losses)/income - net	(43,643)	65,753	
Share of results of associated companies and joint ventures	(24,392)	8,203	
Profit before income tax	836,240	953,950	
Income tax expense	(179,064)	(170,221)	
Profit after tax	657,176	783,729	
Attributable to: Equity holders of the Company Non-controlling interest	661,976 (4,800) 657,176	786,142 (2,413) 783,729	

#### CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

	Gr	oup
	2017 \$'000	2016 \$'000
Profit after tax	657,176	783,729
Other comprehensive income/(loss): Items that may be reclassified subsequently to profit or loss		
Cash flow hedges		
<ul><li>Fair value gains/(losses)</li><li>Reclassified to investment in associated companies and joint ventures</li></ul>	303 (320)	(1,728) 16,284
Currency translation differences		
<ul><li>Gains/(losses)</li><li>Share of currency translation gain/(loss) of</li></ul>	56,615	(54,224)
associated companies and joint ventures	5,473	(5,425)
Other comprehensive income/(loss), net of tax	62,071	(45,093)
Total comprehensive income	719,247	738,636
Total comprehensive income attributable to:		
Equity holders of the Company	723,899	742,841
Non-controlling interest	(4,652)	(4,205)
	719,247	738,636

#### **BALANCE SHEETS**

#### AS AT 31 MARCH 2017

	Group		Company		
	2017	2016	2017	2016	
	\$'000	\$'000	\$'000	\$'000	
ASSETS					
Current assets					
Cash and cash equivalents	2,693,847	3,338,023	2,629,088	3,291,275	
Trade and other receivables	208,057	192,372	186,684	154,659	
Held-to-maturity financial assets	112,620	30,756	112,620	30,756	
Other current assets Inventories	51,745	66,021	44,847	63,162	
liventories	10,361	10,354	7,984	9,492	
	3,076,630	3,637,526	2,981,223	3,549,344	
Non-current assets					
Deferred income tax assets	425	242	-	-	
Other non-current assets	948	1,940	3,968	2,633	
Held-to-maturity financial assets	9,017	115,735	9,017	115,735	
Trade and other receivables	-	-	224,581	145,599	
Investments in subsidiaries Investments in associated companies and joint ventures	- 282,739	263,186	257,965 10,652	257,965 10,652	
Property, plant and equipment	5,097,382	3,905,596	5,061,542	3,878,518	
Investment property under development	792,708	536,450	-	-	
	6,183,219	4,823,149	5,567,725	4,411,102	
Total assets	9,259,849	8,460,675	8,548,948	7,960,446	
LIABILITIES Current liabilities Trade and other payables	995,942	866,236	875,394	798,366	
Derivative financial instruments	-	85	-	-	
Income received in advance	17,708	11,062	17,810	11,076	
Deferred income	5,862	4,698	4,311	4,445	
Current income tax liabilities	241,168	234,796	239,150	231,896	
Non-current liabilities	1,260,680	1,116,877	1,136,665	1,045,783	
Trade and other payables	148,040	143,091	130,361	139,760	
Loans and borrowings	684,228	456,021	-	-	
Derivative financial instruments	4,520	4,823	-	-	
Deferred income	88,723	92,900	88,723	92,900	
Deferred income tax liabilities	36,931	60,738	36,412	60,566	
	962,442	757,573	255,496	293,226	
Total liabilities	2,223,122	1,874,450	1,392,161	1,339,009	
NET ASSETS	7,036,727	6,586,225	7,156,787	6,621,437	
EQUITY					
Share capital and reserves	3,361,872	3,209,458	3,456,338	3,365,847	
Retained profits	3,682,266	3,384,526	3,700,449	3,255,590	
·	7,044,138	6,593,984	7,156,787	6,621,437	
Non-controlling interest	(7,411)	(7,759)			
Total equity	7,036,727	6,586,225	7,156,787	6,621,437	

#### **CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

	Share capital	Hedging and other reserves	Currency translation reserve	Sinking fund reserve	Retained profits	Non- controlling interest	Total equity
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
2017							
<b>Beginning of financial year</b> Dividend paid	3,280,387	10,821	(167,210)	<b>85,460</b>	<b>3,384,526</b> (273,745)	(7,759) -	6,586,225 (273,745)
Sinking fund contribution Capital contribution from non-controlling interest	-	-	-	90,491	(90,491)	5,000	- E 000
Total comprehensive income	-	(165)	62,088	-	661,976	(4,652)	5,000 719,247
End of financial year	3,280,387	10,656	(105,122)	175,951	3,682,266	(7,411)	7,036,727
2016							
<b>Beginning of financial year</b> Dividend paid	3,280,387	(5,527)	(107,561)	-	<b>2,959,388</b> (275,544)	(3,554)	6,123,133 (275,544)
Sinking fund contribution Total comprehensive income	-	- 16,348	- (59,649)	85,460 -	(85,460) 786,142	- (4,205)	738,636
End of financial year	3,280,387	10,821	(167,210)	85,460	3,384,526	(7,759)	6,586,225

#### **CONSOLIDATED STATEMENT OF CASH FLOWS**

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2017

	2017 \$'000	2016 \$'000
Cash flows from operating activities		
Profit after tax Adjustments for:	657,176	783,729
- Income tax expense	179,064	170,221
- Depreciation of property, plant and equipment	304,060	287,254
- Government grant	(20,677)	(20,731)
- Gain on disposal of a joint venture	-	(423)
- Net loss on disposal of property, plant and equipment	202	1,468
<ul> <li>Impairment of investment in associated companies and joint ventures</li> <li>Impairment of trade and other receivables</li> </ul>	109,475 2,737	-
- Share of results of associated companies and joint ventures	24,392	(8,203)
- Unrealised currency translation differences	1,383	408
- Amortisation of deferred income	(4,698)	(4,585)
- Interest expense	265	-
- Interest income	(57,123)	(53,934)
Changes in working capital	1,196,256	1,155,204
- Inventories	(7)	(1,303)
- Trade and other receivables	(18,422)	(59,597)
- Other assets	9,959	13,395
- Trade and other payables	22,667	62,386
Cash generated from operations	1,210,453	1,170,085
Interest received	49,930	40,544
Interest paid	(12,651)	(8,162)
Government grant received	21,742	20,370
Income tax paid	(188,890)	(211,652)
Net cash provided by operating activities	1,080,584	1,011,185
Cash flows from investing activities		
Additions to property, plant and equipment and capital work-in-progress	(1,429,028)	(1,139,395)
Additions to investment property under development  Proceeds from disposal of property, plant and equipment	(216,202) 314	(109,281) 63
Proceeds from disposal of a joint venture	-	5,305
Payment for investment in associated companies and joint ventures	(75,232)	(64,315)
Dividend income received	8,684	2,783
Purchase of held-to-maturity financial assets	(6,768)	(53,265)
Proceeds from held-to-maturity financial assets	30,750	
Net cash used in investing activities	(1,687,482)	(1,358,105)
Cash flow from financing activities		
Proceeds from loan and borrowings, net of transactions costs	228,420	111,881
Capital contribution from non-controlling interest	5,000	(075 544)
Dividend paid to equity holder of the Company	(273,745)	(275,544)
Net cash used in financing activities	(40,325)	(163,663)
Net decrease in cash and cash equivalents	(647,223)	(510,583)
Cash and cash equivalents at beginning of financial year	3,338,023	3,849,014
Effects of currency translation on cash and cash equivalents	3,047	(408)
Cash and cash equivalents at end of financial year	2,693,847	3,338,023

#### LISTING OF SIGNIFICANT COMPANIES IN THE GROUP

Name of companies	Principal activities	Country of business/ incorporation Equity ho		holding
			2017 %	2016 %
Significant subsidiaries Held by the Company				, ,
Changi Airports International Pte. Ltd. (a)	Investment holding and provision of consultancy services in the field of civil aviation	Singapore	100	100
Changi Travel Services Pte. Ltd. (a)	Sale of travel and tour-related products and packages	Singapore	100	100
Jewel Changi Airport Holdings Pte. Ltd. (a)	Investment holding	Singapore	100	100
Held by the Group				
Changi Airport Consultants Pte. Ltd. (a)	Provision of airport related consultancy services	Singapore	100	100
Changi Airport Planners and Engineers Pte. Ltd. <sup>(a)</sup>	Provision of professional engineering services in the field of civil aviation	Singapore	100	100
Changi Airport Saudi Ltd. (b)	Provision of airport management and operations services	Saudi Arabia	100	100
Changi Airports China Ltd. (a)	Investment holding	Singapore	100	100
Changi Airports Europe Pte. Ltd. (a)	Investment holding	Singapore	100	100
Changi Airports India Pte. Ltd. (a)	Investment holding	Singapore	100	100
Changi Airports MENA Pte. Ltd. (a)	Investment holding	Singapore	100	100
Theta Enterprise Pte. Ltd. (a)	Investment holding	Singapore	100	100
Excelente B.V. (d)	Investment holding	Netherlands	100	100
Excelente Brasil Participações Ltda. (d)	Provision of consultancy services	Brazil	100	100
Jewel Changi Airport Devt Pte Ltd <sup>(a)</sup>	Provision of development, project, and real estate management services	Singapore	51	51
Jewel Changi Airport Trust <sup>(a)</sup>	Project development, operation and management	Singapore	51	51
Jewel Changi Airport Trustee Pte Ltd (a)	Provision of trustee-management services	Singapore	51	51
Changi Airports International HIA Pte. Ltd. (formerly known as Alpha Vela Pte. Ltd.) (a)	Investment holding	Singapore	100	100
Goldenhorn Gate Pte. Ltd. (a)	Investment holding	Singapore	100	-
CTS Southeast Asia Pte. Ltd. (a)	Provision of travel related services	Singapore	60	-

#### LISTING OF SIGNIFICANT COMPANIES IN THE GROUP

Name of companies	Principal activities	Country of business/incorporation	Equity	Equity holding	
			2017 %	2016 %	
Significant associated companies and joint ventures					
Held by the Company					
Experia Events Pte Ltd (c)	Organising and management of conferences, exhibitions and other related activities	Singapore	20	20	
Held by the Group					
Bengal Aerotropolis Projects Ltd (c) (e)	Development of airport and township projects	India	36.7	36.3	
Transport AMD-2 Ltd (c)	Investment holding	Cyprus	37.5	37.5	
OJSC International Airport Sochi <sup>(c)</sup>	Provision of airport and related services	Russia	37.5	37.5	
OJSC International Airport Krasnodar <sup>(c)</sup>	Provision of airport and related services	Russia	37.5	37.5	
OJSC International Airport Anapa <sup>(c)</sup>	Provision of airport and related services	Russia	37.5	28.1	
Basel Aero LLC (c)	Airport management	Russia	37.5	37.5	
Rio de Janeiro Aeroporto S.A (c)	Investment holding	Brazil	40	40	
Concessionária Aeroporto Rio de Janeiro S.A <sup>(c)</sup>	Airport concessionaire	Brazil	20.4	20.4	
Terminal Valdivostok (c)	Provision of airport and related services	Russia	33.3	-	
Vladivostok International Airport (c)	Provision of airport and related services	Russia	17.4	-	

<sup>(</sup>a) Audited by PricewaterhouseCoopers LLP, Singapore.

<sup>(</sup>b) Audited by PricewaterhouseCoopers, Saudi Arabia.

<sup>(</sup>c) Audited by other firms.

<sup>(</sup>d) Not required to be audited.

<sup>(</sup>e) BAPL has obtained financing from a consortium of banks. As required in the financing agreement, a subsidiary of the Group has undertaken not to sell, assign or transfer its shareholding in BAPL without prior approval of the banks.



### CORPORATE INFORMATION

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Company Registration No. 20091087N

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